Examining Organizational Learning Culture (OLC) in Schools Adopting Trauma-Informed Practices

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Examining Organizational Learning Culture (OLC) in Schools

Adopting Trauma-Informed Practices

Constance Grimm-Grason

Governors State University

Dissertation Capstone

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For the Doctor of Education

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Governors State University

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Abstract

Trauma-informed practices represent a departure from the status-quo disciplinary practices originating from zero-tolerance approaches. This departure from the status-quo represents a transformative change in schools. Teachers are often the initial responders to student struggles or misbehaviors, and the teacher’s response is conditioned by their belief system, their self-efficacy, and the norms of the school where they teach. The shift to supportive school discipline approaches, such as trauma-informed practices, may alter the formal discipline norms of the school, but the shift may not transfer to the teacher’s belief systems, their sense of self-efficacy with trauma, or the informal norms of the school at the classroom level. The goal of this study was to examine the differences observed in schools undergoing the implementation of trauma-informed practices as it relates to the attributes of OLC (OLC). The causal-comparative study found some associations between the attributes of OLC and the strength of implementation of trauma-informed practices. Attributes of OLC that produced significant levels of variance included a) clarity and support of a collective mission, vision, or purpose; and b) belief, trust, and readiness related to change. Cultivating an OLC, particularly supporting the attributes of shared vision and belief in the change, can impact the implementation of transformative change such trauma-informed practices in place of zero-tolerance discipline approaches.

Keywords: OLC, trauma-informed practices, transformative change, elementary school district, zero-tolerance, supportive school discipline
Acknowledgements

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I want to acknowledge my parents for instilling a love of learning that never leaves me. Thank you for giving me the foundation upon which I could stand and grow.

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I want to recognize my friends, Melissa, and Catherine, who gave me the space to stress out and the requirement to relax and enjoy life occasionally.

Finally, I want to thank my capstone committee for their guidance and support: Dr. Marlon Cummings for remaining calm even when I was stressed, Dr. Saundra Mickles for sharing her experience and knowledge, and Dr. Lionel Allen for continuing to inspire me to greatness.

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Chapter 1: Introduction

The school-discipline reform movement, initiated by the 2014 Dear Colleague Letter: Nondiscriminatory (Lhamon & Samuels, 2014), represents a significant and transformative reform effort in schools across the nation. The Dear Colleague Letter was written in response to the findings of the Civil Rights Data Collection administered by the Office of Civil Rights, indicating that students of certain racial or ethnic groups have higher rates of disciplinary action than other racial groups. The Supportive School Discipline Initiative (SSDI, U.S. Department of Justice & U.S. Department of Education, 2011) and the resulting Dear Colleague Letter (Lhamon & Samuels, 2014) called for a “180-degree pivot” from the zero tolerance framework schools utilized for their discipline models to stem the school-to-prison pipeline.

The SSDI is the foundation of current school-discipline reform efforts. It prioritizes addressing injustices, increases fairness and improves equity by maintaining the purpose of disciplinary responses, which are to guide and support students toward better future choices. The SSDI focuses is on supporting student growth to make better behavioral choices that in turn leads to greater success in school.

Before the SSDI, student discipline and classroom management were commonly based upon the zero-tolerance framework centered on maintaining order and safety of the school environment (Fabelo et al., 2011; Mallett, 2016). Common school response to student misbehavior had centered on the punitive consequences that disproportionately relied on exclusionary options such as suspensions and expulsions (Fabelo et al., 2011; Office of Civil Rights, 2014; US Department of Justice & US Department of Education, 2014). The SSDI and its focus on supporting student behavioral growth is a departure from the “get tough” or “broken
windows” punishment framework of zero-tolerance where order and safety drive discipline decisions even at the risk of discriminatory results (Mallett, 2016).

All school reform efforts are challenging, particularly reform that requires transformative change. The existing norms and beliefs differ significantly from the norms and beliefs grounding the reform initiative. Classroom management and responding to student misbehavior reflect the school’s culture and a reflection of the norms and values of the school staff. Before to SSDI, removal of the student from the classroom to the office or from the school to home was a frequently used tool to maintain order and ensure student learning. In interviews and focus groups since the shift to SSDI, teachers are expressing an overwhelming view that removal from the learning environment is “a useful tool for temporarily removing problem students from their classrooms and sending strong messages to parents” (Gray et al., 2017, p. 50) resulting in a perceived lack of support by school administrators and a perceived feeling of loss (Gray et al., 2017, Teach Plus, 2018). The feelings of loss and lack of support expressed by teachers who continue to value student removal from classrooms and school indicates that the change required by SSDI is transformative and challenging.

Districts, schools, and classrooms are having varied success achieving the goals of the SSDI (Gray et al., 2017; Educators 4 Excellence; 2018; Steinberg & Lacoe, 2017; Teach Plus, 2018; The Council of State Governors Justice Center, 2017). The mixed results stem from multiple causes. Some argue that the intentions of the SSDI do not consider the needs of most students who “want to learn” and school climate has deteriorated as a result (Gray et al., 2017). Others argue that supportive school discipline methods are “soft” and only work with some types of students, but not all types, and not with behaviorally challenged students (Gray et al., 2017; Mulgrew, 2016; Teach Plus, 2018). Another common argument is that the Department of
Education pushed the reform without funding resulting in yet another failed unfunded mandate (D’Orio, 2018; Mulgrew, 2016; Steinberg & Lacoe, 2017; Watanabe & Blum, 2015). The lack of funding is a frequently presented argument by teacher unions who criticize the reform for the lack of training and a lack of staff to effectively implement such change (Mulgrew, 2016; Teach Plus, 2018). However, there are schools and entire districts that are demonstrating progress and growth toward the goals of the supportive school-discipline reform efforts (Teach Plus, 2018; The Council of State Governors Justice Center, 2017) despite similar challenges.

When examining the implementation of school-discipline reform, the hurdles of adequate funding, quality training, and challenging student demographics impact effective reform. A less obvious hurdle involves the school’s culture and climate surrounding change. School-discipline reform is challenging, and it represents a transformative change to the school. The process of transformative change in any organization can be viewed through the lens of OLC.

The goal of this study was to examine the relationship between the OLC in school settings and the perceived success levels of guiding principles found in the SSDI. More specifically, the purpose of this study was to understand how characteristics of learning organizations—readiness for change, organizational learning capacity, perceived organizational supports, and change recipients’ beliefs and trust—exist in educational organizations undergoing school discipline reform. This study explored the relationship between OLC and the effectiveness of implementing and maintaining transformative change in schools and school districts.
Background of the Study

The Challenge of Change

Change is prevalent in all modern organizations, both in the public sector and the private sector. Change is necessary for an organization to maintain its competitive edge in a globally expanding world. Organizations that do not adapt and refine themselves in today’s rapidly changing environments struggle and often do not survive (Kotter, 2012; Van de Ven & Poole, 1995). Despite the importance of change, studies and surveys report that 70% percent of change initiatives do not attain their goals or are not sustained as reported by managers and leaders directing the change initiatives (Keller, Meaney, & Pung, 2010; Lindsay, Smit, & Waugh, 2018).

The lack of sustained and successful initiatives is evident for all types of change. Change types range from the incremental, first-order change to transitional, second-order change. Incremental, first-order change produces procedural changes that alter how things are done—the routines, protocols, or structures of the systems in the organization. Transitional, second-order change produces transformational shifts in the organization that alter why things are done—the purpose, the mission, or the guiding principles of the organization (Ackerman, 1997; Marzano, Waters & McNulty, 2005). Transformational, second-order change is more complex and more deeply ingrained in the organization resulting in greater challenges when organizations undertake such transformative change.

In the corporate setting, businesses that are unable to undergo effective change leads to business decline and the consumer moving to a competitor. Unlike most corporations, public school districts function like monopolies with limited, viable competitors for student consumers. As school districts struggle and decline, the district may consolidate students into fewer school sites, but dissolving an entire school district is not feasible.
In communities with school options, whether choice schools or private schools, there are not enough seats to enroll every public-school student in a failing school district. School districts do not close their doors, rather they undergo reform or improvement or restructuring to address the needed changes in the organization. As a result, publicly funded educational organizations have a greater expectation to effectively change through reform and improvement as they are providing education in a monopoly-like environment. Additionally, the stakes for improved educational experiences for students exceeds the stakes for businesses and corporations. The long-lasting impact of a lower quality education ripples beyond high school graduation and in turn directly impacts the economy and businesses.

Educational institutions experience changes under the umbrella of “educational reform” with change rarely resulting from natural competition but rather from oversight and accountability measures. Since the progressive period of modern education prior to the 1950s, the call for educational reform continues with mixed results in the classrooms (Fullan, 2007, 2010, 2016). Fullan has examined and written about organizational change in education since the 1970s. While Fullan (2016) acknowledged there has been some sporadic success of whole-system improvement in education, the success of change continues to be limited. Over the past 23 years, Fullan argues that educators have not “cracked the code of getting beyond the classroom door on a large scale” (Fullan, 2016, p. ii). Fullan fully recognizes the complex challenge of implementing change, or reforms, in schools and districts.

**SSDI Guiding Principles**

To provide support and guidance for the implementation of the SSDI, the U.S. Department of Education (2014) published a resource guide containing a variety of best practices that could guide the organization through the initiative. The resource guide focused on three
The first guiding principle focuses on climate and prevention. Positive school climates improve student learning by working to prevent problem behaviors from disrupting classroom learning. The primary form of prevention recommended is providing supports to struggling and at-risk students in the form of social-emotional learning programs, effective interventions, and skill-building both academically and behaviorally. The first guiding principle requires the greatest transformational shift in how the school environment changes from a zero-tolerance approach to a supportive schools approach (U.S. Department of Education, 2014).

The second guiding principle involves expectations and consequences. While the SSDI has a goal to reduce the use of suspensions and expulsions in schools, SSDI supports the creation of discipline policies that delineate clear, appropriate, and consistently applied consequences that focus on improving student behavior, increasing student engagement, and raising student achievement. Schools are encouraged to set high expectations for behavior while identifying developmentally appropriate and proportional consequences for student misbehavior. This guiding principle emphasizes the goal of students learning from their mistakes and gaining improved skills to self-manage their behaviors (U.S. Department of Education, 2014).

The third guiding principle is equity and continuous improvement. This guiding principle stresses the importance of schools building staff capacity to reinforce appropriate behaviors and
to respond to student misbehavior skillfully and strategically in a way that is effective, supportive, fair and equitable. Additionally, schools and districts are encouraged to analyze and reflect on the discipline policies and practices to ensure fairness and equity are evident (U.S. Department of Education, 2014).

**Trauma-Informed Practices in Schools**

The goal of trauma-informed schools is to create school environments that are responsive and supportive to the needs of students who have experienced childhood trauma. The approaches used by trauma-informed schools are in alignment with the SSDI guiding principles focused on creating a positive school climate and supporting students as they learn from their mistakes. Trauma experiences in childhood, particularly chronic traumas, alter student neurodevelopment impacting the student’s cognitive functioning and emotional regulation (Craig, 2015). Adverse childhood experiences (ACEs) are stressful or traumatic events such as physical/sexual/emotional abuse, physical/emotional neglect, mother treated violently, substance abuse in the home, mental illness in the home, parental separation/divorce, or incarcerated family member (Felitti et al., 1998). The prevalence and duration of the ACEs raises the disruption of neurodevelopment leading to greater challenges for the student.

Students who have experienced chronic trauma or ACEs can present as unmotivated, angry, uncooperative, or lost in the classroom setting causing teachers to wonder what is wrong with the student (Craig, 2015). Challenging behaviors, including those stemming from childhood trauma, create a perspective that can lead to punitive disciplinary responses such as those found in zero-tolerance policies. However, when educators look at students through a trauma-informed lens, teachers are more likely to consider what has happened to the student to cause them to behave in this manner which increases the likelihood that the educator will respond with
supportive interventions that teach students new behavioral and emotional skills (Ford et al., 2006). This shift in perspective builds teacher and staff capacity to effectively implement the guiding principles of SSDI.

Educators who deepen their awareness and understanding of chronic trauma in children develop a perspective that increases the use of supporting behavioral responses and decreases the use of suspensions or expulsions to respond to challenging student behaviors. Woodbridge et al. (2015) found that Black middle-school students are more likely than White students to report exposure to ACEs or trauma. Higher exposure to childhood trauma is associated with increased incidents of student misbehavior that subsequently increases the risk of Black students to face disciplinary consequences such as suspension (Busby, Lambert, & Ialongo, 2013). Trauma-informed practices provide the supportive environment that can effectively address trauma associated behaviors as envisioned in the SSDI.

**Background Summary**

Organizational change involves a multitude of factors that either enhance or hinder the change process with most change initiatives classified as unsuccessful in achieving and maintaining the goals of the initiative (Keller et al., 2010; Lindsay et al., 2018; Marzano, Zaffron, Zraik, Robbins, & Yoon, 1995). Marzano et al. (1995) posited that change-oriented educational initiatives struggle because the change process does not address the influence of existing beliefs and perceptions. First order change, or incremental change, is successful when the beliefs and perceptions align with the initiative while second-order change, or transformative change, requires the initiative to actively address the potential misalignment of the beliefs or perception in order to succeed. In the sphere of educational organizations, modern schools have repeatedly experienced the cost of failed change initiatives and reforms. In schools, reform
efforts have become a persistent presence that in turn destabilizes the school’s organizational culture (Fullan, 2016). A culture of successful reforms and change initiatives would strengthen rather than destabilize the school’s organizational culture. The SSDI and the implementation of trauma-informed practices are fundamental components of the school discipline reform movement.

**Purpose of Research and Intended Audience**

Change is an ever-present element of modern organizations and a critical factor of an organization’s success. Understanding the change process and understanding readiness for change are significant factors contributing to the success of any educational organization. Organizational change, change readiness, and organizational culture have each been studied extensively in the business setting, but a limited number of studies have focused on using similar measures to assess an educational organization’s potential for effectively engaging in second-order change.

The purpose of this study was to understand how characteristics of learning organizations—readiness for change, organizational learning capacity, perceived organizational supports, and change recipients’ beliefs and trust—exist in educational organizations undergoing school discipline reform. This study explored the relationship between OLC and the effectiveness of implementing and maintaining transformative change in schools and school districts.

The results of this study may assist superintendents and other educational leaders in assessing the educational organization’s receptivity for change. By determining the organization’s readiness levels and the degree of learning organization culture, leaders can prepare to support the organization through the change. Advanced assessment and planning for
change could improve the likelihood of successfully implemented and maintained change which benefits all stakeholders by limiting the negative impact from weak or unsuccessful change.

**Problem Statement**

This study looked at the OLC attributes to readiness, capacity, and beliefs of teachers undergoing transformative, second-order change as it relates to the implementation of trauma-informed school climate practices. The increased focus on students’ social-emotional learning, as supported by the SSDI and the Every Student Succeeds Act (ESSA) of 2015, has required schools and school districts to transform school cultures and to systemically change the way schools work. Various school districts in the southern suburbs of the Chicago metropolitan area have partnered with the Partnership for Resilience to transform into trauma-informed schools with the intention of better meeting the social-emotional needs of the students they serve. The level of successful implementation varies among the school districts and even among the individual schools within a school district.

This study proposed that the presence of an OLC contributes to the organization’s effective implementation of transformative change. Schools that present attributes of organizational learning are better prepared to adjust and adopt new approaches resulting in stronger implementation of the transformative change. Schools that have weaker or slower implementation of the transformative change present fewer attributes of OLC (Garcia-Morales, Lopez-Martin, & Llamas-Sanchez, 2006).

By focusing on schools and school districts that are engaging in the transformative change process toward becoming trauma-informed schools, this study examined the determining factors at the school culture level that potentially influence the implementation and sustainability of the change. In measuring readiness factors in advance, leaders (superintendents, external
leaders, principals, etc.) can assess the likelihood of a successful change process before committing to the initiative and can address any deficient areas to better prepare for the change.

There are many different schools of thought related to successfully leading organizational change, but the specific theories involving organizational learning may hold a key to why school-discipline reform succeeds or fails. The purpose of this study was to understand how characteristics of learning organizations—readiness for change, organizational learning capacity, perceived organizational supports, and change recipients’ beliefs and trust—exist in educational organizations undergoing school discipline reform. Each of the schools in this study is currently working with the Partnership for Resilience and have committed to increasing the use of trauma-informed practices to build and strengthen a supportive school culture.

The assumption for this study was that schools engaged in trauma-informed practices are working toward a supportive school culture and will rely on less exclusionary disciplinary practices when addressing student misbehaviors. Each school is a member of a school district that has elected to work with the Partnership for Resilience to provide the district, the schools, and the classrooms with guidance, training, and support toward implementing supportive school practices.

Research Question

This study is built on and extends existing research by examining the relationship between the attributes of an OLC and the effectiveness of the change initiative. The research question posed was:

What differences are observed in schools undergoing the implementation of trauma-informed practices as it relates to the attributes of OLC?
This study sought to better understand how the culture of the school, as it relates to change, can impede, or promote the process of transformative change. Leading change in an organization can be undertaken using different approaches resulting in varied rates of success. Transformative change is more challenging for organizations than incremental change and thus organizations undergoing transformative change may require different approaches to successfully achieve their change goal. One possible approach for leading transformative change is creating a learning organization. Organizational learning theory includes examining the organization’s culture and propensity toward learning. It represents a more theoretical and more complex approach to leading change than change management, another common approach to leading change.

Trauma-informed practices represent a departure from the status-quo disciplinary practices originating from zero-tolerance approaches. Teachers are often the initial responders to student struggles and misbehavior, and their response is conditioned by their belief system, their self-efficacy, and the norms of the school where they teach.

The shift to supportive school discipline approaches such as trauma-informed practices may alter the formal norms of the school, but the shift may not transfer to the teachers’ belief systems, sense of self-efficacy using trauma-informed strategies, or the informal norms of the school (Educators 4 Excellence, 2018; Gray et al., 2017; Teach Plus, 2018). This study looked to compare the presence of attributes associated with OLC in schools that are reporting stronger implementation of the trauma-informed practices as contrasted by schools reporting weaker implementation of the trauma-informed practices to determine if OLC attributes promote transformational change.
Chapter 2: Literature Review

The purpose of this chapter is to review the foundation of research on change theory, particularly as it relates to organizational change. This chapter introduces the theoretical framework upon which this study is developed followed by the review of literature. The first section of the review of literature begins by examining change in educational settings and school reform. The second section focuses on organizational change including change management, organizational learning, and learning organizations. The following section then discusses the measurable attributes of OLC including readiness, capacity, perceived supports, trust, and change recipients’ beliefs. The review concludes with unique challenges inherent in schools and school districts that impact the cultivation of organizational learning.

Theoretical Framework

Multiple factors are identified as essential to an organization ready for change, and many researchers (Argyris & Schon, 1995; Fullan, 2001; Garvin, 1993; Goh, 1998; Kotter, 2002; Marsick & Watkins, 1997; Senge 1990) have developed models for managing the change process in organizations. In change theory, learning organizations represent one approach to managing organizational change.

Organizational learning as coined by Argyris and Schon (1995) is the process by which individual learning is transferred to the organization through structures, mental models, and culture. Senge (1990) defined a learning organization as “an organization where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn” (p. 35). The two definitions have nuanced differences that contribute to confusion within the research on organizational change theory.
Senge’s work has been criticized as focusing on the theory of the ideal learning organization without identifying building models that create and cultivate learning organizations (Garvin, Edmondson & Gino, 2008; Yang, Watkins, & Marsick, 2004). Later theorists built upon the early work of Argyris and Schon (1995) and Senge (1990) to define the building blocks of an organization’s culture and the actions that foster organizational learning that lead to the ideal of a learning organization.

This study focuses on the work of Garvin (1993), Goh and Richards (1997), Marsick and Watkins (1997) and Garvin et al. (2008) who have applied learning organization theory to identify critical components of a learning organization. The theoretical framework for this study aligns with the work of Goh (1998, 2003) who based his model on Garvin’s synthesized definition of a learning organization. Garvin (1993) defined a learning organization as “an organization skilled at creating, acquiring, and transforming knowledge, and at modifying its behavior to reflect new knowledge and insights” (p. 80). Additionally, Goh established that organizations possessing the qualities and attributes of organizational learning can be considered a learning organization and that the two terms can be used interchangeably (Goh, Cousins, & Elliot, 2006).

Goh (1998, 2003) identified five strategic building blocks or learning organization characteristics that include: clarity and support for the mission, leadership that supports learning, an experimenting organizational culture, the ability to transfer knowledge effectively, and teamwork and cooperation. The concept of OLC is associated with these five building blocks and can be measured using the Organizational Learning Survey developed by Goh and Richards (1997).
This study’s theoretical framework synthesizes the common building blocks of learning organizations as researched by Garvin (1993), Goh and Richards (1997), Marsick and Watkins (1997) and Garvin et al. (2008) into seven strategic and foundation blocks organized into three layers. The five strategic blocks are categorized based on “the two components representing the people who make up the organization and representing the structures and culture created by the organization’s social institution” (Yang et al., 2004, p. 40).

In Figure 1, the theoretical framework captures the seven synthesized building blocks of a learning organization categorized into three layers of the people who work at the organization, the structures of the social institution at the organization, plus the organizational support structures.

<table>
<thead>
<tr>
<th>STRATEGIC BUILDING-BLOCKS OF A LEARNING ORGANIZATION</th>
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<tbody>
<tr>
<td><strong>People Layer</strong></td>
</tr>
<tr>
<td>o Clarity and support of collective vision, mission, or purpose</td>
</tr>
<tr>
<td>o Continuous learning opportunities with experimentation and risk-taking</td>
</tr>
<tr>
<td>o Collaboration, teamwork, and group problem-solving</td>
</tr>
<tr>
<td><strong>Structural Layer</strong></td>
</tr>
<tr>
<td>o Established systems to capture and share knowledge</td>
</tr>
<tr>
<td>o Leadership commitment and empowerment</td>
</tr>
<tr>
<td><strong>Organizational Support Structures</strong></td>
</tr>
<tr>
<td>o Organizational design with flat hierarchies and less formalization</td>
</tr>
<tr>
<td>o Members skills and competencies</td>
</tr>
</tbody>
</table>


Infused throughout the building blocks of learning organizations represented in Figure 1 are the concepts of belief, readiness, and trust. Each of these components can stand on their own
as an element of organizational learning, or they can align and complement the six building blocks in this study’s organizational learning framework. One unique quality of belief, readiness, and trust is that they are reflected in the internal response of the individual to the culture of the learning organization. Belief, readiness, and trust can make a team coherent or they can erode the organization’s culture and impede change. They are ever-present to the organizational learning framework, yet often unnoticed or unrecognized.

**Review of Literature**

Change in an organization is complex and often unsuccessful. Leaders, managers, and change agents have a direct influence on the success rate of change in how they engage members of the organization in the experience. The structure of the organization, the forces of competition, the sense of urgency, and the way the organization functions can each impede or promote the change process. However, an organization’s culture around change is a critical driver for successful change initiatives. Educational organizations, including schools and school districts, are perpetually undergoing change initiatives or reforms within an organizational structure that complicates the process of organizational change.

**School-Discipline Reform Efforts**

School improvement or school reform frequently focuses on measures of student achievement; however, school culture and climate metrics have taken on increased importance in response to the inclusion of the social-emotional learning requirements involving the ESSA. Of interest is the changing expectation regarding student discipline, student behavior and classroom management.

For more than a half century, Americans have consistently identified student discipline as a major problem facing their local public schools (Phi Delta Kappa, 2018). Student behavior is a
highly visible measure of school performance. It is often used by the public to informally evaluate a school’s effectiveness and to label the school as a “good school.”

Zero-Tolerance. The age of zero tolerance disciplinary approaches can be traced back to the late 1980s or early 1990s with support from the Gun-Free Schools Act (1994). Congress passed the Gun-Free Schools Act making federal education funds contingent on the state passing a law that requires local school districts to expel for a minimum of one year any student who brings a firearm to school (Fabelo et al., 2011).

In an oft-cited longitudinal study of student discipline in Texas, Fabelo et al. (2011) found that nearly 60% of secondary level public school students who entered seventh grade in the years 2000, 2001, or 2002 were suspended or expelled at least once during their secondary education experience. Of misbehaviors producing a suspension or an expulsion, only 3% were the result of the state’s zero-tolerance laws related to weapons and drugs with the remainder resulting from less severe violations against the local school’s code of conduct such as willful defiance, truancy, rule violations and fighting.

Along with the findings of the study by Fabelo et al. (2011), the Office for Civil Rights (2016) identified disproportionate rates of suspension and expulsions for minority students and students with disabilities. Black students are 3.8 times as likely to receive out-of-school suspensions as White students, while students with disabilities are more than twice as likely to receive out-of-school suspensions than their non-disabled peers. After controlling for school variables related to poor academic performance and more serious student offenses, Black students were still more likely to receive harsher disciplinary consequences such as suspensions and expulsions, even when the offense was a discretionary local school code offense rather than a state-mandated offense.
SSDI. In response to the student discipline data (Fabelo et al., 2011; Office for Civil Rights, 2016), the U.S. Department of Justice and the U.S. Department of Education announced the creation of SSDI in July 2011. The purpose of SSDI is to develop positive school climates and improve school discipline policies leading to student achievement and success. The SSDI identified three guiding principles to support the initiative’s purpose. The first guiding principle focuses on forging positive school climates that prevent and respond to inappropriate student behaviors. The second asks educators to put clear, appropriate, and consistent expectations in place that align to appropriate consequences responding to student misbehavior. The third focuses attention on the importance of fairness and equity for all students and their civil rights by evaluating the impact of discipline practices on all students (U.S. Department of Education, 2014).

Currently, educators in the State of Illinois, are grappling with the shift in focus from zero-tolerance discipline approaches from the past 25 years to new strategies related to student misbehavior and discipline (Educators 4 Excellence, 2018; Teach Plus, 2018). The new approaches are mandated by Illinois Senate Bill 100 (SB100) and ESSA. Both SB100 and ESSA require educators to incorporate social-emotional learning to build a supportive, positive school climate that enhances student success (Gregory & Fergus, 2017). Illinois SB100 specifically mandates the use of interventions and the consideration of circumstances when determining disciplinary consequences to student misbehavior.

Currently, school districts are working to transform their schools to align with the guiding principles of the SSDI. This change represents a change in basic assumptions or a second-order change that requires a change in beliefs and a change in actions. The prevalence of “get tough” or zero-tolerance discipline practices since 1994 and earlier resulted in the zero-tolerance
approach as the primary frame of reference most teachers have for managing their classrooms and creating an environment conducive to learning (Baker, 2005). The approaches and practices often associated with zero-tolerance discipline have created a belief system, or mindset, that is counter to the educator mindset required under the guidelines of the SSDI, Illinois Senate Bill 100 or ESSA. In simplest terms, the zero-tolerance mindset emphasizes punishment in response to misbehavior while the supportive schools mindset emphasizes guidance as the preferred response.

**Approaches to Organizational Change**

All change is not the same. For organizational change, most change can be categorized into one of two broad types that are labeled differently depending on the theory or the researcher. The two types of change are based on the magnitude of the changes. Marzano and Waters (2009) described first-order change as “changes that are perceived as extensions of the past” (p. 105) and second order change as “changes that are perceived as breaks with the past” (p. 105). These researchers extended their first-order change as fitting within current beliefs or paradigms, aligned with current norms or beliefs, utilizes existing skills and knowledge, and the change may be easily accepted, as necessary.

In comparison, second-order change represents a new paradigm, conflicts with current beliefs and norms, requires new skills and knowledge, requires new resources for the innovation, and risks resistance due to less agreement of the necessity of the change. Another way of describing the two types of change is one is incremental where the organization experiences improvements and adaptations that resulting in small to moderate changes in the organization’s way of doing things while the other change is transformational where the organization
significantly alters the core systems of the organization resulting in major changes in the organization’s way of doing things (Marzano & Waters, 2009).

The two types of change—incremental, first-order change and transformational, second-order change—each require different types of learning to fully execute the change. First-order change involves adaptive learning that focuses on the existing routines or single-loop learning that focuses on detecting and correcting errors to improve existing systems (Argyris & Schon, 1995). Second-order change involves generative learning that requires new ways of looking at the organization and questioning long-held assumptions (Senge, 1990; Senge et al., 2000) or double-loop learning that involves examining underlying causes and effects to modify the organization’s norms, policies, and goals (Argyris & Schon, 1995). This study used the terms incremental, first-order change and transformative, second-order change to describe the types of change and the associated learning type.

Organizational Change Theory

Organizational change is ever-present in modern organizations and is activated by such forces as competition, globalization, crisis situations, or leaders. Organizational change can be defined as the process of changing an organization’s way of doing (strategies, procedures, processes, technologies, culture, etc.) to evolve in response to external and internal forces. Organizational change is challenging, and most change initiatives do not successfully meet the goals. The McKinsey consulting firm surveyed managers and leaders from 1,536 companies that underwent organizational change. Only 38% reported that the change initiative achieved its intended goals (Isern & Pung, 2007; Keller et al., 2010).

Organizational change has been studied and analyzed by many researchers, yet the research has not produced a single, unified theory. Organizational change theory has been
researched through a wide range of discipline such as psychology, management, sociology, leadership, etc. Each researcher examines organizational change through the discipline’s lens resulting in a variety of frameworks, models, and theories. The two most prevalent approaches to organizational change involve the theories of change management and learning organizations. The level of commonality between the two theories varies from model to model but there are some elements that are hallmarks of either change management or learning organizations.

Both change management theories and learning organization theories reference the foundational work of Lewin’s (1947) theory of change. Lewin proposed a three-stage process for successful organizational change involving unfreezing, changing, and refreezing. Unfreezing reflects the period where the organization is preparing for the changes that will alter their current practices. Unfreezing includes the realization that the current state is no longer ideal, and a new ideal is presented to the members of the organization. Changing involves the action stage where the organization is undergoing the actual transformation through vision creation, goal setting, planning, and execution of the actions required to achieve the change. The changing stage is complex and complicated with resistance impeding progress. The final stage is refreezing where the change is stabilized as the new norm of the organization. The refreezing stage formalizes the change in an effort to internalize the change into the organization’s culture. Nearly all models of organizational change reflect elements of Lewin’s three stage process of change.

**Change Management**

Change management is how an organization prepares, equips, and supports members to change and respond to the environment in which it operates. Change management often uses a stage process approach where the members of the organization are guided through the various stages of the proposed change. Change management models are often driven by leaders and
managers who have identified a need for the change. Two frequently utilized change management models are Kotter’s 8-step process for leading change (Kotter, 2012) and ADKAR (Hiatt, 2006).

**Kotter’s 8-step process for leading change.** Kotter’s 8-steps is initiated once the organization’s leadership determines that a change initiative is needed for the organization to thrive. To begin, the leaders create a sense of urgency motivating members to believe in the change. Steps two and three have leaders building a guiding coalition and forming a strategic vision and initiatives. Leaders then enlist a volunteer army that will rally around the change initiative and drive the change in the same direction (step 4). Step five has leaders enabling action by removing barriers that impede the change resulting in step six which is generating short-term wins. Step seven has the organization building upon the short-term wins and sustaining acceleration on the change vision. Step eight involves leaders instituting change as a part of the new organizational culture.

**Hiatt’s ADKAR.** A second change management model is Haitt’s (2006) ADKAR model. ADKAR is based on the stage process, and it emphasizes the collective change of the individual’s behavior that produces a new outcome for the organization. ADKAR is an abbreviation for awareness, desire, knowledge, ability, and reinforcement. The first stage, awareness focuses on the individuals becoming aware of the need for change. Next, the individuals collectively generate a desire to support and participate in the change. The knowledge stage involves the building of knowledge to make the desired change leading to the next stage which is fostering the collective individuals’ ability to execute the change. Lastly, the reinforcement stage allows the change to be sustained throughout the organization.
Change management, as seen in Kotter’s (2012) 8-step process and Hiatt’s (2006) ADKAR process, reflects Lewin’s (1947) three stages of change with unfreezing, changing, and refreezing. Both models are initiated and managed by leaders and change agents within the organization often relying on transformational leadership to inspire the unfreezing element of the change management process.

Organizational Learning/Learning Organizations

Lewin established a relationship between change and learning through his three-stage process where individuals first unlearn the status quo during the unfreezing stage, then acquire new learning during the changing stage, and then stabilize the new learning with the refreezing stage. Learning at the individual, team, and organizational levels contributes to successful change (Argyris & Schon, 1995; Senge, 1990). Organizational learning focuses on how organizations experience the change process through a learning lens and supported by a learning culture.

Organizational learning. One of the more recent schools of thought surrounding organizational change involves organizational learning. The concept of organizational learning was first coined by Argyris and Schon (1995) as the process by which individual learning is transferred to the organization through structures, mental models, and culture. A cornerstone of this theory recognizes that learning involves three layers—individual, team/group, and organizational—to produce widespread transformative change in an organization. The flow of learning must travel through all three layers to result in change at the organizational level rather than stagnating at the individual or departmental levels. Argyris and Schon’s (1995) emphasis on organizational learning includes:

- The use of mental models leading to a shared mission and vision
- Structures to communicate and to formalize the changes into policies and procedures that become the “norm” for the organization
- The culture that allows learning and change to occur where the status quo is not set in stone

Each of Argyris and Schon’s three elements align to this study’s theoretical framework with the building blocks of shared mission and vision, systems to capture and share knowledge, and learning opportunities for risk-taking and experimentation.

**Learning organizations.** Senge (1990) expanded the idea of organizational learning to define a new term, a learning organization, as “an organization where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn” (p. 35). Senge’s five disciplines of shared mission and vision, mental models, team problem solving, personal mastery, and systems thinking begin to define what he argued are the cultural requirements for an organization that embodies learning, growth, and change.

Based on Senge’s definition of a learning organization, learning is a perpetual process for organizations that are continually adapting, responding, and changing to the environmental factors. Such learning is optimized when the members of the organization possess a shared vision, work together to solve problems, communicate their mental models, possess personal mastery, and spread the learning through the system. Senge’s theory is considered a foundational work in the theories of learning organizations and in the theories of organizational learning.
Discussion of Organizational Learning Theories

While Senge’s (1990) work on learning organizations is often cited when researching how organizations learn, some researchers argue that Senge’s work is too theoretical and it is unable to translate to application. Critics assert that Senge’s five dimensions describe the ideal learning organization for identification purposes but his work does not provide guidance on how organizations can achieve his defined ideal of a learning organization (Garvin, 2008; Yang et al., 2004). In this way, Senge’s work brings attention toward the idea that the culture of an organization dictates how it learns and adapts, which in turn contributes to the rate of success or failure of a change initiative in organizations.

In change management models, the change initiative succeeds or fails based on whether the leaders successfully inspire the change or whether they successfully manage the stages of the change. Change management tends to utilize a top-down hierarchy where the change is thrust upon the organization from the leadership team. The increased focus on a learning organization ideal has led researchers to examine the process of organizational learning. Research examines how the entire organization learns and adapts resulting in widespread change throughout the organization. The learning organization culture shifts the change process from a top-down hierarchy to a flattened organizational hierarchy where learning flows in all directions. It is a dramatic shift from change imposed upon the members of the organization to change emanating from within the organization and originating at any level.

Culture of Organizational Learning and Learning Organizations

Organizational learning theorists agree that the culture of an organization has a powerful impact upon the change experience and the success of the change (Argyris & Schon, 1995; Armenakis, Harris, & Mossholder, 1993; Cook & Yanow, 1993; Garvin, 1993; Garvin et al.,
Most organizational learning theories/frameworks include the following:

- The ability of anyone in the organization to initiate change in response to environmental demands (e.g. competition, improvements, etc.).

- The importance of disseminating the change throughout the organization so learning is not isolated to individuals, departments, sites, etc. There must be an expectation that learning that improves the organization must be shared and communicated. At the organizational level, when the change is becoming widespread, it is imperative that the systems not only communicate the new order or the new norms, but that the change becomes codified, intertwined, and established as an elemental component of the organization’s identity and its way of doing things. This is particularly true when the change is transformational, and the belief systems of the organization have been recalibrated.

- The expectation that the status quo is not permanent. When data from the environment indicates a need for change, whether incremental (first order) or transformative (second order), then experimentation and risk taking are not only permitted but also expected and encouraged. Calculated mistakes are tolerated and expected. In strong learning organizations, failures are publicly discussed as a learning opportunity.

- The use of groups, collaboration, and team-structures to problem solve with the belief that the group is stronger than the individual when it comes to problem solving and innovating.
• The organization provides supports during the learning process in the form of training, protection (from reprisal), rewards for risk, and the transfer of learning at the systems level. Supports come from the leadership and the organization plus other directions in the flattened hierarchy. But the top levels must provide supports to achieve learning organization ideals.

While many researchers (Argyris & Schon, 1995; Armenakis et al., 1993; Cook & Yanow, 1993; Garvin, 1993; Garvin et al., 2008; Goh, 1998, 2003; Goh & Richards, 1997; Marsick & Watkins, 1997, 2003; Senge, 1990; Senge et al., 2000) who have studied the culture of learning in organizations typically include many of the common elements listed above, each researcher has tailored their framework based on the foundations of other theoretical frameworks and their own interpretations of what elements are the most critical in effective organizational learning.

Organizational Learning Models

This study will focus on three related frameworks that define the elements found in a culture of organizational learning. Garvin’s (1993) early work paved the way for the work of Marsick and Watkins (1997, 2003), and Goh (1998, 2003), along with Armenakis, Bernerth, Pitts, and Walker (2007), which in turn influenced Garvin et al.’s (2008) recent work. Garvin’s (1998) definition of organizational learning provided the foundation for both his work and for the framework of Goh and Richards (1998). Goh (1997, 2003) adopted Garvin’s synthesized definition of a learning organization as “an organization skilled at creating, acquiring and transforming knowledge and at modifying its behavior to reflect new knowledge and insights” (Garvin, 1993, p. 80).

Both Goh and Garvin based their frameworks on the belief that if an organization demonstrates the attributes that occur with organizational learning, then the organization can be
also classified as a learning organization. Garvin and Goh did not make a clear distinction between organizational learning and a learning organization, which reflects a lack of clarity in organizational learning theory. Garvin (1993) and Goh and Richards (1997) posited that an organization demonstrating high levels of measurable organizational learning characteristics, then it can be concluded that the organization qualifies as a learning organization, even if the organization does not fulfill every dimension of Senge’s ideal model for learning organizations.

**Marsick and Watkins.** Marsick and Watkins (1997, 2003) defined seven dimensions of learning organizations for their model of organizational learning. The first dimension involves creating continuous learning opportunities where people learn on the job with ongoing education and growth. The dimension of promoting inquiry and dialogue focuses on a culture that supports feedback, questioning, and experimentation. The third dimension focuses on groups working and learning together through collaboration and team learning. The researchers included the interconnectedness of the individual, the group, and the organization as an essential fourth component of their model with systems to capture and share learning throughout the organization. For the fifth dimension, people are empowered to create a collective vision with shared responsibility and accountability. Connecting the organization to the environment is a unique element of Marsick and Watkin’s model, where individuals see the effect of their work throughout the organization and into the community. The final dimension of the model provides strategic leadership for learning where leaders are expected to model, champion and support learning.

To measure the dimensions of the learning organization, Marsick and Watkins (1997) narrowed their focus to four measurable dimensions: climate, culture, systems, and structures of the organization. The researchers subsequently developed the Dimensions of Learning
Organization Questionnaire (DLOQ) as an instrument to define, describe and measure the four dimensions as they relate to organizational learning. The DLOQ instrument is regularly used by business organizations to assess their capacity on each of the four measurable dimensions (Yang et al., 2004).

**Goh.** Goh (1998) isolated five strategic building blocks that are present when organizational learning is occurring as the basis of his organizational learning model. Goh’s five strategic building blocks are: clarity and support for the mission, leadership that supports learning, an experimenting organizational culture, the ability to transfer knowledge effectively, and teamwork/cooperation. Goh further identified two foundational support structures upon which the building blocks stand: an organizational design with flat hierarchies and less formalization plus members of the organization possessing the necessary skills and competencies for the learning and change.

The first block on Goh’s (1998) model focuses on the organization having clarity and support of mission and vision where the whole organization and each team and individual understand the purpose of the organization and how they contribute to the success of the mission. Leadership commitment and empowerment, the next building block, describes the role of the leader in creating a climate of trust that empowers the organization to work together and risk failure as part of the learning process. The third building block of organizational learning emphasizes experimentation and rewards where members of the organization view problems as opportunities to experiment and where innovation is rewarded. Next Goh identified the transfer of knowledge as a strategic building block enabling the organization to transfer knowledge and skills to all members of the organization to learn from both successes and failures. The final building block focuses on teamwork and group problem-solving. For this block, individuals
depend on each other to accomplish the mission and the organization institutes structures and systems that foster the strength of group problem-solving.

Along with his five building blocks, Goh (1998, 2003) recognized the importance of two supporting elements that form the foundation of quality organizational learning. Organizational design describes the ideal structure that maximizes the five building blocks. Goh described the ideal organization as having a flattened hierarchy with limited formalization that encourages learning to flow in all directions within the organization. The second support structure emphasizes the value of employee skills and competencies, particularly critical thinking, and collective problem-solving skills. Training, professional development and capacity building are critical requirements for organizational learning to thrive. While an organization can partake in organizational learning without the two support structures, the learning will not be optimal.

Together, the seven elements of the model—the five strategic building blocks of learning organizations and the two organizational support structures—represent the characteristics needed for an organization to function as a learning organization. Goh and Richards (1997) developed a benchmark instrument to measure the five building blocks called the Organizational Learning Survey (OLS). The OLS includes 21 items that measure an organization’s learning capability as outlined by the five building blocks.

**Garvin, Edmondson, and Gino.** More recently, Garvin, Edmondson, and Gino (2008) have generated a modified model of OLC that is composed of three domains. The first domain is supportive learning environment, which includes four identifying characteristics. The first characteristic is the attribute of psychological safety defined as the individual’s ability to learn absent of fear of belittlement or marginalization for their opinions and thoughts. The second characteristic of supportive learning environment is appreciation of differences where people
learn when exposed to opposing ideas causing new thinking and enthusiasm. Openness to new ideas is the third characteristic of the domain and it is described as risk taking and exploring the unknown. The fourth characteristic is time for reflection where the organization allows time to reflect and review the learning and current status of the organization.

The second domain described by Garvin et al. (2008) is the concrete learning processes and practices. It includes a series of five steps and actions to cultivate a learning organization. This building block measures experimentation, collection of information, analysis and interpretation of information, education or training, and systematically shared knowledge to assess an organization’s level of learning organization. Leadership that reinforces learning is the name given to the third domain. The third building block recognizes the impact and importance of the leaders in supporting organizational learning.

Garvin et al. (2008) emphasized that a strong leader of a learning organization is measured more by what the leaders do, their behaviors, than by who the leaders are, their leadership style. Leaders who reinforce learning are open to alternative points of view, actively listen to members of the organization and communicate confidence in the employee’s ideas and perspective.

The Three Models and the Theoretical Framework

The three models of organizational learning as defined by Marsick and Watkins (1997, 2003), Goh (1998, 2003), and Garvin (Garvin, 1993; Garvin et al., 2008) are synthesized into a modified model to create the theoretical framework used for this study. The theoretical framework includes five building blocks of learning organizations plus two organizational support structures. The five building blocks include clarity and support of the collective vision; mission or purpose; continuous learning opportunities with experimentation and risk-taking;
collaboration, teamwork, and group-problem solving; established systems to capture and share knowledge; and leadership commitment and empowerment. The organizational support structures can be broken down into organizational design with flat hierarchies and less formalization, and members skills and competencies. Figure 2 represents each researchers’ contribution to the theoretical framework for this study.
### Strategic Building-Blocks of Learning Organizations

<table>
<thead>
<tr>
<th>Clarity and support of collective vision, mission, or purpose</th>
<th>Marsick and Watkins</th>
<th>Collective vision</th>
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<tbody>
<tr>
<td>Goh</td>
<td>Shared mission and vision</td>
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<td>Garvin, Edmondson, and Gino</td>
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<tr>
<th>Continuous learning opportunities with experimentation and risk-taking</th>
<th>Marsick and Watkins</th>
<th>Promote inquiry and dialogue</th>
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<td>Goh</td>
<td>Experimenting organizational culture</td>
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<td>Garvin, Edmondson, and Gino</td>
<td>Risk-taking and exploring the unknown</td>
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<th>Collaboration, teamwork, and group problem solving</th>
<th>Marsick and Watkins</th>
<th>Collaboration and team learning</th>
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<tr>
<td>Goh</td>
<td>Teamwork and group problem-solving</td>
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<td>Garvin, Edmondson, and Gino</td>
<td>Solving problems systematically, supportive learning environment</td>
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<th>Established systems to capture and share knowledge</th>
<th>Marsick and Watkins</th>
<th>Create systems to capture and share knowledge</th>
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<td>Goh</td>
<td>Ability to transfer knowledge effectively</td>
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<td>Garvin, Edmondson, and Gino</td>
<td>Systematically shared knowledge and transfer of knowledge</td>
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<th>Leadership commitment and empowerment</th>
<th>Marsick and Watkins</th>
<th>Provide strategic leadership for learning</th>
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<td>Goh</td>
<td>Leadership that supports learning</td>
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<td>Garvin, Edmondson, and Gino</td>
<td>Actively listen, communicate confidence in the organization members, and open</td>
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<th>Organizational design with flat hierarchies and less formalization</th>
<th>Marsick and Watkins</th>
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<td>Goh</td>
<td>Learning originates from all levels of the organization</td>
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<td>Garvin, Edmondson, and Gino</td>
<td>Leadership is open to alternate points of view</td>
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<th>Members skills and competencies</th>
<th>Marsick and Watkins</th>
<th>Create continuous learning opportunities</th>
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<td>Goh</td>
<td>Possessing the necessary skills and competencies required of the change</td>
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<tr>
<td>Garvin, Edmondson, and Gino</td>
<td>Concrete learning processes and practices</td>
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*Figure 2. Synthesized strategic and foundation building blocks of a learning organization from the research of Garvin (1993), Garvin *et al.* (2008), Goh and Richards (1997), and Marsick & Watkins (1997).*

### Measurable Attributes of Learning Organization Culture

**Readiness for change.** Readiness for change is defined as “the cognitive precursor to the behaviors of either resistance to, or support for, a change effort” (Armenakis et al., 1993, p. 681).
The researchers asserted that the message of the change is the primary mechanism that creates readiness for change, which in turn is related to the individual’s beliefs, attitudes, and intentions.

Armenakis et al. (1993) focused their research of the concept of readiness for change as it pertains to the learning organization culture. The research focused on the degree of openness the members of the organization feel for change. This is a critical measure for both organizational learning and change management in that it can uncover the potential for resistance. Readiness for change is the precursor to either resistance or support for the change. Resistance for change, adaptation or innovation communicates that the setting is conducive to abandoning the status quo and exploring change. Readiness is more characteristic of the individuals in the organization than it is of the organization. From the organizational and leadership level, creating readiness for change is connected to the message being sent about the change and the social interpretation of the change.

The change readiness scale measures the readiness for organizational change at an individual level (Holt et al., 2007) was developed based upon the theoretical work of Armenakis et al. (1993). The change readiness scale measures four sub-scales: change-specific efficacy, appropriateness of the change, management support, and personal valence. Change specific efficacy focuses on whether the individual believes that they are capable of executing the proposed change. The next scale, appropriateness, determines whether the individual agrees with the need for the proposed change. Management support refers to the individual’s confidence that the organization’s leadership is committed to the change. Lastly, personal valence focuses on the individual’s belief that the proposed change will benefit the organization’s members. The change readiness scale is primarily focused on the individual’s perception of the change and their role in the change process.
OLC. Another important measure of learning organizational culture is the measurement of OLC. OLC is defined by Fullan (2007) as the development of individual and collective effectiveness in knowledge and competencies, resources, and motivation. Goh and Richards (1997) focused their definition to the presence or absence of internal organizational conditions that lead to learning and modifying behaviors as measured by the OLS. These researchers based the OLS on the five strategic building blocks of Goh’s (1998) model where the 21 items on the OLS are separated into five sub-scales: clarity of purpose, leadership, experimentation and rewards, transfer of knowledge, and teamwork.

The items on the OLS measure reflects whether the leadership has created an organizational culture and the structures are in place for organizational learning to thrive—it is more about the organization than the individual. The OLS does not effectively measure the individual’s experience with the change, rather whether the individual observes specific attributes within the organization.

Organizational support structures. The idea of organizational support shows in Goh’s (1998, 2003) foundational support structures and in the work of Ming-Chu and Meng-Hsiu (2015) with perceived organizational support. Ming-Chu and Meng-Hsiu argued that perceived organizational support is key to an organization’s legitimacy when promoting change. It is the degree individuals believe and trust that the organization’s leaders will recognize the individual’s effort and that the leaders will attend to the individual’s social-emotional needs during the change. Goh’s model delineates two foundational support structures: how the organization is designed, and the skills and competencies of the members of the organization.

Goh’s (1998, 2003) organizational design supports emphasize learning, innovation, and change originating from any level within the organization. The author asserted that a flat
hierarchical organizational structure where there are fewer formalized controls over an individual’s work improves the OLC. The lack of formalized controls over how an individual accomplishes their responsibilities encourages innovation and experimentation rather than compliance and uniformity. The fact that innovation and change can originate throughout the flat hierarch of the organization permits change to be dynamic and independent of a leader’s stamp of approval. The organizational design support structure encourages a flow of ideas and changes that are necessary for organizational learning and is an impediment when absent.

The second organizational support structure ties to employee’s skills and competencies relates to whether the employees can execute the requirements of the change. Professional development and training are offered to employees to provide them with the understanding, skills, and competencies to execute the actions associated with the innovation. This can be technical training, or it can be the development of new understandings or beliefs through shared learning experiences. This support structure also includes the use of communication systems to share knowledge throughout the organization. Isolated learning and innovation do not lead to organizational learning and a lack of communication of the innovations and understandings creates a barrier to widespread learning. Rewards and recognition that motivate employees to gain new knowledge, skills and competencies communicates to individuals that the organization values continual learning and improvement of its staff (Goh, 1998, 2003).

**Organizational change recipients’ belief scale.** Along with readiness for change, Armenakis et al. (2007) posited that the role of the change recipient’s beliefs regarding the organizational change. The researchers identified five beliefs in organizational change that are measurable and are included in the Organizational Change Recipients’ Belief Scale (OCRBS) instrument.
The first belief is discrepancy where the individual believes that the need for change exists resulting from a discrepancy between current and desired states. Appropriateness, the second belief, is defined as the individual’s belief that the proposed change was carefully considered, deliberated, and planned, thus minimizing uncertainty in the change. The third belief is efficacy, where the individual has confidence that they possess the capacity to implement the change. Next is principal support, which is defined as whether the individual believes the change agent leading the change supports the change. Last, the fifth belief measured by the OCRBS is valence, which refers to the level of personal attractiveness or motivation the individual perceives the outcome of the change will have on the individual. The OCRBS measures an individual’s commitment, buy-in and alignment with the change initiative underway (Armenakis et al., 2007).

**Trust in the organization.** Just as readiness and belief are studied as elements or even building blocks of OLC, trust is also a critical element for organizations adopting a learning culture. The culture of a learning organization is depended upon trust at all levels of the organizational learning framework. Organizational trust can be broken down into individual trust and institutional trust (Panahi, 2014). Individual trust is based on interactions such as during collaborative problem-solving, sharing knowledge, or conferencing with a leadership team. Individual trust depends on qualities such as benevolence, competency, and reliability (Covey & Merril, 2006; Tschannen-Moran, 2004).

Institutional trust is aligned tightly with organization members’ attitude and commitment to the shared vision and to the organization. Innovation and risk-taking are directly associated with both individual trust and institutional trust (Dovey, 2009). Each building block of the OLC
can be linked to trust. It is a lack of trust that represents a significant barrier to organizations achieving the full potential of a learning culture (Panahi, 2014).

Organizational Learning Challenges Unique to Educational Settings

Most research on organizational learning is conducted in a business setting. While there are some common elements between businesses and schools, there are also distinct differences that directly impact the building of an OLC in an educational setting.

Individualism and autonomy. The structure of classrooms, schools, and districts, fosters teacher autonomy and individualism (Garcia-Morales et al., 2006). It is a common observation that each teacher has great leeway for how they teach in their classroom. Each principal has leeway for how they lead their school, and the district is a separate entity.

The ability of a teacher to close their classroom door and teach in the way that they deem appropriate when not being monitored illustrates high levels of autonomy. Each classroom in a school and each school in a district has its own personality based upon the person making decisions in that setting, thus reinforcing the individualistic nature of how education differs from businesses.

Scheduling for collaboration. The rigid structure of time is another challenge facing educational institutions as compared to businesses. Many businesses have both the flexibility to adjust schedules as needed but also to build in ample time for meetings and collaboration. The schedules in schools are notoriously rigid and collaboration time is either limited, lacking or unavailable. This in turn negatively impacts the frequency and quality of collaborative problem solving at the team/group level.

As researchers note (Garvin, 1993; Goh, 1998; Senge et al., 2000) team problem solving not only bridges learning from an individual to the organization, it also improves the caliber of
learning with collective effort. A lack of time for quality collaboration is a major impediment to change in a school setting.

**Tendency for maintaining status quo.** Educational institutions are steeped in history, and while educational reforms have never been more prevalent than in the past 50 years, the institution of education has changed little in comparison to the rate of change in society at large (Fullan, 2016). The opposing forces to change and the forces that honor tradition influence the degree a mission and vision is shared. Furthermore, the never-ending cycle of reforms facing modern teachers creates fatigue and distrust of the change experience.

Individuals who lack a readiness to change, whether from a commitment to tradition or a leeriness of another unsuccessful change initiative, undermine the organization’s culture of openness, innovation, and adaptation (Armenakis et al., 1993). The established practice of teacher autonomy further undermines the learning culture allowing resistance to hide behind closed classroom doors unaddressed. The level of distrust expressed by some educators, as commonly communicated with “this too shall pass,” underlies a serious threat to building an OLC.

**Hierarchy and organizational structure.** The organizational structure, particularly at the district level, also impedes the prevalence of organizational learning (Goh, 1993, 2003). Districts, schools, and even classrooms are typically strongly entrenched vertical hierarchies. Even in schools where teacher leaders and teacher teams are integral parts of the school’s leadership—thus flattening the school’s hierarchy—the district often retains an external vertical hierarchy thus potentially limiting the school’s organizational design structures.

**Coherence.** The prevalence of “coherence” as a valued quality in schools and districts can potentially have an adverse effect on innovation and risk taking if coherence is rigidly
enforced and monitored. Some schools set the expectation of classrooms moving in lockstep within the school and at times within the district. This rigidity reinforces the top-down flow of learning and does not allow for experimentation which is a hallmark of organizational learning.

Coordination and bounded autonomy are two variations of coherence that move away from the rigid structures some schools adopt to maintain a balance between the need for school-wide coherence and being responsive to the needs of the classroom. The desired organizational learning attributes of experimentation and risk-taking can be stymied by high demands for coherence in schools and school districts.

**Bureaucracy.** As a government institution, public school districts and their schools often experience high levels of bureaucracy that impact supports and learning. An example of bureaucracy is the academic calendar. The academic calendar influences the cycle of change when adjustments to personnel, teams, and staffing needs are frequently confined to the start of the academic school year. Changes in schedules, organizational structures, or procedures are also frequently tied to the academic calendar cycle.

Purchasing of materials, particularly curricular materials, are also typically aligned to the start of the school year. The layers of bureaucracy both internally and at the state and federal level impacts the ease of a school to acquire supports needed to implement a change or to learn. On the other hand, the renewal mentality associated with each new school year can provide a clear structure whereby districts or schools communicate a clear start of change initiative. Each year, districts and schools reflect and analyze whether a reform effort will be instituted come August, thus allowing for an annual innovation cycle. Bureaucracy can impede experimentation that challenges the structures used in schools while it can also encourage experimentation on a cyclical schedule.
Summary

The supportive school discipline reform movement depends on an effective implementation process to produce transformational change in schools. Organizational change theory establishes the challenge of initiating, implementing, and stabilizing change, whether incremental or transformative, as most change initiatives fail in achieving their goals.

Organizational learning models (Garvin, 1993; Garvin et al., 2008; Goh, 1998, 2003; Marsick & Watkins, 1997, 2003) emphasize the importance of the organization’s culture around learning and innovation as a cornerstone for success. There is limited research that examines the presence or absence of organizational learning attributes in educational settings as defined by this study’s theoretical framework. There also has been minimal research that evaluates the impact of an OLC on the implementation of supportive school discipline practices or trauma-informed practices in schools.

The purpose of this study was to understand how characteristics of learning organizations—readiness for change, organizational learning capacity, perceived organizational supports, and change recipients’ beliefs and trust—exist in educational organizations undergoing school discipline reform. This study explored the relationship between organizational learning culture and the effectiveness of implementing and maintaining transformative change in schools and school districts.
Chapter 3: Methodology

The purpose of this study was to understand how characteristics of learning organizations—readiness for change, organizational learning capacity, perceived organizational supports, and change recipients’ beliefs and trust—exist in educational organizations undergoing school discipline reform. This study explored the relationship between OLC and the effectiveness of implementing and maintaining transformative change in schools and school districts. Researchers have studied organizational change and OLC as it applies to corporations and non-profits with minimal research focused on the educational setting. Limited research has been applied to the presence of organizational learning attributes in conjunction with assessing the success level of the change initiative.

This study was built on and extends existing research by examining the relationship between the attributes of OLC and the effectiveness of the change initiative. The research question posed was, “What differences are observed in schools undergoing the implementation of trauma-informed practices as it relates to the attributes of OLC?”

Research Design

A causal-comparative research design emphasizes comparing two or more ex post facto intact groups to understand the reasons for the groups’ differences. For a causal-comparative research design, two or more intact groups are analyzed against one or more independent variables with a focus on the differences of variables between groups (Salkind, 2010). For this study, a causal-comparative research design was the most appropriate research design. Two ex post facto, intact groups were compared to each other with the group assignment based on the dependent variable, level of implementation of trauma-sensitive practices. Level of implementation of trauma-sensitive practices were determined using a survey at a point in time.
No experimental treatment was used during this study. The independent variable, OLC, used a survey instrument to measure the presence of readiness for change, capacity for change, perceived organizational supports, trust, and organizational change recipients’ beliefs in the organization. Survey items measuring the dependent variable, the perceived level of implementation of trauma-informed practices in the school organization, were administered at the same time as the survey items measuring the independent variable.

This study investigated the effect of OLC by comparing the two groups based on the strength of the reported implementation of trauma-informed practices. The focus on the relationship between a single independent variable on the dependent variable found in two or more groups indicates the use of causal-comparative research design as the most appropriate research design.

A causal-comparative research design shares elements with both experimental research design and correlational research design. An experimental research design can provide results that are considered highly reliable and valid; however, in this study, time and access constraints limited the ability of this researcher to randomize groupings, create experimental and control groups, and apply an experimental treatment to the experimental group with pre- and post-assessment of the influence of the experimental treatment to the two groups as suggested by Salkind (2010). Correlational research design does not require the manipulation of dependent variables with experimental treatment groups unlike the focus of correlational research design (Creswell, 2015). As a result, the correlational research design was not the appropriate design of choice for this study. A causal-comparative research design was appropriate for this proposed study because the emphasis is on the relationship between an independent variable and the two ex post facto groups as defined by a dependent variable. This researcher was able to have an
opportunity to analyze any relationships that may exist between the independent variable in relation to the two groups.

**Research Setting**

This study focused on one district, Cook County School District 130 (CCSD130), located in the south suburbs of the Chicago metropolitan area that collaborates with the Partnership for Resilience to implement trauma-informed practices that contribute to a supportive school culture. CCSD 130 initially joined the Partnership for Resilience with one pilot school in the summer of 2016 and then expanded to a district-wide initiative in the summer of 2018.

The CCSD130 is comprised of 12 schools serving approximately 3,700 students in pre-K through eighth grade. The district represents the largest school district participating in the Partnership for Resiliency initiative. The district implemented Positive Behavior Intervention Supports since 2008 with varying levels of commitment and fidelity. Beginning in 2015, CCSD130 has implemented changes specifically aligned to SSDI and SB100. The district revised the Student Code of Conduct in response to SB100 expectations and provided information sessions to staff about the impact SB100 had upon student suspensions. In 2016, CCSD130 initiated professional development for teams of teachers on Responsive Classroom Strategies with mixed success.

**Research Sample**

This study used non-probability convenience sampling where the researcher chose research participants who were available, convenient, and who represented the characteristics required of the research problem (Creswell, 2015). The survey data was collected from teachers in a medium sized urban district in south Cook County. The CCSD130 has approximately 3,700 students enrolled in 12 schools and a predominately low-income, minority demographic.
The target population was teachers at CCSD130 schools with building resiliency teams leading the trauma-informed practices change initiative. Via email, 290 teachers in the district received an invitation to participate in an anonymous on-line survey administered via SurveyMonkey, an on-line survey administration platform.

Limited teacher-level demographics were available to this researcher. Teachers were asked to identify three demographics: grade band taught, years taught, and years implementing trauma-informed practices. Teachers were given the following options to identify their grade band taught: middle school (grades sixth through eighth), intermediate (grades fourth and fifth), primary (grades kindergarten through third), and early childhood (pre-kindergarten), their number of years taught (0-3 years, 4-8 years, 9-15 years and 16+ years) and their number of years implementing trauma-informed practices (one, two, three or more than four). While survey data was collected from teachers at the early childhood level given their inclusion on the teacher email distribution list, the data collected from early childhood teachers was not included with the target population due to the limitation of anonymity and the difference in disciplinary practices used in early childhood classrooms.

Data Collection Method

An electronic survey was administered to teachers working at CCSD130 schools partnered with the Partnership for Resiliency during the research window. The anonymous on-line survey was delivered to teachers via email link. Each of the 290 CCSD130 teachers assigned to teach in any grade from pre-kindergarten through eighth grade were invited to voluntarily complete the survey. Educators were provided with a link and instructions on how to complete the electronic survey.
A cover letter was distributed to all survey participants explaining the purpose of the survey, confidentiality safeguards, and ethical considerations. Each survey participant was asked at the start of the survey if he or she consent to voluntarily participate. Any survey participant who did not agree was immediately exited from the survey and thanked for their consideration. Survey participants who gave their consent were presented with the survey items.

The electronic survey consisted of 35 items to measure the independent variable of OLC and the dependent variables measuring teacher perception of strong or weak implementation of trauma-informed practices in the school. The survey items for OLC were modeled after the Organizational Learning Survey created by Goh and Richards (1997), the readiness for change survey (Armenakis et al., 1993), the Perceived Organizational Support Survey (Goh & Richards, 1997; Ming-Chu & Meng-Hsiu, 2015), the Organizational Change Recipients’ Belief Scale (Armenakis et al., 2007), and the Organizational Learning Tool (Garvin et al., 2008). Each model instrument included items that were similar to or overlapped with items from another model instrument.

There were 100 possible items measuring OLC attributes, which were narrowed down by this researcher to 26 items with the removal of similar items or items that aligned more closely to business organizations than to educational organizations. Each item was measured using a four-point Likert forced-choice scale designed using interval scales providing continuous response options to questions with assumed equal distances between each option as promoted by Creswell (2015).

The dependent variables measured teacher perception of the implementation of trauma-informed practices in the school using an eight-item survey that was administered at the same point in time as the OLC items. The items measuring teacher perception of the success of the
change initiative for the survey were generated by this researcher. Each item is measured using a four-point Likert scale with equal interval scales.

Three additional items were included in the survey asking the individual to identify their school level (early childhood, primary, intermediate or middle), the number of years teaching (0-3yrs, 4-8yrs, 9-15yrs, or 16+yrs), and the number of years the teacher had participated in the trauma-informed initiative (first year, second year, third year, or fourth year). These three demographic items were used to aggregate the data by school type. No additional identifying information was requested. The final survey instrument can be found in Appendix A.

**Data Analysis**

The relationship between OLC and implementation level of trauma-informed practices in the school was examined using a causal-comparative design. The survey instrument used 28 items to provide independent variable sub-scale scores for the five building blocks, the organizational support structures; and the individual’s belief, readiness, and trust scale. The instrument included four items aligned to the five building blocks: clarity and support of the collective vision, mission or purpose; continuous learning opportunities with experimentation and risk-taking; collaboration, teamwork and group-problem solving; established systems to capture and share knowledge; leadership commitment and empowerment; and organizational support structures. The survey instrument also included four items used to measure the change recipient’s beliefs and the trust and/or readiness surrounding the change initiative.

The Likert forced-choice response options were assigned numerical values, which were used to tabulate mean percentages connected to the varying responses for each of the seven sub-scales. The forced choice response structure of the continuous scale required participants to choose a direction (agree or disagree) rather than select a neutral value between agree and
disagree. The four options were assigned the following numeric values: strongly agree (4.0), agree (3.0), disagree (2.0) and strongly disagree (1.0).

The dependent variable of stronger or weaker implementation of trauma-informed practices at the school was measured using the eight items on implementation levels. As with the independent variable, the Likert forced-choice response options were assigned the same numerical values that were used to tabulate mean percentages connected to the varying response for the variable. A threshold of greater than or equal to 3.50 was set as the cut point between stronger implementation and weaker implementation for the dependent variable, trauma-informed practice implementation.

While the causal-comparative design of this study was unable to definitively prove cause-and-effect results, inferential statistics demonstrated if a relationship exists between the attributes of the OLC and the level of implementation of trauma-informed practices (Salkind, 2010). The relationship between the dependent variable (stronger or weaker implementation of trauma-informed practices) and the seven sub-scores measuring the independent variables (attributes of OLC) were statistically analyzed using one-way and multifactorial ANOVA to explore any significant difference or variance between groups based on their mean scores (Salkind, 2010).

Validity/Reliability/Trustworthiness

For the measures of OLC, each of the original model instruments had been assessed for validity and reliability separately. Because the instrument designed for this study was a combination of items from existing instruments, the validity and reliability for OLC cannot be assumed based upon previous results. Cronbach Alpha values were calculated for the full scale of OLC and the sub-scales. The questionnaire items measuring the implementation level of trauma-
informed practices also underwent Cronbach Alpha calculations to measure internal consistency and the reliability of the survey items.

**Ethical Considerations**

The level of confidentiality related to the quantitative data collected in this study was reasonable, as the surveys were conducted anonymously by the subjects that participated. Slight limitations existed resulting from teachers being asked to identify their school’s grade band: grades Pre-K (early childhood), K-3 (primary), grades 4-5 (intermediate), and grades 7-8 (middle). Teachers were also asked to identify the number of years they have taught (0-3yrs, 4-8yrs, 9-15yrs, or 16+yrs) and the number of years they have implemented trauma-informed practices (first year, second year, third year, or fourth year).

CCSD 130 has 12 school sites with two sites serving early childhood classrooms, three sites serving primary classrooms, three sites serving intermediate classrooms, one site serving both primary and intermediate classrooms and three sites serving middle school classrooms. The number of school sites provided sufficient sample populations at each grade band to limit the risks to subject confidentiality. No names, emails, school site or other identifying information, aside from the grade band, was collected through the survey instrument.

Because this researcher’s role in the district is as a principal in one of the schools participating in this study, teachers were not asked to identify the specific school in which they are staffed. It was recognized that care must be taken to maintain teacher anonymity and to ensure confidentiality to minimize any concern the subject may have about the information they share being identifiable to an individual.
Chapter 4: Data Analysis and Results

This study explored the relationship between OLC and the effectiveness of implementing trauma-informed practices in schools and school districts. This study was founded on a hybrid theoretical framework of OLC synthesized from the research of Garvin (1993), Garvin et al. (2008), Goh and Richards (1997), Marsick and Watkins (1997) and Armenakis et al. (2007) related to readiness and belief around change. The quantitative data was collected using a questionnaire consisting of items focusing on the attributes of OLC, readiness for change, the implementation of trauma-informed practices, and teacher demographic information. This chapter presents a summary of the demographic information obtained from the participants, followed with instrument reliability results and the descriptive and inferential statistics related to the research question examining OLC in schools adopting trauma-informed practices.

Research Question

The research question posed for this study was:

What differences are observed in schools undergoing the implementation of trauma-informed practices as it relates to the attributes of OLC?

The research question examined the relationship between the respondents’ perception of their school possessing the building blocks of an OLC and their perception of the progress of implementing trauma-informed practices in their classrooms. The research question was examined using both descriptive and inferential statistical methods.

Hypotheses

Null Hypothesis: There is not a statistically significant relationship between OLC of the district and implementation of trauma-informed practices by the teachers.
Alternate Hypothesis: There is a statistically significant relationship between the OLC of the district and implementation of trauma-informed practices by the teachers.

Sub-Alternate Hypothesis 1: There is a statistically significant relationship between the layers of OLC and the implementation of trauma-informed practices by the teachers.

Sub-Alternate Hypothesis 2: There is a statistically significant relationship between the influence of belief, readiness and trust factors and the implementation of trauma-informed practices by the teachers.

Sub-Alternate Hypothesis 3: There is a statistically significant relationship between the OLC of the grade band and the implementation of trauma-informed practices by the teachers in that grade band.

Sub-Alternate Hypothesis 4: There is a statistically significant relationship between the layers of OLC of the grade band and the implementation of trauma-informed practices by the teachers in that grade band.

Sub-Alternate Hypothesis 5: There is a statistically significant relationship between the influence of belief, readiness and trust factors at the grade band level and the implementation of trauma-informed practices by the teachers of that grade band.

Summary of Demographic Information

Teachers from CCSD130 based in Illinois constituted the target population for this study. An email distribution list was created, including all staff members employed by CCSD130 during the 2018-2019 school year and in a position that required an Illinois Professional Educator License with teaching credentials. The email distribution list consisted of 290 teacher emails compiled by the CCSD130 technology director.
The survey link to the online questionnaire was sent to the entire email distribution list inviting the recipient to participate in the research study. Of the 290 emails on the distribution list, 119 participants responded to the survey invitation with an overall response rate of 41%. Of the 119 responses, 118 indicated they consented to participate in the study, and one indicated that they did not consent to participate. Of the 118 consenting participants, 84 completed 95% or more of the survey items, while 35 participants completed less than 50% of the items. The 35 incomplete responses were removed from the study due to the lack of responses.

An additional three participants were removed from the study because they indicated their position as an early childhood educator. The three early childhood educators in CCSD130 were excluded from the research design based upon concerns for their anonymity and based on the lack of involvement at the early childhood schools with the district’s trauma-informed practices initiative. As a result, the final total number of participants for this study involved 81 teachers from CCSD130.

Each participant for this study was asked to identify demographic information related to their grade band (middle school, intermediate, or primary), their years of teaching experience (0-3 years, 4-8 years, 9-15 years or 16+ years) and their years of experience with trauma-informed practices (one, two, three, or four years). The summary of the demographic information is shown in Table 1.
Table 1

Demographic Information of Participants (*N* = 81)

<table>
<thead>
<tr>
<th>What grade band is your main teaching assignment? (Select only one)</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Middle School level</td>
<td>29</td>
<td>35.8</td>
<td>35.8</td>
<td>35.8</td>
</tr>
<tr>
<td>Intermediate level</td>
<td>27</td>
<td>33.3</td>
<td>33.3</td>
<td>69.1</td>
</tr>
<tr>
<td>Primary level</td>
<td>25</td>
<td>30.9</td>
<td>30.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

How many years have you taught in total?

<table>
<thead>
<tr>
<th>How many years have you taught in total?</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3 years</td>
<td>5</td>
<td>6.2</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>4-8 years</td>
<td>12</td>
<td>14.8</td>
<td>14.8</td>
<td>21.0</td>
</tr>
<tr>
<td>9-15 years</td>
<td>30</td>
<td>37.0</td>
<td>37.0</td>
<td>58.0</td>
</tr>
<tr>
<td>16 or more years</td>
<td>34</td>
<td>42.0</td>
<td>42.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

How many years have you been participating in the resiliency/ACEs initiative to implement trauma-informed practices?

<table>
<thead>
<tr>
<th>How many years have you been participating in the resiliency/ACEs initiative to implement trauma-informed practices?</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>First year</td>
<td>46</td>
<td>56.8</td>
<td>56.8</td>
<td>56.8</td>
</tr>
<tr>
<td>Second year</td>
<td>23</td>
<td>28.4</td>
<td>28.4</td>
<td>85.2</td>
</tr>
<tr>
<td>Third year</td>
<td>6</td>
<td>7.4</td>
<td>7.4</td>
<td>92.6</td>
</tr>
<tr>
<td>More than four years</td>
<td>6</td>
<td>7.4</td>
<td>7.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Reliability of the Instrumentation

In this study, participants were asked to answer 24 questions related to OLC; 4 questions related to belief, trust, and readiness to change; and 8 questions related to the implementation of the trauma-informed practices initiative. Participants were asked to give responses to 37 items based on a 4-point Likert forced-choice scale with the choices of 1 = strongly disagree, 2 = disagree, 3 = agree or 4 = strongly agree. To test the reliability of the survey instruments, internal consistency was measured using Cronbach’s Alpha.
OLC Questionnaire

The 24 items for OLC were categorized by the six building blocks of an OLC: a) clarity and support of the collective vision, mission or purpose; b) continuous learning opportunities with experimentation and risk-taking; c) collaboration; teamwork and group-problem solving; d) established systems to capture and share knowledge; e) leadership commitment and empowerment; and f) organizational support structures. As shown in Table 2, Cronbach’s Alpha for each of the six building blocks ranged from 0.76 to 0.90. The overall Cronbach’s Alpha for the overall survey instrument for OLC was 0.94. The reliability of the OLC instrument used in this study was strong.

Table 2

*Cronbach’s Alpha for OLC*

<table>
<thead>
<tr>
<th>Building Block Sub-Scale</th>
<th>Item Number</th>
<th>Cronbach’s Alpha α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity and support of the collective vision, mission, or purpose</td>
<td>2, 3, 4, 5</td>
<td>0.76</td>
</tr>
<tr>
<td>Continuous learning opportunities with experimentation and risk-taking</td>
<td>6, 7, 8, 9</td>
<td>0.75</td>
</tr>
<tr>
<td>Collaboration, teamwork, and group-problem solving</td>
<td>10, 11, 12, 13</td>
<td>0.81</td>
</tr>
<tr>
<td>Established systems to capture and share knowledge</td>
<td>14, 15, 16, 17</td>
<td>0.78</td>
</tr>
<tr>
<td>Leadership commitment and empowerment</td>
<td>18, 19, 20, 21</td>
<td>0.90</td>
</tr>
<tr>
<td>Organizational support structures</td>
<td>22, 23, 24, 25</td>
<td>0.76</td>
</tr>
<tr>
<td>OLC with Organizational Support Structures Overall</td>
<td>2 through 25</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Readiness for Change, Trust, and Belief Questionnaire

The instruments used in this study included four items to measure the level of readiness for change, trust, and the belief in the change as perceived by the participant. The questionnaire items were adapted from items included in the readiness for change survey (Armenakis et al.,
 organizational Change Recipients’ Belief Scale (Armenakis et al., 2007).

Cronbach’s Alpha for the readiness for change, trust, and belief items on this instrument was 0.66, which fell below the desired threshold of 0.70 or greater. In reviewing the item-total statistics as produced by the Statistical Package for Social Sciences (SPSS) Data Statistics Editor, none of the four items, if deleted, would improve the overall Cronbach’s Alpha value. As a result, the reliability of the readiness for change, trust, and belief items on this study’s instrument fell within the questionable range slightly below the 0.70 threshold.

**Trauma-Informed Practices Initiative Questionnaire**

To measure the participant’s perception of the progress and success related to the CCSD130’s implementation of trauma-informed practices, eight items were created by this researcher using the 4-Point Likert forced-choice scale used throughout the study instrument. Cronbach’s Alpha for the eight items was 0.90, indicating the internal consistency of the instrument was strong and can be accepted as reliable for this study.

**Statistical Findings**

**Descriptive Statistical Results**

**OLC and organizational supports structure.** As shown in Table 3, the mean of each of the multiple questionnaire items were calculated to produce overall means for OLC, including each building block sub-scale for readiness for change and for implementation of trauma-informed practices. The mean score for each building block sub-scale ranged from 2.90 to 3.17. The mean score for the OLC with organizational support structures overall composite was 3.03.
Table 3

Means and Standard Deviations for the OLC with Building Block Sub-Scales

<table>
<thead>
<tr>
<th>Sub-Scale</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity and Support of Collective Mission, Vision or Purpose</td>
<td>81</td>
<td>3.1687</td>
<td>.40697</td>
</tr>
<tr>
<td>Continuous Learning Opportunities with Experimentation and Risk-Taking</td>
<td>81</td>
<td>2.9671</td>
<td>.51415</td>
</tr>
<tr>
<td>Collaboration, Teamwork and Group Problem Solving</td>
<td>81</td>
<td>2.8992</td>
<td>.52881</td>
</tr>
<tr>
<td>Established Systems to Capture and Share Knowledge</td>
<td>81</td>
<td>3.0864</td>
<td>.44223</td>
</tr>
<tr>
<td>Leadership Commitment and Empowerment</td>
<td>81</td>
<td>3.0988</td>
<td>.60166</td>
</tr>
<tr>
<td>Organizational Support Structures</td>
<td>81</td>
<td>2.9722</td>
<td>.45758</td>
</tr>
<tr>
<td>OLC with Organizational Support Structures Overall</td>
<td>81</td>
<td>3.0326</td>
<td>.39929</td>
</tr>
</tbody>
</table>

The theoretical framework for OLC organized the building block sub-scales into three categories that describe whether the building blocks are most reliant on the people of the organization, the structure of the organization, or the structures of support in the organization. The people layer included the building blocks of clarity and support of collective mission, vision or purpose, continuous learning opportunities with experimentation, risk-taking, collaboration, team work, and group problem solving. Established systems to capture and share knowledge plus leadership commitment and empowerment were categorized under the structural layer. The level of organizational support contained only the sub-scale of organizational support structures.

The participant responses were combined to calculate mean scores for each of the three categories of OLC: people, structure, and organizational support. The mean scores and the standard deviations for each of the three layers of OLC are shown in Table 4. The mean scores
for each of the layers and the overall mean score for OLC with organizational support structures
were then used as the independent variable factors for the inferential statistics of this study.

Table 4

*Means and Standard Deviations of the Three Layers of OLC*

<table>
<thead>
<tr>
<th>Layer</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>People layer Components of OLC</td>
<td>81</td>
<td>3.0121</td>
<td>.40361</td>
</tr>
<tr>
<td>Structural layer Components of OLC</td>
<td>81</td>
<td>3.0926</td>
<td>.46228</td>
</tr>
<tr>
<td>Organizational Support Structures</td>
<td>81</td>
<td>2.9722</td>
<td>.45758</td>
</tr>
<tr>
<td>OLC with Organizational Support Structures Overall</td>
<td>81</td>
<td>3.0326</td>
<td>.39929</td>
</tr>
</tbody>
</table>

**Readiness for change, belief, and trust.** The four questionnaire items measuring
readiness for change, trust, and belief in change were combined to create a readiness, belief, and
trust mean score. As shown in Table 5, the overall mean score for readiness, belief, and trust was
2.86 (MS) with a standard deviation of 0.39 (SD). The internal consistency and reliability of the
readiness for change and belief questionnaire produced a questionable Cronbach’s Alpha of 0.66
leading this researcher to review the mean scores for the individual items to determine the
appropriate inclusion of the readiness, belief, and trust questionnaire in this study. The item,
“staff members do not resist change” had a low mean score of 2.35 and the Cronbach’s Alpha for
readiness and belief decreased to 0.49 if that item was deleted from the instrument. Although the
Cronbach’s Alpha for readiness and change was at a questionable 0.66 level, the questionnaire
data were retained in the study and used cautiously for any analysis and discussion.

Table 5

*Mean and Standard Deviations for the Readiness, Belief and Trust Questionnaire and Individual Question Items*
<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readiness, Belief and Trust Overall</td>
<td>81</td>
<td>2.8642</td>
<td>.38941</td>
</tr>
<tr>
<td>This change will benefit me and is worth my effort.</td>
<td>80</td>
<td>3.2125</td>
<td>.46914</td>
</tr>
<tr>
<td>Staff members do not resist change.</td>
<td>80</td>
<td>2.3500</td>
<td>.63843</td>
</tr>
<tr>
<td>I believe we can successfully implement this change.</td>
<td>81</td>
<td>3.0741</td>
<td>.38006</td>
</tr>
<tr>
<td>Staff spends time building trust with each other.</td>
<td>81</td>
<td>2.8148</td>
<td>.69121</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Trauma-informed practices implementation.** The eight questionnaire items designed to examine the progress and success of the implementation of trauma-informed practices were calculated into an overall value. The combined overall trauma-informed practices implementation mean score result was calculated at 3.16 (MS) with 0.44 (SD).

The research question focused on the relationship between strong implementation of trauma-informed practices and OLC. For this study, each participant’s mean score for trauma-informed practices implementation was coded with a value of 1.0 for stronger implementation mean or with a value of 2.0 for weaker implementation mean. Stronger implementation mean threshold was set at 3.50 or greater resulting in 19 (23%) participant’s trauma-informed implementation mean score being recoded as 1.0 for stronger implementation. The number of participants whose mean score was recoded as 2.0 for weaker implementation totaled 62 (77%). The threshold mean score of 3.50 was slightly lower than the +1 standard deviation mean score of 3.60.
Inferential Statistical Results

The research design for this study was based on a causal-comparative model in that the researcher is examining the relationship between post-hoc variables. Because of the causal-comparative design, correlational statistics are discouraged. To examine potential relationships between the dependent variable, strength of trauma-informed practice implementation, and the independent variable of OLC with organizational support structures an analysis of variance (ANOVA) for both one-way and multifactorial models was done.

**OLC with organizational support structures and strength of trauma-informed practices implementation.** To determine differences in participants’ perception of trauma-informed practices implementation based on their perception of their school’s OLC, including organizational support structures, a one-way ANOVA was conducted. Table 6 illustrates that there is a statistically significant difference in participants’ reporting of stronger implementation of trauma-informed practices with respect to their school’s level of OLC with organizational support structures at the $p < 0.05$ level for significance.

Table 6

*One-Way ANOVA for Differences in Strong Trauma-Informed Practices Implementation by OLC with Organizational Support Structures*

<table>
<thead>
<tr>
<th>Strength of Trauma Implementation $\geq 3.50$ (MS)</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>10.571</td>
<td>39</td>
<td>.271</td>
<td>2.798</td>
<td>.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3.972</td>
<td>41</td>
<td>.097</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14.543</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Readiness, trust, and belief of change and the strength of trauma-informed practices implementation.** A one-way ANOVA was performed to examine whether there are significant differences in participants’ perception of the implementation of trauma-informed practices based
on their perception of readiness, trust, and belief in the change. As shown in Table 7, at the \( p < 0.05 \) level of significance, there is a statistically significant difference in strength of trauma implementation and readiness, trust, and belief of change in the school.

Table 7

*One-Way ANOVA for Differences in Strong Implementation of Trauma-Informed Practices by Readiness, Trust, and Belief of Change*

<table>
<thead>
<tr>
<th>Strength of Trauma Implementation ( \geq 3.50 ) (MS)</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4.604</td>
<td>8</td>
<td>.576</td>
<td>24.169</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>9.939</td>
<td>72</td>
<td>.138</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14.543</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Three layers of OLC and strength of trauma-informed practices implementation.

OLC is a complex framework composed of three interactive layers: people, structural, and organizational supports. Performing a multifactorial ANOVA with the three layers as independent variables indicated if the mean scores of the three layers individually or in combination are significantly different. Table 8 demonstrates that only the interrelationship between the people layer and the structural layer present statistically significant differences at the \( p < 0.05 \) level. All other factors show no statistically significant differences at the \( p < 0.05 \) level when analyzed as interacting variables.

Table 8

*Multifactorial ANOVA for Differences in Strong Trauma-Informed Practices Implementation by the Three Layers of OLC*

<table>
<thead>
<tr>
<th>Strength of Trauma Implementation ( \geq 3.50 ) (MS)</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>14.043(^{a})</td>
<td>73</td>
<td>.192</td>
<td>2.693</td>
<td>.084</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Intercept</td>
<td>145.687</td>
<td>1</td>
<td>145.687</td>
<td>2039.613</td>
<td>.000</td>
</tr>
<tr>
<td>Structural Layer Mean</td>
<td>1.438</td>
<td>11</td>
<td>.131</td>
<td>1.830</td>
<td>.217</td>
</tr>
<tr>
<td>People Layer Mean</td>
<td>3.353</td>
<td>17</td>
<td>.197</td>
<td>2.761</td>
<td>.088</td>
</tr>
<tr>
<td>OSS Mean</td>
<td>.109</td>
<td>5</td>
<td>.022</td>
<td>.305</td>
<td>.895</td>
</tr>
<tr>
<td>Structural Layer Mean * People Layer Mean</td>
<td>1.550</td>
<td>5</td>
<td>.310</td>
<td>4.340</td>
<td>.041</td>
</tr>
<tr>
<td>Structural Layer Mean * OSS Mean</td>
<td>.286</td>
<td>1</td>
<td>.286</td>
<td>4.000</td>
<td>.086</td>
</tr>
<tr>
<td>People Layer Mean * OSS Mean</td>
<td>.468</td>
<td>2</td>
<td>.234</td>
<td>3.274</td>
<td>.099</td>
</tr>
<tr>
<td>Structural Layer Mean * People Layer Mean * OSS Mean</td>
<td>.000</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Error</td>
<td>.500</td>
<td>7</td>
<td>.071</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>267.000</td>
<td>81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>14.543</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* R Squared = .966 (Adjusted R Squared = .607)

**Research Question Using Disaggregated Demographics**

Participants were asked to provide demographic information related to their current teaching grade band, the number of years they have taught, and the number of years they have been implementing trauma-informed practices. The data involving the number of years participants have taught and the number of years participants have been implementing trauma-informed practices was imbalanced resulting in sub-groups with numbers that do not permit statistical analysis. However, the group distribution of grade band levels were balanced with middle school ($N = 29$), intermediate ($N = 27$) and primary ($N = 25$), allowing disaggregated statistical analysis by grade band level taught.
The response rates for each grade band level are balanced in respect to the overall percentage of participants. However, each grade band level is not equally represented in the 290 teachers invited to participate in the study. Of the 290 teachers in the total population, middle school was represented by 32.8% \((N = 95)\), while intermediate accounted for 20.7% \((N = 60)\) and primary made up 40.7% \((N = 118)\). Early childhood teachers, not included in this study but included in the total population, included 5.7% percent \((N = 17)\) of teachers.

In looking at response rates that are disaggregated by grade level band and the population sizes of each of the grade level bands, the intermediate group had a high response rate of 45%. The response rate of the middle school group was 30.5%, while the primary group response rate was 21.2%.

**Descriptive Statistics of Disaggregated Groups (Grade Band Taught)**

**OLC and organizational support structures.** The mean score and the standard deviation for the building blocks of OLC were calculated for each of the grade-band groups: middle school, intermediate and primary. As shown in Table 9, the mean scores for middle school teachers ranged from 2.61 to 3.02 for the sub-scale scores with a mean score of 2.83 for the OLC with organizational support structures overall value. Intermediate teachers had a mean score range of 2.97 to 3.29 with an OLC with organizational support structures overall mean score of 3.11. Primary teachers had the greatest mean scores with a range of 3.05 to 3.38 with a mean score of 3.18 for the OLC with organizational support structures value. There was no overlap between the mean scores calculated for the middle school group and the primary group with the middle school’s maximum mean score of 3.02 less than the primary’s minimum mean score of 3.05. Intermediate mean scores fell between the middle school and primary mean scores.
Table 9

*Means and Standard Deviations for the OLC with Building Block Sub-Scales by Grade Band*

<table>
<thead>
<tr>
<th>What grade band is your main teaching assignment? (Select only one)</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity and Support of Collective Mission, Vision or Purpose</td>
<td>29</td>
<td>3.0172</td>
<td>.32686</td>
</tr>
<tr>
<td>Continuous Learning Opportunities with Experimentation and Risk-Taking</td>
<td>29</td>
<td>2.8190</td>
<td>.56259</td>
</tr>
<tr>
<td>Collaboration, Teamwork and Group Problem Solving</td>
<td>29</td>
<td>2.6149</td>
<td>.49170</td>
</tr>
<tr>
<td>Established Systems to Capture and Share Knowledge</td>
<td>29</td>
<td>2.8534</td>
<td>.43567</td>
</tr>
<tr>
<td>Leadership Commitment and Empowerment</td>
<td>29</td>
<td>2.9224</td>
<td>.59800</td>
</tr>
<tr>
<td>Organizational Support Structures</td>
<td>29</td>
<td>2.7500</td>
<td>.37201</td>
</tr>
<tr>
<td>OLC with Organizational Support Structures</td>
<td>29</td>
<td>2.8303</td>
<td>.33992</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9 Continued

<table>
<thead>
<tr>
<th>What grade band is your main teaching assignment? (Select only one)</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity and Support of Collective Mission, Vision, or Purpose</td>
<td>27</td>
<td>3.2870</td>
<td>.42576</td>
</tr>
<tr>
<td>Continuous Learning Opportunities with Experimentation and Risk-Taking</td>
<td>27</td>
<td>2.9660</td>
<td>.50545</td>
</tr>
<tr>
<td>Primary level</td>
<td>Clarity and Support of Collective Mission, Vision or Purpose</td>
<td>25</td>
<td>3.2167</td>
</tr>
<tr>
<td>Collaboration, Teamwork and Group Problem Solving</td>
<td>25</td>
<td>3.0500</td>
<td>.37500</td>
</tr>
<tr>
<td>Established Systems to Capture and Share Knowledge</td>
<td>25</td>
<td>3.2100</td>
<td>.41883</td>
</tr>
<tr>
<td>Leadership Commitment and Empowerment</td>
<td>25</td>
<td>3.3800</td>
<td>.48477</td>
</tr>
<tr>
<td>Organizational Support Structures</td>
<td>25</td>
<td>3.0900</td>
<td>.44418</td>
</tr>
<tr>
<td>OLC with Organizational Support Structures</td>
<td>25</td>
<td>3.1813</td>
<td>.34787</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Readiness and belief for change.** The mean score and standard deviation values were calculated for each grade band grouping. Middle school resulted in the lowest mean score with 2.65 (SD = 0.27), primary with the greatest mean score of 3.01 (SD = 0.36) and intermediate with a mean score of 2.96 (SD = 0.43) falling between the two groups.
**Trauma-Informed practices implementation.** For the eight items on the trauma-informed practice implementation questionnaire, the mean scores and standard deviations were calculated for each of the grade band groups. The middle school group had the lowest results with a mean score of 2.96 (SD = 0.38), with the intermediate group next with a mean score of 3.20 (SD = 0.50), and primary with the greatest mean score for implementation of trauma-informed practices at 3.36 (SD = 0.33).

For Inferential statistical results for disaggregated groups (grade band taught) OLC with organizational support structures and strength of trauma-informed practices implementation, a disaggregated one-way ANOVA was performed to determine significant differences in participants’ perception of the strength of implementation of trauma-informed practices based on the participants’ perception of the OLC with organizational support structures at their school. Table 10 illustrates that for all three groups, there are no statistically significant differences at the $p < 0.05$ level.
Table 10

One-Way ANOVA for Differences in Strong Trauma-Informed Practices Implementation by OLC with Organizational Support Structures by Grade Band

<table>
<thead>
<tr>
<th>Strength of Trauma Implementation ≥3.50 (MS)</th>
<th>What grade band is your main teaching assignment? (Select only one)</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Middle School level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between Groups</td>
<td>1.523</td>
<td>18</td>
<td>.085</td>
<td>.725</td>
<td>.735</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>1.167</td>
<td>10</td>
<td>.117</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.690</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intermediate level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between Groups</td>
<td>4.830</td>
<td>21</td>
<td>.230</td>
<td>1.437</td>
<td>.367</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>.800</td>
<td>5</td>
<td>.160</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.630</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between Groups</td>
<td>4.940</td>
<td>19</td>
<td>.260</td>
<td>2.600</td>
<td>.147</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>.500</td>
<td>5</td>
<td>.100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.440</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Three layers of OLC and strength of trauma-informed practices implementation.**

Performing a one-way ANOVAs on the disaggregated groups based on grade band taught for the three layers of OLC only indicated significantly statistical results for the intermediate group at the structural layer ($p = 0.007$) and the organizational support structures layer ($p = 0.008$). All three groups had no statistically significant differences at the $p < 0.05$ for the people layer of OLC. Both middle school and primary groups had no statistically significant differences for the structural layer or the organizational supports layer.

**Readiness, trust, and belief of change and strength of trauma-informed practices implementation.** The one-way ANOVA results for readiness and belief of change resulted in no statistically significant differences for the middle school and primary groups. The intermediate
group did indicate that there is a statistically significant difference with $p = 0.011$ for the strength of trauma-informed practices implementation with respect to readiness, trust, and belief for change.

Three layers of OLC and strength of trauma-informed practices implementation. A multifactorial ANOVA was performed for the three grade band groups with the factors of the three layers of OLC: people layer, structural layer, and organizational supports layer. The disaggregated data did not provide any statistical results related to significance and as a result differences could be statistically determined.

**Summary**

This study asked teachers from CCSD130 to complete a survey with questionnaire items focused on OLC and the implementation of trauma-informed practices. Teachers completed the anonymous survey online and the data was analyzed using both descriptive and inferential statistics. The mean data and the ANOVA results indicated limited significance between the two groups. Chapter 5 explores the findings in greater depth.
Chapter 5: Discussion and Conclusion

This study examined the relationship between the OLC and the effectiveness of implementing and maintaining second-order change in schools and school districts. The review of literature provided an overview of the foundations of organizational change theory and its various models and approaches. The review presented a theoretical framework focused on the characteristics of OLC based on the models developed by Marsick and Watkins (1993, 1997), Goh and Richards (1997) and Garvin et al. (2018). The review of literature also examined the history of school discipline reform efforts as the context for the second-order change occurring in the schools of CCSD 130. The implementation of trauma-informed practices in the CCSD130 schools presents a second-order change with how teachers approach student discipline and classroom environment.

The design of this study was quantitative using a causal-comparative approach to examine relationships between OLC and the effective implementation of trauma-informed practices as perceived by the participants. This study utilized descriptive and inferential statistics and analysis of variance (ANOVA), to analyze whether the perceived implementation of trauma-informed practices has a relationship with the level of OLC reported at the participant’s school.

This chapter presents a summary of the study and discusses the results and findings from empirical data. This chapter begins with a summary of the study followed by a discussion of the results with conclusions. The chapter ends with limitations of the study followed by implications of the results with recommendations for future research.

Summary of the Results

Second-order change is an ever-present challenge in modern organizations and in educational institutions. Multiple factors are identified as essential to an organization ready for
change and many researchers (Argyris & Schon, 1995; Fullan, 2001; Garvin, 1993; Goh, 1998; Kotter, 2002; Marsick & Watkins, 1997; Senge 1990) have used change theory to develop models for managing the change process in organizations. This study focused on one prominent theory, learning organizations or organizational learning, to examine the culture of schools that are actively experiencing a second-order change process at the time of this study.

Using the models of organizational learning from Marsick and Watkins (1997), Goh and Richards (1997), and Garvin, Edmondson, and Gino (2008), a synthesized theoretical framework was used to identify the essential attributes that are present in an OLC. The theoretical framework consisted of three primary layers and a supporting attribute.

The first layer, the people layer, focused on the people who work in the organization. It included three attributes: clarity and support of collective vision, mission, or purpose; continuous learning opportunities with experimentation and risk-taking; and collaboration, teamwork, and group problem-solving. The second layer, the structural layer, focused on how the organization works and its internal structures. The structural layer included two attributes: established systems to capture and share knowledge; and leadership commitment and empowerment. The third layer, organizational structural supports, supplemented the people layer and the structural layer, and it is a supporting layer rather than a core layer.

Organizational support structures conducive to OLC include less formal, flatter hierarchies in the organization. It includes the competence levels of the organization’s members to perform the new work demanded by the change. Each of these three layers complements each other to work in tandem to face the demands of the second-order change.

This study included an additional component focused on the individual’s internal response as an influencing element of change in an organization. Armenakis et al. (1993) and
Armenakis et al. (2007) targeted the elements of belief in the change and readiness for the change as fundamental requirements for effectively managing change in an organization. Trust pervades every attribute of OLC, collaborative problem-solving, shared vision, and sharing of knowledge (Penahi, 2014). While this additional component could be argued as synonymous or aligned to the attributes of shared vision and of skills and competencies, this study included questionnaire items from the Armenakis et al. Change Recipient’s Belief Scale and Readiness for Change Scale to more thoroughly examine the alignment of the participant’s individual, internal response to the change process in the context of OLC.

For this study, the context of second-order change focused on a district-wide initiative to address student misbehavior using the lens of supportive school discipline by incorporating trauma-informed practices into the schools. The approach of trauma-informed practices emphasizes the use of pro-active, supportive responses to student misbehavior rather than exclusionary responses typical of schools in the past. The shift from educators removing students who are misbehaving to changing the educator mindset and skill set that has student removal reserved for more egregious misbehaviors is complex and represents a second-order change that cannot be accomplished with the simple changing of policy.

The purpose of this study was to understand how characteristics of learning organizations—readiness for change, organizational learning capacity, perceived organizational supports, and change recipients’ beliefs and trust—exist in educational organizations undergoing school discipline reform. This study explored the relationship between OLC and the effectiveness of implementing and maintaining transformative change in schools and school districts.
Discussion of Findings

This study produced several statistically significant findings that indicate there is a relationship between the quality of the OLC of the school and the effective implementation of trauma-informed practices by the teachers. Overall, educators agree that the schools in the CCSD130 demonstrate the necessary attributes found in an OLC more often than not. Regarding the implementation of trauma-informed practices, the district educators reported that the implementation was more successful than not. Additionally, educators in the different grade bands reported varying levels of OLC attributes and of trauma-informed practice implementation. Following is a detailed description of these findings organized by the main hypothesis and the four sub-hypotheses.

Research Question and Hypotheses

This study was based on the following research question: What differences are observed in schools undergoing the implementation of trauma-informed practices as it relates to the attributes of OLC? The research question examined the relationship between the participants’ perception of their school possessing the building blocks of an OLC and their perception of the progress of implementing trauma-informed practices in their classrooms.

The hypotheses associated with the research question were:

Null Hypothesis: There is not a statistically significant relationship between OLC of the district and implementation of trauma-informed practices by the teachers.

Alternate Hypothesis: There is a statistically significant relationship between the OLC of the district and implementation of trauma-informed practices by the teachers.

The use of one-way ANOVA resulted in statistical significance of $p = 0.001$, thereby rejecting the null hypothesis and accepting the alternate hypothesis that there is a difference
between the means of OLC and stronger levels of trauma-informed practices implementation. This indicates a relationship exists between the total organizational learning capacity within the culture and strong implementation of the change initiative. The total OLC mean was compiled from six sub-scales of the building block attributes that each contributed equally to the overall mean ($M = 3.03, SD = .40$).

When examining the six sub-scales, three building block attributes had means above the overall mean, and three building block attributes had means below the overall mean. The attributes falling above the overall mean included collective mission, vision, and purpose ($M = 3.17$), leadership commitment and empowerment ($M = 3.10$), and systems to capture and share knowledge ($M = 3.09$). The three attributes falling below the overall mean had mean values close to the overall mean and included organizational support structures ($M = 2.98$), experimentation, risk-taking ($M = 2.97$), and collaboration and group problem-solving ($M = 2.90$). Taken separately, each of the means from the building blocks sub-scales did not noticeably deviate from the overall mean and the sub-scales did not demonstrate a specific building block having a greater impact on the overall OLC mean than any other building block.

Sub-alternate hypothesis 1 examined the relationship between the three layers of OLC (people, structural and organizational support structures) and the implementation of trauma-informed practices by teachers. The people layer had a mean of $3.01$ and included collective mission, vision, and purpose ($M = 3.17$), experimentation and risk-taking ($M = 2.97$), and collaboration and group problem solving ($M = 2.90$). The people layer consisted of the building block with the greatest mean ($M = 3.17$) and the least mean ($M = 2.90$). The structural layer had a mean of $3.09$ and consisted of two building blocks, both falling above the overall mean ($M = 3.03$) with leadership commitment and empowerment ($M = 3.10$) and systems to capture and
share knowledge \((M = 3.09)\). Organizational support structures were the sole building block of the third layer with a mean of 2.98 that fell below the overall mean.

A multifactorial ANOVA determined that only the interaction of the people layer and the structural layer resulted in statistical significance at the level of \(p = .041\). None of the individual layers nor the other combined interactions of the layers resulted in a significant difference between the means. The combined influence of the people layer and the structural layer coincided with the core OLC framework formulated by Richards and Goh (1997) as the essential attributes of organizational learning capacity. Additionally, the analysis of the combined interaction of the two core layers indicated their combined influence was greater than their individual influence on the strength of trauma-informed implementation.

The purpose of sub-alternate hypothesis 2 was to incorporate the internal responses to change—belief, readiness, and trust—in relation to the strength of trauma-informed implementation. The measure for belief, readiness, and trust consisted of four questionnaire items with means ranging from 2.35 to 3.21. The alpha coefficient for reliability of the scale was 0.60, indicating cautious use of this scale. The use of a one-way ANOVA to calculate differences between the belief, readiness, trust scale by strong implementation of trauma-informed practices, resulted in a \(p = .000\), indicating statistically significant differences between the means.

Two questionnaire items focused on belief in the value of the change \((M = 3.21)\) and belief in the organization to accomplish the change \((M = 3.07)\), representing solid agreement with the statements. Belief in the value of the change statement complemented the collective mission, vision, and purpose building block of OLC that also had a noticeably higher mean of 3.17. A possible combination of these two attributes resulting in a full belief in the collective vision in the organization could strengthen the educator’s implementation of trauma-informed
practices. It is possible that the strong belief results may have counteracted the very low readiness item about resisting change.

Additional Findings

This study was conducted in an elementary school district serving students from early childhood through eighth grade. The schools within the district are primarily organized around grade bands of middle school, intermediate, primary, and early childhood. Each grade band school has a different structure and serves students who present misbehavior and trauma differently. Study participants were asked three demographic questions so disaggregated data could be reviewed for significant trends. After disaggregating the data by the different demographic groupings, the grade band level responses allowed further statistical analysis given the response rates of Middle School (N = 29), Intermediate (N = 27) and Primary (N = 25). Three additional but parallel sub-alternative hypotheses were created as a result.

The purpose of sub-alternative hypothesis 3 was to examine whether there are significant differences in the relationship between OLC and implementation of trauma-informed practices at three of the grade bands: middle school, intermediate, and primary. The use of one-way ANOVA showed no significant differences in the OLC and strength of implementation for any of the three grade bands. Using descriptive values, the overall OLC means aligned with the mean for trauma-informed implementation for each grade band. The middle school grade band reported the lowest means for OLC ($M = 2.83$) and trauma-informed implementation ($M = 2.96$). The intermediate grade band and the primary grade band each produced means well above the middle school means for both variables.

When looking at the individual patterns of responses to the survey instrument, differences appeared between the middle school grade band and the intermediate or primary grade band
responses. The OLC responses of each grade band were reviewed to identify the percentage of individual participants who presented with six or more disagree/strongly disagree statements and who responded with six or more strongly agree statements. For the trauma-informed practices implementation, the negative opinion and positive opinion threshold was set at 4 responses per individual. The results are listed in Table 11 for both OLC and trauma-informed practices (Trauma).

Table 11

*Percentage of Teachers that Presented a Negative Opinion or a Strongly Positive Opinion of OLC and Strength of Trauma-Informed Practices Implementation by Grade Band*

<table>
<thead>
<tr>
<th>Grade Band</th>
<th>Percent Negative of OLC</th>
<th>Percent Positive of OLC</th>
<th>Percent Negative of Trauma</th>
<th>Percent Positive of Trauma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle School level</td>
<td>60.7</td>
<td>25.0</td>
<td>10.7</td>
<td>14.3</td>
</tr>
<tr>
<td>Intermediate level</td>
<td>19.2</td>
<td>38.4</td>
<td>11.5</td>
<td>30.8</td>
</tr>
<tr>
<td>Primary level</td>
<td>20.8</td>
<td>45.9</td>
<td>0.0</td>
<td>37.5</td>
</tr>
<tr>
<td>Total</td>
<td>33.3</td>
<td>34.6</td>
<td>4.9</td>
<td>25.9</td>
</tr>
</tbody>
</table>

The middle school grade band had nearly three times the percentage of teachers with negative opinions regarding their OLC as compared to the intermediate and primary grade band levels. The middle school grade band also had the lowest percentage of positive opinions on OLC as compared to the intermediate and primary grade band levels. This indicates a greater polarization of opinions within the middle school grade band teachers in relation to the level of polarization at the intermediate or primary grade band levels.

For trauma informed practices, less than half as many middle school grade band teachers reported a positive opinion on the trauma informed practices implementation in relation to the percentages of teachers reporting a positive opinion at the intermediate or primary grade band.
levels. The intermediate grade band teachers had a slightly greater percentage of teachers reporting a negative opinion of the trauma initiative than the middle school grade band teachers, while none of the primary grade band teachers met the negative opinion threshold for implementing trauma informed practices. These results could indicate a weaker commitment to the collective mission, vision and purpose surrounding the trauma-informed practices initiative at the middle school grade band level than at the intermediate and primary grade band levels or it could indicate a weaker implementation of the initiative at the middle school level. This discrepancy between the middle school grade band and the primary and intermediate grade bands potentially impacted the overall results reported in prior sections.

Sub-alternative hypothesis 4 focused on the relationship between the three layers of OLC—people, structural, and organizational support—being statistically different from the means of trauma-informed practice implementation. None of the three grade bands displayed statistical significance at the \( p < .05 \) level for the people layer based on one-way ANOVA. However, the intermediate grade band did demonstrate statistically significant results at the structural layer \( (p = .007) \) and the organizational support layer \( (p = .008) \). The primary and middle school grade bands did not have statistically significant results for any of the three layers.

One possible explanation is the small sizes of the intermediate schools may have created tighter, more coherent OLCs with stronger collegial bonds. Another explanation for this outcome could be the balance of student behavioral regulation with the less challenging behaviors presented by intermediate students has created a classroom where trauma-informed practices are implemented more quickly.

Sub-alternate hypothesis 5 examined whether the relationship between belief, readiness and trust, and trauma-informed practices were statistically significant at the grade band levels.
The one-way ANOVA only indicated statistical significance at the intermediate level with a \( p = .011 \), while primary and middle school bands had no statistical significance. The nature of the intermediate schools with their small size and more regulated and compliant students could explain the possible relationship between belief, readiness, and trust factors, and the strength of implementation of trauma-informed practices.

**Conclusions Based on the Results**

**OLC and Trauma-Informed Practices Implementation**

The primary research question examined the differences and relationship between strong implementation of the change process in trauma-informed practices and the presence of OLC attributes in CCSD130 schools. The use of one-way ANOVA demonstrated that the two variables have some form of influence on each other. When looking at the means for each of the building block sub-scales, three means fell below the overall mean (\( M = 3.03 \)) and three means fell above with a balanced range above and below the overall mean line. These findings encourage further research to determine the types of associations and the directions of the associations between the two variables. Designing a mixed-method expanded study with a greater response rate of the 290 teachers participating and then conducing qualitative research using focus groups and interviews of both teachers and school leaders would strengthen the findings and deepen the understanding of the complex relationships found in OLC.

**Cultivating a Collective Mission and Belief**

When reviewing the various building block sub-scales and components, two means were noticeably greater than the means of the other sub-scales. The mean of cultivating a collective mission, vision, or purpose was calculated at \( M = 3.17 \), indicating a moderately positive response from the participants. The questionnaire items that measure collective mission, vision or purpose
have similar items included in the OCRBS, indicating that the two attributes may compound their effects in the data analysis.

Based on the limited findings from this study, collective mission, vision or purpose, and belief attitudes may have a greater than expected impact on the change process. This emphasis on increasing teacher commitment for belief in the change and for collective vision could strengthen the implementation of trauma-informed practices.

**Differences in Grade Band Groups**

The sizable differences found when the data was split according to grade band demographics was greater than expected. This researcher’s experience in schools with each of the grade band levels led to the expectation that the middle school results would skew toward the negative end of the scale as compared to the intermediate or primary grade band levels. The nature of middle school students who are entering adolescence can result in greater instances of student misbehavior and discipline resulting from developmental challenges. Furthermore, the departmental structure of middle schools, with students frequently changing teachers throughout the school day, also contributes to a school culture and climate that may not fully address the social and emotional needs of the middle school students, thus potentially skewing the results toward the negative end of the scales. Because of the different characteristics of middle schools, this researcher anticipated possible lower mean scores for the middle school grade band level than for the intermediate and primary grade band levels.

Consistently the middle school grade band produced the lowest means while the primary grade band produced the greatest means and the intermediate grade band means falling just below the primary means. This pattern was consistent across all descriptive measures. Nonetheless, this researcher was not anticipating the overall mean score for OLC at the middle
school grade band level to fall below the one standard deviation range of the primary grade band level. This difference in mean scores between the middle school grade band and the primary grade band was greater than expected.

**Middle School Conclusions**

The differences in the middle school grade band findings could possibly be explained in several ways. The demands teachers face during a second-order change can increase their stress levels and decrease their sense of self-efficacy, resulting in reduced commitment to the change. In terms of trauma-informed practices, the implementation of the new supportive responses is more complex at the middle school level. All middle school students, whether they experienced trauma or not, are dysregulated due to adolescent hormones. For students who have experienced trauma, the onset of puberty could increase the students’ frequency and intensity of dysregulation and misbehavior. Additionally, the departmental schedule of middle schools reduces the amount of time a teacher has available to them to support a student before they leave for another class period. The limited time to effectively implement trauma-informed practices with students who may be increasing their frequency and intensity of misbehavior could cause a teacher to resist the change when faced with less typical success. Moreover, the limited time to build relationships with students and the lack of fidelity implementing community building morning meeting sessions contributes to middle school teachers experiencing less success when implementing trauma-informed practices in their classrooms as compared to their colleagues in other grade bands.

The unique environments at each of the middle schools included in this study also potentially contributed to the responses from the middle school teachers. Across the district, each school has a principal who has been assigned to the school for 3 years or less. At the middle
school level, each of the principals are in their second year at that particular school. The leadership styles of each principal vary, and the data cannot be disaggregated by school, only by grade band level. It is unclear whether the lower mean scores or the greater polarization of individual responses at the middle school grade band are impacted by the specific school climate and leadership style of the principal, but it cannot be ruled out.

Each of these elements compounding can erode the success of implementation. Additional research done at other middle schools would be needed to raise the confidence level of these conclusions.

**Intermediate Conclusions**

While the intermediate grade band mean values consistently fell in between the means of the middle school and primary grade bands, the intermediate grade bands were the only means that were statistically significant for differences between the variables means. This raises the question as to why the intermediate grade band data was significant when the middle school and primary grade bands were found not significant. Statistically significant differences were calculated for the structural layer, the organizational support layer, and the belief, readiness, and trust variable.

Possible explanations include the school size and the nature of the intermediate student. The intermediate schools in the district only service two grade levels and enroll half the students compared to the other grade bands. The small school size could foster a closer, more collegial staff thus increasing the qualities of trust and collaboration. The smaller staff could benefit from more direct interaction with the administration producing an informal, flatter hierarchy, an element found in organizational support structures.
Beyond the smaller organizational environment, the students at the intermediate level may be more regulated and have fewer misbehaviors than students attending the primary and the middle schools. Fewer incidences of misbehavior can provide teachers with the time needed to effectively implement student supports and reduce future misbehaviors. Furthermore, the intermediate grade band schedule is conducive to building strong relationships with students though morning meeting and full day interaction unlike the middle school grade band.

**Implications for Practice**

Deepening our understanding of how OLC directly impacts the implementation of change and the change process in schools have several positive impacts upon school reform. First, leaders and teachers could use the OLC scales and instruments to regularly self-assess their attainment of various organizational learning building blocks for reflection and adjustment. Such self-assessments could occur periodically during a change process cycle to monitor the organization’s practices or it could occur when the change process stalls or struggles and the school is proactively responding to challenges they face.

This use of an instrument to formatively assess OLC would be a complement to the more formal and statistically rigorous Illinois 5Essentials Survey administered to public schools in Illinois every one to two years (Illinois Board of Education, n.d.). The survey’s measures on effective leaders and collaborative teachers align to the OLC theoretical framework used in this study and provide additional data for schools and school leaders to assess and reflect on the OLC of the school. However, leaders looking to examine the OLC of their school would benefit from having a formative instrument such as the one based on the study’s theoretical framework to modify and adjust their leadership practices on a more frequent basis than the Illinois 5Essentials Survey would allow.
Another implication for practice would be using the organizational learning tools to pre-assess an organization’s preparedness for a change initiative. This could be for internal change initiatives or it could be used by outside grant organizations to assess a school’s readiness for implementing the grant proposals. When considering an organization’s readiness for change, leaders can forget that they have already undertaken the researching, reflecting, and strategizing stages of considering change while the rest of the organization enters the change process without such preparation thus creating a disconnect between the leaders and the members of the organization (Prochaska, Prochaska, & Levesque, , 2001). Leaders may erroneously conclude that the organization is more prepared for the proposed change than the members are. Formatively assessing the organization’s learning culture can promote greater alignment between the perceptions of the leadership and the realities of the organization.

A significant implication for this study relates to how leaders at the district and school level can better manage and support the change process in schools. As is common in educational institutions, school reform arising from the federal or state level and change initiatives arising from the district are ever present. Superintendents and other district administrators who initiate change in the schools are typically distanced from the classrooms where the change will take place. Even principals can make decisions from a distance without fully considering the impact the change initiative will have at the classroom level.

The disconnect between leaders and the classroom can complicate the success rate of change initiatives because the leaders do not have a clear awareness of the OLC in the schools. As a superintendent, this instrument could be used in the early strategic planning stages of a new initiative to strengthen the OLC attributes in advance of implementing the change. Additionally, superintendents could adjust how they support individual principals who are leading the change
at the school level based on the findings from the OLC assessment. Classroom teachers understand the value of frequent formative assessment to adapt instruction to the students they are teaching. Superintendents would benefit from assessment instruments such as this instrument to adapt district supports and strategic planning, so it aligns with each school they are serving.

Currently, superintendents are relying on observational data and standardized tools such as the Illinois 5Essentials to make conclusions about the schools in the district. Having current data about the organizational learning climate of a school that is not used for evaluation could result in superintendents improving the success rate of district change initiatives which lead to improved schools.

Lastly, the theoretical framework for this study was a synthesis of the work done by Garvin (1993), Garvin et al. (2008), Goh and Richards (1997), and Marsick and Watkins (1997), and represents a variation of prior organizational learning models. The theoretical framework used in this study could be adopted as an alternative to the existing models currently used by the original researchers for decades.

**Limitations of the Study**

There are limitations of this study that provide direction for future investigations. First, anonymity protection for the sample population was given priority over the collection of data that could have provided deeper insights to the data. Participant anonymity was protected given this researcher’s administrative role in the school district, which likely resulted in a greater number of participants. Anonymity protections prevented the data from being disaggregated at the individual school level thus, it was impossible to know whether the negative shift of the middle school teachers’ data was the result of all three school sites or whether it was clustered on a specific school site. The anonymity also limited the study’s ability to consider other
demographic groups such as teacher race, teacher gender, or teacher program assignment (special education or bilingual).

Given the overrepresentation of male students, Black students, and special education students in school discipline statistics, this researcher has an interest in further studying any associations between the race, gender, and program assignments of teachers and their implementation responses to trauma-informed practices. Having the ability to explore the impact various groups have on the overall data and disaggregated data could have impacted the significance levels for some or all combinations.

A second limitation of this study was the focus: using teacher perceptions of the OLC. The exclusion of both school and district level leaders to provide their perceptions of the schools’ OLC does not provide a full picture of the OLC for schools or for the district. Analyzing the data from leaders and comparing the results to the teacher data could provide greater insight and understanding of the relationship between the OLC and the success of the change initiative.

The timeframe of this study limited the ability to design it as a mixed methods study. The quantitative data provided one element of determining the degree of OLC in the school setting. A mixed methods research design could include observational study of the organization at work like the research design used by Bess et al. (2011). Additionally, a mixed method design could have incorporated interviews or focus groups for this researcher to gain a deeper understanding of select participants perceptions when they completed the survey instrument.

Research findings indicate the need for an experimental research design over the limited causal-comparative design to increase the validity of the findings. Increasing the sample population and implementing either matching or the randomization of participant select for data
analysis are two approaches that improve the quality of the data collected. The inability to apply additional correlational statistics to the data impedes the impact of the potential findings.

**Recommendations for Further Research**

The results of this study highlight the importance of examining the potential relationship between the OLC and the real-world implementation of a second-order change in the school setting. The focus of researchers has been on developing the instruments and scales used to measure the presence and level of OLC based on a handful of frameworks. Marsick and Watkins (1997) developed and validated the Dimensions of Learning Organizations Questionnaire (DLOQ), Armenakis et al. (1993) developed the Readiness for Organizational Change Scale and the Organizational Change Recipients’ Belief Scale, and Goh and Richards (1997) began work on their Organizational Learning Capacity Scale and their support structures survey items to measure the elements of their organizational learning model. Garvin et al. (2008) developed the Organizational Learning Tool using their framework and essential components. While there have been multiple instruments to make learning organization theory measurable, each of these scales and tools have been studied using businesses primarily with a limited number of studies set in school districts or schools.

Organizational learning in educational institutions has been led by researchers such Fullan (2016, 2006), Marzano et al. (1995) and Senge et al. (2000) through guidance on ways to lead and create an OLC. What is lacking in current educational change theory research are studies that analyze empirical results examining the presence of OLC and it’s positive or negative impact upon the implementation of any transformative initiative at the school level. Further research is needed to determine whether, and to what degree, an OLC positively
influences effective implementation of change in all settings including business, education, and not-for-profit.

Furthermore, achieving a fully developed OLC is complex and difficult to accomplish. Additional research is needed to determine which of the building blocks have the greatest leverage in a successful change process, so those building blocks are prioritized by all members of the organization.

Lastly, examining the use of formative assessment of OLC as a tool for superintendents and principals to assess and reflect on the change process occurring at their schools would promote the concept of differentiated supports and approaches to the change process tailored to the organization experiencing the change. The research related to the Illinois 5Essentials Survey indicates that schools that are strong in three of the five essentials measured on the survey are 10 times more likely to show gains in student learning (UChicago Impact, 2019). The results from the Illinois 5Essentials is critical to improving schools but the data represents summative assessment of the school’s organization with reports that are provided months after the survey is administered. Further research could examine how a formative organizational culture tool such as this instrument leads to greater success with implementing change or showing gains in student learning.

Conclusions

The results of this study highlight the need for organizational learning theory to move beyond defining and measuring various theoretical models and move toward measuring and analyzing the effectiveness of the theoretical models on actual change in the real world. Schools are perpetually faced with both first and second-order change through school reforms, but there
has been limited impact on student outcomes. The expectation of 70% percent of all change initiatives failing to reach fruition is unacceptable for children and teachers (Lindsay et al, 2018).

This study focused on examining the impact of OLC on strength of implementation of trauma-informed practices where initial findings indicated a statistically significant relationship between the two variables. Students and teachers need better odds than a 30 percent likelihood their efforts will result in successful change, school improvements and increased student outcomes and OLC. Superintendents and principals can assess schools’ OLC to determine readiness for change and to provide differentiated supports and approaches to the change process to increase the success rate of the initiative. In establishing an association between the OLC and the strength of implementation of a transformational change, this study and the OLC instrument developed provides superintendents with the rationale to strengthen and to monitor the OLC of each school in the district.
Chapter 6: Summary of Research

Currently, schools face expectations to transform their approaches and attitudes related to managing student behavior and student discipline after decades of zero-tolerance policies and practices. The federal government prompted a school reform movement, the SSDI (U.S. Department of Justice & U.S. Department of Education, 2011), in response to findings of disproportionate use of exclusionary disciplinary consequences for sub-groups of students based on race, gender, and or disability (Fabelo et al., 2011; Office of Civil Rights, 2014). The State of Illinois responded to the federal reform efforts by passing IL Public Act 099-0456, also known as Senate Bill 100, in 2015, which placed Illinois at the forefront of school discipline reform in the nation.

Districts, schools, and classrooms are experiencing varied success achieving the goals of the SSDI. School-discipline reform is challenging and represents a transformative change for the school. The SSDI proposes several changes for schools to address the inequities present in zero-tolerance discipline practices while maintaining a safe school environment for all students.

Trauma-informed practices are closely aligned to the guiding principles of SSDI with a focus on creating positive school climates that are responsive and supportive of the needs of all students. Childhood trauma, or ACEs, contribute to regulation and behavioral challenges often observed in classrooms and schools. Implementing trauma-informed practices rather than exclusionary discipline consequences requires educators to shift their beliefs about whether disruptive and challenging students deserve to remain in the classroom setting when they fail to meet behavioral expectations. As with any transformative second-order change, the experience of changing perspectives or changing beliefs is a complex and arduous task.
Organizations facing change initiatives typically fail to attain their initiative goals 70% of the time (Keller et al., 2010; Lindsay et al., 2018), which includes both first-order and second-order change initiatives. Second-order change such as school-discipline reforms or implementing trauma-informed practices are likely to fail without the presence of strong OLCs. This study referenced the work of Garvin (1993), Goh and Richards (1997), Marsick and Watkins (1997) and Garvin et al. (2008) to synthesize seven building blocks of an OLC categorized into three layers: people who work at the organization, structures of the social institution at the organization plus the organizational support structures. Infused throughout the building blocks of OLC are the concepts of belief (Armenakis et al., 2007), of readiness (Armenakis et al., 1993) and of trust (Dovey, 2009). The three layers of OLC along with belief, readiness and trust form the theoretical framework for this study.

**Purpose and Methodology of the Study**

The purpose of this study was to understand how characteristics of learning organizations—readiness for change, organizational learning capacity, perceived organizational supports, and change recipients’ beliefs and trust—exist in educational organizations undergoing school discipline reform. The OLC attributes were defined by the theoretical framework, while the transformative, second-order change was defined by the CCCD130’s implementation of trauma-informed practices in response to school-discipline reform. The study posed the following research question:

What differences are observed in schools undergoing the implementation of trauma-informed practices as it relates to the attributes of OLC?

A causal-comparative research design was used to examine any differences observed between schools in CCSD130. All 11 schools in CCSD130 were beginning the implementation
of trauma-informed practices as part of a district-wide initiative with the Partnership for Resiliency at the time of this study.

An anonymous online questionnaire was sent to all CCSD130 certified teachers asking them to rate 36 statements using a forced-choice, four-point Likert scale. Of the 36 statements included on the questionnaire, 28 questions targeted attributes of OLC and concepts of belief, readiness, and trust. Statements focused on indicators of trauma-informed practice implementation represented eight items out of the 36 statements. The questionnaire also included three questions to group teachers based on their grade-band assignment, the number of years in teaching, and the number of years implementing trauma-informed practices.

Conclusions of the Study

The final data included responses from 81 completed surveys representing teachers from the primary, intermediate, and middle school grade bands. The survey items for each measurable attribute were assessed for internal consistency using Cronbach’s alpha measures with strong results for all attributes except for belief, readiness, and trust, which produced a result slightly below the desired threshold at 0.66. The strength of trauma-informed implementation was set at a mean of $\geq 3.50$ to represent strong implementation with all mean values below 3.50 indicating weaker implementation.

An ANOVA was calculated between the mean value of strong trauma-informed practice implementation and the mean values of OLC. When comparing the means of strong implementation of trauma-informed practices and the overall mean of OLC, statistical significance of $p = 0.001$ indicated there is an association between the level of OLC and the strength of implementation of trauma-informed practices, thus rejecting the null hypothesis,
which was there is not a statistically significant relationship between OLC of the district and implementation of trauma-informed practices by the teachers.

When breaking down the OLC into the building blocks, the concept of belief, readiness, trust, and the three layers of people, structural, and organizational support, most ANOVA calculations did not result in a significant difference ($p = 0.05$) between the strong trauma-informed implementation and the OLC attribute. However, a limited number of significant associations did arise in the analysis.

- Multifactorial ANOVA indicated significance with the combined influence of the people layer and the structural layer of OLC. These two layers represent the core five building blocks of OLC as defined by Richards and Goh (1997).
- Using a one-way ANOVA for belief, readiness and trust, there was statistical significance of $p = 0.000$, indicating an association between an individual’s belief, readiness, and trust in the change, and their level of implementation of trauma-informed practices.
- The concepts of belief, readiness, and trust complements the attribute of collective mission, vision, or purpose, which could account for the attribute’s noticeably higher mean value of 3.17 as compared to other attributes.

Additional findings were made when the responses were disaggregated according to grade-band assignment.

Consistently, the primary grade band reported the highest mean values for OLC and trauma-informed implementation while the middle school grade band reported the lowest mean values. The intermediate grade band consistently fell in between the primary mean values and the middle school mean values. However, when one-way ANOVAs were calculated for the three
layers of OLC, the intermediate grade band demonstrated the only statistical significance for the structural and the organizational support layers. Additionally, only the intermediate grade band produced statistical significance with the concepts of belief, readiness, and trust. It is unclear what quality of the intermediate grade band schools produced the differences; however, the smaller school size or the behavioral characteristics of the intermediate students are possible aspects to consider for future research.

This study found an association between the strength of implementation of trauma-informed practices and the degree of OLC present in the school. The concepts of belief, readiness, and trust also presented as significant along with the noticeably high mean value for the associated attribute of collective mission, vision, or purpose, indicating an organization would benefit from building a strong shared vision of the change. Additionally, for school organizations, the influence of OLC appears to produce a greater difference between the means at the intermediate level than at the primary and middle school grade band levels.

**Recommendations for Further Research**

This study indicates a need for organizational learning theory to move beyond defining and measuring various theoretical models and to move toward measuring the effectiveness of the theoretical models on actual change in real organizations. Schools represent ideal organizations to examine effective organizational change because they are faced with continuous reform efforts, which are often structured in a cyclical timeframe. Additionally, the societal impact of improving school reforms and second-order change initiatives in education is far reaching and critically important to the future of society, particularly in relation to school-discipline reforms and trauma-informed practices.
Superintendents and principals can better lead a transformational change initiative when the attributes of OLC are present. The ability of superintendents and principals to strengthen the OLC in advance of implementing a change initiative or school reform can impact the strength of the implementation. Moreover, the use of an OLC instrument to formatively assess the status of the school allows superintendents to collaborate with principals on next steps to successfully leading the change.
References


Appendix A

Survey Instrument

Participants will be asked to indicate their level of agreement on a 4-point Likert scale (Strongly Disagree, Disagree, Agree or Strongly Agree) for 39 items. One item will ask participants to identify the type of school (primary, intermediate, or middle) that aligns the closest to their teaching assignment.

Clarity and support of collective vision, mission, or purpose

1. When I think about this change, I believe it will have a favorable effect on our school.
2. The majority of my respected peers are dedicated to making this change work.
3. My school administrators are in favor of this change.
4. There is widespread support and acceptance of the mission around this change.

Continuous learning opportunities with experimentation and risk-taking

5. I can often bring new ideas into the school.
6. Innovative ideas that work is often recognized by school administration.
7. My school experiments frequently with new ways of doing things.
8. Failures are constructively discussed in my school.

Collaboration, teamwork, and group problem-solving

9. People in this school are eager to share information about what does and does not work.
10. People in this school are usually comfortable talking about problems and disagreements.
11. We can form informal groups to solve school problems.
12. Staff respect each other’s perspectives and opinions.

Established systems to capture and share knowledge

13. I have opportunities to share my knowledge or skills with other staff.
14. I have an opportunity to talk to other staff about successful programs or work activities in order to understand why they succeed.
15. Staff ask each other for information about work issues and activities.
16. New work processes that may be useful to the school as a whole are usually shared with all staff.
Leadership commitment and empowerment

17. My administrators have an open mind toward criticism or negative feedback about the school.
18. My administrators accept change and are not afraid of new ideas.
19. My principal encourages multiple points of view.
20. My administrators lead by example.

Organizational support structures

21. There are no boundaries or barriers between units/teams that keep staff from working together.
22. Learning that increased my skills and knowledge is encouraged.
23. Staff are recognized for helping solve school problems.
24. I have the capability to implement this change.

Beliefs, Trust, and Readiness

25. This change will benefit me and is worth my effort.
26. Staff members do not resist change.
27. I believe we can successfully implement this change.
28. Staff spends time building trust with each other.

Implementation levels

29. ACEs, resiliency, and trauma-informed practices are a major focus at my school.
30. I can explain how ACEs and trauma impacts student success in school to someone who is unfamiliar with the information.
31. I consider the impact of ACEs and trauma when students struggle or misbehave.
32. Since learning about ACEs and trauma, I am using different strategies to respond to students who may be impacted by trauma or ACEs.
33. My commitment to trauma-informed practices has increased this year.
34. I have raised my commitment to my personal self-care in an effort to strengthen my resiliency.
35. I hold morning meetings with my students 3 or more times per week.
36. My school is successfully implementing the changes for ACEs/resiliency/trauma-informed practices this year.

Grouping questions

1. What grade band is your main assignment (early childhood, primary, intermediate, or middle)?
2. How many years have you taught in total?
3. How many years have you been participating in the resiliency/ACEs initiative to implement trauma-informed practices?