

Georgia State University

ScholarWorks @ Georgia State University

Educational Policy Studies Dissertations

Department of Educational Policy Studies

Spring 5-12-2023

Perceptions Of Principal Practices Influencing Organizational Learning And Collective Teacher Efficacy

Bindu Sunil

Follow this and additional works at: https://scholarworks.gsu.edu/eps_diss

Recommended Citation

Sunil, Bindu, "Perceptions Of Principal Practices Influencing Organizational Learning And Collective Teacher Efficacy." Dissertation, Georgia State University, 2023.
doi: <https://doi.org/10.57709/35534214>

This Dissertation is brought to you for free and open access by the Department of Educational Policy Studies at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Educational Policy Studies Dissertations by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

ACCEPTANCE

This dissertation, PERCEPTIONS OF PRINCIPAL PRACTICES INFLUENCING ORGANIZATIONAL LEARNING AND COLLECTIVE TEACHER EFFICACY, by BINDU SUNIL, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree, Doctor of Philosophy, in the College of Education & Human Development, Georgia State University.

The Dissertation Advisory Committee and the student's Department Chairperson, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty.

Nicholas Sauers, Ph.D.
Committee Chair

Yinying Wang, Ed.D.
Committee Member

James Kahrs, Ed.D.
Committee Member

Date

Jennifer Esposito, Ph.D.
Chairperson, Department of
Educational Policy Studies

Paul A. Alberto, Ph.D.
Dean, College of Education &
Human Development

AUTHOR'S STATEMENT

By presenting this dissertation as a partial fulfillment of the requirements for the advanced degree from Georgia State University, I agree that the library of Georgia State University shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to quote, to copy from, or to publish this dissertation may be granted by the professor under whose direction it was written, by the College of Education & Human Development's Director of Graduate Studies, or by me. Such quoting, copying, or publishing must be solely for scholarly purposes and will not involve potential financial gain. It is understood that any copying from or publication of this dissertation which involves potential financial gain will not be allowed without my written permission.

Bindu Sunil

NOTICE TO BORROWERS

All dissertations deposited in the Georgia State University library must be used in accordance with the stipulations prescribed by the author in the preceding statement. The author of this dissertation is:

Bindu Sunil
Department of Educational Policy Studies
College of Education & Human Development
Georgia State University

The director of this dissertation is:

Nicholas Sauer, Ph.D.
Department of Educational Policy Studies
College of Education & Human Development
Georgia State University
Atlanta, GA 30303

CURRICULUM VITAE

Bindu Sunil

ADDRESS: Roswell, GA 30075

EDUCATION:

Ed.D.	2023	Georgia State University Education Policy Studies
Ed.S.	2015	University of Massachusetts Lowell Curriculum and Instruction
MAT	2004	Emory University Middle Grades Math and Science
BE	1994	Pune University, India Electronics Engineering

PROFESSIONAL EXPERIENCE:

2021-present	Consultant-Faculty Coach Instructional Empowerment
2019-2021	Mathematics Coordinator Atlanta Public Schools, GA
2015-2019	District Math Coach Shelby County Schools, KY

PRESENTATIONS AND PUBLICATIONS:

Sunil, B. (2022, June). *Creating Culturally Sustaining Classrooms*. Presented at the Building Expertise Conference, Orlando, FL.

Sunil, B. (2022, April). *Math, Rigor, and Equity: Where's the Intersection in the Classroom?* Presented at Dylan William Formative Assessment Conference.

Sunil B. (2018, April). *3-Act Tasks: Making Math Meaningful for Students and Teachers*. Presented at the Kentucky Center for Mathematics conference, Lexington, KY

PROFESSIONAL SOCIETIES AND ORGANIZATIONS

2022	Education Week
2021	Learning Forward

PERCEPTIONS OF PRINCIPAL PRACTICES INFLUENCING ORGANIZATIONAL
LEARNING AND COLLECTIVE TEACHER EFFICACY

by

BINDU SUNIL

Under the Direction of Nicholas J. Sauer, Ph.D.

ABSTRACT

Disparities in the educational experiences of economically disadvantaged students continue into the first quarter of the 21st century. Studies on organizational learning have shown that schools have had more success with acquiring and distributing information on effective instructional structures and practices than implementing them to become a school's learning culture. This qualitative study examined principals' and teachers' perceptions of leadership practices that enhance organizational learning and influence collective teacher efficacy. The following research questions guided this study: (1) What are the principal and teachers' perceptions of principal practices that enhance organizational learning? (2) What role does collective teacher efficacy play in influencing organizational learning? The hermeneutic interpretive phenomenological study explored the perspectives of eight participants who serve as school leaders and teachers in a large urban public school district in the Southeastern United States. The study used the conceptual framework of organizational learning mechanisms (OLMs) to ground the data collection from semi-structured interviews focused on acquiring, distributing, analyzing, retrieving, and using information for decision-making. Interview questions also collected data on enactive (mastery), vicarious, and emotive (affective) states necessary for collective teacher efficacy to flourish. The interview data provided rich descriptions of participants' lived experiences concerning changes the schools implemented to improve student learning. I maintained a reflexive journal to capture the thoughts and reactions I experienced during the interviewing process to account for my prejudices and biases regarding teaching and learning. Interview data were analyzed using the stages of the interpretative phenomenological analysis (IPA) technique. Two main themes emerged from the data analysis. *1) Coaching promotes a culture of collaboration and learning, and 2) Participative decision-making encourages staff to contribute and solve problems.* The two main themes emerged from synthesizing several sub-themes. The sub-themes such as coaching

shift teacher focus to student-centered learning, PLCs engage teachers in collective ownership, district personnel, and parents are partners in learning. Intentional collaboration between new and experienced teachers combined to form one of the main themes, coaching promotes a culture of collaboration and learning for all. Similarly, the other main theme developed from the sub-themes, staff having access to relevant information, such as student data, to make instructional decisions encourage participative decision-making. During participative decision-making, staff contribute ideas and solve problems that affect student achievement. Implications of this research lead to recommendations for schools and districts. The schools and districts can use coaching structures effectively to maximize the benefits of PLC, developing collective efficacy by creating structures and practices for staff to learn with their peers collaboratively to practice participative decision-making to build collective ownership of all students.

INDEX WORDS: Organizational learning; organizational learning mechanisms; phenomenology; collective teacher efficacy; collaborative learning culture; professional learning communities; instructional coaching; participative decision making; district support

PERCEPTIONS OF PRINCIPAL PRACTICES INFLUENCING ORGANIZATIONAL
LEARNING AND COLLECTIVE TEACHER EFFICACY

by

Bindu Sunil

A Dissertation

Presented in Partial Fulfillment of Requirements for the

Degree of

Doctor of Education

in

Educational Leadership

in

Educational Policy Studies

in

the College of Education & Human Development

Georgia State University

Atlanta, GA

2023

Copyright by
Bindu Sunil
2023

DEDICATION

I dedicate this work to three people who encouraged and motivated me to start and finish this journey. My father, G.B. Pillai, always encouraged me to try new things, take risks, and believe in myself. My mother, Radha Pillai, loved, protected, and believed in me during my high and low periods. Finally, my teacher, Dr. Regina Panasuk from the University of Massachusetts, Lowell, spent her precious time and effort teaching me. She patiently conversed with me for hours teaching, guiding, and motivating me to continue exploring my passion about understanding how we learn and make sense of ideas. She was a powerful force in my life to find my internal motivation and passion for serving the students who need a good quality education.

ACKNOWLEDGMENTS

Several people have helped me in various ways to accomplish the process leading to the dissertation. I want first to thank my dissertation committee. Dr. Nick Sauers, my dissertation chair, has given his unlimited time and patience in guiding me along the way with questions and suggestions for making decisions. I am forever indebted to him. Dr. Wang has helped me reason and question research studies to get to the bottom of any exploration through logical reasoning. Finally, Dr. Kahrs, my third chair, is fun and always willing to support me in getting to the finish line.

The GSU professors, Dr. Moss, Dr. Brezicha, Dr. Ogletree, Dr. Hendricks, and Dr. O'Brien, have given their knowledge to prepare me for this journey. Their warm, caring, and professional guidance has helped me grow as a researcher and as a person. Thank you for all that you do for your students. My peers from Cohort IX have been an immense strength since we started our journey together during COVID-19. I could not have finished this journey without their support and help. They were instrumental in learning about looking at any situation from multiple perspectives to know and be curious about the unknown.

My family has been an invaluable treasure to cherish during these past three years. My daughter has been understanding, encouraging, and always available to listen and validate me. My son asks questions when I share my experience about the journey that will make me think long after and give ideas I would not have thought of. My husband, to say the least, has been there every day of this journey. He made sure that I did not have to worry about things happening in the family so I could complete my assignments. In addition, he ensured that our 17-year-old dog was cared for so I would not worry. Most importantly, he accepted me in whatever way I showed up, always with understanding and love. Finally, let's not forget all the meals he prepared so I could be healthy. This journey would be impossible without Him.

Table of Contents

LIST OF TABLES	iv
LIST OF FIGURES	v
1 THE PROBLEM	1
Statement of the Problem.....	3
Purpose of the Study	6
Research Questions	7
Significance of the Study	8
Definition of Organizational Learning.....	9
2 REVIEW OF THE LITERATURE	11
Organizational Learning.....	11
Organizational Learning and School leadership.....	14
Principal Trust and Organizational Learning.....	18
Teacher Motivation and Organizational Learning	20
Collective Teacher Efficacy.....	21
3 METHODOLOGY	25
Conceptual Framework.....	25
Organizational Learning Mechanisms.....	26
Research Design.....	30
Data Collection.....	40
Data Analysis.....	43
Expectations.....	46
4 RESULTS	51
Findings.....	52
Theme 1: Coaching Promotes A Culture of Collaboration and Learning.....	53
Theme 2: Participative Decision Making Encourage Staff to Problem Solving.....	61
Summary of Findings.....	68
5 DISCUSSION	70
Discussion of Findings.....	71
Implications for Practice.....	82
Limitations to the Study and Suggestions for Further Research.....	86
Conclusions.....	88
REFERENCES	92
APPENDICES	105

LIST OF TABLES

Table 1: Three Year Milestone Data for Elementary Math and Algebra	2
Table 2: Participant Experience	35

LIST OF FIGURES

Figure 1: Framework For Assessing Teacher Collaboration	39
Figure 2: Findings: Themes and Sub-themes	53
Figure 3: Relating Themes and Dimensions of Organizational Learning.....	72

1 THE PROBLEM

The achievement scores for economically disadvantaged students in international, national, and state assessments show a pattern of low achievement compared to their peers. (The Governor's Office of Student Achievement [GOSA], 2022; National Assessment of Educational Progress [NAEP], 2021; Trends in International Mathematics and Science Study [TIMSS], 2019). This chapter presents the gap in student achievement patterns observed for economically disadvantaged students in public schools. International scores of fourth graders eligible for Free or Reduced-Price Lunch (FRPL) show an average math score of 41 points below the average for all the fourth graders in US public schools (TIMSS, 2019). The national math score illustrates that 63% of fourth grade students eligible for the National School Lunch Program (NSLP) scored 30 points lower than those who are not (NAEP, 2019). The reading score for the 4th graders shows a similar pattern. Fourth grade students who are eligible for NSLP make up 65% of the total, while only 20% of the students eligible for NSLP are proficient in the assessment (NAEP, 2019). This is a stark contrast to the 56% proficiency rate for students who are not eligible for NSLP. Thus, students who are not eligible for NSLP make up 31% of the 4th grade students, while their proficiency rate is three times more than students who are eligible for NSLP.

The state assessment in Georgia, Georgia Milestone shows a similar pattern that students from economically disadvantaged groups are underperforming (GOSA, 2022). Table 1 presents the three-year Milestone data for students from the elementary grades (Grades three, four, & five) and Algebra I course. The math achievement data of students certified as economically disadvantaged is below students who are not economically disadvantaged (NED). We must address the problem of low performance of students from economically disadvantaged homes in our public schools. Georgia Department of Education (GaDOE, 2019) in the handbook for the

Title I directors define high-poverty schools (also known as high-needs schools) as schools where 60% or more students are enrolled in the free or reduced meals program. The study will explore the problem of economically disadvantaged students achieving below their peers through the lens of organizational learning influenced by leadership practices and collective teacher efficacy. The exploration is conducted in an urban inner city school district in the southeast US where about 70% of its schools have 95% of its students eligible for Free and Reduced-Price Lunch (FRPL).

Table 1

Milestone Data for Elementary Math and Algebra I in an Urban School District in Southeast US

Year	Grade Level/ Course	Number of Students	Beginning Learner	Developing Learner	Proficient Learner	Distinguished Learner
2021-22	Elementary Math	ED (8,430)	53.6%	32.9%	11.8%	1.6%
		NED (3,256)	8.0%	20.7%	40.0%	31.3%
	Algebra I	ED (2,832)	65.5%	26.4%	7.1%	1.0%
		NED (700)	26.0%	31.1%	30.0%	12.9%
2018-19	Elementary Math	ED (10,083)	34.8%	38.0%	22.8%	4.3%
		NED (3,388)	4.3%	14.6%	43.8%	37.3%
	Algebra I	ED (2,813)	56.5%	29.2%	12.6%	1.8%
		NED (494)	16.8%	27.3%	38.7%	17.2%
2017-18	Elementary Math	ED (10,289)	33.1%	43.7%	19.5%	3.7%
		NED (3,337)	4.3%	17.9%	42.1%	35.7%
	Algebra I	ED (2,922)	59.1%	29.8%	10.2%	0.9%
		NED (347)	20.5%	40.6%	30.5%	8.4%

Statement of the Problem

The Governor's Office of Student Achievement (GOSA) in the state of Georgia (GA) uses a single statewide accountability system for school performance for K-12 public schools and districts (GOSA, 2022). A large inner-city urban school district is the focus of the qualitative study. It has a variety of learning sites, about 50 neighborhood schools, approximately ten partner schools, about 20 charter schools, a couple of citywide single-gender academies, and three alternative programs (GOSA, 2022). The district enrollment is over 50,000 students. The Algebra I Milestone data for the district reflect that many of the students in the high-poverty schools are underperforming. The underachievement of students in Algebra I in high-needs schools is a significant concern (GOSA, 2022). As seen in Table 1, the low proficiency math score in elementary grades and Algebra I course for students who are identified as economically disadvantaged in the Milestone assessment. Similar low proficiency is noticed in the 4th graders who took the Milestone Assessment for English Language Arts (ELA). The ELA proficiency score for economically disadvantaged students is 23% compared to the proficiency rate of 75% for 4th graders who are not economically disadvantaged (GOSA, 2022). Students leaving high school with low math proficiency is a major concern for the school district as students enter a post-secondary institution unprepared for college-level mathematics (Boatman, 2021).

Many of these students entering college take a math placement test and get assigned to at least one high-school-level remedial math course. In addition, students entering a 2-year public community college may be assigned to remedial courses (Chen & Simone, 2016). The Algebra I score in Table 1 depicts that the economically disadvantaged group has a proficiency rate of 14% compared to a proficiency rate of 56% for students who are identified as not economically disadvantaged. The low proficiency rate in Algebra I result in many high school students entering a

post-secondary institution unprepared for college-level mathematics (Boatman, 2021). The gap in proficiency rate seen in Algebra I continues as students graduate from high schools and enter a two-year or a four-year public higher educational setting. In Georgia, of the 40% of students who attend a public institution, about 20% require remediation in mathematics (GOSA, 2021). Consequently, many of these students will be placed in a remedial math course, and some will take multiple remediation courses (Chen & Simone, 2016).

The students taking multiple remedial math courses take longer to get their diplomas. Along with time, many students must invest money, which becomes burdensome for students who are already hard-pressed for cash due to their economic status. The underachievement of students who are from the economically disadvantaged group is a national crisis (Murakami & Kearney, 2020). Thus, many students from low socioeconomic status are academically struggling, indicating that the public school system is unable to provide quality education. The low proficiency rate among students certified as economically disadvantaged begins to emerge way before students reach high school. The low proficiency rate among economically disadvantaged students is noticeable in the elementary grades, as seen in the Milestone data trend from 2017-18 to 2021-22. After the Pandemic, the proficiency rate for economically disadvantaged students has reduced compared to the previous year. Specifically, the gap between the proficiency rates of economically disadvantaged students and the students not identified as economically disadvantaged has widened.

Possible Solutions

Schools engage in organizational learning using professional learning and instructional practices to address the crisis of low achievement patterns observed for economically disadvantaged students (Darling-Hammond & Oakes, 2019; Gupta & Lee, 2020; Murray, 2013; Youngs

& King, 2002). Murray (2013) suggests that time be built into the school day for professional learning as teachers collaboratively plan instruction, share instructional strategies, assess student work, and observe each other's teaching. Student learning improves when teachers enhance their knowledge and skills to deliver high-quality instruction (Murray, 2013). Schools provide professional development courses to teachers to enhance their instructional expertise. However, many of the strategies learned in the workshop are not implemented in the classroom (Gupta & Lee, 2020).

The research focused on improving student outcomes in high-needs schools and approached it from three distinct perspectives. Research from the leader's point of view found that leaders develop a shared vision, implement strategies to induce commitment, and build respectful and trusting relationships to motivate teachers to improve student achievement (Wagner, 2001; Leithwood et al., 2002; Klar & Brewer, 2013; Yoon, 2016). From the teachers' perspective, their role is critical in improving student achievement as they collaborate in professional learning communities, implement standards-based instruction, and have opportunities to get involved in instructional decision-making (Felner et al., 2008). In contrast, students' perspective values self-efficacy as they collaborate with their peers, engage in contextual learning and connect different ideas that they come across (Knapp et al., 1995). Teacher collaboration promotes collective efficacy because teachers share their teaching strategies and beliefs with their peers and communicate instructional issues they face. They collectively develop strategies and competencies to address their issues (Akiba & Liand, 2016). Organizational learning improves teacher competencies which in turn influences student learning. When school policy implementers and district policymakers work together, the rate of success in implementing organizational learning will be high (Honig, 2004; Mulford & Silins, 2003).

Purpose of the Study

The purpose of the research study is to explore leadership practices that positively influence the successful implementation of organizational learning. For this study, the successful implementation of organizational learning will be measured by two factors. The first measure connects to school staff developing a shared understanding of new information and interpreting it to create coherent collective action to reach coordinated decision making (Crossan et al., 1999). For example, when differentiated learning is shared with the school staff, what structures are in place for them to make sense of differentiated learning? To successfully build a shared understanding of a new instructional practice, dialogues and collaborative actions are essential to implement differentiated learning.

The second measure relates to how a school retrieves information from its memory to apply the knowledge to improve organizational capacity. The process of organizational learning is complete when the new information is implemented into the schools' procedures and practices by developing shared understandings (Crossan et al., 1999). Then the new information gets embedded into the school's memory (Argote et al., 2003), similar to when new information gets embedded into the human brain to become short-term and long-term memory. For example, in the previous instances of differentiated learning, what structures and practices were employed to conceptualize the new knowledge? Was there an effort to record the shared understanding? Will the staff engage in further discussion or plan instruction around differentiated instruction? The ability of an organization to retrieve past learning and apply it in the current context promotes the transfer of learning (Butler et al., 2017). The research questions will investigate leadership practices that will influence how schools make sense of the new information and their ability to apply

their learning in new situations. Additionally, the research will look at practices that promote collective teacher efficacy and their influence on organizational learning.

Research Questions

Schools continually change policies, structures, practices and train its staff to adapt, learn, and apply new information (Silins et al., 2002). Schools more often engage in acquiring and sharing new knowledge among their staff than taking time to conceptualize and make sense of the new information to apply it to their practice (Silins et al., 2002). Many attempts to improve schools have indicated more success with initiating changes than sustaining long-term positive effects of the new initiatives (Collinson et al., 2006; Giles, 2007; Higgins et al., 2012). Quick fixes and silver bullets that are geared towards first-order change to improve education have failed to influence lasting school improvements. Instead of tinkering with existing systems to make small incremental changes, implementing second order change that challenges assumptions and status quo to a new world view results in sustainable change (Coaching Leaders, 2022).

The study will investigate various ways new knowledge is integrated into a school's practices with the intention of sustainable changes. Collinson et al. (2006) propose a deliberate, systematic improvement by following the processes of organizational learning to improve learning for students and teachers. However, some school reform may first acquire knowledge before they try to make sense of the acquired knowledge or discuss and experiment with applying the new learning (Elkjaer, 2004; Flores et al., 2012). The idea of organizational learning in schools came from the business world, and this study will explore the processes of organizational learning (Hesbol, 2019). The following research questions will investigate organizational learning from the perspectives of principals and teachers.

1. What perceptions do principals and teachers have of principal practices that enhance organizational learning?
2. What role does collective teacher efficacy play in influencing organizational learning?

Significance of the Study

Many studies have revealed leadership practices that create structure and agency for staff to engage in deliberate processes of organizational learning (Finnigan & Daly, 2012; Schechter & Qadach, 2012; Louis & Murphy, 2017). Researchers have found collective efficacy, social trust, participative decision making, principal caring, and transformational leadership to impact organizational learning directly. (Schechter, 2008; Flores et al., 2012; Collinson et al., 2006; Louis & Murphy, 2017). Most of these studies apply quantitative research methods, and few have drawn on mixed methods. This study will be conducted using a qualitative research method. The research will explore teachers' perceptions of leaders' actions to encourage organizational learning and collective teacher efficacy. Studying perceptions from the viewpoints of principals and teachers will give reliable measures of leadership practices for school improvement (Silins et al., 2002; Schechter, 2008; Kurland et al., 2010). This study will also illuminate the effect of collective teacher efficacy on organizational learning.

Some studies have explored organizational learning using organizational learning theories (Bensimon, 2005; Evans et al., 2012). Some have used sociocultural learning theories (Van Lare & Brazer, 2013; Honig, 2008; Honig et al., 2017). Yet, others have used a combination of the two theories (Collinson et al., 2006; Knapp, 2008; Higgins et al., 2012). This study uses the organizational learning mechanisms formalized by Schechter (2008) to conduct studies on organizational learning. Xie (2019) conducted a systematic literature review of leadership and organizational learning culture. She selected 58 articles using selection criteria from various journals,

48 of these studies on organizational learning used the quantitative research method. There were eight that designed their studies qualitatively, while two studies followed a mixed-method approach. Most qualitative studies were conducted in Europe (Xie, 2019).

Another surprising result surfaced while researching studies on organizational learning that used the conceptual framework of organizational learning mechanisms. Many of these studies are conducted in Israel (Flores et al., 2012; Schechter & Feldman, 2010; Schechter & Qadach, 2012; Schechter & Atarchi, 2014; Qadach et al., 2020). There needs to be qualitative studies conducted in the United States public schools on organizational learning, using the framework of organizational learning mechanisms. Research confirms that collective teacher efficacy directly impacts students' achievement (Tschannen-Moran & Barr, 2004; Goddard et al., 2015). This study will use the conceptual framework of organizational learning mechanisms to explore leadership practices' impact on organizational learning and collective teacher efficacy.

Definition of Organizational Learning

A simple definition of organizational learning adopted by Argote (2011) is "a change in the organization that occurs as the organization acquires experience" (p. 1124). The changes may manifest as a change in beliefs or as a change in behaviors (Argote, 2011). Sometimes changes due to organizational learning may result in positive outcomes, and sometimes not. For example, organizations may develop positive outcomes such as shared goals, collaborative work culture among teachers and students, and continuous learning opportunities for staff to impact student learning (Giles, 2007; Silins et al., 2002). In contrast, a team's learning behavior may become an obstacle when there is a high level of diversity within teams (Kim, 2017). The negative influence of diversity can be offset when the team is led by a transformational leader who values collabora-

tion and is supportive of all the members (Kim, 2017). The next chapter delves into the organizational learning phenomena in detail, including different definitions, approaches, and its relationship with leadership.

Thus, organizational learning gathers and processes information and follows a cyclical, dynamic, and interactive nature through the five phases of the information processing cycle (Schechter, 2008). The five phases are information acquisition, distribution, interpretation, organizational memory, and retrieving information from memory for organizational use (Chen, 2008). The research questions will explore the impact of principal practices on the phases of organizational learning and the influence of collective teacher efficacy on organizational learning with the goal to improve student learning in high-needs schools.

2 REVIEW OF THE LITERATURE

This chapter builds knowledge about organizational learning by reviewing the extant literature on the phenomenon. It expounds on the different conceptualizations of the phenomena and presents the five dimensions of organizational learning. Next, the section describes different approaches to organizational learning adopted by researchers. The chapter gives extensive details on the interaction between organizational learning and school leadership and its connection with principal trust. Finally, the chapter investigates the construct of collective teacher efficacy and the relationship between teacher motivation and organizational learning.

Organizational Learning

Organizational learning is a process for identifying and solving issues to improve an organization's effectiveness by going beyond quick fixes by examining assumptions and addressing root causes to change beliefs and behaviors (Finnigan & Daly, 2012). One approach to changing beliefs and behaviors in high-needs schools is to improve the technical and social aspects of learning. Finnigan and Daly (2012) suggest that the technical aspects of learning can be improved by focusing on goals, optimum utilization of resources, inviting new ideas, and strategically developing school improvement plans. Moreover, the social aspects can be built by strengthening relationships, collaborative structure, and improving school climate (Finnigan & Daly, 2012).

Organizational learning is a complex multidimensional construct with various subprocesses comprising its structural model. It focuses on the dimensions of managerial commitment, systems perspective, openness and experimentation, and knowledge transfer and integration. (Gómez, Lorente, & Cabrera, 2005). The learner-centric definitions of organizational learning attend to searching for new information, assessing new information, and using new information

(Louis & Murphy, 2017). The basic dimension of organizational learning is action-oriented, routine, and incremental, occurring within existing mental models, norms, policies, and underlying assumptions (Grinsven & Visser, 2011). A different three-dimensional theoretical framework focuses on learning to examine how often the learning happens, whether the learning is situated locally or globally, and whether the cognitive intensity within the learning process is reflective or inert (Rerup & Levinthal, 2014).

Organizational learning is composed of several sub-processes. Flores et al.'s (2012), through empirical testing, derived five sub-processes. These subprocesses get more complex as the information moves up the level to become organizational memory. This study will use the five distinct dimensions of organizational learning of Flores et al. (2012), namely, “information acquisition, distribution, interpretation, integration, and organizational memory” (p. 661).

1. Flores et al. (2012) describe information acquisition (scanning) as the first subprocess where the organization obtains information from its internal and external resources. Apart from external and internal resources, an organization may look back to information received previously as feedback for its future use.
2. Information distribution is the process where data and knowledge received by an individual or a group need to be shared with relevant personnel to ensure that improvement and change efforts are communicated clearly (Flores et al., 2012).
3. Information interpretation is the process where individuals in the organization make sense of the new information acquired through distribution. Attempting to make sense of the new information reduces ambiguity and enhances an individual's understanding and actions for implementation (Flores et al., 2012). The process of interpretation is “critical

in developing the shared understanding that leads to organizational learning” (Flores et al., 2012, p. 643).

4. Information integration is the process “when various interpretations converge to form unified understanding (Flores et al., 2012, 644). Information integration differs from information interpretation. During information integration, groups conceptualize their collective understanding of information to transfer it to a coherent collective action (Crossan et al., 1999). While in information interpretation, individuals make sense of information and build individual understanding.
5. Organizational memory is a process that deals with “encoding, storing, and retrieving the lessons learned from an organization’s history, despite the turnover of personnel” (Flores et al., 2012, p. 644). The outcome of the process is expressed as standard operating procedures, routines, and rules and strategies.

Approaches to Organizational Learning

Studies on improving the achievement of students from low socioeconomic status share different approaches for changing teacher and leader practices. Some practices from a leader’s perspective focus on leaders developing a shared vision of effective instruction, implementing strategies that promote staff commitment, and building respectful and trusting relationships (Wagner, 2001). Other strategies to improve student learning include reorganizing students into small learning communities to implement standards-based instruction focusing on numeracy and literacy, empowering teachers in participative decision-making, and forging connections with families and communities (Felner et al., 2008). Solutions presented to improve the learning experience of students who are identified as economically disadvantaged require schools to embrace

organizational learning into their organizational culture. Successful organizational change requires cultural support from the policy implementers within schools (Mulford & Silins, 2003) and from district policymakers designing reform initiatives that support successful bottom-up reforms (Honig (2004).

Other approaches to organizational learning emphasize peer collaboration among both students and teachers. Students collaborate with their peers to make sense of learning presented in context by connecting ideas between different contents and relating learning to real-life experiences (Knapp et al., 1995). Similarly, teacher-centered collaborative learning experiences promote collective efficacy where teachers share their teaching approaches and beliefs informally, communicating the teaching and learning issues they encounter that influence their teaching practices (Akiba & Liand, 2016). All the above approaches look at school improvement from the lens of educational leadership. This study will explore school improvement, considering the construct of organizational learning and its intersection with school leadership.

Organizational Learning and School Leadership

Research on organizational learning came to education from the business world (Hesbol, 2019). As a result, several researchers began investigating the impact of school leadership on the dimensions of organizational learning. Parallely, organizational culture, schoolwide capacity building, and teacher collaboration in schools also influenced organizational learning by changing teacher practices to improve student learning. School leadership that is transformational and values participative decision-making directly promotes organizational learning (Flores et al., 2012), teachers feel empowered and involved in decision-making as a professional community. Transformational leadership is characterized by leaders setting high expectations for performance and ethics, communicating a compelling vision and inspiring their staff to achieve more,

questioning the status quo and encouraging unconventional approaches to problem solving, and supporting and coaching individuals to reach their leadership potential (Stewart, 2006).

Teachers feel safe to engage in honest, reflective discussions about learning opportunities when diversity and collaboration are valued (Mulford & Silins, 2003; Silins et al., 2002). In contrast, schools that are culturally diverse and economically disadvantaged are successful when principal practices focus on a shared sense of purpose, a climate of high expectations, and building the academic capacity of teachers using professional learning communities (Ylimaki, 2007).

Improving leadership practices that build schoolwide capacity supports organizational learning (Higgins et al., 2012; Thoonen et al., 2012). Schoolwide capacity building involves professional learning for teachers and leaders supporting high-quality teaching and learning (Heck & Hallinger, 2009; Mulford & Silins, 2003). To sustain schoolwide capacity for continuous improvement over a period, Thoonen et al. (2012) encourage transformational leadership in the form of enhancing the school's vision, welcoming staff's divergent ideas, and encouraging teachers to experiment with new teaching methods to improve their practices. Thoonen et al. (2012) also found that leaders can influence collaboration among teachers and can encourage teachers to participate in decision-making about teaching resources and strategies.

Higgins et al. (2012) portray similar dimensions of organizational learning for capacity-building as Thoonen et al. (2012) but use different vocabulary terms. They note that when teachers feel psychologically safe and have a strong sense of shared responsibility for every child's learning, they are willing to experiment with new instructional practices in an active learning environment. A key role of school leaders is to create conditions for learning, by themselves engaging in learning and implementing and monitoring cultures of learning for teachers and students

(Higgins et al., 2012). In all, principals play a significant role in easing a creative interface between structure and agency, incorporating required knowledge and skills through shared commitment and collaborative activity with consistent avenues for feedback and accountability (Giles, 2007). Thus, leaders and teachers strive for academic excellence by engaging in learning and growing their craft so they can actively participate in the change process. There is a need for such instances of a productive interface between all levels of school staff and to extend collaboration across schools, districts, and regions. What role can the district office play in promoting organizational learning in all its schools that educate students from different strata of economic status?

Van Lare and Brazer (2013) urge us to explore teacher learning within professional learning communities by combining sociocultural and organizational learning theories. One way to improve the quality of teaching and learning is to investigate organizational learning from the perspective of school district offices through the lens of sociocultural and organizational theories (Honig, 2004; Honig, 2008; Honig et al., 2017). For a successful bottom-up reform, district policymakers are required to make sense of strategies, practices, and resources, so that they can implement reform through a clear understanding of reform requirements (Honig, 2004). Along with a clear understanding, district offices need to become a learning organization to develop positive relationships with their schools (Honig, 2008). Recently, Honig et al. (2017) investigated the ways central office administrators use research to shift their practice within the sociocultural learning theory. They found that district supervisors can support principal growth using data from classroom teaching observations using a hands-on approach to improve instructional quality (Honig et al., 2017). It is powerful to envision district and school leaders working together to

design and implement instructional strategies collectively. A district that works collaboratively with its schools will likely improve instruction and student learning.

When teachers perceive their principals to be involved in supporting struggling students' academic growth, it dramatically influences organizational learning, more so than when the principal is perceived as caring (Louis & Murphy, 2016). Thus, teachers perceive their leadership as actively involved in the school's core functions (Silins et al., 2002). In contrast, researchers did not find principal trust in teachers' professionalism to stimulate organizational learning (Louis & Murphy, 2016). However, there was a boost in organizational learning when school staff and school leaders, and school and district personnel share professional trusting relationships (Johnson & Chrispeels, 2010). Additionally, organizational learning improves when teachers openly and in supportive ways build collective efficacy by improving their practices, learning from their experienced peers, and feeling hopeful in their collective strength to improve achievement (Silins et al., 2002; Mulford & Silins, 2003). Thus, some constructs directly influence organizational learning, while others influence the phenomena of organizational learning through mediators.

Mulford and Silins (2003) and Silins et al. (2002) discovered a direct influence of students' positive perception of teachers' work on student engagement and academic success. In addition, research points out the indirect effects of school leadership on student outcomes. Principals enact a rich learning environment, effective instruction, and collaborative learning indirectly when they influence teacher practices through their intentional leadership practices (Supovitz et al., 2010; Louis et al., 2010). Thus, leaders are critical in creating opportunities for teachers to learn and work collaboratively. The collaboration improves teachers' instructional effectiveness to enhance student outcomes (Leithwood et al., 2010). A clear link exists between collective

teacher efficacy—the perception by teachers that they can take action to positively influence student achievement (Schechter & Qadach, 2012) and leadership practices. Conclusively, teachers willingly participate in organizational learning when leadership practices support participative decision-making, teacher collaboration, a caring and trustful climate, establishing a shared vision, listening to concerns, and leading teachers through coaching (Kurland et al., 2010; Thoonen et al., 2012). *How do Principals and Teachers Perceive their Influence on Organizational Learning?*

Research studies have investigated the nature of leadership practices on organizational learning. Practices such as setting purpose by seeking consensus on school priorities and goals are known to establish interactions among staff and students that are grounded in trust, respect, and caring. These interactions value participative decision-making and distributive leadership and promotes intellectual stimulation by engaging in self-reflection and collaborative learning (Mulford & Silins, 2003). Mulford and Silins (2003) and Silins et al. (2002) investigated how schools change as learning organizations. They found that principal leadership is indirectly related to student outcomes through the mediating effects of organizational learning and teachers' work. Teachers' work refers to students' perception of the teacher's ability to deliver quality instruction, including ways teachers challenge students and hold them to high expectations (Silins et al., 2002). In contrast, students' outcomes refer to their participation and engagement in school. Organizational learning thrives in schools that engage staff in open and productive communication and encourage them to take the initiative and risks (Silins et al., 2002).

Principal Trust and Organizational Learning

Much research on organizational learning in schools and districts attempt to find factors that advance or abate the progression of organizational learning in schools and districts.

Leithwood et al. (1998) conducted a multi-case qualitative study to identify in-school and out-school conditions that foster organizational learning. They used the framework of organizational learning processes in combination with different forms of school leadership. The researchers found community involvement an excellent influencer for organizational learning while clear vision and strategies to accomplish goals and transformational leadership surfaced as important in-school factors that promote organizational learning. While Leithwood et al. (1998) studied conditions that foster organizational learning, Rusch (2005), on the other hand, studied factors that cause barriers to organizational learning. She explored how our current understandings of organizational learning support the transfer of learning from single school sites to school systems. She found that incoherent district structures, beliefs, and actions among schools prompted by fear of competition impede organizational learning.

On the other hand, Kurland et al. (2010) discovered that school vision is a potent mediator influencing principals' leadership style and organizational learning. Their quantitative study investigated the mediating effect of school vision when exploring the impact of principals' leadership style on organizational learning. They found that when principals and the staff collaboratively create a school vision, it becomes a powerful motivator for organizational learning.

Schools collaborating around vision statements have a more significant impact on organizational learning than principals' transformational leadership style.

A related study conducted by Louis and Murphy (2017) researched principals' impact on organizational learning by focusing on their cognitive trust in teachers' professional competency and teachers' perception of principals' caring. Their study revealed a direct correlation between teachers' perception of principal caring and organizational learning and an even stronger correlation between organizational learning and academic support for students. In contrast, principal

trust was indirectly related to organizational learning through the mediation of principal caring and academic support. A qualitative multiple case study investigated how the central office could change their practices to bring about changes in schools' organizational learning using sociocultural learning theory (Honig et al., 2005). The researchers recommend that executive central office leadership is centered around teaching and learning. They shift principal supervision from evaluation and operations to teaching principals to grow as instructional leaders (Honig et al., 2005).

This section explored the intersection of organizational learning and school leadership. It also presented the interaction between principal trust and organizational learning. Several constructs, such as school vision, teachers' perception of principal caring, and academic support for students, have stronger ties to organizational learning. Gómez, Lorente, & Cabrera (2005) observe that trust is an antecedent for the success of factors that stimulate the path of organizational learning.

Teacher Motivation and Organizational Learning

Teacher motivation is associated with principal trust and caring and influences organizational learning. Thoonen et al. (2011) analyzed motivational factors that influence teacher behavior. These motivational factors are expectancy, value, and affectiveness. First, expectancy components relate to self-efficacy and teachers' beliefs about their ability to accomplish a task (Thoonen et al., 2011). Next, value connects to teachers' goals and interest in completing a task. Finally, the affective component considers teachers' feelings towards tasks or school. Thus, the motivational factors bridge organizational conditions and leadership, and teacher practices and teacher learning.

Exploring the extant literature on organizational learning reveals that most empirical studies are conducted in business settings (Hesbol, 2019). In cases where the study is done in the educational field, most have used quantitative research methods to conduct their research in international settings like the Netherlands and Israel. Although only a few qualitative studies on organizational learning exist (Xie, 2019), fewer still have used the framework of organizational learning mechanisms to study in the United States. Schechter and Qadach (2012) conducted research in Israel to establish a clear positive link between organizational learning mechanisms and collective teacher efficacy for addressing instructional and disciplinary issues in elementary schools. Another research using organizational learning mechanisms found positive relations between collective teacher efficacy and teachers' affective and normative commitment (Schechter & Atarchi, 2014).

Collective Teacher Efficacy

Students' academic achievement significantly improved when teachers believed in their combined abilities to influence student outcomes (Bandura, 1993). The human behavior pattern is called collective efficacy and is defined as "group's shared belief in its conjoint capability to organize and execute the courses of action required to produce given levels of attainment" (Bandura, 1997, p. 477). Another definition of collective efficacy broadens the environment to include home, school, and community. Together, these entities with individual worth and distinctive roles can create a learning environment for student growth (Henderson et al., 1998). In essence, collective teacher efficacy is teachers' insights that the staff can accomplish tasks to influence student learning positively (Goddard et al., 2000).

A quantitative study investigated the mediating effect of collective teacher efficacy on the relationship between teacher motivation and principal leadership (André et al., 2020). The findings illustrated that principal leadership impacts teacher collaboration indirectly when mediated by collective teacher efficacy. Their study reported that teachers rarely collaborate, and when they do, they share information and teaching resources and rarely collaborate on ideas that influence teaching practices. Teachers are more likely to work together with the belief that they can influence student outcomes when principals are engaged as instructional leaders in professional learning activities (André et al., 2020). Encouraging principal practices that promote collaborative learning among teachers is essential since there are substantial positive relations between collective teacher efficacy and collaborative learning (Schechter, 2008). Setting structures and expectations by instructional leaders for teachers to engage in frequent collaboration to improve instruction indirectly influences collective efficacy among teachers (Goddard et al., 2015).

This study is looking for practices that will mitigate the influence of low socioeconomic status on student learning. Donohoo et al. (2018) substantiate the powerful influence of collective teacher efficacy on student achievement using John Hattie's (2016) meta-analysis on various factors that influence student learning. Collective teacher efficacy is "three times more powerful and predictive of student achievement than socioeconomic status" (Donohoo et al., 2018, p.41) and "more than double the effect of prior achievement and more than triple the effect of home environment and parental involvement. It is also greater than three times more predictive of student achievement than student motivation and concentration, persistence, and engagement" (Donohoo et al., 2018, p.42). Thus, collective efficacy among teachers can improve student outcomes for those identified as economically challenged.

Bandura (1997) identifies four sources of collective efficacy: enactive (mastery), vicarious, exhortative (social persuasion), and emotive (Psychological). The enactive or mastery experience is the most powerful one because perceptions of efficacy increase when team members have successful personal experiences. The other three sources indirectly trigger efficacy through others' experience of success (vicarious), a credible peer provides words of encouragement and guidance (exhortative). Finally, the emotive (affective) states involve positive and negative emotional reactions that strengthen resilience and efficacy. Goddard et al. (2015) support the claim that mastery experiences predict strong collective efficacy as it connects to prior accomplishments.

If mastery learning is a powerful source of collective efficacy in teachers, then practices that encourage teacher collaboration to promote mastery learning are essential. It is important to keep in mind that collective efficacy is the mediator between principal leadership and teacher collaboration (André et al., 2020). Goddard et al. (2015) present a different perspective on the interactions between teacher collaboration, leadership, and collective efficacy. The researchers articulate that "Teacher collaboration is a key to the pathway from leadership to collective efficacy beliefs because it is the shared interactions among group members that serve as the building blocks of collective efficacy" (Goddard et al., 2015, p. 504).

Conclusion

The literature shows that organizational learning is an essential process if reforms are to improve student learning. Students coming from economically disadvantaged homes need to experience success in school. Education becomes the road map for students to come out of generational poverty. Organizational learning is critical for ensuring that effective teaching and leading are happening. Many reform efforts fail during the subprocesses of organizational learning when

schools interpret, integrate, and build organizational memory of new knowledge. Research study exploring conditions favorable for information interpretation, information integration, and organizational memory is beneficial. Recognizing favorable conditions that enhance organizational learning will improve teacher practices and student learning. Student learning is positively impacted by collective teacher efficacy. The literature expounds on the positive influence of teacher efficacy on student learning. The literature suggests several practices influencing organizational learning, such as building social trust, participative decision-making, principal caring, transformational leadership, and collective efficacy. Unfortunately, most research on organizational learning are quantitative. Amongst the few that are qualitative, fewer look at principals' and teachers' perceptions of leadership practices that promote organizational learning. Therefore, to address the gap in the literature, this study aims to identify principal practices that lead to a successful implementation of organizational learning and collective teacher efficacy using the framework of organizational learning mechanisms.

3 METHODOLOGY

This chapter begins with an overview of the research study by stating its purpose and re-introducing the research questions. Next, the theoretical framework used to investigate the research questions is introduced and explained. Then, the research design method of the phenomenological qualitative method is described. The research design highlights the sample selection of the site and participants. Next, the desirable criteria for selecting sites and participants are presented. Sources of data collection and details on data analysis using the interpretive phenomenological analysis (IPA) method follows. The last section enumerates the various expectations for the qualitative study to be dependable, valid, trustworthy, and reliable.

This qualitative study aims to investigate leadership practices that influence the implementation of organizational learning within a school. Implementing organizational learning will focus on how school staff interprets and integrates new information received through professional learning. Furthermore, the process followed to retrieve information from organizational memory to apply the new learning to improve schools. The study will also explore the influence of collective teacher efficacy on organizational learning. The following research questions will guide the study:

1. What perceptions do principals and teachers have of principal practices that enhance organizational learning?
2. What role does collective teacher efficacy play in influencing organizational learning?

Conceptual Framework

Organizational learning mechanisms (OLMs) will be used as the conceptual framework to answer the research questions. The framework of organizational learning mechanisms is used

to study the impact of organizational learning subprocesses to improve teaching and learning (Popper & Lipshitz, 1998; Schechter, 2008). The framework will also connect the constructs influencing organizational learning from the literature reviews to the research questions. The following pages will explain how the organizational learning mechanisms framework will be used to answer the research questions. The phenomenon of organizational learning is studied by combining sociocultural learning and organizational learning theories to enhance the quality of teaching and learning (Honig, 2004, 2008; Honig et al., 2017; Van Lare & Brazer, 2013). The study employs the framework of organizational learning mechanisms because the subprocesses of OLMs can explore the impact of leadership practices on organizational learning.

Organizational Learning Mechanisms

This section presents the framework of organizational learning mechanisms as the lens to measure the subprocesses of organizational learning. It explains the framework's intended purpose, how it will be used, and what specific organizational learning factors it will measure to accomplish the purpose of the study. Organizational learning in a school context may be understood as the operational implementation of structures and applications, seen as surface-level changes (Schechter, 2008). Therefore, the organizational learning mechanisms framework is chosen to study lasting changes implemented to improve organizational learning by looking at principal practices. Teacher perceptions of principal practices influence the understanding of organizational learning (Kurland et al., 2010; Schechter, 2008; Silins et al., 2002). Therefore, the framework of organizational learning mechanisms will study teachers' perceptions of leadership practices and the impact of these practices on the organizational learning subprocesses of information integration, analysis, and the application of new information to improve student learning.

These processes reflect a higher-order change when the acquired information is analyzed, stored, retrieved, and applied within the organization to embrace new learning. (Schechter, 2008)

Organizational learning mechanisms measure the performance of the organization and its members. It measures how information is received, distributed, analyzed, stored, and retrieved for future use (Popper & Lipshitz, 1998). Organizational learning mechanisms provide a coherent framework because it assimilates information from external changes (district initiatives) and internal experiences (school capacity) (Schechter & Qadach, 2012). The framework will measure the three subprocesses of organizational learning (information interpretation, information integration, & organizational memory). The sub-processes of organizational learning are influenced by how teachers or subordinates perceive leaders' behavior and leadership practices (Kurland et al., 2010; Schechter, 2008; Silins et al., 2002). Thus, organizational learning mechanisms will measure teachers' perception of leadership practices and the influence of these practices on the subprocesses of information interpretation, information integration, and organizational memory.

Organizational learning mechanisms also predict teachers' collective efficacy (Schechter & Qadach, 2012). Many studies describe a positive relationship between collective teacher efficacy and student achievement (Goddard et al., 2015; Tschannen-Moran & Barr, 2004). Since the research problem relates to students' underperforming in high-needs schools, the research questions use the causation between collective teacher efficacy and student achievement to investigate organizational learning. As mentioned earlier, organizational learning mechanisms are used to explore organizational learning and its connection to collective teacher efficacy in an urban inner-city school to understand the issue of low proficiency among students certified as economically disadvantaged.

Organizational learning mechanisms strongly connect to the extant literature on organizational learning. The study will use the first two factors out of the four factors that make up organizational learning mechanisms in an elementary school setting. The four factors of OLMs are a) information analysis; b) information storage, retrieval, and putting to use information; c) receiving and disseminating information; d) seeking information (Schechter, 2008). The first factor, information analysis, will measure how teachers collectively make sense of incoming information and decide how to incorporate it into school routines and procedures (Schechter, 2008). The second factor measures how information is stored, retrieved, and used in the future for collective decision-making. The first and second factors connect to the first research question: What perceptions do principals and teachers have of principal practices that enhance organizational learning? The research questions explore the phenomena of organizational learning from the perspective of the principal and teachers by focusing on leadership practices.

Furthermore, the organizational learning mechanisms framework has positive relationships with participative decision-making and collective teacher efficacy, centering on a social construction model within social relationships (Flores et al., 2012). The research question, what role does collective teacher efficacy play in influencing organizational learning, connects to the role of teachers' collective efficacy in organizational learning. Hence, organizational learning mechanisms will support measuring learning as a social process within cultural, institutional, and historical contexts (Knapp, 2008).

The Two Dimensions of Organizational Learning Mechanisms. The research will emphasize the first two dimensions of organizational learning mechanisms. Data is collected on the dimensions of a) information analysis and b) information storage, retrieval, and putting to use in-

formation. The reason for focusing on these dimensions relates to what we know from the research on organizational learning. The research suggests that organizations are skillful in acquiring information from internal and external sources and distributing it among staff (Flores et al., 2012). Information may be obtained through experiential learning (such as action research), vicariously observing other organizations' strategies, and scanning their environment (Schechter & Atarchi, 2014). Information obtained by the organization is then shared through meetings and memos, electronic mail, documents, and workflow management systems (Schechter & Atarchi, 2014). The literature indicates that schools are more successful in gathering and distributing information than analyzing and implementing knowledge to improve teaching and learning (Schechter & Atarchi, 2014). Teachers may often process information differently from what the school leaders intended (Diamond & Spillane, 2004). Teachers also need support applying the information to their instructional practices to impact student learning.

Many schools skilled in acquiring and distributing information need help interpreting and integrating knowledge. Information interpretation requires collective discussion where individuals challenge each other's viewpoints while sharing their beliefs and opinions of new initiatives (Zollo & Winter, 2002). In urban school settings, the OLM dimension of analyzing information and storing-retrieving-putting to use information is critical as they mediate teachers' sense of collective efficacy and the environmental uncertainty in urban schools (Schechter & Qadach, 2012). While analyzing the information dimension of OLM, the information is interpreted as school staff engaging in collective sense-making of the incoming information (Schechter & Atarchi, 2014). For example, teachers may collaborate to make sense of student work collected for formative assessment. While during the dimension of storing-retrieving-putting to use information, teachers may use the student data to determine the next steps to improve learning for all students

(Schechter, 2008). Thus, school staff collectively decide what and how the analyzed information will be integrated into the school routines. However, schools need help making sense of the information and integrating it into its schema (Higgins et al., 2012). Consequently, the schools become inefficient in retrieving the information stored within the school to use it to make decisions to improve teaching and learning. One of the key elements in the successful processing of information is social relationships (Argote et al., 2003). Social relationships ensure that the school members interact with each other to collectively make sense of the information and feel safe and comfortable to challenge and question diverse viewpoints during information interpretation and integration.

Research Design

The study employs the qualitative method of inquiry employing phenomenology research design to explore the impact of principals' and teachers' perceptions of principal practices on organizational learning. Willis (2007) explains that phenomenologists accept human experiences as perceptions of a phenomenon. Interpretive phenomenology believes that people share experiences within the contexts of culture, language, and practice (Wojnar & Swanson, 2007). The research questions attend to the perceptions of the participants who are directly experiencing organizational learning processes. Through participants' experiences, the research attempts to capture how information is interpreted, integrated, and applied while noticing social interactions that facilitate organizational learning. The data collection listens for participant experiences related to social interactions (community of practitioners) and instances of participants making sense of information (connecting to their prior experiences) (Higgins et al., 2012). Thus, hermeneutic interpretive phenomenology turns out to be the best fit for my study. Data is collected and interpreted

about the participants' experiences from diverse perspectives on the phenomena of organizational learning.

The phenomenological study describes the phenomena of organizational learning from the participants' perspectives, capturing their lived experiences (Groenewald, 2004; Picho, 2013). During the phenomenological analysis, the study examines individual participant responses to grasp the meaning and essence of their lived experiences. My personal conception of organizational learning and my presuppositions and beliefs about learning will likely influence the research (Groenewald, 2004). Ultimately, the research study captures the essence of the phenomena of organizational learning with a sample size of fewer than ten participants (Starks & Trinidad, 2007).

Sample

This study employs purposive criterion sampling to select the research site and the participants. According to Groenewald (2004), purposive criterion sampling, a non-probability sampling technique, identifies the primary participants for the study. Hycner (1999) maintains that the phenomena dictate the type of sampling method for selecting sites and participants in the study. Moreover, the sampling method serves the research purpose (Groenewald, 2004). After Georgia State University's Institutional Review Board (IRB) approved my study, I approached the school district's Office of Research & Evaluation department to get approval to conduct the study. I submitted the participant recruitment email, interview protocol, and a sample consent form along with the district's application form. The Office of Research & Evaluation permitted me to connect with seven schools to seek the school principal's approval to conduct the study. I

emailed the seven school principals and heard back from two principals. The two schools became the research sites for me to study organizational learning. The following section details the criteria I used to select the school sites for the study.

Site Selection

This study was conducted in two elementary school sites, Rank Elementary and Pitt Elementary. A total of eight participants from the two schools shared their perspectives on leadership practices related to the phenomena of organizational learning. Over the past two to three years, the two schools have changed their structures, resources, and practices to build teachers' capacity to implement effective instructional strategies. The purposive criterion sampling method used for the schools fulfills the following conditions.

1. The schools have over 70% of their students certified as economically disadvantaged.
2. The schools are actively implementing changes in their structure and practices to improve student learning.

The school sites are in a large urban inner-city school district in the southeast region of the United States. The school district has a large percentage of its students certified as having economic disadvantages. The district's strategic plan indicates that many of the schools are implementing practices to enhance student learning, thus serving the research purpose and sampling method of purposive criterion. The large district has about 60 different schools serving over 50,000 students (GOSA, 2019). About two-thirds of elementary schools have fifty to seventy percent of students from economically disadvantaged homes (GOSA, 2019). Almost half of these schools have over seventy percent of students identified as economically disadvantaged. GaDOE (2020) data on the CCRPI components of progress and closing gaps for the district show that

economically disadvantaged students have made significantly less progress and less improvement in their proficiency rates than students in other subgroups. The limited progress made by students from economically disadvantaged homes aligns with the trend noticed about this group of students across the states and the nation. About 50% of schools in the district have over 60% of their students certified as economically disadvantaged (GOSA, 2019). The two schools participating in the study have over 70% of their students certified as economically disadvantaged.

Rank and Pitt Elementary are actively implementing changes in their structures and practices to improve student learning. The five-year strategic plan of the school district indicates that the district is focused on improving student proficiency as identified by its strategic priorities (Finnigan & Daly, 2012). One of the strategic priorities of the school district is to promote academic excellence for all students by identifying and addressing student needs. Schools are encouraged to attain this strategic priority through research-based best practices and implementing initiatives that have successfully closed racial and socioeconomic achievement gaps. In addition, the two schools are implementing high-leverage instructional strategies like using quality curriculum tasks and materials, effective teaching strategies to develop conceptual understanding, scaffolding support, active student engagement, and technology integration (McCleskey et al., 2017).

The principals of Rank and Pitt Elementary participate in professional learning focused on improving student learning (Quint et al., 2007) and use a variety of data to enhance and advance instruction (Cavalluzzo et al., 2013). Opportunities for professional learning among teachers increase when principals are involved in developing their knowledge of effective instruction. Teachers' engagement in improving instructional quality, in turn, increases student achievement (Quint et al., 2007). There is also evidence that paying attention to data capturing the quality of teaching practices and teachers' self-efficacy improves student achievement (Kane et al., 2011).

Browsing through the schools' web pages indicates that the two schools have initiatives to improve instructional effectiveness. Additionally, the schools put in the effort to get certified in enhancing instructional rigor through International Baccalaureate and STEM certifications. Social media platforms like Facebook, YouTube, and Twitter provided another avenue for gathering data on instructional events during and after school. Social media tools make lovely communication tools. They allow once-invisible communication within an organization visible for external interests (Leonardi, 2014). Social messages from both the schools posted on Facebook, Twitter and YouTube gave information regarding actions happening in connection to teaching and learning.

A social media platform such as Twitter, with its 280-character limit, has users convey direct and relevant information on a topic. The schools used Twitter to communicate big and small events that were happening on a daily basis. Social media posts highlight events related to professional learning around lesson planning; students engaged in hands-on learning; staff reflecting and planning to create a culturally responsive learning environment; students taking on a reading challenge, and many more such events. The Twitter handle for Rank and Pitt Elementary gave easy access to the timestamped data on the instructional events being implemented, which was useful for collecting implementation patterns (Gruber et al., 2015). Once the schools were identified, the next step was to select participants from the two schools. An instructional coach and two teachers were selected from each school, along with the principal. Four participants from each school made up a total of eight participants interviewed for the study.

Participant Selection

Purposive criterion sampling is used to select the eight participants for the study. Creswell (1998) recommends long interviews with up to ten participants for a phenomenological

study, and Groenewald (2004) advocated participant numbers of two to ten as adequate for reaching saturation. A total of eight participants performing different roles and responsibilities were chosen from two elementary schools to get different perspectives on leadership practices. The selected participants came from the leadership and teacher groups in a K-12 public school district. Thus, four leaders and four teachers made up the sample size of eight. Table 2 shows their current role, years of experience, and the various roles each participant has previously held.

Table 2:

Participant Profile

Participants	Role	Elementary School	Years in Education	Other roles previously held
Dr. Carly Phil	Principal	Rank	35	Elementary and middle school teacher, school counselor
Ms. Brenda Grady	Principal	Pitt	18	Elementary and middle school teacher, technology specialist, assistant principal
Ms. AngLee Park	Instructional Coach	Rank	17	Elementary teacher, reading specialist
Ms. Reia Gray	Instructional Coach	Pitt	21	Elementary and middle school teacher
Ms. Coco Ray	Teacher	Rank	4	Elementary teacher
Ms. Leah Finn	Teacher	Rank	13	Elementary teacher, STEM teacher
Ms. Rae Glass	Teacher	Pitt	31	Elementary teacher, gifted teacher, grade-level chair
Ms. Anita Wicks	Teacher	Pitt	7	Elementary teacher, grade-level chair

Leader Selection. The two schools' principals and instructional coaches represent the participants with leadership roles. The following criteria are applied to the participants from the leadership group.

1. The participants give importance to building schoolwide capacity by creating structures and practices that enhance staff and student learning.
2. The participants are charged with planning, facilitating, monitoring, or reflecting on the implementation success of new practices that enhance student learning.

Participants are purposely selected for experiences related to organizational learning phenomena, either as teachers or instructional leaders (Stark & Trinidad, 2007; Groenewald, 2004). Identifying schools within the district where principals implement highly effective practices to improve teacher and student capacity is used to select leaders. Such leaders build schoolwide capacity through professional learning to implement high-quality teaching and learning (Heck & Hallinger, 2009; Mulford & Silins, 2003), provide psychologically safe space to their staff, and take on a learner attitude themselves are desirable (Higgins et al., 2012). In addition, leaders who encourage teachers to participate in decision-making, have high expectations from their staff and plan for high-quality professional learning that meets the needs of their staff will be suitable (Ylimaki, 2007). The principals of the two schools, Rank and Pitt Elementary, embody the criteria of creating structures and practices that allow for student and teacher learning by using data to monitor the success of different initiatives they are pursuing.

Research on school improvement emphasizes teachers' involvement in decision-making, schools partnering with families and communities, and leaders providing academic support to struggling students (Akiba & Liand, 2016; Felner et al., 2008; Flores et al., 2012; Louis & Murphy, 2016). The school leaders of the study site value the district's key strategic priorities of fostering academic excellence to close socioeconomic achievement gaps, building a culture of student support through inclusiveness and collaboration, and partnering with families and communities to seek school support. The district's five-year strategic plan is committed to addressing the

learning gap experienced by marginalized students by developing goals, priorities, and strategies to achieve its vision of becoming a high-performing school district.

The second criteria identify leaders who employ an effective team that plans, implements, and monitors practices to improve student learning. An effective leadership team uses distributive leadership and participative decision-making by engaging in intellectual stimulation and self-reflection (Mulford & Silins, 2003). Kurland et al. (2010) state that when leaders and staff collaboratively create their school's vision, they are motivated to engage in learning. School leaders articulating a clear and comprehensible vision to their staff and engaging in community practices are highly desirable (Leithwood et al., 1998). The school leaders in the study employ shared decision-making with their team and take steps to ensure that their team members have the opportunity to reach their own goals. The following section talks about the criteria used to select teacher participants.

Teacher Selection. The principal recommended the teacher participants for each school. Recommended teachers were known to take ownership of implementing new initiatives the principal promotes. In qualitative research, Patton (2015) explains that selecting participants that provide rich information and insightful, in-depth understanding of their experiences related to organizational learning is powerful. Gentles et al. (2015) further clarify that purposive sampling specifies that participants have knowledge of the practices implemented to improve the school and are verbally eloquent in describing their experiences. Teachers in the study were selected as they are articulate enough to give rich details of their experiences (Willig, 2007). The four teacher participants come from different grade levels, teaching different content areas, and have specialized roles such as STEM teacher, gifted teacher, or grade-level chair. They bring diverse

perspectives to their narration as they engage in organizational learning. The following criteria establish the selection of classroom teachers for collecting data.

- The teachers actively participate in the leadership team's professional learning initiatives to improve student learning.
- The teachers work collaboratively with their peers to build their capacity.

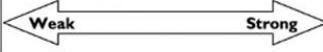
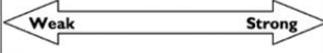
The first criterion for teacher selection is participating in professional learning on effective instructional strategies. High-leverage instructional strategies such as explicit articulation of learning goals, students working in teams, and students building their skills in self-assessment are a few strategies known to have a high effect size (Douglas et al., 2016). Another factor supporting the first criterion for teacher selection is teacher self-efficacy. Teachers who believe they can accomplish a task are motivated to embrace new learning that benefits students (Thoonen et al., 2011). Another influencer on positive student outcomes relates to students being challenged and held to high expectations and students' perception of the teacher's ability to deliver quality instruction (Mulford & Silins, 2003). Therefore, the school leaders recommended teachers who meet the above criteria concerning taking initiatives to improve student learning.

Felner et al. (2008) offer that when teachers collaborate in teams to implement effective instruction, they collectively improve student achievement. Collaborating and discussing instructional issues and solutions that teachers encounter build strong relationships that positively influence student achievement (Akiba & Liand, 2016). Teachers who work collaboratively to build collective efficacy invariably improve student achievement (Goddard et al., 2015; Tschannen-Moran & Barr, 2004). Principals were given a framework for assessing teacher collaboration to identify teachers who meet the criteria of the framework. The framework presents evidence for strong

and weak implementation of key principles related to time, content, leadership and support, and structure related to teacher collaboration (National Center for Time & Learning, 2017).

Figure 1

Framework For Assessing Teacher Collaboration

	Key Principles	Evidence of Strong Implementation	Evidence of Weak Implementation	Assessment
Time	Sufficient time is provided for teachers to discuss student learning needs and share, review, and provide feedback on instructional practices that address these needs	<ul style="list-style-type: none"> Master schedule thoughtfully designed to provide targeted opportunities for collaboration amongst teachers Collaboration meetings are at least 45 minutes long Collaboration meetings are sacred, uninterrupted, and start on time 	<ul style="list-style-type: none"> Teacher schedules are not aligned to allow for regular meetings Meetings are sporadic and less than 45 minutes long Collaboration meetings are often skipped, interrupted or otherwise not taken seriously 	 <p>Notes:</p>
Content	Collaboration meetings are a mechanism for teachers to improve instruction and build expertise	<ul style="list-style-type: none"> Team members strategize and discuss effective instructional practices and brainstorm ways to refine practice Student-level data is used to drive collaboration and action Team members routinely analyze student work and teacher assignments to gauge instructional effectiveness Team members observe and learn from model lessons 	<ul style="list-style-type: none"> No common instructional practices are identified to drive collaboration Student-level data is rarely reviewed Discussion of student behavior management, logistics, or school "housekeeping" issues take center stage 	 <p>Notes:</p>
Leadership and Support	District and school leadership see collaboration as primary vehicle for improving instruction and student performance	<ul style="list-style-type: none"> Administrators and coaches actively participate in and support collaboration meetings, providing guidance and feedback as necessary Principal, other school leaders and teachers share common understanding of what collaboration means and entails Teams are provided with the necessary material support, training, and assistance to help collaborative meetings succeed 	<ul style="list-style-type: none"> Principals and other school leaders have little involvement in meetings or follow-up Members do not exhibit common understanding of purpose of collaborative teams Teams do not have access to reference materials, consultants, etc. needed to build expertise or collaborative skills 	 <p>Notes:</p>
Structure	Collaboration meetings are part of a coherent school improvement plan and are structured with clearly mapped goals and objectives	<ul style="list-style-type: none"> Thought is given to who should comprise each team, offering opportunities for vertical and horizontal teaming when possible All teams exhibit coherence in their focus on the same issues and content connected to instructional improvement Teams have established structured operating principles with well-defined roles and responsibilities Effective meeting management strategies (e.g. agendas, minutes, action items, etc.) are routinely used Teams report progress publicly by distributing minutes/agendas 	<ul style="list-style-type: none"> Teams are hastily or haphazardly formed with insufficient thought given to whom should participate There is no coherent plan for what teachers are trying to accomplish Meetings are unstructured, with ill- or undefined roles for participants and lacking established norms for participation 	 <p>Notes:</p>

The framework aligns with the study's intentions for collaboration to provide structure and evidence of practice related to improving instructional practices. The framework for assessing teacher collaboration is presented in Figure 1. The school principal in this study act as gatekeepers, participants who have formal or informal authority to give access to a site (Neuman,

2000). In contrast, the teachers in this study are the key insiders who are recommended by gatekeepers and are cordial to researchers (Neuman, 2000).

Data Collection

The data was primarily collected as semi-structured interviews with the eight participants to understand the phenomena of organizational learning. In addition, I looked at the school website to note the school vision and mission along with the school improvement plans to gather any additional data. The interview data provided rich, diverse perspectives based on the participants' experiences. Interpretive phenomenology looks for clarity and details about participants' lived experiences of a phenomenon (Stark & Trinidad, 2007). Under a phenomenological study, researchers are reluctant to provide specific steps not to curtail participants' tendency to express their thoughts about a situation (Hycner, 1999). Therefore, the preferred format for the interview questions is semi-structured. The interview technique allows the researcher to ask follow-up questions based on the interviewee's responses, thereby maintaining the integrity of the phenomenology study (Hycner, 1999). However, as a novice researcher conducting a phenomenological study, I had some guidelines to help me stay on course with the interview questions. Therefore, I conducted semi-structured individual interviews by following guidelines by predetermining some open-ended interview questions that connect to the research questions (Groenewald, 2004). Next, the details of the data sources used for data collection follow.

First, a semi-structured in-depth phenomenological interview with the participants was conducted. This interview was conducted once with each of the participants. The first two interview questions asked about participants' background experience and the significant changes they have experienced in the last two years. The following four questions asked about the

processes of organizational learning. The questions briefly asked how the information related to teaching and learning is acquired and distributed, and the next set of questions tried to understand ways the staff made sense of the information that was distributed. Where was the information stored, and when and how was the stored information retrieved and used to make decisions? Saturation of data collection with interviewees was reached when participants did not offer any new views on the topic (Groenewald, 2004). The latter part of the interview questions was asked to gather participant experiences regarding mastery learning, learning from peers, and if they felt hopeful and excited about implementing structures and practices that benefitted student achievement. A phenomenological study captures a detailed description of the organizational learning phenomena and the collective teacher efficacy experienced by the participants in their school setting (Groenewald, 2004).

The interviews with each participant used Seidman's three-pronged approach (Picho, 2016). Data collection at the beginning of the interview asked about practices schools were implementing to improve teaching and learning. These questions interweaved the processes of organizational learning. The latter part of the interview focused on the three sources of collective teacher efficacy, mastery learning, vicarious learning, and effective source (Picho, 2013). The interviews were scheduled for 60 minutes resulting in about eight hours of interview recordings. Most of the interviews were conducted over the phone, with few that used video conferencing to gather data. All interviews were recorded on the phone using the voice memo app. All the interviews were transcribed verbatim to a document and shared with the participants for their review (trustworthiness). All participants accepted the transcript shared with them.

The interview questions ask participants to share their lived experiences on principal practices that they believe help implement the subprocesses of organizational learning —

information interpretation, information integration, and organizational memory. They are also asked to share their experiences with collective efficacy practices to improve student outcomes. The interview questions gave insight into the participants' experiences on how information was interpreted, integrated, stored, and retrieved for decision-making. The interview questions were open-ended to gather participants' lived experiences based on how they interpreted the questions.

The interview questions formed from the organizational learning mechanisms framework relate to interpreting, integrating, and applying information related to the subprocesses of organizational learning. The opening question will have an experiential focus (Willig, 2007). Then, further open-ended questions may be asked so the participants can elaborate on their thinking (Willig, 2007; Chan et al., 2013). Questions on participants' reactions to how they analyze and apply relevant information in their work were central to the organizational learning mechanisms framework. Their responses revealed positive and negative experiences analyzing and applying the information for decision-making. Within the prepared interview guide, I asked open-ended questions based on the participant's responses to the three subprocesses of organizational learning that connect to the organizational learning mechanisms (Chan et al., 2013). In addition, I asked probing questions outside of the predetermined ones when further clarification or details became necessary (Stark & Trinidad, 2007). During the interview, I took every opportunity to explore the pauses during the participants' responses to dig deeper into those pauses. In addition, I asked for examples and details when participants shared information that needed more clarification. The interview questions are located in Appendix B.

A reflexive journal was maintained throughout the research process to capture additional details to validate information collected from interviews and documentation. Journaling "pro-

motes an internal dialogue for analyzing and understanding important issues in the research project" (Smith, 1999, p. 360). It also cultivates self-awareness of one's beliefs, feelings, and values to support the hermeneutic analysis of data (Smith, 1999). Finally, it is essential to address the ethical consideration that needs to be put in place to collect the participants' expressions and keep personal biases aside. The following section discusses the data analysis method used to interpret the data collected for this study.

Data Analysis

The study is of an interpretive phenomenological nature, and therefore, the data analysis approach mirrored the attempts to make sense of the phenomena of organizational learning. The interpretive phenomenological analysis (IPA) method was used to make sense of the participant's experiences, preserving both the complexity and content shared (Wojnar & Swanson, 2007). IPA as a research analysis method was appropriate for the interpretive phenomenology study as it narrates detailed descriptions of human experiences and values individual differences in experiences (Wojnar & Swanson, 2007). IPA was the most suitable approach as the participants responded with rich, detailed, first-person accounts of their experiences (Edward, 2018). This analysis method used flexible guidelines to match the research purpose. However, it started with a set of common principles and was more than a thematic analysis to form a multi-directional, fluid, and iterative analysis. The IPA research analysis method generated main (superordinate) themes from sub-themes (sub-ordinate themes) (Rizwan, 2015).

My study aimed to understand the phenomena of organizational learning by examining the experiences of teachers and leaders in implementing organizational learning and its influence on collective teacher efficacy. Therefore, IPA proved to be more appropriate than the descriptive phenomenology approach. Furthermore, it helped with understanding how teachers make sense

of the information that is shared to improve organizational learning in a school. What follows is a brief description of the data analysis stages for an interpretive phenomenology where the transcripts for each interview were analyzed individually to collect individual and shared human experiences (Wojnar & Swanson, 2007).

Stages of IPA Analysis

The IPA analysis consisted of stages of analysis that resulted in two major themes and seven subthemes aligned with the two major themes (Edward, 2018). First, I listened to each interview recording to transcribe them carefully to capture every word and phrase that was clear and audible. The stages below explain the process used for data analysis using the IPA, once the interviews were transcribed (Edward, 2018). I used NVivo software to assist with the data analysis process. All eight transcripts were gathered under the folder named "Files." Then, each file was read individually to analyze ideas to capture the participants' lived experiences. The next steps follow the IPA process to analyze and synthesize ideas to form main themes and sub-themes (Edward, 2018).

1. Reading and note-taking: Each transcript is read carefully and annotated to capture the tone and expression used by the participant and my thoughts and reflections about the participants' descriptions to preserve the distinct characteristics each participant articulated.
2. Developing emergent themes: During the second read, each significant idea was coded as a concise phrase to indicate a code. The codes reflect the essence of what was unearthed from the transcript. Each of the transcripts was read a second time to develop codes in the form of a concise phrase.

3. Developing sub-themes for each interview: Within each transcript, the codes were collected informally to form sub-themes that describe a topic or concept. Emphasis was given to approaching each transcript by capturing the unique perspective to ensure its individuality (Edward, 2018).
4. Developing sub-themes from all codes: Initially, 206 codes emerged from all eight interview transcripts that were analyzed by reading and re-reading. Then, the process of combining codes related to a common topic began. These formed the first-level organization of themes. Appendix C shows the codes that were gathered and connected to form sub-themes. Concepts formed as themes cluster together and hold "hierarchical relationships with one another" (Edward, 2018, p.78). There were sixteen sub-themes formed during the process. For example, shifting culture was a sub-theme formed by collecting themes such as transforming culture to student-centered, leaders asking for explanations about the practice to foster a learning environment, and collegial environment to promote staff to be vulnerable and seek support from the experts.
5. Developing main themes: Several sub-themes were collected to form the main themes. For instance, sub-themes focused on collaboration between teachers, forging a collaborative partnership between district personnel and parents, and collaboration between new and experienced teachers led to creating the main theme, connecting collaboration, and learning through instructional coaching.
6. Table of themes and sub-themes: A visual display of sub-themes and main themes was developed. When sub-themes and main themes are supported by data extract or quotes

from the participants, it provides an authentic voice by telling individuals' lived experiences. I went back to the sub-themes and main themes to review and modify themes by consulting the original transcript (Edward, 2018).

7. Writing up the research: In this final stage, in chapter 4, the table of themes is described as findings and explained using illustrations in narrative writing (Edward, 2018). Again, the researcher's interpretation may seek into the narrative description.

A final statement on the description of the phenomena of organizational learning was formed by collecting the sub-themes and themes revealed by following the different stages of the IPA.

Expectations

The research questions asked participants to share their lived experiences on leadership practices that they believe helped implement the subprocesses of organizational learning — information interpretation, information integration, and the application of new information. They were also asked to share their experiences with collective efficacy practices to improve teaching and learning. Data was primarily collected from the semi-structured interviews with eight participants to answer the research questions. A reflexive journal noted my impressions and feelings during scheduling, conducting, and reflecting on the interviews. The reflexive journal captured the details of participants' non-verbal communication using tone, attitude, and feelings. Also noted were the pauses, confidence level, and time crunch they felt when interviews were conducted during short planning time or between two meetings. Following ethical considerations were implemented to ensure that participants' responses reflected their own thinking as far as possible without bringing my biases into the data.

Reflexive Practices

Daily reflection in the form of field notes or memos was used to capture what my senses observed and my reflective thoughts on the interview to serve "as a faithful witness" (Stark & Trinidad, 2007, p.1376). Awareness of personal perspectives, beliefs, and preconceived notions did benefit the data collection process. My notes listed my judgmental thoughts when I heard the passion in the participants' voices. I also included the non-verbal signs, body language, and descriptions of surroundings during data collection (Roberts, 2010). It was not easy at first to set aside assumptions and to listen with an open mind to participants' experiences during the interview (called bracketing) (Groenewald, 2004). However, when the conversations started, I could listen and ask probing questions when the interviewee paused or mentioned COVID-19 in their response. Asking for details and examples helped capture participants' thinking regarding their experiences related to the information they were processing. During the analysis process, I consulted with peers and mentors to reflect on how my thinking about data has evolved (Stark & Trinidad, 2007). I consulted with a student who had graduated a year earlier, sharing my thoughts about the data collection process. In addition, I could discuss the data collection process with two other peers in the same phase as me in their dissertation. Talking about participants' responses and my thinking helped me bring my biases to the forefront.

Informed Consent

The participants were informed of potential risks, benefits, and rights using informed consent during the research. The form explained the meaning of the terms used in the study, the data collection process, and how the data will be used to answer the research questions (Groenewald, 2004). Before the interview, I asked the participants' permission to record the interview. The participants were assured that all data was stored securely with password protection in an online storage solution, in an external drive, and on my laptop's hard disk. They knew who will

have access to the data, and that the data will be deleted after three years from the study's completion date. Additionally, the participants were informed that they could withdraw from this study at any time without giving any reason.

Dependability and Validity

The dependability of a research process improves when readers can examine the research process to see if it is logical, traceable, and documented (Lincoln & Guba, 1985). I have explained in detail the procedures I used to collect and analyze the data. The information in appendices C, D, and E show the process of coding used to form sub-themes and main themes. During the interview, I asked for examples and details to understand the participants better without leading them on. I also asked open-ended questions to get the conversation started and into the depth of the ideas being shared. Sometimes, I asked clarifying questions to elicit more details (dependability).

Although the interpretive study allows for the perspectives to be part of the phenomena, the interview process requires participants to reflect on their experiences. I was aware of my own thinking as participants shared their experiences because of the years I have spent learning about pedagogy and andragogy, including the knowledge I collected during the literature review. Using a reflexive journal, as mentioned earlier, helped me write down my thoughts, feelings, and perceptions, so I could re-examine my thinking when issues emerged (Chan et al., 2013). Chan et al. (2013) maintain that reflexivity will help with bracketing, intentional action of setting aside what we already know about the phenomena. I bracketed my thinking to demonstrate validity before data collection and analysis.

Credibility and Trustworthiness

I established credibility in several ways. First, research transparency was achieved by confirming the accuracy of interview transcripts with the participants. After conducting an interview, I transcribed it and sent it to the participants for their review. Additionally, I engaged in member-checking with the participants on the findings and interpretations of data (Lincoln & Guba, 1985). Third, I asked the participants to check for accuracy in interpreting and summarizing interview ideas. Continuing the idea of consulting with peers and mentors, I requested them to check the logic of my arguments and the connections I draw between the data and the emerging themes. The act of co-creation on the interpretation to build shared understandings leads to credibility and trustworthiness (Lincoln & Guba, 1985). Fourth, I described the data interpretation collected from multiple sources (Lincoln & Guba, 1985). Finally, I checked how language, words, and phrases were used to make sincere, convincing, and trustworthy explanations (Starks & Trinidad, 2007). Reflexive journaling will highlight the presumptions and biases that I will bring to the study and, at the same time, gain trust by being open about my biases.

Confirmability and Transferability

Ensuring that the information is credible and dependable will improve the confirmability of the data to a certain extent (Lincoln & Guba, 1985). Lincoln and Guba (1985) assert that providing a rationale for the theoretical framework, the type of methodology, or the data-analysis method will improve confirmability (Lincoln & Guba, 1985). I provided a clear, detailed explanation of how the framework of organizational learning mechanisms was selected to support the exploration of the research questions and how the organizational learning mechanisms connect to the data analysis method, interpretive phenomenological analysis (IPA). The transferability of a study refers to the extent to which research can be generalized. Alternatively, its procedures

transferred to other similar contexts (Lincoln & Guba, 1985). A thick description and bracketing will lay out all the research details in qualitative research, including assumptions, decisions, biases, preconceived notions, and desire for specific research outcomes. All the necessary details for other researchers to dissect and analyze are available.

Conclusion

The qualitative research method applied to investigate the research questions use the conceptual framework of organizational learning mechanisms to explore the perceptions of principals and teachers about the practices that enhance organizational learning and influence collective teacher efficacy. Data collected by semi-structured interviews were analyzed carefully to find sub-themes and main themes highlighting the practices promoting organizational learning. Throughout the process, attention was paid to collecting participants' lived experiences on interpreting, integrating, storing, and retrieving information to make sound decisions that benefitted teaching and learning. During the research design phase, several ethical considerations were put in place to be aware of my biases and to highlight participants' thinking as far as possible.

4 RESULTS

Introduction

The study aimed to investigate leadership practices that influence the implementation of organizational learning within a public school system. The focus on organizational learning came about due to overwhelming evidence that students from economically disadvantaged homes achieve lower academic proficiency and are considerably behind their peers who are not economically disadvantaged (GOSA, 2022; NAEP, 2019; TIMSS, 2019). Following the COVID-19 Pandemic, the achievement gap between the economically disadvantaged and the not-economically disadvantaged students has widened. For example, the math proficiency rate for economically disadvantaged elementary students dropped to 13% in 2021-22 from 27% in 2018-19 (GOSA, 2022). This drop is far less for students not identified as economically disadvantaged. Their proficiency level dropped to 71% from 81% for the same period (GOSA, 2022). A similar trend is noticed for high school Algebra I proficiency rate. The proficiency rate for students identified as economically disadvantaged dropped to 7% in 2021-22 from 14% in 2018-19. (GOSA, 2022). The study was guided by the two research questions to understand the perspectives of principals and teachers as they engage in organizational learning:

RQ1. What perceptions do principals and teachers have of principal practices that enhance organizational learning?

RQ2. What role does collective teacher efficacy play in influencing organizational learning?

To improve schools' academic performance, researchers Higgins et al. (2012) and Thoonen et al. (2012) identified several leadership practices necessary for improving different systems within struggling schools. Schools should consider leadership practices such as creating a school

vision with the staff, involving teachers in instructional decision-making, and leaders being open to learning to lead school improvement efforts (Higgins et al., 2012 & Thoonen et al., 2012). The following sections in this chapter will present the findings from the analyses of eight interviews conducted in two elementary schools. First, the findings are represented as themes and sub-themes, as depicted in Figure 2. Then, each theme and sub-themes are described in detail from the perspectives of principals and teachers. These details highlight the structures and practice the participants found to promote organizational learning. The chapter ends with a summary of the findings and some additional ideas that emerged about the impact of COVID-19 on students and families.

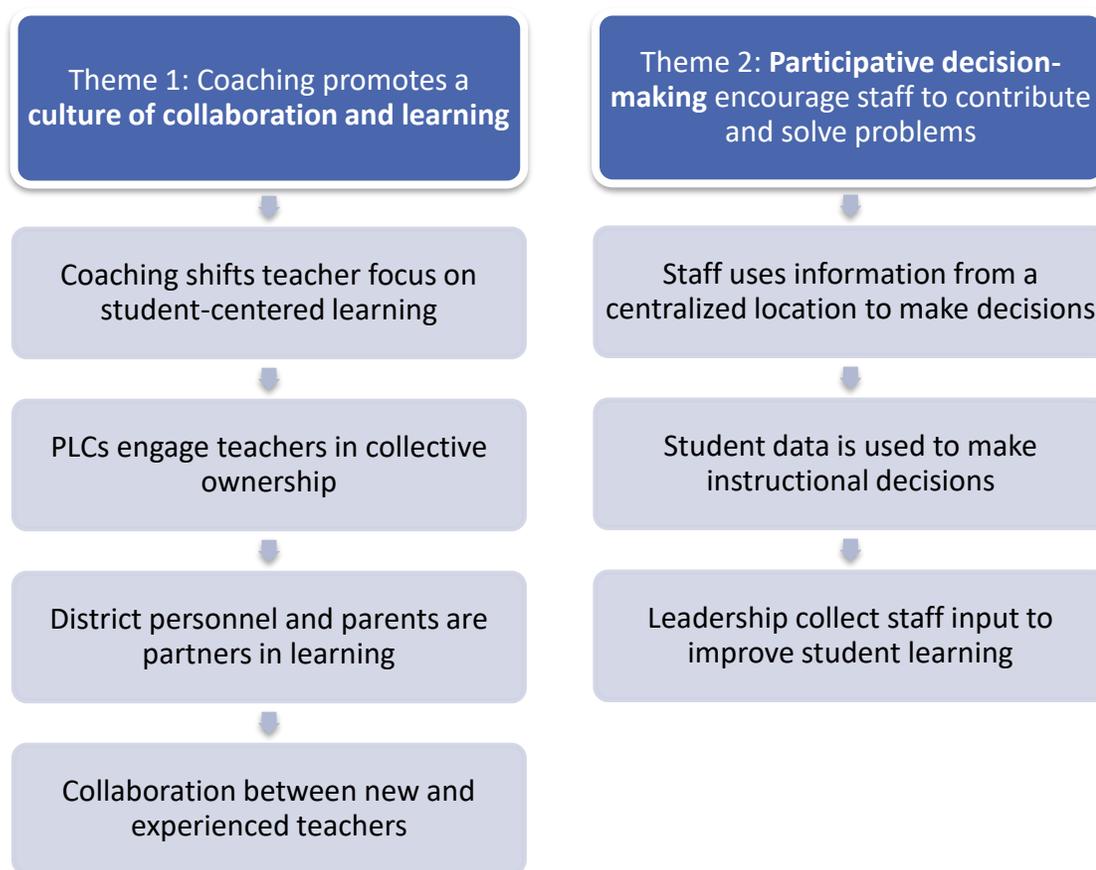
Findings

Two major themes emerged from the data analysis of the eight interviews. I interviewed two principals, two instructional coaches, and four teachers. The results from these interviews emerged in the form of two major themes. The first major theme is that coaching promotes a culture of collaboration and learning. Principals provide structures and resources for fostering collaborative culture by engaging teachers in student-centered learning. The collaboration also extends to district personnel who clarify and support teachers and instructional coaches. In addition, the school invites parents to participate in their child's learning journey. The second major theme is that principals' participative decision-making encourages staff to contribute and solve problems. Participative decision-making ensures that staff has access to relevant information on instructional strategies and student data. Leaders and teachers jointly make decisions regarding issues using data and information accessible to all. In addition to the two major themes, the participants shared information related to the impact COVID-19 had on their daily work schedule.

Figure 2 lists the two major themes and sub-themes that emerged and synthesized to form the two main themes.

Figure 2

Findings Shown as Themes and Sub-Themes



Theme 1: Coaching Promotes A Culture of Collaboration and Learning

In this theme, principals at both schools intentionally used coaching to create collaborative structures and implemented practices so all stakeholders could grow as learners. This section describes the first major theme and the supporting sub-themes related to instructional coaching. It explains how a collaborative culture engages all stakeholders to adorn a learner's attitude. When the participants' data were analyzed, it became clear that the schools needed collaboration and learning structures for all stakeholders. Collaboration and learning became important as

schools transformed to student-centered learning, where 21st-century skills such as critical thinking, problem-solving, and working collaboratively with peers became immanent as students bridged learning gaps to be ready for grade-level instruction.

Dr. Phil, principal at Rank Elementary, and Ms. Grady, principal at Pitt Elementary, described their focus on student-centered learning and developing 21st-century skills. Dr. Phil emphasized that students choose what and how they want to learn. At the same time, teachers provide engaging instruction to their students. For example, she says students "want to talk to each other, so collaboration, communication, problem-solving, and critical thinking skills are necessary. You cannot get that by listening to lectures." Ms. Grady elaborates that in her school, the students are required to abide by the International Baccalaureate (IB) learner profile attributes that support the development of 21st-century skills related to thinking & research skills, social & communication skills, and self-management skills. These skills ensure that students develop problem-solving and reflection skills, participate in class, and collaborate with others while setting learning goals and learning time and task management.

Sub-theme 1: Coaching Shifts Teacher Focus on Student-Centered Learning. The principals established student-centered learning culture by utilizing the coaching model to build teachers' instructional capacity. Each school has two instructional coaches, each with specialized skills in coaching either English language arts or mathematics to support teachers in implementing effective instructional strategies. The instructional coaches are instrumental in transferring principals' instructional vision by communicating and supporting teachers through professional learning communities to improve student learning. The principals agreed that implementing change to enhance student learning takes time. Moreover, the work to transform schools with students from

economically disadvantaged homes requires a concentrated and collaborative effort. They encourage a collegial environment in their schools so teachers feel safe being vulnerable when asking for support from coaches and are comfortable seeking peer support. They have transformed into student-centered learning by creating a mindset among teachers who now believe collaborating and learning together is essential in achieving their instructional goals. Dr. Phil, the principal at Rank Elementary herself, is not afraid to admit when she does not understand something. She explains:

We believe that together we are stronger, so no one is an island in themselves, including me. I am a lead learner, but I do not know everything. I always model that by asking teachers, when they share practice, to explain it to me because I do not understand. I foster a collegial environment by saying, let us do this together.

Ms. Grady, Pitt Elementary's principal, notices that teachers are more comfortable now asking for support. She states that teachers are now taking the initiative in seeking support and are vulnerable, promoting a learning culture. A culture where all are learning and need one another to improve the craft of teaching continuously. Ms. Park, the instructional coach at Rank, describes coaching as requiring persuasion and negotiation skills. She works to shift teacher practices, especially when some grade-level teams are more willing and happier about working together than others. She is ready to meet the teachers in the middle, giving in to their ideas when appropriate and, at the same time, stating the non-negotiables clearly. As a first-year coach, she is beginning to realize that coaching involves shifting mindsets. In the beginning, she heard teachers say, "the kids cannot," Now, as they work together through a coaching cycle, teachers can "get to that place where they know they can, and everything will be all right if we just keep pushing forward."

Ms. Gray, the instructional coach from Pitt Elementary, describes her coaching cycle as more about teachers building their instructional capacity on lesson internalization. During the

PLCs, she asks coaching questions to lead teachers through lesson internalization, thinking through their lessons, and planning for students' misconceptions and learning gaps. She finds lesson internalization a perfect setting for coaching and building teachers' content knowledge. When having feedback conversations, Ms. Gray and teachers collaboratively look at the student data to plan instructional next steps. While planning instructional next steps, the coach uses the classroom observation data to determine the focus for teachers' growth as they move along their coaching cycle. Ms. Wicks, the teacher who collaborates with Ms. Gray, confirms that her team will seek out Ms. Gray when they need clarification and support implementing the planned lesson. She validates that her coach, Ms. Gray, chunks information that helps them understand concepts better, where they can plan lessons considering student misconceptions or learning gaps students show in their assessment data.

The sub-theme, coaching shifts teacher focus on student-centered learning, requires that principals clearly explain their vision around student-centered learning. The clarity of vision is expressed by setting expectations for PLC interactions as coaches and teachers collaborate and learn to improve their craft to ensure high-quality core instruction. Both Rank and Pitt Elementary schools value their coaches as coaches work with teachers to shift their perspectives to focus on students' strengths to lead students to grow and learn together to develop grade-level competencies.

Sub-theme 2: Professional Learning Communities Engage Teachers in Collective Ownership. Post-pandemic, when schools returned to face-to-face instruction, they scheduled a weekly 90-minute PLC time where teachers engage in lesson internalization and use student data to plan instruction. As teachers collaborated in PLCs, they started valuing the time to learn from each other as they analyzed student data to make decisions. At Pitt Elementary, Principal Grady sees

teachers discussing standards and learning targets. They determine where students are with respect to learning targets and seek input from their peers to move students along their learning progression. The instructional coach, Ms. Park from Rank Elementary, expects her teachers to come prepared for PLCs with their lessons so they can share with their peers. She is noticing teacher teams that work collaboratively engage in meaningful discussion around what instructional moves will benefit their students. Their conversations about students lead teachers to take collective ownership of all the students within their K-2 grade band. The idea of *collective ownership* is used to frame engagement (in this case, student learning) as everyone's responsibility by shifting to believing and using the language, "yes, we can," and "all our students" (Sanchez, Sell, & Theriault, 2019). Teachers became engaged in equitable practice by taking collective ownership of student learning. Teachers collaborated as they learned together to improve their efficacy and analyzed information together to make sense. For example, in lower elementary, teachers flexibly group students to attend reading groups led by various K-2 teachers to learn the skills the students need the most. The existing literature mentioned teacher collaboration planning instructional next steps based on student assessment data. However, teacher teams take collective ownership of all students by reorganizing themselves to address students' learning needs came up as one of the findings in this study.

PLCs at Pitt Elementary are a space where teachers learn from each other as they support each other model instructional strategies that successfully address student learning gaps. Another space when teachers take collective ownership is during planning days. An entire day is dedicated to teachers collaborating and planning a series of lessons responding to what their students show in formative assessments. The content teachers collectively look at the benchmark data and discuss ways to group students and the appropriate strategies to put in place to improve student

achievement. The PLC structures become a powerful learning opportunity for all teachers, novice and experienced. They get to collaborate about their craft of teaching, ask for support and feel safe making mistakes while collectively taking ownership of all students as they discuss the next steps to move them forward. The continuous improvement cycle teachers engage in begins to transfer to their students as they collaborate and work cohesively. Ms. Glass talks about how her students now collaborate and support each other as they work through their mistakes.

The sub-theme, PLCs engage teachers in collective ownership and promote a culture of collaboration and learning. Teachers in PLCs have dedicated planning time to build more robust practices by supporting each other to address their various needs to improve student learning. The instructional coaches use the dedicated planning time to address specific needs generated by classroom walks to grow teachers' capacity to build more robust teaching practices.

Sub-theme 3: District Personnel and Parents are Partners in Learning. There is more support from the district and parents as schools implement various initiatives to improve student achievement. This shift comes as principals and coaches reach out to district content experts for support once they have exhausted all their internal resources. The content specialists from the district office visit schools, observe teachers in classrooms and then have study groups with teachers to directly give them information to improve instruction and to answer any questions teachers may have as they implement district-endorsed programs. The instructional coach, Ms. Park, gives details on the extent of support they receive from the district. She elaborates that Ms. Lopez comes to support writing initiatives, Dr. Spark uses PLCs time to support ELA, reading, and writing, and Ms. Waters supports lower elementary teachers in phonemic awareness.

Dr. Phil explains that bringing district initiatives to her staff can be challenging. She intentionally embeds district initiatives into what they are already doing. Her school leadership

team has collectively decided to focus on student data, instructional expertise, and collaborative culture as the three big rocks they want to focus on this year. If a district or school initiative aligns with one of the big rocks, then they embrace it. She clarified that when the district rolled out a new intervention plan in response to COVID-19, her message to staff was that we were tweaking our current intervention program using a different platform. The district and the school leadership team would help us navigate the new platform. Another way district support trickles to schools are when the school-based instructional coaches have monthly meetings with the district content support team. During these meetings, the instructional coaches get trained on coaching conversations and ways to support teachers in achieving instructional rigor in classrooms.

The schools have a high percentage of students from low socioeconomic status and generally do not have anyone at home to help with academics and come to school with instructional gaps. In Rank Elementary, 70% of the students are in the beginning proficiency level. Dr. Phil uses the low proficiency data to convince her staff about the need for intervention blocks to bridge students' learning gaps collectively. Ms. Wicks ascertains that not all parts of the intervention program are easy to implement. The online platform guides students to work at their pace on their level based on the diagnostic score. The small group intervention is challenging when teachers need to use district promoted materials in a specific way to get the intended outcome.

An important partner in students' learning journey is the parents. Schools welcome and encourage parents to take part in school activities to make learning better for students. When Ms. Grady holds a math workshop for parents, it is not just about building parents' capacity to teach math. She wants her staff to forge connections with the parents. That way, when the parents see academic work come home, they will ensure that their child attempts to complete that work. On

the other hand, Dr. Phil invites parents to a parent center where they can create instructional resources to take home to learn with their child. She says, "We can never do it alone. It is engaging and empowering parents and helping them to understand that they, too, have a significant role."

The partnership with parents is collaborative. This partnership positively influences her students' desire to be in school. Parents love the fact that their children want to be at school, want to learn, and want to do well. Schools lean on the district to help them implement practices related to instruction and appropriate use of data to improve student learning. They also encourage parents to be part of the learning and seek their support so the children can develop a love for learning.

Sub-theme 4: Collaboration Between New and Experienced Teachers. New and experienced teachers collaborate as they share knowledge and resources and learn by visiting classrooms and giving peer feedback. It is a two-way sharing between new teachers and experienced teachers.

Experienced teachers remember being new teachers and understand that the situation is challenging for new teachers post-pandemic. So, they support new teachers by being readily available to answer questions, share resources, and invite novice teachers into their classrooms to see them in action. There are a lot of newer teachers, post-pandemic, in schools. New teachers have a group that meets regularly to check in on how they are doing. In addition, new teachers have opportunities to share effective practices they learned in their teacher training program.

Staff members at Rank Elementary have embraced a learner's attitude, including the administrative leaders and instructional coaches. Ms. Park and Ms. Finn support new teachers as they share research-based practices learned in their teacher preparation program. In addition, principals encourage their new teachers to observe teachers identified as experts in certain areas. For example, teachers watch Ms. Finn do number talks, or Mr. John uses Jamboard to engage his students at the end of the day when student engagement is very low. At Pitt Elementary, coaches

create a schedule so teachers can visit classrooms that show strengths in specific practices. Ms. Grady explains that teachers can travel to other classrooms depending on which effective teaching strategy they want to observe. Coaches create a schedule of different strategies that they have noticed worth highlighting.

Principal Grady elaborates that these strategies include "strong lesson opening, asking good questions, giving wait-time to students, modeling of concept, engaging students in independent practice, facilitating personalized learning, providing feedback to students during learning time." During the classroom visits, visiting teachers are invited to give feedback and suggestions. The power of peer observations becomes evident when teachers bring the practices from observing peers to the PLCs as they engage in "teach back" and continue refining their teaching skills. Peer learning and peer feedback are high-leverage practices that foster a true professional learning community. The next few paragraphs will elaborate on the second major theme, participative decision-making encourages staff to engage in problem-solving, along with three sub-themes that support the second theme.

Theme 2: Participative Decision Making Encourage Staff to Solve Problems

Principals share information related to instructional practices and use student data with the staff weekly. The leadership team shares information with the staff in various ways and seeks staff expertise in making decisions to solve issues that impact student learning. Leaders involve their staff in decision-making and problem-solving by sharing information to encourage creative ideas to reach organizational objectives (Panicker & Sharma, 2020). In participative or shared decision-making, principals and teachers make joint decisions knowing that shared decision-making offers several potential benefits. Somech (2005) says that apart from increasing teachers'

motivation, participative decision-making improves the quality of decisions and positively contributes to teachers' satisfaction with their professional responsibilities.

Three sub-themes support the central theme of principals engaging in participative decision-making with their staff to solve a problem affecting student learning. Sub-theme one informs that staff has access to all relevant information on effective instructional practices and resources available to make decisions. Sub-theme two refers to teachers collaboratively using student data to identify specific skills to bridge learning gaps in small-group targeted instruction. Finally, sub-theme three signifies ways principals have created structures for teachers to provide feedback so they can use teacher input to improve student learning.

Sub-theme 1: Staff Uses Information From Centralized Location to Make Decisions. Leadership ensures staff has access to relevant information on instructional practices and resources through cloud-based storage to enable staff to make sense of the shared information independently. The cloud-based shared storage platform is where all teachers have access to the folders using their professional work emails. The information shared during staff meetings and other student-related information is secured in a safe storage system. Additionally, information related to curriculum, instruction, and assessments is stored so teachers can access pertinent information from a single source. To understand the information shared through a centralized location, teachers often ask the coaches and leaders clarifying questions to make sense of that information. All staff members access information related to instruction and student data such as lesson plans, PLC protocol, curriculum, student assessment data, and attendance through Google Drive. The leadership team provides easy access to Google Drive in their email signature line. In addition, critical information from the community, district, or school is shared during the staff meetings. Information is also shared through a newsletter or GroupMe. If Ms. Grady needs to

send out time-sensitive messages, she prefers quick text so "everybody has it before they come to school."

Receiving information in time is necessary. However, teachers need time to discuss, reflect, and make sense of the received information. Ms. Ray, the elementary teacher at Rank, appreciates the planning time she has with her colleagues. She values discussing information with her grade-level team so they are "on the same page," If they cannot comprehend it fully, they go to the coaches or the principal for clarification. Ms. Park, the coach, explains that based on the feedback from teachers, the school has added a weekly schedule of upcoming events in the newsletter. This allows teachers to have all information in one place, elevating anxiety and frustration. Principals capitalize on teachers' access to information and encourage them to make decisions jointly. Ms. Wicks at Pitt Elementary prioritize information, so she is an effective teacher for her students. Ms. Grady, the principal, encourages teachers to be involved in making decisions. She trusts their classroom expertise and expects her instructional coaches to support teachers with high-leverage instruction.

At Pitt Elementary, one of the barriers to student learning has been the low attendance during and after the COVID-19 Pandemic. Ms. Grady reached out to her staff to get involved in solving the student attendance issue. The teachers have brainstormed and devised novel initiatives to address the problem of low student attendance. They have used "attendance buddies for each classroom, adults monitoring classroom attendance and providing incentives every day, sending shoutouts to parents of students who are in attendance, and celebratory activities on Fridays for students who are in attendance for the week." As a result, student attendance at Pitt has improved a lot. Last year, the attendance rate increased to 88%, and this year, the student attendance rate has risen to 94%. The shared decision-making model implemented at Pitt Elementary

to increase student attendance by involving staff in problem-solving has benefitted the student learning outcome. In addition, schools have used cloud-based storage so staff can access information such as student data, professional learning resources, and other information that might help them make decisions.

Sub-theme 2: Teachers Use Data to Make Instructional Decisions to Reduce Student Learning Gaps. At Rank Elementary, students are encouraged to set goals based on their assessment data. They use assessment data to plan how they will achieve their goals. They develop their goals and plan to achieve them, stimulating academic ownership. Students begin owning their data and taking charge of their learning. They can articulate the steps they will take to meet their learning goals. Teachers use assessment data to identify each student's specific skills to form small groups. The students in small groups get targeted instruction to help close learning gaps. Thus, the schools use student data to make instructional decisions to improve students achieve their learning goals. Seeing students improve their academic skills in benchmark assessments empowers teachers to continue to invest in targeted small-group instruction.

Along with the benchmarks, schools use daily checkpoint assessments to gather data on students' progress in skills. Which skills are getting more robust? And which skills need attention? The skills that need attention are addressed during the intervention block. Once teachers internalize lessons and implement them, considering the learning gaps, they look at the student data with their instructional coach. Then, they collectively decide the steps to address the learning gaps. Ms. Ray commented that PLC structures provide a fertile ground for data analysis. She meets with the instructional coaches to discuss student data so they can collaboratively decide the next steps. The next steps vary from reteaching content differently to challenging students to master the skills. Dr. Phil uses data and empathy to create urgency. Using data to paint and tell

stories so teachers feel non-threatening and, thus, the staff gets opportunities to understand the need to change behavior and actions. She continues, "I use a language that more or less supports teacher efficacy, and I empower them to understand their role in changing the trajectory of the students based on their daily activities."

Schools have a 90-minute ELA block where the lower elementary students learn reading from the Foundations program. Another program supports students in building their skills in comprehension and writing. In addition, a separate intervention program is used to address learning gaps. Schools have extended the day by 30 minutes to accommodate the intervention programs. During the intervention time, students work independently work on their assigned program, and then, for the other half of the time, they work in a small group with the teacher where they are doing grade-level work. The district initiative on intervention is rolled out to schools to provide differentiated and targeted support for students. The differentiated and targeted support bridge the gap for students to reach grade-level proficiency. A coordinated roll-out in classrooms ensures that interventions are implemented using the same learning targets while allowing teachers to use different ways to achieve the learning targets.

To keep initiatives clear and purposeful, the principal shares the information with the teacher leadership team, transmitting the new information to the rest of the teachers. The flow of information through the teacher leadership team ensures that "they are able to decode the information in such a way that most teachers are able to digest new information." Teachers understand that students have deficiencies, and intervention strategies help students grow throughout the year with targeted instruction. However, teachers claim that learning to use the intervention materials in a certain way poses a challenge. To mitigate the challenge, teachers attend professional learning on the intervention component offered by district personnel to ensure that they

implement the intervention strategies best. In summation, teachers during the PLCs use student data to set learning goals and identify specific skills students need to reach their learning goals. The structure of additional learning time is made available through the intervention block and a 90-minute core instruction block where students learn in small groups to bridge the learning gaps shown on their assessment data.

Sub-theme 3: Staff Gives Feedback and Input to Improve Student Learning. Leadership collects feedback from staff to identify their needs and include them in making decisions to improve student learning. Schools collect feedback from teachers in several ways. Sometimes, team leaders will share teachers' responses to information received from the administration. Other times teacher needs are gathered through classroom visits. For example, during classroom visits, it may become evident that teachers need more time to build content pedagogical knowledge. Furthermore, the leadership team may create professional learning to meet staff needs. At the same time, the coaches support teachers during instructional time. Finally, teachers can self-report and self-assess their needs to the leadership team.

The leadership team uses data to inform every decision they make. A concerted effort is made to align data decisions with the school's mission and vision. The team uses data to prioritize their effort in areas that will most improve student learning. The four data questions that guide Dr. Phil during the data talks are: What do we want students to learn and be able to do? How do we know when they know it? What do we do when they already know it? And how do we teach when they don't? When data is used to make changes and improvements, there is more trust between leaders and teachers. Ms. Grady's participative decision-making encourages teachers to take the initiatives to improve their teaching. She trusts her teachers and coaches to do

their jobs effectively. She says, "I have such an awesome teaching staff. They are always thinking of ways to get better. It just goes back to creating an environment where people feel comfortable." When she gives her teachers tasks, they collaborate in their teams to figure out the best way to implement the task and ask questions about how to do it better. She leans on her instructional team to support teachers with the task. She maintains that "coaches are the face of instruction, and I trust them explicitly with instruction."

The work of a principal is hard and necessitates other adults to take ownership and responsibility. The attempt is to create an environment where the responsibilities are distributed and do not just lay on their shoulders. Others take ownership and maintain high standards, high quality, and high fidelity. When principals seek feedback from the staff to accommodate their needs, it is an act of caring. The extended day schedule disrupted many staff members who have young children. Dr. Phil agreed to a flexible teaching schedule to accommodate the staff's needs. Teachers could choose between two arrival times based on their personal needs and still fulfill the extended day commitment by leaving at different times. This flexible schedule worked in favor of all, as people who had to come later could remain and still support the expectation of an extended day.

Impact of COVID-19

An unintended but important outcome from data analysis surfaced related to COVID-19. Although it was not directly related to the research questions, the participants mentioned it consistently. Therefore, it has been included in this section to honor their voices. The participants shared that Covid was detrimental for many families as they experienced financial hardship. Although the school provided technology support during Covid for students to participate in learning, many students needed to log into their devices to practice their skills. Teachers and

leaders say that the Pandemic has widened the learning gaps between economically disadvantaged students and those who are not. The widening learning gap is notable in the Georgia Milestones result during the post-pandemic academic year of 2021-22. In addition, the disruptive social behavior shown by students has led to teachers taking steps to address and build students' social-emotional learning capacities.

Summary of Findings

The qualitative analysis of the interviews of principals, instructional coaches, and teachers presented their perspectives that were gathered into sub-themes. The sub-themes are synthesized based on the commonality and connections they forged to form two main themes. The first theme relates to the importance of coaching in promoting a school culture that values collaboration and learning for all. The practice of coaching shifted teachers to inspect their practices from the viewpoint of student-centered learning. Teachers build their capacity to deliver student-centered learning through a PLC structure that encourages them to develop collective ownership of all students. To successfully build collective ownership for all students, schools invited district content experts and parents to be partners in learning. Finally, setting structures and practices to encourage collaboration between new and experienced teachers ensured that all became active participants in building a culture of collaboration and learning.

The second theme presented that the leaders engage in participative decision-making by having the staff participate in a joint decision-making process to solve problems concerned with student learning. To ensure information is available to all concerned, schools designate a centralized location for staff to access all information shared during meetings and through emails. The centralized location also houses student data so teachers can analyze the data to make instruc-

tional decisions as a team. To make the shared decision-making robust, the leadership team periodically invites staff to provide feedback and input to improve processes that influence student learning.

One of the research questions of this study asked what perceptions principals and teachers have of principal practices that enhance organizational learning. The findings highlight the perceptions that the teachers and principals found to improve teacher skills to address the challenges related to student learning. The second research question examined organizational learning by examining the influence of collective teacher efficacy. The PLC structure affords teachers to collaborate and learn to plan and share their instructional strategies. The collaboration further extends to peer collaboration as teachers continue to learn through a hands-on approach by visiting classrooms. Building a culture of learning is a continuous improvement effort of examining parts that are working and a willingness to change and reform parts that are not. Dr. Phil, the principal at Rank Elementary, explains how she encourages and supports teachers in peer collaboration.

We do have peer collaboration where teachers can go to other classrooms to see different things. Coaches have created a table that identifies a teacher who does a good opening, has excellent questioning techniques, or gives wait time to their students. You want to see someone who does a great job modeling a strategy and monitoring students learning that strategy through independent practice. You want to see someone who does a great job modeling a strategy, and monitoring students learning that strategy through independent practice. If you want to see somebody who does an outstanding job with personalized learning, asking questions and giving feedback to every student in their room, and students knowing what is expected from them to be successful.

The instructional coach at Rank Elementary says it all:

The teachers are able to collaborate as a team. And the team leader usually leads those practices, so the person who wrote the reading lesson plans may model a strategy on Monday that helps the team. And the same process is followed for the other content areas. So, they have time twice a week when they can, and we were meticulous about who the team leader was. So, choosing a data-driven team leader, their instructional practices form teacher exemplars, so teachers become leaders in instructional practices.

5 DISCUSSION

This qualitative hermeneutic interpretive phenomenology study aimed to explore the leadership practices that influence organizational learning. Along with the leadership practices, the research also investigated the impact of teachers' collective efficacy on organizational learning. This chapter discusses the connection of findings presented as sub-themes to the processes of organizational learning. In addition, a section describes the findings related to the literature on organizational learning and school leadership, organizational learning and principal trust, and organizational learning and teacher motivation. A brief mention is made regarding the findings in connection to collective teacher efficacy. The chapter concludes with the implications of this study for school and district leaders to facilitate organizational learning. The research questions crafted for the study are:

RQ1: What perceptions do principals and teachers have of principal practices that enhance organizational learning?

RQ2: What role does collective teacher efficacy play in influencing organizational learning?

Examining the perception of principals and teachers on organizational learning and the influence of collective teacher efficacy on organizational learning generated two main themes that integrate leadership practices and collective teacher efficacy. The two major themes are: (a) coaching promotes a culture of collaboration and learning, and (b) participative decision-making encourages staff to contribute and solve problems. The themes identify the practices essential for building a collaborative learning environment where teachers collectively take ownership of student learning through participative decision-making. The following section discusses in detail each major theme from the findings.

Discussion of Findings

This section will discuss the details of the two major themes by citing evidence from research on organizational learning. The evidence from the literature review will be augmented by the perspectives the leaders and teachers shared on leadership practices they found to support the first major theme: coaching promotes a culture of collaboration and learning for all. The details presented on the first theme align with the second-order change, bringing sustainable changes that challenge the status quo and suppositions to create structures and practices that enhance a culture of collaboration and learning (Coaching Leaders, 2022). This section discusses these structures in detail. The findings from the data analysis connected with the theoretical framework, organizational learning mechanisms, that measure how leadership practices and collective teacher efficacy influence organizational learning. First, let us explore the connections between the findings in the form of sub-themes and the processes of organizational learning.

Connecting Findings and the Dimensions of Organizational Learning

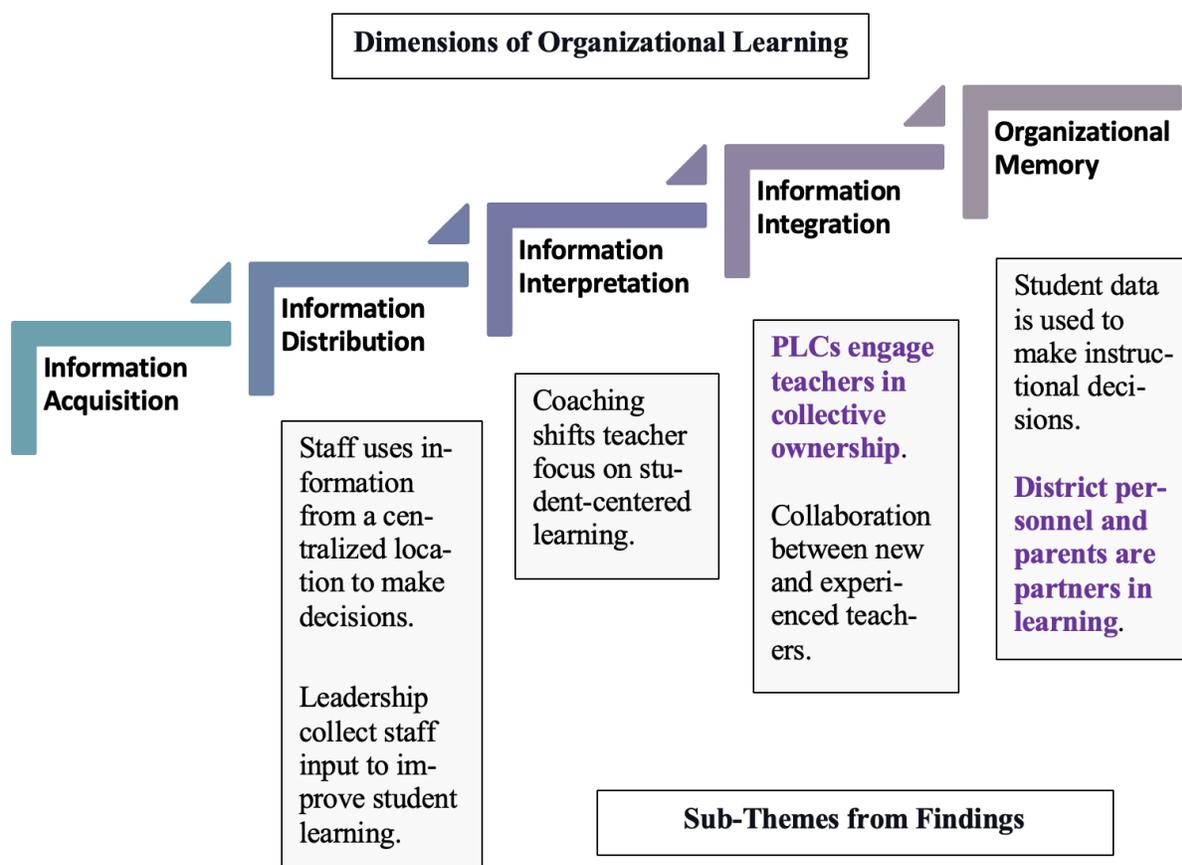
The themes generated from the research study connect to the sub-processes of organizational learning. Figure 3 relates the sub-themes emerging from the findings to the dimensions of organizational learning. Two sub-themes, the staff uses information from a centralized location to make decisions, and leadership collects staff input to improve student learning aligned to the sub-process of information distribution. The sub-theme of coaching shifts teacher focus on student-centered learning connected with the information interpretation phase of organizational learning. The subthemes support the information integration process, PLCs engage teachers in collective ownership, and student data is used to make instructional decisions. Finally, the sub-themes, district personnel, and parents are partners in learning, and collaboration between new and experienced teachers leads to the sub-process of organizational memory.

Two New Findings

Two new findings are shown in bold in Figure 3 that surfaced from the analysis and discussion of the research results. The two new findings are: 1) PLCs engage teachers in collective ownership, and 2) district personnel and parents are partners in learning. These findings are new, as the existing literature on organizational learning did not support the idea of collective ownership displayed by teacher teams as they embraced student learning as everyone's responsibility. Also, is new, the idea of seeking parents and district support as partners in learning to ensure successful implementation of the practices to enhance organizational learning.

Figure 3

Relating Sub-Themes and Dimensions of Organizational Learning



Coaching Promotes A Culture Of Collaboration And Learning

Schools use professional learning and instructional coaching to improve teachers' instructional practices (Darling-Hammond & Oakes, 2019; Gupta & Lee, 2020; Murray, 2013; Youngs & King, 2002). The major theme gathered from the findings show that the structure of coaching created by principals through PLCs helped the teachers experience on-the-job learning by collaboratively planning lessons, analyzing student work, sharing instructional strategies, and taking time to observe peer teaching (Murray, 2013). The teachers shared that their instructional practices improved as they collaborated with their peers and instructional coaches. The principals and teachers revealed the benefits of creating structures within their weekly schedule for a 90-minute PLC block. The PLCs supported teachers in improving their instructional practices through instructional coaching. The teachers talked about examining lesson plans by considering students to plan instructional next steps under the guidance of instructional coaches (lesson internalization). Murray (2013) asserts that student learning and achievement improve when teachers learn together to implement high-quality instruction.

The principals believed in their instructional coaches' abilities to lead the work of PLC. In addition, they invested in themselves to grow as instructional leaders and become experts in the process of PLC work. One of the principals articulated the attention paid to the four PLC questions that drive collaborative teamwork that attends to student learning. The four questions are what do we want students to learn? How will we know if they have learned it? What will we do if they still need to, and how will we provide extended learning opportunities for students who have mastered the content (Dufour & Reeves, 2016)? Teachers confirmed that they come together and engage in the hard work of PLCs as they learn from each other and share their knowledge about what instructional strategies are working in their classrooms and their struggles

with meeting students' needs. Collaboration and learning from peers go hand in hand. Even the new teachers have an active role as they contribute during staff meetings by sharing the learning they have gathered from their teacher prep program. In addition, the new teachers appreciate the opportunities to visit experienced teachers' classrooms as they acclimate to the school culture.

Teachers work hard during PLCs to provide schools with a perfect setting for respectful and trusting relationships that motivate teachers as they learn from each other and work collaboratively to improve student achievement (Wagner, 2001; Leithwood et al., 2002; Klar & Brewer, 2013; Yoon, 2016). The student-centered learning during grade-level PLC is enhanced when teachers meet as vertical teams. In the vertical teams, lower and upper elementary teachers collaborate to take collective ownership of the students. Teachers take collective ownership by reorganizing students into groups based on their instructional needs. For example, the vertical teams determine whether students need targeted instruction or accelerated learning. Some collaborative teacher teams have successfully reorganized students to address their specific needs. Collaborative teacher teams provide intentional learning for students, thus engaging in collective ownership of student learning.

Working together, teachers implement standards-based instruction, make instructional decisions (Felner et al., 2008), and discuss instructional issues to collectively develop solutions to build strong relationships that positively influence student achievement (Akiba & Liand, 2016). Teacher interactions poised for instructional success are the beginning blocks of collective efficacy (Goddard et al., 2015). As teachers work collaboratively to develop collective efficacy, their instructional skills improve and positively impact student achievement (Tschannen-Moran & Barr, 2004). The intentional practice where teachers collaboratively engage in PLCs to improve their instructional capabilities in the research sites confirms the role of collective teacher

efficacy in enhancing organizational learning. The above finding supports social aspects of learning (Finnigan & Daly, 2012), where a culture of collaboration and learning supports the practice of PLCs, influencing collective teacher efficacy and enhancing organizational learning. Collective teacher efficacy is an essential mediator for principal leadership to impact teacher collaboration (André et al., 2020). Participants shared that they engage in lesson internalization and student work analysis during PLCs. However, the study did not find all the elements of collective teacher efficacy. It may be fair to say that teachers are beginning to collaborate on ideas that influence teaching practices. However, with time, one could expect the collaboration to strengthen as principals gain expertise in instructional leadership.

Four sources feed into collective teacher efficacy. They are enactive or mastery learning, vicarious learning, exhortative (social persuasion), and emotive (Psychological). The most potent source is enactive or mastery, where teachers experience success directly and gain a perception of efficacy (Bandura, 1997). Participants shared that through collaboration, they could implement strategies that successfully improved students' skills. The sources of vicarious learning, exhortative (social persuasion) and emotive (Psychological), indirectly trigger collective efficacy. Participants shared visiting their peer's classrooms to see specific teaching strategies. Coaches create a schedule for teachers to visit classrooms based on their specific needs to facilitate vicarious learning. Both school sites encouraged teachers to visit other classrooms to see teachers in action depending on which effective teaching strategy they want to observe. Surprisingly, many participants did not entirely agree with feeling hopeful and excited about their collective strength to improve student achievement. They used phrases such as "yes and no" while responding to the interview question on the emotive stage of collective efficacy. Many participants mentioned that

negative experiences with COVID-19 have disrupted students' learning, especially for students coming from economically disadvantaged homes.

Teachers responded positively about their success with mastery learning. Since this is the most influential of the sources for collective efficacy, teachers were beginning to develop collective efficacy as they collaborated and gained instructional competence. Data analysis shows that one school had a higher number of sources available as compared to the other school. All four participants felt hopeful and excited about improving student achievement at Pitt Elementary. On the other hand, three out of four participants in Rank Elementary mentioned that they felt hopeful and excited about improving student achievement. Nonetheless, both schools agreed that they were well established in the sources of enactive (mastery), vicarious, and exhortative (social persuasion), indicative of collective teacher efficacy in both schools.

The instructional coaches and teachers consistently appreciated principals being involved in supporting initiatives to improve the academic growth of struggling students. When teachers see their principal as caring and supporting struggling students' learning, it influences organizational learning (Louis & Murphy, 2016). The principals in the study want teachers to focus on student-centered learning, asking teachers to invite them to see student engagement and creating a safe space for teachers to be vulnerable enough to ask for help. In addition, principals have created structures so teachers can go and observe others who are recognized as experts in certain instructional practices. Observing and learning from their expert peers also creates a conducive environment for teachers to brainstorm ideas to address students' learning gaps (Silins et al., 2002; Mulford & Silins, 2003).

Ylimaki (2007) believes professional learning communities build the academic capacity of teachers. She maintains that students from economically disadvantaged homes thrive when

teachers engage in PLCs to learn and grow their expertise supported by principals who implement practices to create a shared sense of purpose. Principal Phil motivates teachers by using student data to create a sense of purpose. She requires her staff to engage in intentional intervention because "70% of our students are in the beginning category" on the proficiency scale. She empowers teachers "to understand their role in changing the trajectory of the students daily." As a leader, she persuades teachers to create conditions for learning using student data and engaging themselves in learning while monitoring student-centered learning culture (Higgins et al., 2012).

Honig (2008) urges district offices to become learning organizations as they forge positive relationships with their schools. Using data from classroom teaching, district supervisors can support principal growth in instructional capabilities (Honig et al., 2017). The schools welcome and support learning walks by district officials to engage them as partners in learning. Several participants mentioned district support changing in light of COVID-19. The schools feel supported as different department district personnel come and share information or coach teachers as they engage in instructional activity. Although principals conduct learning walks, they did not mention district supervisors supporting them in improving their instructional competence. However, school leaders were frustrated about the numerous programs that were initiated year after year without giving space and time for the current initiatives to flourish.

School leaders require district personnel to consider the readiness level and the needs of students from low socioeconomic status as they plan out the agenda for school support. Participants in the study agreed that students have to be exposed to grade-level learning even as they experience learning loss. In the same breadth, participants talked about intervention programs as students engage in online and small group instruction during the 30-minute intervention block. How much coherence exists between the core instruction delivering grade-level learning and the

learning during the intervention block? Organizational learning is impeded when incoherent district initiatives compete and cancel the benefits of targeted direct instruction (Rusch, 2005). The leaders ensured that student learning during the intervention block bridges the learning gap that students need to succeed for the in-the-moment or just-in-time learning during core instruction.

Participative Decision Making Encourage Staff to Solve Problems

Thoonen et al. (2012) and Felner et al. (2008) assert that teachers contribute to organizational learning when they participate in decision-making related to teaching resources and strategies. In addition, when interactions among staff are grounded in respect, care, and trust, participants value participative decision-making and distributive leadership (Mulford & Silins, 2003). Teachers in the study played a key role in implementing meaningful weekly PLCs by examining student work to plan lessons that addressed student misconceptions and errors revealed through formative assessments. In addition, the principal at Pitt Elementary believes that teachers are "part of the decision-making process." Her teachers participated in making decisions to address the low student attendance rate. Teachers at Pitt Elementary created programs to get students excited about coming to school. The programs included forming "attendance buddies for each classroom, adults monitoring attendance daily, and teachers giving out incentives and shoutouts to parents." The group solves problems strategically and follows through with their commitments. Through participative decision-making, schools create "initiatives to solve issues that plague the community of our school."

Rank elementary approaches participative decision-making by collecting regular feedback from teachers after staff meetings. Based on teachers' feedback, the weekly newsletter now includes a snapshot of various meetings during the weekdays. Another change that Rank Elementary embraced following teachers' participative decision-making was reorganizing students

to attend different grade levels during the intervention block. Hence, students get the instruction they need by going to another teacher in a different grade level. Felner et al. (2008) found that reorganizing students into small learning communities to implement standards-based instruction for literacy and numeracy not only empowers teachers by involving them in participative decision-making but also shapes connections with families and communities. Forging social relationships by interacting with families and community members helps create a safe and comfortable space for collectively making sense of the information. Argote et al. (2003) propose that making sense of new information in a safe and comfortable space allows members to bring diverse viewpoints and challenge and question unclear information. Thus, when leadership practices encourage participative decision-making, teachers willingly collaborate in a caring and trusting climate, so coaches can listen and lead teachers toward organizational learning (Kurland et al., 2010; Thoonen et al., 2012).

In urban school settings where uncertainty is more prevalent, analyzing information and using information from previous learning as appropriate is critical. The researchers explain that when staff engages in collective and open discussion to interpret and integrate information into their existing work, it is an essential conduit for teachers' sense of collective efficacy as the staff navigates the environmental uncertainty in urban schools (Schechter & Qadach, 2012). Participants claimed they usually try to make sense of information independently, especially related to an existing practice. However, when they need help interpreting the distributed information, they seek out experts and ask questions to understand better. For example, the staff asked district and school-based experts for support while implementing a new intervention program. Seeking clarification and asking questions was more of an individual effort than a systemic structure in place to encourage collective discussion among the staff.

Organizations acquire information from various internal and external sources (Flores et al., 2012) and then share the information using various means, such as meetings, memos, workflow management systems, and electronic mail (Schechter & Atarchi, 2014). Participants seek out information to engage in participative decision-making. Although information may be shared via meetings, text messages, newsletters, and emails, the most relevant information is also accessible via a cloud based storage system. Schools have an effective system to gather and distribute information. However, no system was established for analyzing and integrating information into the implementation cycle. When an interview question asked about integrating and retrieving information for future use, many participants talked about student data being used for instructional planning. The practices noticed regarding information processing align with the research that organizations are skillful in acquiring and distributing information (Flores et al., 2012), while the process of analyzing and interpreting information and further integration and implementation to improve teaching and learning is left to chance (Schechter & Atarchi, 2014). It was clear from the participants' responses that there was no system to discuss and clarify information to ensure that teachers do not process information differently from what the school leaders intended (Diamond & Spillane, 2004). Thus, teachers needed opportunities to collectively discuss and challenge viewpoints or give their opinions on new initiatives (Zollo & Winter, 2002). Participative decision-making was available to the staff in certain areas that were decided by the leadership team.

Participants were asked to describe instances when they retrieved and used information from prior learning to make decisions regarding teaching and learning. Most participants talked about retrieving student data to address the misconceptions and learning gaps, as shown by the

formative assessment. Schechter (2008) found that for the dimension of storing-retrieving-putting to use of information of organizational learning, teachers generally talked about retrieving students' performance indicators to take the instructional next steps. This section describes the literature connection related to the second theme. Participative decision-making encourages staff to solve problems. It described in detail ways school leaders acquire, distribute, and store information so the staff has access to information to participate in collective decision-making to improve student learning.

Based on the discussion of findings, the first research question connected to principal practices that enhance organizational learning was satisfactorily achieved. The practices related to teachers collaborating and learning in professional learning communities through coaching were most notable. Within the PLCs, teachers focus on student-centered learning and support each other to determine instructional next steps based on the student data. The culture of collaboration and learning continues with district support personnel and parents as they contribute towards students growing their knowledge and skills. Another critical practice relates to teachers using the information to engage in participative decision-making to solve problems that affect student learning. Leadership ensured that staff had access to information through a centralized location to make decisions to improve student learning. The second research question, which is aligned with the role of collective teacher efficacy in influencing organizational learning, also surfaced. Of the four sources of collective efficacy, participants overwhelmingly agreed that they experienced mastery or enactive learning, which directly influences collective efficacy. Participants also experienced other sources of collective efficacy, such as experiencing the success of others (vicarious) and hearing peers' words of encouragement and guidance (exhortative). Partic-

ipants did not experience the state where they collectively feel hopeful and excited about accomplishing goals together to improve student achievement. Most times, participants talked about students lacking skills and having learning gaps as they were recovering from the effects of the COVID-19 pandemic.

Implications for Practice

Discussion of the findings revealed that school leaders were focused on developing structures and practices conducive to building collective teacher efficacy and organizational learning to impact student achievement. Multiple themes and subthemes emerged from analyzing interview data to reveal findings that enhanced collaboration, participative decision-making, and facilitation of a learning environment for all. Based on the findings, there are several implications for school and district leaders as they implement organizational learning processes to improve student learning and achievement. I will discuss three recommendations for school and district leaders as they lead a culture of collaboration and learning.

Benefits of Instructional Coaching Structures

The first recommendation for school leaders is to use coaching structures to create a culture of collaboration around learning for all. PLCs are likely implemented in some form in schools. However, not all have sound PLC structures supported by instructional coaches to build school instructional capacity. Students, teachers, district specialists, and parents interact with each other to become active learners, primarily focusing on positively impacting student learning. The findings highlight the schools are actively acquiring and distributing information to build instructional expertise. However, there is a lack of structures for adults to interpret and integrate important information they receive regularly. Learning becomes permanent when the new

information is connected to prior learning. Additionally, adults need to integrate new information by discussing different perspectives to address the dissonance between prior and new learning.

It is suggested that schools provide space for staff to discuss new information and learn within productive norms. Norms allow individuals to express new ideas and solutions, using respectful language as staff discuss the next steps and analyze solutions that will best meet the needs of students. Although the teachers appreciated having access to coaches to lead them through solid instructional practices, they were frustrated about the directives from school leaders and coaches when new activities were added to their plates without first discussing with them. One of the critical elements in successfully processing change is social relationships. According to Argote et al. (2003), social relationships ensure that staff feels safe and comfortable as they discuss diverse viewpoints to make sense of the information from school and district leadership. Collectively processing information is important as new information that may not yet completely align with the prior learning gets assimilated and accommodated into adults' schema. As staff comes together to process information collectively, they begin to develop collective efficacy and believe they can collaborate and overcome the problem of students from economically disadvantaged homes achieving lower proficiency than their peers.

Creating Structures and Practices for Developing Collective Efficacy

There are many benefits to teachers developing collective efficacy, especially in schools that serve students from economically disadvantaged homes. The second recommendation is for schools and districts to intentionally build collective teacher efficacy because it is robust in reversing the adverse effects of low socioeconomic status. Donohoo et al. (2018) established that collective teacher efficacy is three times more powerful and predictive of student achievement than socioeconomic status, home environment, student motivation, and engagement, and more

than double the effect of prior achievement. Armed with this crucial positive influence of collective teacher efficacy on student achievement, it is pivotal that schools and districts use resources to develop collective teacher efficacy. So, how does one build collective teacher efficacy in schools struggling to increase student achievement?

Bandura's (1997) research identifies four causes that are instrumental in building collective teacher efficacy. The first and most important source is mastery learning, where teachers have successful personal experiences with students learning by implementing effective instructional strategies. Here is where instructional coaching is most influential. Coaches support new and experienced teachers in building skills in lesson internalization and using student work to plan instructional strategies to meet students' academic needs. The research sites in this study used the 90-minute PLC time by coaches to build teachers' capacity. Teacher collaboration in PLCs allows for shared interactions among teachers. They shared their instructional skills during this weekly PLC and asked questions to grow their expertise. Goddard et al. (2004) describe four ways to increase collective efficacy. The study showed that collective teacher efficacy improved through the source of mastery learning, where leaders provide support and resources to grow teacher capacity. Collective teacher efficacy was seen to improve through vicarious experience as leaders provide teachers opportunities to watch and learn from expert teachers. There are other ways to increase collective teacher efficacy that did not come up in the study but are powerful sources for developing collective efficacy. Leaders should consider using social persuasion, where leaders provide guidance and examples to achieve success, and use the affective state to increase collective efficacy, celebrating success and task accomplishment through the feeling of excitement and joy (Goddard et al., 2004). Another study by Tschannen et al. (2001) urge us to

consider leaders to emphasize employee success and provide feedback to teachers about their work, along with ensuring that the staff maintain focus on organizational goals.

The shared interactions give teachers time and space to learn and reflect to grow their instructional expertise as they plan and discuss strategies that are more effective than others. School and district leaders must create schedules where teachers can interact, as these shared interactions become the foundational structure for collective efficacy (Goddard et al., 2015). Once teachers are on the mastery learning path, they can engage in peer learning by visiting other teachers' classrooms to observe and learn. The vicarious learning experience is another way to grow collective efficacy. Creating a culture where teachers can go and observe others teach is a powerful practice to bring collective efficacy. In addition, staff meetings can become a breeding ground for peers to provide encouragement and guidance as teachers engage in peer learning walks.

Participative Decision Making for Collective Ownership

This study's framework of organizational learning mechanisms is situated in social relationships as they forge positive relationships with collective efficacy and participative decision-making. The third recommendation for district and school leadership is to embrace the practice of participative decision-making by inviting their staff into the decision-making process to generate more creative ideas as they take collective ownership. In participative or shared decision-making, principals and teachers make joint decisions knowing that shared decision-making offers several potential benefits. For example, schools may see increased teacher motivation as they feel belonging with the school, feel satisfied with their job, and develop creative and innovative solutions to problems, reducing teacher turnover (Panicker & Sharma, 2020; Somech, 2005).

Inviting teachers to join the decision-making process allows them to cultivate a sense of

self-efficacy and self-determination (Somech, 2005), thus, believing in their effectiveness. Participative decision-making brings innovative ideas, and at the same time, teachers feel that they are engaged in meaningful work and are ready to take collective ownership of all students. Participants narrated inviting and including teacher input by seeking feedback and suggestions to consider their needs. The school leaders opened opportunities for engaging in decision-making to all staff members. In one school, unable to tackle student attendance issues, the leadership team invited teachers to brainstorm ideas to increase student attendance rate. Participative decision-making generated many innovative ideas by teachers to significantly improve student attendance rates.

Schools seeking to improve student achievement will notice that participative decision-making increases teachers' support for educational change and are more willing to try new practices (Bouwman et al., 2017). The study confirmed the previous research findings that schools are established in acquiring and distributing information, and interpretation and integration of information gets transpired through loosely help structures that need to verify how accurately the information was processed and understood. With participative decision-making, teachers will be organically involved in discussions to share their ideas and listen and understand others' ideas, facilitating interpretation and analysis of new information. When teachers make sense of the new information collaboratively and can contribute their ideas to solve problems, they become more engaged in their professional duties and take collective ownership of student learning.

Limitations to the Study and Suggestions for Further Research

One important limitation of the study is the sample size of eight participants selected from two schools from a single school district. Although eight participants are a good sample number for a phenomenological study, including more schools and diverse participants such as

male leaders would be beneficial. Selecting schools that do not have instructional coaches or are focused on fulfilling their instructional needs through other means, such as district support, would have provided different perspectives on the phenomena of organizational learning. The results of this study will likely give different outcomes if schools that do not have instructional coaches formed research sites. Future studies may investigate expanding the sample size and school types to include middle and high schools to give different perspectives. In addition, it may be worthwhile doing the interviews twice with the same participants, once closer to the beginning of the year and another towards the end of the school year to capture the sustainable practices that promoted organizational learning.

Another limitation of this study is that it did not take into consideration the interrelation between student socio-economic status, racial diversity, student achievement pattern, and the sustainable sub-processes of organizational learning. The study's methodology did not take the perspective between race, students' economic disadvantage status, and grade-level content proficiency. Future research will benefit from considering the interrelationship between students' achievement, race, and socioeconomic status to understand the role race may play in influencing the sub-processes of organizational learning. Yet another limitation of the study is that it did not capture the levels of self-efficacy different teachers have and as such their perspectives on teacher collaboration. For instance, teachers who are new may be more inclined towards collaboration compared to experienced teachers who see the new initiatives as old ideas repackaged using new terminology. Future research may want to study the conditions for collaboration observed for teachers who were at different self-efficacy levels. Research looking at the possibility of different collaborative structures based on teacher efficacy levels may give us an expanded view of the impact of collective teacher efficacy on organizational learning.

Conclusion

The findings from this phenomenological qualitative study answered the two research questions related to the principal practices that influence organizational learning and the impact of collective teacher efficacy on organizational learning. Organizational learning, with its processes of information acquisition, information distribution, information interpretation, information integration, and retrieval of information support improvement efforts implemented through leadership practices and collective teacher efficacy. This research study sought perceptions from principals and teachers regarding school improvement practices that enhance organizational learning. In addition, the research was necessary for school turnaround work as international, national, and state achievement data revealed the wide gap between the achievement scores of students from economically disadvantaged homes versus students who are not.

The literature review elicited possible solutions to address the problem of underachievement of students categorized as economically disadvantaged. Several research studies in education point to much quantitative research on organizational learning. Several mixed-method studies have been conducted outside of the United States. There needs to be more qualitative research conducted in the United States. Although conducted in one urban inner city school district in the southeast United States within two different school sites, this research will present the perceptions of principals and teachers as they implement leadership practices and collective teacher efficacy to enhance organizational learning.

The conceptual framework of organizational learning mechanisms was used to conduct the hermeneutic interpretive phenomenological study focusing on how new information was interpreted and integrated for retrieval and application to influence organizational learning. Inter-

views with eight participants holding different roles and responsibilities offered different perspectives on practices that were implemented to address student learning after the COVID-19 pandemic. Analyzing interview data led to the unfolding of several themes and subthemes. The themes that emerged are that coaching promotes a culture of collaboration and learning, and participative decision-making encourages staff to contribute and solve problems. Four subthemes relate to the theme; coaching promotes a culture of collaboration and learning. They are coaching shifts teacher focus on student-centered learning, PLCs engage teachers in collective ownership, district personnel, and parents are partners in learning and collaboration between new and experienced teachers. Three subthemes support the second theme on participative decision-making. These subthemes are staff use information from a centralized location to make decisions, student data is used to make instructional decisions, and leadership collects staff input to improve student learning.

Several leadership practices identified to promote organizational learning in the literature review surfaced as findings aligned to practices that enhance organizational learning. Additionally, several sources of collective teacher efficacy emerged in the participant's descriptions of their actions and behaviors to build their instructional capacity. Participants expressed a culture of collaboration and learning as the schools' focus shifted to student-centered learning. Collaboration through the structure of PLCs and the practices of lesson internalization and student work analysis were instrumental in growing teachers' ability to implement instructional strategies. The participants reflected on collaboration with their peers as they tackled the challenges of bridging students' learning gaps. Along with peer collaboration, school leaders collaborated with district specialists and parents as they were enlisted to support students in building their content

knowledge through targeted support. Data in different forms were utilized to bring up-to-date information to the staff to engage in participative decision-making. Most information regarding academic and student data is stored in a cloud-based storage space. Participants collaborated to look at student data across vertical grade levels to address diverse student learning needs.

Other robust findings can be tied to the literature review around collective teacher efficacy. The participants shared the most influential source of collective teacher efficacy, mastery learning, or enactive learning, where participants had opportunities to learn and grow their craft of teaching. Participants shared that they could visit peer teachers to observe and vicariously learn from them. The weekly staff and PLC meetings gave plenty of grounds for teachers to give words of encouragement and praise each other for their hard work.

The research study successfully answered both research questions as participants described the practices that helped them be focused on their goals and mentioned challenges that hindered their path forward. The participants overwhelmingly supported having instructional coaching as they focused on improving instruction through effective strategies. Schools need to strengthen their sources for building collective teacher efficacy as it is believed to mitigate the effects of low socioeconomic status and inadequate prior learning. Empowering teachers by inviting them to participate in decision-making will improve collective teacher efficacy and job satisfaction and empower them to have collective ownership towards all students. Post-COVID-19, the schools have struggled to get students back in classrooms. Principal Grady uses participative decision-making to maximize staff involvement to implement more relevant solutions for her school. When staff sees that things are working, they are more hopeful and excited. The following quotes from Ms. Grady at Pitt Elementary capture the essence of practices for creating a culture of collaboration, learning, and participative decision-making.

This year, we wanted to beef up our attendance and get kids excited about coming back and attending school every single day. So, my staff created programs that are just amazing. We have attendance buddies for each classroom. We have adults that monitor attendance for one classroom and give incentives to the classroom and shoutouts to parents every day. We also accommodate celebration activities on Fridays for making attendance goals. As a result, our attendance has improved dramatically. Last year, we were at 88 percent for the average daily attendance rate. Right now, we're sitting at 94 percent.

It just goes back to creating an environment where people feel comfortable, so whenever there's a task they're given, by the time I even get to them to talk about the task, they've already figured out how they can do it. And they are ready with questions about how to do it better. The coaches are so supportive, so I utilize my instructional team to support that work. They are the face of instruction, and I trust them explicitly with instructional expertise. Teachers can access several learning opportunities with coaches and the leadership team for support.

REFERENCES

- Akiba, M., & Liang, G. (2016). Effects of teacher professional learning activities on student achievement growth. *Journal of Educational Research*, *109*(1), 99–110.
<https://doi.org/10.1080/00220671.2014.924470>
- André, M., Richter, D., Hartung-Beck, V. (2020). The relationship between principal leadership and teacher collaboration: Investigating the mediating effect of teachers' collective efficacy. *Educational Management Administration & Leadership*, *1*.
<https://doi.org/10.1177/1741143220945698>
- Argote, L. (2011). Organizational learning research: Past, present, and future. *Management Learning*, *42*(4), 439-446. <https://doi.org/10.1177/1350507611408217>
- Argote, L., McEvily, B., Reagans, R. (2003). Managing knowledge in organizations: An integrative framework and review of emerging themes. *Management Science*, *49*(4), 571-582.
<https://doi.org/10.1287/mnsc.49.4.571.14424>
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, *28*, 117–148. https://doi.org/10.1207/s15326985ep2802_3
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215. <https://doi.org/10.1037/0033-295X.84.2.191>
- Bensimon, E. (2005). Closing the achievement gap in higher education: An organizational learning perspective. *New Directions for Higher Education*, *2005*(131), 99–111.
- Boatman, A. (2021). Accelerating college remediation: Examining the effects of math course re-design on student academic success. *Journal of Higher Education*, *92*(6), 927–960.
<https://doi.org/10.1080/00221546.2021.1888675>

- Bouwmans, M., Runhaar, P., Wesselink, R., & Mulder, M. (2017). Fostering teachers' team learning: An interplay between transformational leadership and participative decision-making? *Teaching and Teacher Education*, 65, 71–80.
<https://doi.org/10.1016/j.tate.2017.03.010>
- Butler, A. C., Black-Maier, A. C., Raley, N. D., & Marsh, E. J. (2017). Retrieving and applying knowledge to different examples promotes transfer of learning. *Journal of Experimental Psychology: Applied*, 23(4), 433–446. <https://doi.org/10.1037/xap0000142>
- Cavalluzzo, L., Geraghty, T. M., Steele, J. L., Alexander, J. K., Society for Research on Educational Effectiveness (SREE), & CNA Corporation. (2013). Using Data to Inform Decisions: How Teachers Use Data to Inform Practice and Improve Student Performance in Mathematics. *In Society for Research on Educational Effectiveness*.
- Chen, X., & Simone, S. (2016). Remedial course taking at US public 2- and 4-year institutions: Scope, experiences, and outcomes: Statistical analysis report. National Center for Education Statistics. <http://nces.ed.gov/pubs2016/2016405.pdf>
- Chan, Z. C., Fung, Y. L., & Chien, W. T. (2013). Bracketing in phenomenology: Only undertaken in the data collection and analysis process. *The qualitative report*, 18(30), 1-9.
- Coaching Leaders (2022). First order and second order change: Understanding the difference. Retrieved from <https://coachingleaders.co.uk/first-order-change/>
- Collinson, V., Cook, T., & Conley, S. (2006). Organizational learning in schools and school systems: Improving learning, teaching, and leading. *Theory Into Practice*, 45(2), 107–116.
- Crossan, M. M., Lane, H. W., & White, R. E. (1999). An organizational learning framework: From intuition to institution. *Academy of management review*, 24(3), 522-537.

- Darling-Hammond, L. and Oakes, J. (2019). Preparing teachers for deeper learning. Harvard Education Press.
- Diamond, J. B., Spillane, J. P., & Northwestern Univ., E. I. I. for P. R. (2002). High stakes accountability in urban elementary schools: Challenging or reproducing inequality? Institute for Policy Research Working Paper.
- Donohoo, J., Hattie, J., & Eells, R. (2018). The power of collective efficacy. *Educational Leadership*, 75(6), 40-44.
- Donohoo, J., & Hite, S. A. (2021). Addressing Inequity with the Power of Collective Efficacy. *Educational Leadership*, 78(6).
- DuFour, R., & Reeves, D. (2016). The futility of PLC Lite. *The Phi Delta Kappan*, 97(6), 69–71.
- Edward John Noon. (2018). Interpretive Phenomenological Analysis: An Appropriate Methodology for Educational Research? *Journal of Perspectives in Applied Academic Practice*, 6(1), 75–83. <https://doi.org/10.14297/jpaap.v6i1.304>
- Elkjaer, B. (2004). Organizational learning: The 'third way.' *Management Learning*, 35(4), 419-434. <https://doi.org/10.1177/1350507604048271>
- Etikan, I., Bala, K. (2017). Sampling and Sampling Methods. *Biometrics & Biostatistics International Journal* 5(6). DOI: 10.15406/bbij.2017.05.00149
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.
- Evans, L., Thornton, B., & Usinger, J. (2012). Theoretical frameworks to guide school improvement. *NASSP Bulletin*, 96(2), 154–171.
- Felner, R., Bolton, N., Seitsinger, A., Brand, S., & Burns, A. (2008). Creating a statewide educational data system for accountability and improvement: A comprehensive information

- and assessment system for making evidence-based change at school, district, and policy levels. *Psychology in the Schools*, 45(3), 235–256. <https://doi.org/10.1002/pits.20294>
- Finnigan, K. S., & Daly, A. J. (2012). Mind the gap: Organizational learning and improvement in an underperforming urban system. *American Journal of Education*, 119(1), 41–71.
- Fiol, C., & Lyles, M. (1985). Organizational learning. *Academy Of Management Review*, 10(4), 803–813. <https://doi.org/10.5465/AMR.1985.4279103>
- Flores, L., Zheng, W., Rau, D., & Thomas, C. (2012). Organizational learning: Subprocess identification, construct validation, and an empirical test of cultural antecedents. *Journal of Management*, 38(2), 640–667. <https://doi.org/10.1177/0149206310384631>
- Galvan J. & Galvan M. (2017). *Writing Literature Reviews: A Guide For Students Of The Social And Behavioral Sciences*. Routledge
- Gentles, S. J., Charles, C., Ploeg, J., & McKibbin, K. (2015). Sampling in Qualitative Research: Insights from an Overview of the Methods Literature. *The Qualitative Report*, 20(11), 1772–1789. Retrieved from <http://nsuworks.nova.edu/tqr/vol20/iss11/5>
- Giles, C. (2007). Building capacity in challenging US schools: An exploration of successful leadership practice in relation to organizational learning. *International Studies in Educational Administration*, 35(3), 30–38.
- Goodman, L. A. (1961). Snowball sampling. *The annals of mathematical statistics*, 148–170.
- Goddard, R., Goddard, Y., Sook Kim, E., & Miller, R. (2015). A theoretical and empirical analysis of the roles of instructional leadership, teacher collaboration, and collective efficacy beliefs in support of student learning. *American Journal of Education*, 121(4), 501–530. <https://doi.org/10.1086/681925>

- Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective Teacher Efficacy: Its Meaning, Measure, and Impact on Student Achievement. *American Educational Research Journal*, 37(2), 479–507. <https://doi.org/10.3102/00028312037002479>
- Goddard, R., Hoy, W., & Hoy, A. (2004). Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. *Educational Researcher*, 33(3), 3–13. <https://doi.org/10.3102/0013189X033003003>
- Gómez, J. P., Lorente, C. J., & Cabrera, V. R. (2005). Organizational learning capability: A proposal of measurement. *Journal of Business Research*, 58(6), 715–725. <https://doi.org/10.1016/j.jbusres.2003.11.002>
- Governor’s Office of Student Achievement. (2022). K-12 Public Schools Report Card - Georgia Milestones. Oracle. <https://gaawards.gosa.ga.gov/analytics/K12ReportCard>
- Grinsven, V. M., & Visser, M. (2011). Empowerment, knowledge conversion and dimensions of organizational learning. *The Learning Organization*, 18(5), 378–391. <https://doi.org/10.1108/096964711111151729>
- Groenewald, T. (2004). A Phenomenological Research Design Illustrated. *International Journal of Qualitative Methods*, 3(1), 42–55. <https://doi.org/10.1177/160940690400300104>
- Gruber D. A., Smerek R. E., Thomas-Hunt M. C., and James E. H. (2015). The real-time power of Twitter: Crisis management and leadership in an age of social media. *Business Horizons*, 58(2), 163–172. <https://doi.org/10.1016/j.bushor.2014.10.006>.
- Gupta, A., & Lee, G.-L. (2020). The effects of a site-based teacher professional development program on student learning. *International Electronic Journal of Elementary Education*, 12(5), 417–428.

- Heck, R., & Hallinger, P. (2009). Assessing the contribution of distributed leadership to school improvement and growth in math achievement. *American Educational Research Journal*, 46(3), 659–689. <https://doi.org/10.3102/0002831209340042>
- Henderson, P., Jones, M. A., & Self, E. F. (1998). Collective Efficacy in Urban Schools: Linking Home, School and Community Resources.
- Hesbol, K. A. (2019). Principal Self-Efficacy and Learning Organizations: Influencing School Improvement. *International Journal of Educational Leadership Preparation*, 14(1), 33–51.
- Higgins, M., Ishimaru, A., Holcombe, R., & Fowler, A. (2012). Examining organizational learning in schools: The role of psychological safety, experimentation, and leadership that reinforces learning. *Journal of Educational Change*, 13(1), 67–94.
- Honig, M. (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(4), 627–664.
- Honig, M., Venkateswaran, N., & McNeil, P. (2017). Research use as learning: The case of fundamental change in school district central offices. *American Educational Research Journal*, 54(5), 938–971. <https://doi.org/10.3102/0002831217712466>
- Johnson, K., & Olanoff, D. (2020). Using transformative learning theory to help prospective teachers learn mathematics that they already “know.” *Mathematics Enthusiast*, 17(2/3), 725–769.
- Johnson, P. E., & Chrispeels, J. H. (2010). Linking the central office and its schools for reform. *Educational Administration Quarterly*, 46(5), 738–775.

- Kane, T. J., Taylor, E. S., Tyler, J. H., & Wooten, A. L. (2011). Identifying Effective Classroom Practices Using Student Achievement Data. *Journal of Human Resources*, 46(3), 587–613.
- Kim, M. (2017). Effects of team diversity, transformational leadership, and perceived organizational support on team-learning behavior. *Social Behavior and Personality: An International Journal*, 45(8), 1255–1269. <https://doi.org/10.2224/sbp.6325>
- Klar, H. W., & Brewer, C. A. (2013). Successful Leadership in High-Needs Schools: An Examination of Core Leadership Practices Enacted in Challenging Contexts. *Educational Administration Quarterly*, 49(5), 768–808. <https://doi.org/10.1177/0013161X13482577>
- Knapp, M., & Shields, P. (1995). Academic challenge in high-poverty classrooms. *Phi Delta Kappan*, 76(10), 770.
- Knapp, M. S. (2008). How can organizational and sociocultural learning theories shed light on district instructional reform? *American Journal of Education*, 114(4), 521–539.
- Kurland, H., Peretz, H., & Hertz-Lazarowitz, R. (2010). Leadership style and organizational learning: The mediate effect of school vision. *Journal of Educational Administration*, 48(1), 7–30. <https://doi.org/10.1108/09578231011015395>
- Leithwood, K., Jantzi, D., & Mascall, B. (2002). A framework for research on large-scale reform. *Journal of Educational Change*, 3(1), 7–33.
<https://doi.org/10.1023/A:1016527421742>
- Leithwood, K., Patten, S., & Jantzi, D. (2010). Testing a conception of how school leadership influences student learning. *Educational Administration Quarterly*, 46(5), 671–706.
<https://doi.org/10.1177/0013161X10377347>

- Leonardi, P. M. (2014). Social media, knowledge sharing, and innovation: Toward a theory of communication visibility. *Information Systems Research*, 25(4), 796-816.
<https://doi.org/10.1287/isre.2014.0536>
- Louis, K., Dretzke, B., & Wahlstrom, K. (2010). How does leadership affect student achievement? Results from a national US survey. *School Effectiveness and School Improvement*, 21(3), 315–336. <https://doi.org/10.1080/09243453.2010.486586>
- Lincoln, Y. & Guba, E. (1985). *Naturalistic Inquiry*. https://www.google.com/books/edition/Naturalistic_Inquiry/2oA9aWlNeooC?hl=en&gbpv=1&dq=Naturalistic+Inquiry&printsec=frontcover
- Louis, K., & Murphy, J. (2017). Trust, caring and organizational learning: The leader’s role. *Journal of Educational Administration*, 55(1), 103–126. <https://doi.org/10.1108/JEA-07-2016-0077>
- Meyer A, Richter D, Hartung-Beck V. (2020). The relationship between principal leadership and teacher collaboration: Investigating the mediating effect of teachers’ collective efficacy. *Educational Management Administration & Leadership*.
 doi:10.1177/1741143220945698
- McCleskey, J., et.al. (2017). High-leverage practices in special education. Arlington, Virginia: Council for Exceptional Children and CEEDAR Center.
- Miller, D. (1996). A preliminary typology of organizational learning: Synthesizing the literature. *Journal of Management*, 22(3), 485. <https://doi.org/10.1177/014920639602200305>
- Mulford, B., & Silins, H. (2003). Leadership for organizational learning and improved student outcomes—What do we know? *Cambridge Journal of Education*, 33(2), 175.
- Murakami, E., & Kearney, W. (2020). Lessons from principals of high-performing ethnically diverse high-poverty schools. *School Leadership Review*, 15(1).

- Murray, J. (2013). Transforming teacher learning in American schools. *International Journal of Leadership in Education*, 16(1), 126–131.
- National Assessment of Educational Progress. (2021). Explore the nation's report card. National Center for Education Statistics. <https://nces.ed.gov/nationsreportcard/mathematics/>
- National Center on Time & Learning. (2017). Framework for assessing teacher collaboration. <https://www.timeandlearning.org/school-resources/framework-assessing-teacher-collaboration>
- Panicker, A., & Sharma, A. (2020). Demonstrating the impact of participative decision making, distributive justice perception and growth opportunities on favorable and unfavorable employee outcomes: mediating effect of workplace inclusion in Indian Heis. *International Journal of Business Science & Applied Management*, 15(1), 30–46.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). Thousand Oaks, CA: Sage
- Picho, K. (2016). The psychosocial experience of high school girls highly susceptible to stereotype threat: A phenomenological study. *Journal of Educational Research*, 109(6), 608–623. <https://doi.org/10.1080/00220671.2015.1010192>
- Popper, M., & Lipshitz, R. (1998). Organizational learning mechanisms: A structural and cultural approach to organizational learning. *The Journal of Applied Behavioral Science*, 34(2), 161–179. <https://doi.org/10.1177/0021886398342003>
- Qadach, M., Schechter, C., & Da'as, R. (2020). From principals to teachers to students: Exploring an integrative model for predicting students' achievements. *Educational Administration Quarterly*, 56(5), 736–778.

- Quint, J. C., Akey, T. M., Rappaport, S., Willner, C. J., & Manpower Demonstration Research Corp., N. Y. N. (2007). Instructional Leadership, Teaching Quality and Student Achievement Suggestive Evidence from Three Urban School Districts. In MDRC. MDRC.
- Rerup, C., & Levinthal, D. A. (2014). Situating the concept of organizational mindfulness: the multiple dimensions of organizational learning. *Mindful change in times of permanent re-organization: Organizational, institutional and sustainability perspectives*, 33-48.
- Rizwan, R., & Williams, A. (2015). “Only the wind hears you...” The experiences of Pakistani girls in a primary school: An Interpretative Phenomenological Analysis. *Educational & Child Psychology*, 32(2), 36–46.
- Rusch, E. A. (2005). Institutional barriers to organizational learning in school systems: The power of silence. *Educational Administration Quarterly*, 41(1), 83–120.
<https://doi.org/10.1177/0013161X04269546>
- Sanchez, G, Sell, S., & Theriault, K. (2019, October 29). *Engaging for equity. How collective ownership can seed and sustain innovation*. iNACOL Annual Symposium, Palm Springs, CA. https://www.greatschoolspartnership.org/wp-content/uploads/2019/10/Engaging4Equity_iNACOL_Final_for_Web.pdf
- Schechter, C. (2008). Organizational learning mechanisms: The meaning, measure, and implications for school improvement. *Educational Administration Quarterly*, 44(2), 155–186.
- Schechter, C., & Atarchi, L. (2014). The meaning and measure of organizational learning mechanisms in secondary schools. *Educational Administration Quarterly*, 50(4), 577–609.
- Schechter, C. and Feldman, N. (2010), Exploring organizational learning mechanisms in special education. *Journal of Educational Administration*, 48 (4), 490-516.

- Schechter, C., & Qadach, M. (2012). Toward an organizational model of change in elementary schools: The contribution of organizational learning mechanisms. *Educational Administration Quarterly*, 48(1), 116–153.
- Silins, H., Mulford, W., & Zarins, S. (2002). Organizational learning and school change. *Educational Administration Quarterly*, 38(5), 613–642.
- Somech, A. (2005). Directive versus participative leadership: Two complementary approaches to managing school effectiveness. *Educational Administration Quarterly*, 41(5), 777-800.
- Starks, H., & Brown Trinidad, S. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research*, 17(10), 1372–1380. <https://doi.org/10.1177/1049732307307031>
- Stewart, J. (2006). Transformational leadership: An evolving concept examined through the works of Burns, Bass, Avolio, and Leithwood. *Canadian Journal of Educational Administration and Policy*, 54, 1–29.
- Supovitz, J., Sirinides, P., & May, H. (2010). How principals and peers influence teaching and learning. *Educational Administration Quarterly*, 46(1), 31–56. <https://doi.org/10.1177/1094670509353043>
- Thoonen, E., Slegers, P., Oort, F., & Peetsma, T. (2012). Building schoolwide capacity for improvement: The role of leadership, school organizational conditions, and teacher factors. *School Effectiveness & School Improvement*, 23(4), 441–460.
- Trends in International Mathematics and Science Study. (2019). TIMSS 2019 US results. National Center for Education Statistics. <https://nces.ed.gov/timss/results19/index.asp#/math/achievement>

- Tschannen-Moran, M., & Barr, M. (2004). Fostering student learning: The relationship of collective teacher efficacy and student achievement. *Leadership & Policy in Schools, 3*(3), 189–209. <https://doi.org/10.1080/15700760490503706>
- Van Lare, Michelle, D., & Brazer, S. D. (2013). Analyzing learning in professional learning communities: A conceptual framework. *Leadership & Policy in Schools, 12*(4), 374–396.
- Wagner, T. (2001). Leadership for learning. *Phi Delta Kappan, 82*(5), 378.
- What Works Clearinghouse. (2020). What Works Clearinghouse Procedures Handbook, Version 4.1. Washington, DC: US Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.
- Willig, C. (2007). Reflections on the use of a phenomenological method. *Qualitative Research in Psychology, 4*(3), 209–225
- Willis, J. (2007). Foundations of Qualitative Research: Interpretive and critical approaches. Sage.
- Wojnar, D. M., & Swanson, K. M. (2007). Phenomenology: An Exploration. *Journal of Holistic Nursing, 25*(3), 172–180. <https://doi.org/10.1177/0898010106295172>
- Xie, L. (2019). Leadership and organizational learning culture: a systematic literature review. *European Journal of Training and Development, 43* (1/2), 76-104. <https://doi.org/10.1108/EJTD-06-2018-0056>
- Ylimaki, R. (2007). Instructional leadership in challenging US schools. *International Studies in Educational Administration, 35*(3), 11–19.
- Yoon, S. Y. (2016). Principals' Data-Driven Practice and Its Influences on Teacher Buy-in and Student Achievement in Comprehensive School Reform Models. *Leadership & Policy in Schools, 15*(4), 500–523. <https://doi.org/10.1080/15700763.2016.1181187>

Youngs, P., & King, M. B. (2002). Principal leadership for professional development to build school capacity. *Educational Administration Quarterly*, 38(5), 643–670.

Zollo, M., & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization Science*, 13(3), 339–351.

APPENDICES

Appendix A: Informed Consent

Title: Perception of Principal Practices Influencing Organizational Learning and Teachers' Collective Efficacy

Principal Investigator: Dr. Nicolas Sauers

Student Principal Investigator: Bindu Sunil

Introduction and Key Information

You are invited to take part in a research study. It is up to you to decide if you would like to take part in the study.

The purpose of this study is to explore principal practices that positively influence the successful implementation of organizational learning. The following research questions will investigate organizational learning from the perspectives of principals and teachers. 1) What perceptions do principals and teachers have of principal practices that enhance organizational learning? 2) What role does collective teacher efficacy play in influencing organizational learning?

Your role in the study will last 60 minutes over a span of eight weeks. You will be asked to do the following: participate in one 60-minute semi-structured individual interviews with the Student Principal Investigator and share any document to further clarify responses you provide regarding organizational learning. Participating in this study will not expose you to any more risks than you would experience in a typical day.

This study is not designed to benefit you, however, there may be unintended benefit that you may become aware of the structures and practices being implemented that benefits teaching and learning at your school. Overall, we hope to gain information about leadership practices that support student learning especially for students who are from economically disadvantaged homes.

Purpose

The purpose of the study is to understand principal practices that positively influence the successful implementation of organizational learning within a school. You are invited to take part in this research study because you are a teacher, or a school leader involved in implementing structures and practices to improve student learning. A total of eight people will be invited to take part in this study.

Procedures

If you decide to take part, you will participate in one, semi-structured individual interview with the Student Principal Investigator (SI). These interview can be held via a secure online platform or face-to-face at a time of your choosing and will last 60 minutes long. The study may span eight weeks, but the individual's part is only one interview.

- SI will contact you to schedule interview. Interview will be held using a secure online platform or in a face-to-face setting at a location convenient you. The interview will be video recorded and secured on a password-protected computer, locked in a cabinet that only the SI has access to.
- You will be individually interviewed one time. The interviews will take no longer than 60 minutes.
- You will share any relevant document that connects to the information shared during the interview.

Voluntary Participation and Withdrawal

You do not have to be in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You may skip questions or stop participating at any time. You may refuse to take part in the study or stop at any time. This will not cause you to lose any benefits to which you are otherwise entitled.

Confidentiality

We will keep your records private to the extent allowed by law. The following people and entities will have access to the information you provide:

- Bindu Sunil and Dr. Nick Sauers
- GSU Institutional Review Board
- Office for Human Research Protection (OHRP)

We will use your self-selected emergent theme name rather than your name on study records. The information you provide will be stored on a password-and firewall-protected computer and locked in a cabinet that only Bindu Sunil will have a key to access. The emergent theme sheet with the self-selected emergent theme names will be stored separately from the data to ensure privacy. When we present or publish the results of this study, we will not use your name or other information that may identify you.

- The emergent theme sheet to identify the research participants will be destroyed three years after the completion of the study.
- Video recordings of the interviews will be stored on a password-and firewall-protected computer and locked in a cabinet that only Bindu Sunil will have a key to access. The data collected in this repository will be destroyed three years after completion of the study.
- Be aware that any communication sent over the Internet may not be secure. Procedures such as password-protected meeting links and firewall-protected computers will be implemented to address security. The researcher is not collecting IP addresses. **Contact Information**

Contact Dr. Nick Sauers or Bindu Sunil at bsunil1@student.gsu.edu, 508-713-5346.

- If you have questions about the study or your part in it
- If you have questions, concerns, or complaints about the study

The IRB at Georgia State University reviews all research that involves human participants. You can contact the IRB if you would like to speak to someone who is not involved directly with the study. You can contact the IRB for questions, concerns, problems, information, input, or questions about your rights as a research participant. Contact the IRB at 404-413-3500 or irb@gsu.edu. **Consent**

You may print and save a copy of this consent for your records.

Please check the box below to give your consent.

I Agree.

Appendix B: Interview Protocol

The conversation and all data that I receive from you and your school will be kept confidential. Only I will have access to the raw data that identifies you in any form. No one will be able to identify your school or any staff from your school or your district. The transcript of this interview will be shared with you. Thus, the data will be completely confidential.

Is it ok if I record our conversation?

My name is Bindu Sunil. In the past 18 yrs. as an educator, I have been a teacher, an instr. Coach, a content coordinator, and more recently I work as an educational consultant. Currently, I am pursuing a doctoral degree in Edu. leadership. In the dissertation study, I am exploring organizational learning from your perspectives, the practices that enhance OL. And what influence does CTE have on OL.

Interview Question	Research Question	Conceptual Framework
1. How long have you been an educator? During that time, what roles have you served?		Principal/teachers' professional characteristics
2. In your experience, what are some major changes your school has experienced in the past 1-2 years? <i>(In essence, what changes have you brought in to improve teacher practices & student learning?)</i>		Organizational Learning
3. <i>You may be receiving information from different sources. Internal to your school, from your district, or from outside partnership.</i> How does your school share information with the staff? How is information regarding teachers' instructional practices and student learning expectations shared with the staff?	RQ1	Information Distribution
a. <i>Follow-up question, if needed – How do you communicate data</i>		

and knowledge with relevant personnel to ensure improvement and change efforts are implemented?

- | | | | |
|----|--|-----|---|
| 4. | Describe your experience on how you make sense of the information shared by your supervisor or colleagues, especially regarding improving teachers' instructional practices and student learning outcomes.
a. Give examples of how you make sense of new information so you can build shared understanding and take action to implement change. | RQ1 | Information Analysis |
| 5. | Describe an example of how your school stores the information that is distributed and analyzed to improve student learning. | RQ1 | Information Storage |
| 6. | Describe instances when you have retrieved and used information from prior learning to make decisions regarding teaching and learning. | RQ1 | Information Retrieval and Putting to Use |
| 7. | How have the teachers and staff successfully accomplished their expected tasks to improve teaching and learning? (mastery Experience) | RQ2 | Building collective efficacy for instructional strategies |
| 8. | How have teachers in your school collaborated and learned from their more experienced peers to improve student learning? What examples come to your mind? (vicarious experience) | RQ2 | Building collective efficacy for instructional strategies |
| 9. | Have teachers in your school felt hopeful and excited about the | RQ2 | Building collective efficacy for instructional strategies |

changes happening in your school to improve teaching and learning? What examples support your response? (affective states)

10. Thank you for taking the time to meet with me today. Are there any additional ways you are helping to ensure the success of new practices implemented to improve student achievement?
- RQ1
- RQ2

*Is there anything I did not ask that you would like to mention?

*Off the record, is there anything you would like to share regarding factors that impede the changes you want to implement at your school?

Appendix C: First Level Organization of Themes

District Support

- District initiatives get embedded to existing practices
- Make sense of district directive as a team and present in bite size to the staff
- Data Analysis, curriculum & instruction align with district vision
- Schools shift to new initiatives with new district leadership
- District more aware of school reality and bring quality programs than number of programs
- Alignment between school focus and district vision
- Reachout to district when implementation help is needed
- Info from district in PD forms is stored in Drive folder
- School focus on instruction and data align with district initiatives
- District support for coaching on instructional practices
- This is AIG 5
- District PL on pacing w/ Milestone
- District mandated intervention in place
- District walkthroughs are way to know how Ts are accomplishing tasks
- District communicate directly with teachers during PLCs
- District listening to the needs of the children
- External partnership formed if it aligns with the district vision (APS 5)

DM Process

- Data is used to inform every decision to ensure alignment
- Making decisions with the staff need to make sense
- Ts participated in deciding actions to improve
- Feedback is used to gather their needs and provide support
- Leadership team involved in identifying staff needs and facilitating
- Principal include experts to be part of decision-making
- Principal seek support in building ownership in others
- Principal trust teaching staff and the coaches
- Leadership gather feedback from staff

New T to Veteran T Collaboration

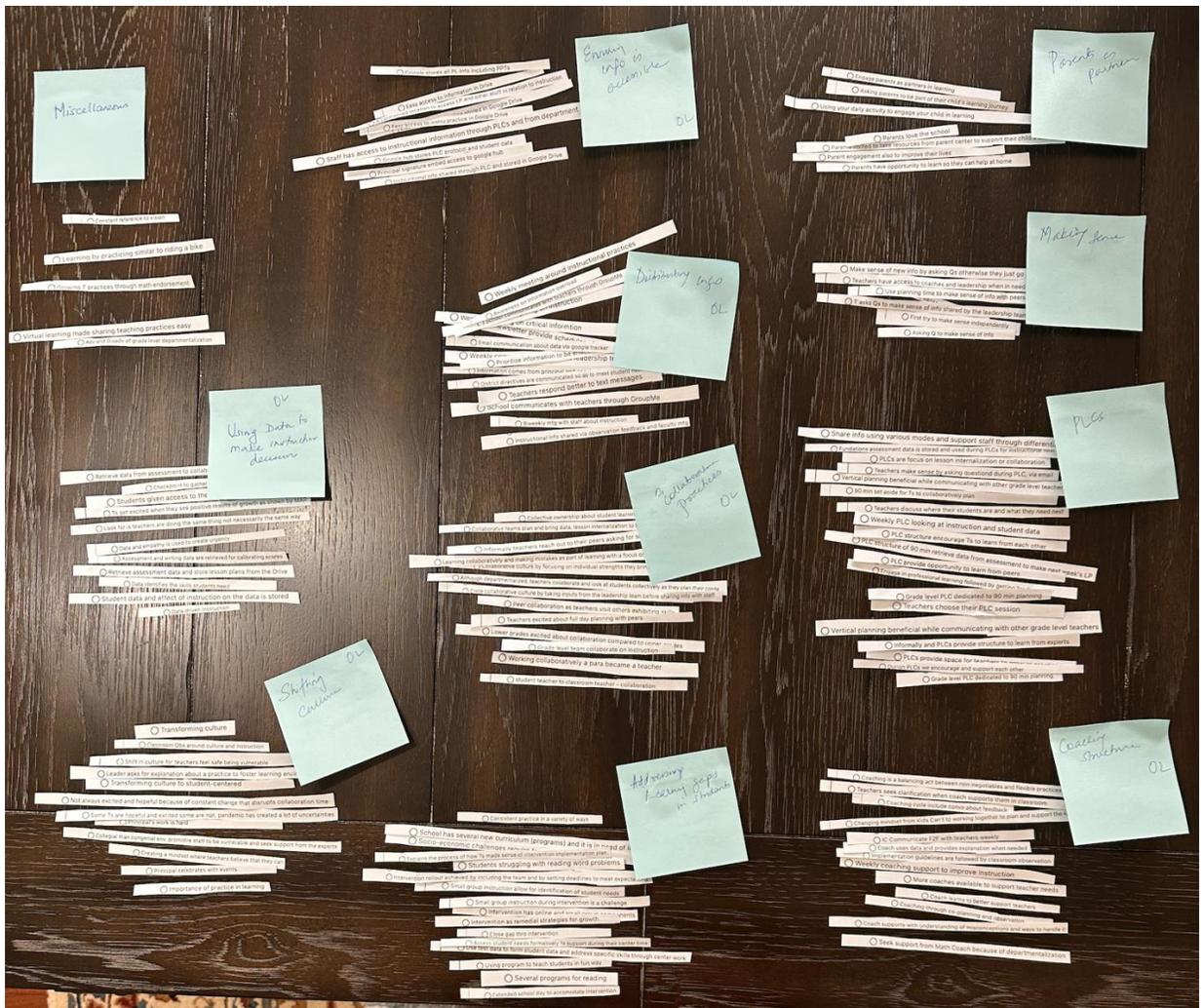
- If New Ts ask they... other classrooms
- New teachers have opportunities to share what they learned in their teacher training
- Support new teachers
- Instructional coaches and the veteran Ts look out for the new Ts
- Data over the next few years will tell what the new Ts have accomplished
- Teachers excited to hear from new teachers on effective practices
- Novice teachers see experts in action to learn
- Being a new T is tough so giving help is imp
- Veteran Ts readily available to answer Qs
- Experts share resources with other team members
- Experienced teachers pushback on changes rather than being a team player
- T concerns about a practice is communicated through another program that suggests self-paced course
- Teacher observation data is stored in Kick-Up
- Kick-Up collects T obs. data and suggestions are provided to support Ts
- Teachers give their peers feedback
- Recommend teachers to go see experts to learn from them
- Ts have electronic access to feedback

Swimband Practices

- Focus on personalized learning
- Preparing students with 21st century skills
- Preparing students for state test - grade level skill exposure and time for review
- Differentiated and targeted support
- Fixed schedule so students can... remediation
- Focus on acceleration rather than remediation
- Students engage in application problem before learning a skill
- Students incentivized when they show growth
- Brain breaks to engage KG students

Because of Pandemic

- Even with access to tech students did not log in and practice their skills
- Increased learning gaps
- Pandemic has affected students' social behavior
- Pandemic may have caused low level of skills in math
- Examples of social behavior
- Pandemic widened learning gap
- Families got free pass from accountability
- Pandemic caused laziness because of the hardship families experienced
- Pandemic has effected attendance rate
- Covid was detrimental for the families
- Lack of practice during pandemic and did not use the tech provided
- Teacher practices during pandemic intentional with the use of research based resources



Miscellaneous

- Teachers are becoming similar to using a bike
- Virtual learning means learning teaching practices easy

Using Data to make instruction decisions

- Remove data from assessment to focus on instruction to learn
- Students given access to the data
- Students are excited when they see positive results or growth in scores
- Look for a teacher or group doing the same or similar success in the future
- Share and compare in order to learn
- Assessment and testing data are reviewed for identifying success
- Review assessment data and share lesson plans from the Drive
- Students share the data across grade
- Student data and results of instruction from the data is shared

Sharing Culture

- Transforming culture
- Teachers are excited when they see positive results or growth in scores
- Look for a teacher or group doing the same or similar success in the future
- Share and compare in order to learn
- Assessment and testing data are reviewed for identifying success
- Review assessment data and share lesson plans from the Drive
- Students share the data across grade
- Student data and results of instruction from the data is shared

Addressing Learning Gaps in Indiana

- Several programs for reading
- Instructional resources about student learning
- Instructional teams are all bring data, lesson observations to PLC
- Instructional teams reach out to their peers asking for help
- Learning collaboratives and learning involves a part of learning with a "lead teacher"
- Instructional resources about student learning
- Instructional teams are all bring data, lesson observations to PLC
- Instructional teams reach out to their peers asking for help
- Learning collaboratives and learning involves a part of learning with a "lead teacher"
- Instructional resources about student learning
- Instructional teams are all bring data, lesson observations to PLC
- Instructional teams reach out to their peers asking for help
- Learning collaboratives and learning involves a part of learning with a "lead teacher"

Erroring info is available

- Staff has access to instructional information through PLCs and from department
- Instructional resources about student learning
- Instructional teams are all bring data, lesson observations to PLC
- Instructional teams reach out to their peers asking for help
- Learning collaboratives and learning involves a part of learning with a "lead teacher"

Distinguishing info

- Teachers respond better to text messages
- Teachers communicate with teachers through GroupMe
- Teachers respond to each other's questions
- Responsibilities shared in observation and lesson planning

Collaboration Practices

- Teachers discuss when their students are and what they need next
- Weekly PLC looking at instruction and student data
- Vertical planning beneficial while communicating with other grade level teachers
- PLCs provide space for teachers to share their experiences
- PLCs are encouraged and support each other
- Grade level PLC dedicated to 90 min planning

Parents as Partners

- Parents have access to instructional information and resources when needed
- Use planning time to make sense of info with other
- Try to make sense of info shared by the leadership team
- Try to make sense independently
- Try to make sense of info

Making Sense

- Share info using various modes and support staff through different
- Instructional assessment data is shared and used through PLCs for collaborative work
- PLCs are focus on lesson information or collaboration
- Teachers make sense of info shared during PLC via email
- Vertical planning beneficial while communicating with other grade level teachers
- 10 min set aside for to collaboratively plan

PLCs

- Teachers discuss when their students are and what they need next
- Weekly PLC looking at instruction and student data
- Vertical planning beneficial while communicating with other grade level teachers
- PLCs provide space for teachers to share their experiences
- PLCs are encouraged and support each other
- Grade level PLC dedicated to 90 min planning

Coaching Instruction

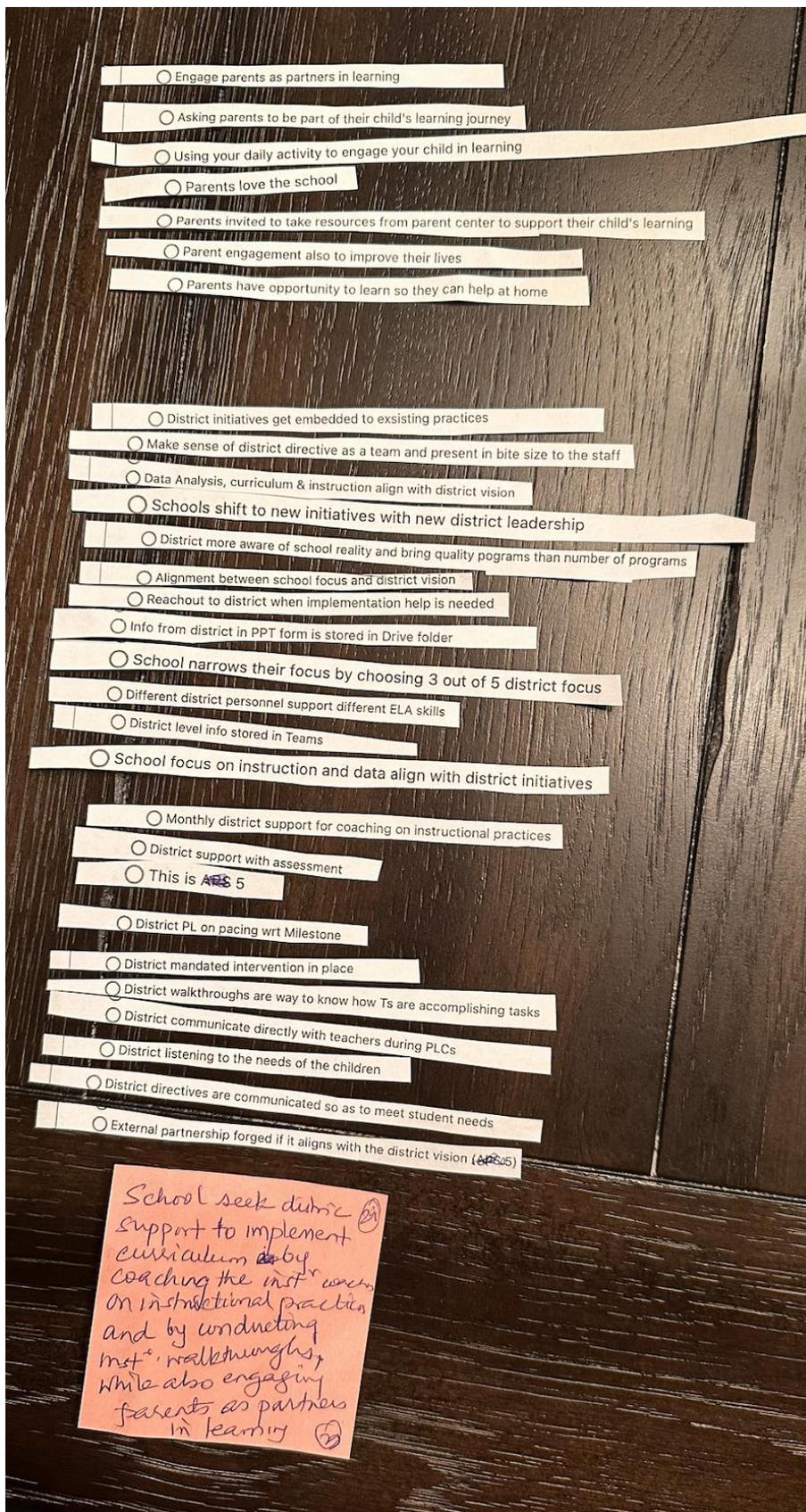
- Teachers seek clarification when much uncertainty them in requirements
- Teachers are excited when they see positive results or growth in scores
- Look for a teacher or group doing the same or similar success in the future
- Share and compare in order to learn
- Assessment and testing data are reviewed for identifying success
- Review assessment data and share lesson plans from the Drive
- Students share the data across grade
- Student data and results of instruction from the data is shared

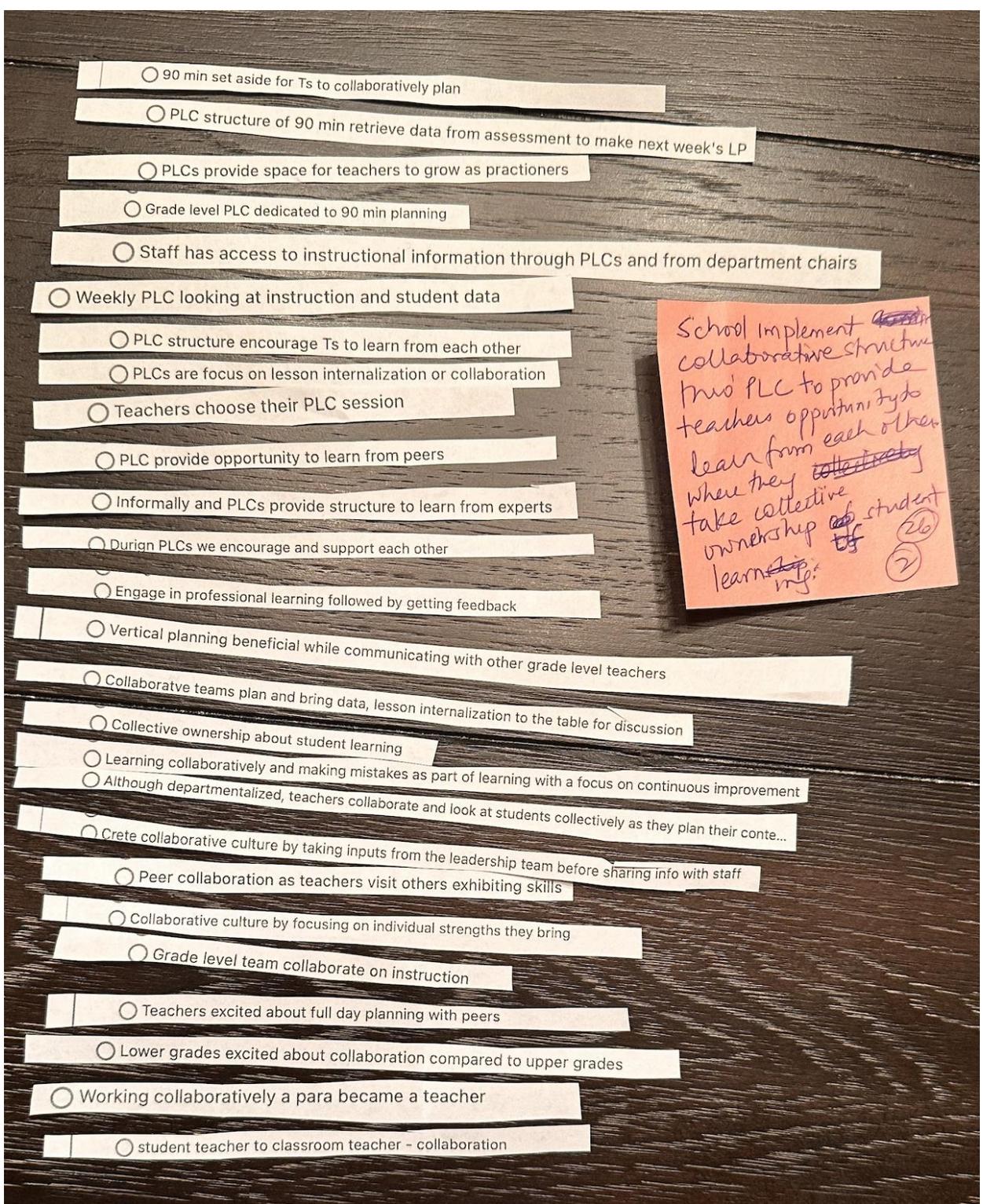
Appendix D: Second Level Organization of Theme 1

- Transforming culture
 - Shift in culture for teachers feel safe being vulnerable
 - Classroom Obs around culture and instruction
 - Leader asks for explanation about a practice to foster learning environment
 - Transforming culture to student-centered
 - Not always excited and hopeful because of constant change that disrupts collaboration time
 - Some Ts are hopeful and excited some are not, pandemic has created a lot of uncertainties
 - Collegial than congenial env. promote staff to be vulnerable and seek support from the experts
 - Principal's work is hard
 - Creating a mindset where teachers believe that they can
 - Principal celebrates with events
- Coaching is a balancing act between non-negotiables and flexible practices
 - Teachers seek clarification when coach supports them in classroom
 - Coaching cycle include convo about feedback
 - Changing mindset from Kids Can't to working together to plan and support the kids
 - IC Communicate F2F with teachers weekly
 - Coach uses data and provides explanation when needed
 - Implementation guidelines are followed by classroom observation
 - Weekly coaching support to improve instruction
 - More coaches available to support teacher needs
 - Coach learns to better support teachers
 - Coaching through co-planning and observation
 - Coach supports with understanding of misconceptions and ways to handle it
 - Seek support from Math Coach because of departmentalization

Principal engage in transforming culture establishing student-centered learning culture by utilizing coaching model to collaborative planning & monitoring build teachers' instr capacity. (24) (P)

- New and experienced teachers collaborate as they share knowledge, resources, & learn by visiting classrooms & giving peer feedback. (7) (16)
- New teachers have opportunities to share what they learned in their teacher training
 - Data over the next few years will tell what the new Ts have accomplished
 - Novice teachers see experts in action to learn
 - Teachers excited to hear from new teachers on effective practices
 - Recommend teachers to go see experts to learn from them
 - Teachers give their peers feedback
 - Ts have electronic access to feedback
- Informally teachers reach out to their peers asking for support
 - If New Ts ask they will be able to visit other classrooms
 - Support new teachers
 - Instructional coaches and the veteran Ts look out for the new Ts
 - Being a new T is tough so giving help is imp
 - Veteran Ts readily available to answer Qs
 - Experts share resources with other teachers
- Experienced teachers pushback on changes rather than being a team player
 - T concerns about a practice is communicated through another program that suggests self-paced course
 - Teacher observation data is stored in Kick-Up
 - Kick-UP collects T obs, data and suggestions are provided to support Ts.

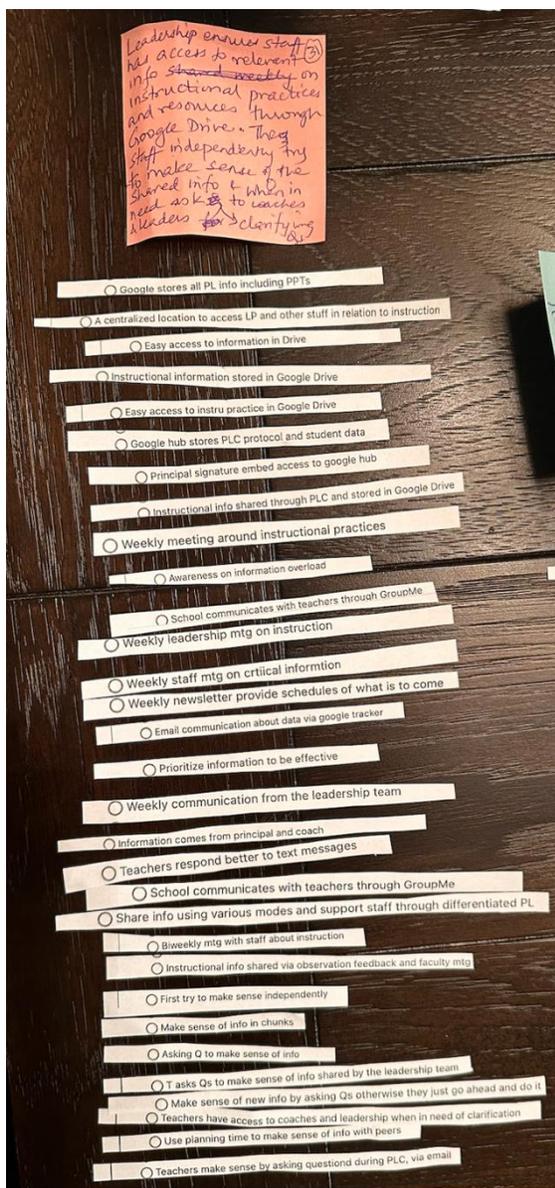
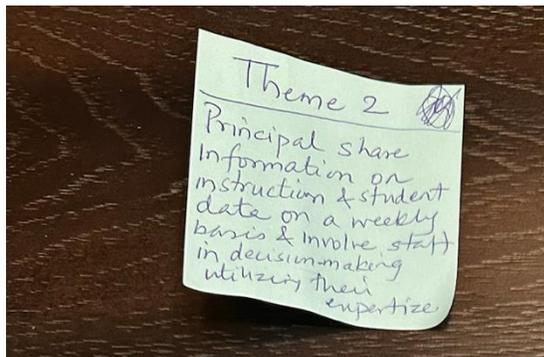




- 90 min set aside for Ts to collaboratively plan
- PLC structure of 90 min retrieve data from assessment to make next week's LP
- PLCs provide space for teachers to grow as practioners
- Grade level PLC dedicated to 90 min planning
- Staff has access to instructional information through PLCs and from department chairs
- Weekly PLC looking at instruction and student data
- PLC structure encourage Ts to learn from each other
- PLCs are focus on lesson internalization or collaboration
- Teachers choose their PLC session
- PLC provide opportunity to learn from peers
- Informally and PLCs provide structure to learn from experts
- Durign PLCs we encourage and support each other
- Engage in professional learning followed by getting feedback
- Vertical planning beneficial while communicating with other grade level teachers
- Collaborative teams plan and bring data, lesson internalization to the table for discussion
- Collective ownership about student learning
- Learning collaboratively and making mistakes as part of learning with a focus on continuous improvement
- Although departmentalized, teachers collaborate and look at students collectively as they plan their conte...
- Crete collaborative culture by taking inputs from the leadership team before sharing info with staff
- Peer collaboration as teachers visit others exhibiting skills
- Collaborative culture by focusing on individual strengths they bring
- Grade level team collaborate on instruction
- Teachers excited about full day planning with peers
- Lower grades excited about collaboration compared to upper grades
- Working collaboratively a para became a teacher
- student teacher to classroom teacher - collaboration

School implement ~~collaborative~~ collaborative structure
 This PLC to provide
 teachers opportunities to
 learn from each other
 when they ~~collectively~~
 take collective
 ownership of student
 learning. ~~by~~ ^{by} student ⁽²⁶⁾
 (2)

Appendix E: Second Level Organization of Theme 2



- Fundations assessment data is stored and used during PLCs for instructional next steps
- Data driven instruction
- Checkpoint to gather data on student skills
- Students given access to their Lexile score
- Assessment and writing data are retrieved for calibrating scores
- Retrieve assessment data and store lesson plans from the Drive
- Importance of practice in learning
- Data identifies the skills students need
- Data and empathy is used to create urgency
- Look for is teachers are doing the same thing not necessarily the same way
- Student data and effect of instruction on the data is stored
- Teachers discuss where their students are and what they need next
- Retrieve data from assessment to collaboratively decide support for students
- Ts get excited when they see positive results of growth as shown by MAP
- School has several new curriculum (programs) and it is in need of improvement
- Socio-economic challenges require focus on student learning
- Explains the process of how Ts made sense of intervention implementation plan
- Students struggling with reading word problems
- Intervention rollout achieved by including the team and by setting deadlines to meet expectations
- Small group instruction allow for identification of student needs
- Small group instruction during intervention is a challenge
- Intervention has online and small group components
- Intervention as remedial strategies for growth
- Close gap thro intervention
- Assess student needs formatively to support during their center time
- Use test data to form student data and address specific skills through center work
- Using program to teach students in fun way
- Several programs for reading
- Extended school day to accommodate intervention
- Differentiated and targeted support

Teacher retrieve student data to identify skills so they can collaboratively decide next steps in instruction. Small group instruction to close learning gap. (3)

- Data is used to inform every decision to ensure alignment to the vision and mission
- Making decisions with the staff need in mind, caring for staff
- Ts participated in deciding acions to improve attendance
- T feedback is used to gather their needs and provide opportunity to self assess
- Leadership team involved in identifying staff needs and facilitate PL
- Leadership gather feedback from staff
- Principal include experts to be part of decision-making
- Pricipal trust teaching staff and the coaches
- Principal seek support in building ownership in others

Leadership collect feedback from staff to identify their needs & include them in making decisions to improve student learning. (9)

○ Foundations assessment data is stored and used during PLCs for instructional next steps

○ Data driven instruction

○ Checkpoint to gather data on student skills

○ Students given access to their Lexile score

○ Assessment and writing data are retrieved for calibrating scores

○ Retrieve assessment data and store lesson plans from the Drive

○ Importance of practice in learning

○ Data identifies the skills students need

○ Data and empathy is used to create urgency

○ Look for is teachers are doing the same thing not necessarily the same way

○ Student data and effect of instruction on the data is stored

○ Teachers discuss where their students are and what they need next

○ Retrieve data from assessment to collaboratively decide support for students

○ Ts get excited when they see positive results of growth as shown by MAP

○ School has several new curriculum (programs) and it is in need of improvement

○ Consistent practice in a variety of ways

○ Socio-economic challenges require focus on student learning

○ Explains the process of how Ts made sense of intervention implementation plan.

○ Students struggling with reading word problems

○ Intervention rollout achieved by including the team and by setting deadlines to meet expectations

○ Small group instruction allow for identification of student needs

○ Small group instruction during intervention is a challenge

○ Intervention has online and small group components

○ Intervention as remedial strategies for growth

○ Close gap thro intervention

○ Assess student needs formatively to support during their center time

○ Use test data to form student data and address specific skills through center work

○ Using program to teach students in fun way

○ Several programs for reading

○ Extended school day to accomodate intervention.

○ Differentiated and targeted support

○ Ts get excited when they see positive results of growth as shown by MAP

Teachers retrieve (31)
 student data to identify skills so they can collaboratively decide next steps in instruction. Small group instruction to close learning gap