2022

See Me, Hear Me, Teach Me: Addressing Equity, Diversity, and Student Engagement through Culturally Responsive Teaching

Diana DiIorio
Sacred Heart University, diloriod@mail.sacredheart.edu

SEE ME, HEAR ME, TEACH ME
ADDRESSING EQUITY, DIVERSITY, AND STUDENT ENGAGEMENT THROUGH
CULTURALLY RESPONSIVE TEACHING

DIANA DIIORIO

A DISSERTATION
In the

Isabelle Farrington College of Education and Human Development

Presented to the Faculty of Sacred Heart University

in Partial Fulfillment of the Requirements for the

Degree of Doctor of Education

2022

Supervisor of Dissertation (Committee Chair):

T. Lee Morgan, Ph.D
Assistant Professor
Director of Inclusive Excelence Education

Dissertation Committee:

David G. Title, Ed.D.
Associate Clinical Professor
Faculty Chair, Farrington College of
Education and Human Development
Director, Ed.D. Program

Linda Gejda, Ed.D.
Assistant Superintendent
Stratford Public Schools

Michael A. Alfano, Ph.D.
Vice Provost for Strategic Partnerships
Dean, Isabelle Farrington College of Education and Human Development

i

SEE ME, HEAR ME, TEACH ME

ADDRESSING EQUITY, DIVERSITY, AND STUDENT ENGAGEMENT THROUGH

CULTURALLY RESPONSIVE TEACHING

COPYRIGHT

Diana DiIorio

Abstract

SEE ME, HEAR ME, TEACH ME

ADDRESSING EQUITY, DIVERSITY, AND STUDENT ENGAGEMENT THROUGH

CULTURALLY RESPONSIVE TEACHING

Diana DiIorio

T. Lee Morgan, Ph.D., Dissertation Chair

This Improvement Science Dissertation in Practice aimed to investigate how teachers' cultural

backgrounds and potential cultural biases were manifested in their teaching and determine the

degree to which student engagement is impacted as a result of teachers' proficiency in the use of

Cultural-linguistic Responsiveness (CLR). Additionally, this study aims to intervene in the

problem of practice (lack of use of Cultural-linguistic Responsiveness strategies) through

assessment of the impact of training to increase Cultural-linguistic Responsiveness strategies. By

utilizing a convergent mixed-method approach, this study follows a team of devoted school

community members as they planned, implemented, studied, and reflected on the outcomes of

initiating targeted Cultural-linguistic Responsive teaching to all staff, one-on-one coaching to

five teachers and observations with feedback with fifteen staff members from a small elementary

school in New England. Through a six-week cycle, the School's Network Improvement

Community organized and executed professional development learning and implementation

sessions after data on a district-wide survey, focus groups, and end-user consultation indicated

that CLR was a necessary focus for the school context. The Network Improvement Community

performed pre and post-intervention observational walkthroughs and focus groups and used

reflection tools to justify the outcomes of this study. Based on the qualitative and quantitative data presented in this Improvement Science study, the researcher feels confident in reporting that the intervention of CLR professional learning and coaching is a viable intervention to increase CLR strategies. In addition, this intervention supported the teacher's knowledge, skills, and attitudes toward implementing Cultural-linguistic Responsive instruction based on student engagement, student self, social- awareness, and self-management. Increased professional learning in CLR increased teacher perception of their practices in CLR pedagogy to improve student-teacher relationships and student engagement. This result was evident based on the observation tool results, which demonstrated a statistically significant increase in participants' use of CLR strategies as a whole. In addition, it was noted that an increase in the CLR learning environment was associated with an increase in student engagement by 4.89 points. The researcher enjoyed watching her staff gradually develop their CLR mindset, skillsets, and student engagement. Recommendations for future research and practice include perfecting the CLR professional development structures for the most impact on individual schools.

DEDICATION

To my family, who has encouraged me throughout my entire educational career and never wavered my achievements' capability. My family, who constantly said, "You can do it."

There are no words good enough to thank my husband, Rinaldo DiIorio Jr., sons, Paul Anthony, Joseph Salvatore, Mark Andrew, and my daughter, Gina Marie. You have each encouraged me throughout this journey and sacrificed "mommy time," so I could achieve one of my dreams. I will be forever grateful as you each stepped up to the plate so I can meet deadlines. My hope is that you have learned through my journey to follow your heart and go for the achievement of your choice, no matter how hard it may seem. You are each dedicated, resilient individual, and knowing we are in this together, supporting each other along the way as you have each supported me, will help you find triumph. I can not wait to watch and cheer you on. I love you!

To my parents, who have molded me into who I am today, who gave me wisdom and love. My first teachers in life who put God in my soul and showed me with His love, anything is possible--one can conquer all as He will fight your fears.

To all my mentors who--through the years (Sister Petrina, Maria, Sandy, Dr. Cornish, Dr. Robinson, Dr. Gejda, Lea Ann, and Lori) have encouraged me to learn, have a growth mindset, and pursue higher things. I thank you…for without each of your seeds you planted in me, I would not have attempted this achievement in the first place.

To all the teachers in my life (you know who you are), you are the people who inspire me each and every day. You inspire me to continue creating an educational environment where young children of all shapes, sizes, and colors learn, grow, and

flourish. Your dedication inspires me daily to pursue new ideas to benefit the education

of our students. "Teachers encourage minds to think, hands to create, and hearts to love" -

author unknown.

Acknowledgments

I would like to express my special thanks and gratitude to my professors. You have each supported me and taught me throughout this incredible journey. The knowledge you bestowed on me will forever be cherished.

Dr. Thomas Morgan, the relentless time and effort you put into preparing me through this journey is truly a sign of passion for research and success in your students. You would not have it any other way, and that determination has pushed me through on the darkest days.

Dr. David Title, you helped lead the design of a great infrastructure and environment for our overall development. You have been with our cohort supporting and cheering us on from day one. I will forever be grateful that you choose me to participate in this first Education Doctoral Degree Cohort. I am proud to be a part of this voyage.

Dr. Linda Gejda, if it wasn't for our yearly check-in meetings and your doctoral goal discussion each year, I am not sure I would have even entertained this expedition. I will be forever grateful for your encouragement and belief in me.

Thank you for your endless "discussion" and "feedback" to our SEAL First Cohort. You have all helped me improve and grow in my own academia, and I am grateful for our new friendship and journey.

Table of Contents

List of Tables

List of Figures

Chapter 1: The Problem of Practice

Teaching through a culturally sensitive lens attempts to engage students in learning. While student success depends on many factors, researchers have yet to discover the mechanism that will make all students energetic, enthusiastic and engaged learners (Christenson, 2013). Nevertheless, scholars have identified ways for teachers to create conditions in which learning is more likely to thrive, and emotional readiness is distinctly part of a successful methodology (Abla & Fraumeni, 2019). Engagement is among the conditions that educators can adjust to make learning more effective and stimulating for their students; however, a lack of engagement often hinders student learning (Honeychurch & Ahmed, 2016). According to Collaborative for Academic Social Emotional Learning (CASEL) (2021), students who acquire social skills have more developed relationships (perspective-taking, problem-solving, and social awareness), which increases engagement. Likewise, students who demonstrate positive engagement and more developed relationships exhibit better academic, social, cultural, and emotional intelligence (Osher & Berg, 2018). To some degree, all teachers teach using cultural responsiveness; however, to whose culture is the teaching responsive?

The query of the degree to which teachers' proficiency in the use of Cultural-linguistic Responsiveness impacts student engagement is the basis for this Improvement Science Dissertation in Practice (ISDiP). Additionally, this study aimed to intervene in the problem of practice identified as the lack of use of Cultural-linguistic Responsive strategies in lessons to support students' self and social awareness, student-teacher relationships, and student engagement.

Introduction

Background

     Student success is complex and varies in needs, from physiological support to academic support. Students demonstrate success and need for additional support in many different ways. Currently, while there is sufficient focus on academic skills, emphasis on the social and emotional manifestations of human development has been left behind in both practices (DePaoli et al., 2017; Osher & Berg, 2017). Although it is imperative that students learn how to read, write, and perform mathematical operations, they also need to develop other abilities, including collaborating with others, self-control, and problem-solving. DePaoli et al. (2017) argued that a student's success relies on factors other than academic skills, including social and emotional competence. Additionally, preparing students with social skills will help equip students for post-secondary success (Raudys, 2018). Specifically, developing social skills through social-emotional learning (SEL) engages students and contributes to their learning (Raudys, 2018).

     According to CASEL (2021), social-emotional learning (SEL) develops self-awareness, self-control, and interpersonal skills that are vital for school, work, and life success. Culturally inclusive Social-emotional development is predicated on a pedagogy that recognizes the importance of including students' cultural references in all aspects of learning (Ladson-Billings, 2014; Brackett, 2020). Strong social-emotional and cultural skills are essential for a child's future success.

     Several factors contribute to the lack of student engagement, including pedagogical differences based on socioeconomic disparities (SES) among students, a focus on assessment in education generally that has not addressed student emotional growth or needs, and the difficulties

in making certain that all teachers fully understand effective ways to build engagement into daily content and standards-based skills (Gregory et al., 2016). Although a correlation exists between low SES and levels of engagement--particularly in behavioral and cognitive terms--no causal link necessarily exists. Students from low SES homes also tend to exhibit lower achievement levels, as measured by standardized test scores (Tomaszewski et al., 2020). Tomaszewski et al. (2020) found that the partial mediation of SES's effects on achievement occurs through student engagement; consequently, prioritization of engagement for these students is crucial. In addition, poverty affects children's lives starting at birth and often intensifies as a child grows older, affecting areas in the child's education (Effects of Poverty on Children, 2021). According to research, children from low-income households tend to have worse outcomes than their more affluent peers in terms of cognitive development and school achievement (Goodman, 2018; Gregory et al., 2016). If schools are to mitigate the impact of SES on student outcomes, increasing engagement with impacted students stands is a viable intervention to investigate.

Student engagement is the degree of attention and motivation a student demonstrates while completing instructional activities. Newmann et al. (1992) described student engagement as the psychological undertaking students produce while learning and mastering knowledge and skills in academic work. Research supports that hungry students suffer a myriad of negative symptoms, including listlessness and trouble sleeping (Thompson & O'Brien, 2014). Within the academic setting, it is more difficult for students to focus and intellectually engage when their cognitive capacity is utilized on thoughts about food insecurity and basic necessities such as running water.

If schools succeed in providing optimal conditions for students from economically challenged homes and cultural differences, student engagement is likely to increase along with academic growth and achievement. A safe, comfortable classroom liberates learners to ask questions, explore ideas and make mistakes (Wood, 2018). To attain such a comfort zone for growth and learning, a cohort of educators at an elementary school in New England identified a plan in 2013 where colleagues (which included teachers, support staff, and the principal of the school) collaborated with students, parents, and staff to understand their perspectives regarding high-quality, engaging lessons, social and emotional feelings, and relationships. These conversations focused on the following three central questions:

- Were class lessons engaging, keeping students' interest, and enhancing a desire for continuous learning?

- What were the possible causes for the lack of engagement?

- How could we improve student engagement?

The school approached the topic knowing that lessons crafted that embedded student interests and experiences were more likely to yield improved student engagement and learning (Abla & Fraumeni, 2019; Bueno & Bolanos, 2019). Abla and Fraumeni (2019) stated that quality lessons include cognitive, emotional, and behavioral components. Supporting teachers to produce motivating and engaging lessons with strong curricular structures is one way to enhance student comfort and performance. Another strategy is to establish the norm of supportive, nurturing environments where everyone, students, and staff, feels safe and has a sense of purpose, community, and ownership of the group task. A third method is sustaining strong classroom management by providing support to teachers who need the support (Abla & Fraumeni, 2019).

Additionally, when teachers create lessons involving topics that interest the students, students are far more likely to pay attention, less likely to disrupt the learning process, and more likely to embrace learning as an opportunity (Martin & Bolliger, 2018). However, when lessons are not of interest to the students, and the students lose focus, strong social and emotional skills must be in place so that students avoid behaviors that limit their learning and disrupt the learning of others. Martin & Bollig (2018) state that educators need to teach the students self-management skills and social awareness skills that will keep their self-control intact and perhaps offer them an avenue to stay motivated and relatively engaged.

To enhance these skills in students, SEL can serve to strengthen emotional intelligence. Emotional intelligence is the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in the self and others (Mayer et al., 2000). SEL provides opportunities for students to develop their emotional intelligence, enhance their social and emotional skills, and support classroom management and student academic growth.

According to Tal (2010), classroom management is a meta-skill that integrates intellectual views, self-regulation and control skills, and relationship skills with others. When students are taught and have the opportunity to develop practice and master the proper social and emotional skill sets, they will likely perform better academically, feel more comfortable and confident in collaborative settings, and embrace learning as part of their identities (CASEL, 2020). Furthermore, CASEL (2020) defines SEL as:

"SEL is the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and

achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions" (CASEL, 2020).

Therefore, like classroom management (creating a learning environment that supports academic and behavioral learning while maintaining order), students need the opportunity to learn, practice, and master different social-emotional skills (Gregory & Pollack, 2016). When schools embed SEL into learning with fidelity, many aspects of a student's experience in school and outside of school tend to improve. Developing social-emotional competencies (CASEL, 2020) (self-awareness, self-management, social awareness, responsible decision-making relationship skills) engenders increased academic success, enriched relationships between teachers and students, and prompted a decrease in aggression (Brackett, 2020).

Teaching SEL also needs a focus on teachers' Cultural-linguistic Responsiveness and sensitivity to their students. Brackett (2020) states that many emotional challenges have roots in systemic social problems like inequality, racism, sexism, and poverty, but we can still improve the ways we deal with the feelings that result. The journey to Cultural-linguistic Responsiveness occurs in two ways: a change in mindset and skillset (Hollie, 2012). Cultural-linguistic Responsiveness includes awareness of one's own and other's cultural identities producing the ability to affirm and validate individual differences in the classroom as an integral part of student learning (Khalifa et al., 2016; Hollie, 2012). Furthermore, the teacher practicing Cultural-linguistic Responsiveness (CLR) and instruction understand that there are many different adaptations within students' capacity to learn and utilize differentiated instruction to support a student's culture. Students learning in a culturally sensitive classroom will feel respected, valued,

and acknowledged in their interests, social identities, values, and upbringing (Ladson‑Billings, 1995; Gay, 2000). Consequently, culturally relevant pedagogy supports and informs a teaching approach that recognizes teachers' idiosyncrasies, with critical dimensions including the perceptions of themselves and others, classroom structures to support respectful social interactions, and teachers' perceptions of knowledge (Ladson-Billings, 1995).

Statement and Definition

The problem of practice addressed in this study is the lack of use of Cultural-linguistic Responsive strategies in lessons to support students' development of self and social awareness intended to increase student engagement. The main goal of this study was to increase teacher practice in Cultural-linguistic Responsive Pedagogy through professional development to improve student-teacher relationships and student engagement through an Improvement Science framework.

Bryk et al. (2015) define Improvement Science as a framework that focuses on inquiries to improve educational practices. Improvement Science focuses on problems and the systems surrounding the problem and then an action plan to improve the problem (Perry et al., 2020). This study took place in two major phases, grounded in the Improvement Science approach to educational change (Bryk et al., 2015; Crawford, 2020). Phase 1 was a root cause analysis with primarily existing data to establish the problem of practice and the environmental factors contributing to the problem of practice. The culmination of phase one was the development of a theory of improvement germane to the specific location where the problem was identified and actionable. Phase 2 was a short-cycle intervention that sought to improve practice and understanding of the process of improvement. The main goal of Phase 2 was to test the theory of

improvement in the context where the identified problem occurred and to understand if the change prompted an improvement and what specific change resulted in an improvement (Crawford, 2020).

Background of Problem at Oakland Elementary School

There are many characteristics of an effective problem of practice with a lens to addressing concerns that are urgent, actionable, feasible, strategic, and tied to a set of practices (Perry et al., 2020). The problem of practice for the student is urgent because a lack of engagement and a sense of belonging impedes the learning process. This school in New England developed a comprehensive needs assessment to verify the problem. The needs assessment was an organic process of collecting information, including environmental interviews, end-user empathy focus groups, and documented review of school climate data. This research analyzed past interviews and focus groups with parents, students, and staff that included questions on student engagement, classroom management, social-emotional learning, and feeling a sense of belonging. The research also reviewed documents such as past office referrals, attendance, and school climate surveys. The Parent School Climate Survey results indicated that in 2019 only 52% of the students felt engaged and motivated. The 2021 data indicated that 47% of their students felt engaged and motivated.

Oakland Schools Leadership Team acted as a Network Improvement Community (NIC). Bryk et al. (2015) describe a NIC team as a group of educators that accept responsibility for analyzing a problem. This process is done by developing an initial theory to the problem of practice, providing professional development (PD) supports, resources, and other change agents, such as coaching and reflection, and then assessment of the change. Using the data described

above, the NIC identified a lack of student engagement and connectedness at Oakland Elementary School as an ongoing issue contributing to students' detachment from school. The next phase consisted of interventions or a change to improve student outcomes (Bryk et al., 2015). This Improvement Science Dissertation in Practice focused on improving social, emotional, and cultural competencies and relationships to improve student engagement and learning.

The target population this study impacted was classroom teachers and support staff, and was focused on their instructional practices related to students' culture, knowledge, skills, and attitudes toward implementing linguistically-responsive practices. Although teachers' practices were the proximal outcomes expected to be observable within the framework of this study, student's level of engagement was a distal outcome. While engagement was expected to improve, engagement level could not be directly assessed within this study.

Given the increasingly diverse context of schooling and students, this study may be significant for other school and district leaders interested in understanding how to utilize CLR as a lever to support teacher efficacy for supporting student engagement. Having strategies that support culturally responsive teaching helps sustain a sense of belonging (Connell, 2013). Therefore this sense of belonging adds to the overall culture and climate of school buildings as well as supports the social-emotional needs of students of different races, socio-economical, sexual, and religious backgrounds, and identities (Egalite et al., 2015; Delprit, 2008). Studies illuminate the problems emerging from the lack of culturally responsive pedagogy, including micro and macro aggressions, lack of classroom management, lack of understanding of

differences, and a sense of belonging (Gregory et al., 2016). However, this study engaged teachers' perspectives on the increase in CLR strategies and their impact on student engagement.

Oakland School is a suburban school in New England where the researcher is employed as a K-6 elementary principal engaged in training teachers. Previous professional development covered trauma-informed practices and social-emotional learning utilizing several frameworks and approaches. Oakland School has partnered with Clifford Beers Health Center, Restorative Practices, and Responsive Classroom. Clifford Beers Health Center provided trauma-sensitive training for all certified district employees. During their faculty meetings and professional learning days, the school continued its trauma-sensitive learning. Some of the strategies from Clifford Beers included being mindful of behaviors that might be caused by trauma, listening and hearing students out completely, and providing a safe and calm place for students to regroup. Some strategies used at Oakland are sensory boxes, creating targeted support for the child's individual needs, scheduled breaks, and providing assistance for families when staff was aware of needs such as food, clothing, and referrals to outside resources.

Oakland data indicated that teachers relied on discipline referrals rather than validating and affirming behaviors due to students' culture in place of the referral. Oakland School began implementing restorative practices in response to high numbers of out-of-school suspensions. In addition, analysis of the data revealed that students of color were suspended disproportionately compared to their European American peers. Oakland School implemented restorative practices to resolve student-to-student and student-to-staff conflicts. Restorative practice is a research-based approach that makes learning environments more supportive, equitable, and anti-racist (DePaoli et al., 2021).

The Responsive Classroom is a methodology Oakland School staff used to encourage a student-centered approach to learning social and emotional skills while creating safe, happy, and engaging classrooms and school communities for both students and staff. Oakland uses strategies to greet students at the door, morning meetings with accountable talk, collaborative rules creating, and interactive modeling.

In the 2020-2021 school year, Oakland School began to train all staff using the RULER (Recognizing, Understanding, Labeling, Regulating, Emotions) approach to social-emotional learning (Brackett, 2020). The RULER approach, when taught with fidelity, has been shown to improve student academic performance, improve student-to-student and student-teacher relationships, and decrease negative behaviors in children (Brackett, 2019).

As this New England school district leaders began to take steps to improve staff pedagogy in SEL, the staff's lack of pedagogy in CLR strategies was an area of concern. Increasing teachers' knowledge to incorporate CLR techniques allowed the study to analyze the perception of teachers, staff, and student's views on engagement. Improving CLR pedagogy assisted in increasing cultural competence for all stakeholders and assisting all students and staff with social-emotional competencies. The theoretical proposition that guided the root cause analysis was that the lack of proficiency in using CLR strategies was a problem of practice for a school and school district, and educators could intervene once the causes were determined and understood (Hinnant-Crawford, 2020). This researcher collected data that could improve student engagement by improving CLR implementation and proficiency (quantity and quality of CLR strategies) to enhance student engagement.

The NIC leadership team provided the study platform to access information using a needs assessment to collect data that informed the process of supporting equity, diversity, and student engagement through CLR instruction. An exploratory case study provided the platform to access this information. Yin (2014) suggests that evidence for case studies may come from many sources of evidence. Consistent with a case study design, the primary sources of information for Phase 1 of this Improvement Science inquiry were interviews, observations, and focus groups with various stakeholders, surveys, and documentary information (Yin, 2014). The stakeholders included teachers of multiple subjects, grade levels, age ranges, and experience. Through semi-structured interviewing, the study extracted insights into the phenomenon of the perceptions of knowledge, skills, and attitudes toward implementing CLR instruction (Yin, 2014). The interviews lasted 45 minutes on average and occurred in English. Table 1 shows the participants' demographics.

Table 1: Demographic Characteristics of Participants

Demographic Characteristics of Participants

Participants (Pseudonym)	Role	Highest Education Level	Age Range	Gender	Years in Education	Years at Site
Grace	General Education Teacher	Master's	30-40	Female	27	14
Donna	General Education Teacher	Bachelor's	20-30	Female	3	<1
Connie	General Education Teacher	Master's	30-40	Female	13	13
Annie	Special Area Teacher	Master's	30-40	Female	7	6
Molly	Special Area Teacher	Master's	30-40	Female	9	4
Luke	General Education Teacher	Certificate of Advanced Studies	50-60	Male	28	18
Ryan	General Education Teacher	Master's	40-50	Male	14	14
Jenny	General Education Teacher	Master's	40-50	Female	10	9
Steph	General Education Teacher	Certificate of Advanced Studies	40-50	Female	26	14
Penny	General Education Teacher	Master's	20-30	Female	14	10
Kate	Special Area Teacher	Master's	40-50	Female	24	14
Toby	Special Area Teacher	Master's	30-40	Female	16	5
Julia	General Education Teacher	Master's	30-40	Female	14	10
Margot	General Education Teacher	Bachelor's	20-30	Female	5	> 1
Kayden	Special Area Teacher	Bachelor's	40-50	Female	3	> 1

Document Review

Documentary information explored was the School Improvement School Plan, school office referrals, attendance, brochures, the district's website, school climate data, and the school's website on both the computer and phone application. The researcher used a consistent protocol to review documents, including transcription and organizing, coding, creating themes, understanding and interpreting the data, and writing a report. Based on the purpose of the research, the considered areas were (a) the original purpose of the document; (b) language – was the document available in other languages besides English; (c) terminologies – was their reference to supporting equity, diversity and student engagement through culturally responsive teaching; (d) was the document current or outdated; (e) was the document focused on supporting

equity, diversity and student engagement through Cultural-linguistic Responsive teaching; and (f) was the document connected to the larger vision of the district's strategic plan and focused on supporting equity, diversity and student engagement through Cultural-linguistic Responsive teaching.

Historical, attitudinal, and behavioral evidence aimed to corroborate the same phenomenon (Yin, 2014). The advantage of using multiple sources of evidence was to develop converging lines of inquiry and enhance the ability to find more convincing conclusions (Yin, 2014). Rossman and Rallis (2016) explain that using multiple sources also allows the reader to interpret and decide the applicability of the case learnings to another setting. Classroom teachers and other support staff received professional development (PD) that modified their teaching to support building relationships and engagement. This study also impacted the elementary school students in an environment where lack of engagement had in the past resulted, in part, in the need for behavioral interventions, failure to meet standards in assessment, absenteeism, and an array of corollary outcomes that negatively affect the larger learning community (see Tables 2, 3 and 4).

Findings

Phase 1 of this study aimed to understand the root causes that serve as generative mechanisms for creating the teachers' knowledge, skills, and attitudes toward implementing CLR instruction. In understanding the individual and structural drivers of the impact of supporting equity, diversity, and student engagement through Cultural-linguistic Responsive teaching, the researcher theorized that the analysis would validate the problem of practice and provide guidance for an intervention that is specific to the localized context. This section presents the

findings of the instrumental case study that explored supporting equity, diversity, and student engagement through Cultural-linguistic Responsive teaching. All sources contributed to a rich and in-depth understanding of supporting equity, diversity, and student engagement through Cultural-linguistic Responsive teaching. The researcher was able to identify shared or contradictory values, visions, and conditions around supporting equity, diversity, and student engagement through Cultural-linguistic Responsive teaching in the Oakland School. The researcher discussed these narratives through main categories along with themes and sub-themes that emerged. The final section of the chapter provides a summary of the findings.

The Parent School Climate Survey results in the targeted research district in 2019 revealed that 52% of the students indicated that students lack engagement and motivation. In the spring of 2021, 47% of the students indicated that they lacked engagement and motivation. Additionally, the percentage of students who do not feel a sense of belonging was 62% for 2019 and 68% for 2021. Students often act out when they do not feel significant or connected to an adult (Davis et al., 2012). For example, during a focus group session with one of the NIC group members, one student commented, "I can't pay attention when I don't feel like my teachers care if I'm here or not."

By directing its attention at one of the primary sources of the problem, a lack of consistent and coherent SEL integrated into instruction and the culture of the community, this study attempted to improve both the culture of this elementary school and the outcomes for its students to a demonstrably more comfortable, engaged culture of learners and educators. The *macro-level* of identifying and supporting the problems involving student engagement seemed intuitively apparent.

Handelsman et al. (2005) assert that student engagement is a predictor of student achievement. Student engagement involves many factors and is an indicator of success, including academic and social-emotional success. When students are engaged, they are open to learning which can impact academic achievement at the school and district levels. Student engagement could also raise climate survey scores. On the *micro-level*, however, the study had to identify and address specific symptoms exhibited by individuals in the day-to-day environment. Aggregate data offered many insights into the effectiveness of an implemented practice or policy but successfully working with the disengaged fourth-grade students or the too-often stressed teacher posed a more challenging task regardless of overarching philosophy or optimistic ambition.

Setting and System

The demographic status of the school district where this study took place is as follows: Oakland School is an extremely diverse school within a diverse district. Oakland is one of nine elementary schools serving K - 6th-grade students. There are three classrooms per grade level, with the exception of 5th grade, which has four classrooms, and first grade, which has two classrooms. Oakland qualifies and receives free lunch for the entire school population. The Connecticut State Department of Education (2020) reported that Oakland School serves 457 students K - 6th-grade students with the following demographic profile: 75% minoritized, 9% students with disabilities, and 8% English as a second language students. Oakland qualifies to receive Title I funds for the entire school (Public School, 2020); therefore, the entire school population receives free lunch.

Demographically, Oakland School is more diverse than the overall district, with a greater percentage of Black, Indigenous, and People of Color (BIPOC) students and students who are

from economically disadvantaged homes. Students in this district live in homes with lower median family income, lower education, more children in poverty, and more children residing in single-parent families. Table 2 shows that the study location is more economically disadvantaged than the school district or the District Reference Group and racially and ethnically more diverse.

Table 2

Demographic Elementary Data 2021-2022

	Oakland	District	DRG G
Student Enrollment	457	3373	4387
Minoritized Students	75%	68%	N/A
Students with Disabilities	9%	15%	N/A
English as a Second Language	7%	8%	20%
Economically Disadvantaged Students	100%	35%	40%

In addition, Oakland has a significant and variable transient population, with students enrolling in and exiting the school weekly, a reflection of the community dynamic--families frequently moving in and out of school and district boundaries (Public School District, 2020). A transient population is a group of individuals in a location where they do not normally reside; they sometimes come and go for brief periods due to the convenience of many rental properties at reasonable rent.

This constant change made continuity very difficult and thus required extra thought and strategies in which teachers got to know and engage the students and create a nurturing, respectful, welcoming environment for all students, which followed the district mission statement and Strategic Plan. This plan included a mission statement that involved the school community in collaboration with community partnerships that ensured that all students would acquire the knowledge, character, and 21st-century skills to succeed through a high-quality

learning experience. The mission statement also included a culture of diversity and respect. The plan included four elements and covered definitions, assessments, and supports needed within a five-year period. One of the phases was implementing a rigorous social curriculum to promote character development, social-emotional wellness, and positive behaviors.

The researcher was a building principal who worked with the NIC Team, which was composed of educators within the school to support effective educational practice. Oakland's NIC group worked on these topics as the district rolled out each phase. Currently, the school district has partnered with the Yale Center for Emotional Intelligence for the entire district. Also, as part of supporting the school's SEL needs, the Oakland NIC team analyzed other approaches the school uses and documented the number of trained staff in each approach (see Table 3).

The other SEL approaches used at Oakland include Responsive Classroom (RC), Move this World (K-6 curriculum involving movement breaks,) and Restorative Practices. The staff used the Responsive Classroom approach, with 19 out of seventy-one staff trained by the RC professional team. Due to budgetary restraints, the rest of the staff had to receive their training through the turnkey model, where formally trained staff shares the information and new learning with those not attending the training.

Table 3

Staff SEL Training Distribution

Number of Staff Trained in SEL

Staff Members	Move this World	RULER	Restorative Practices	Responsive Classroom
Kindergarten	3	3	2	2
Grade 1	2	2	2	2
Grade 2	3	3	3	2
Grade 3	3	3	3	3
Grade 4	3	3	3	2
Grade 5	3	4	3	3
Grade 6	3	3	3	3
Other	20	20	4	12
Total	40	41	23	29

Note. Other represents staff members such as specialists, resource teachers, social workers, psychologists, and administrators.

The above training breakdown includes coaches, specialists, special education staff, paraprofessionals, tutors, interns, and building substitutes. Following the RULER team's suggestion, the 2020-2021 staff focused on adult social-emotional skills and the importance of taking care of themselves to support their students better. This rollout included RULER language and an introduction to particular key terms and phrases. To analyze the fidelity of the implemented programs, the teachers completed a self-assessment twice a year, which the NIC team analyzed for future training and analysis. According to the Oakland survey data, even with the RULER SEL program and other approaches utilized by the school, student engagement, and cultural sensitivity remained areas of weakness.

The Oakland NIC team consisted of nine staff members, including teachers, special education department members, coaches, specialists, and administrators. The NIC helped roll out the RULER approach as well as support this study in analyzing surveys, interview and focus group results, and other supports in this Improvement Science project. The NIC team understood

that the Oakland staff must provide a rigorous curriculum and innovative teaching strategies to engage its students. Hence, the NIC Team supported the teachers in carrying out this mission. In addition, the district has six Professional Learning Communities (PLC) early release days where students go home early, which allows the staff to meet collaboratively to share successful strategies and roll out what this study implied or required. PLCs are groups of professional educators who meet regularly to describe, share, reflect upon, and discuss their instruction and student work (Kanold, 2012). The NIC team helped support the fidelity of this project and shared their final results with the district.

Although the Oakland NIC team helped the staff keep their mission at the forefront, the ongoing Coronavirus Pandemic (COVID-19) presented numerous challenges and constraints. All stakeholders, including students, staff, and parents, were also coping with additional stressors reflected in staff climate surveys. O'Leary (2020) states,

> The typical ways to enact a school's mission have had to drastically shift due to the pandemic. Maslow's hierarchy of needs places safety before belonging and self-esteem. Therefore, social and emotional growth cannot be addressed if safety has not been satisfied. In a pandemic, health safety questions extremely stressful (K. O'Leary, personal communication, March 31, 2020).

The Oakland Leadership Team (NIC) has continued to keep its mission at the forefront of its work fostering academic, social, and emotional growth with a heavy emphasis on resilience, innovation, and mindfulness.

This Improvement Science project's targeted population was K-6 teachers, roughly 21 classroom teachers, and support staff. The teachers participating in the project ranged from a

third-year teacher to a veteran teacher who has been teaching for 30 years—about three teachers per grade level, all holding a state teaching certificate. At least one teacher per grade level had formal training in Restorative Practices and Responsive Classroom, which they then taught to the rest of their grade-level colleagues. All teachers completed their first year of the RULER training, which focused on adult SEL while modeling the components to roll out with students in the ensuing years. There were two male teachers (3rd grade and 5th grade) and 19 female teachers. The teacher's ages ranged from 26 to 56.

Purpose of Study

This study aimed to explore how teachers' cultural backgrounds and potential cultural biases were manifested in their teaching and to determine the degree to which student engagement was impacted due to teachers' proficiency in the use of Cultural-linguistic Responsiveness (CLR) as outlined in Figure 1.

Figure 1

Path to Student Engagement

This study also investigated the rate at which educators taught CLR and their perceptions of its relationship to social awareness skills and student engagement. This Improvement Science Dissertation in Practice aimed to examine a plausible solution to the engagement challenges facing educators and students in an elementary school. The school had many students demonstrating a lack of engagement during instruction, causing a disconnect to classwork,

teacher-student bonds, and a diminished sense of belonging to the classroom and school community as a whole.

Elementary students often experience tremendous anxiety, loneliness, and a need to belong (Davis et al., 2012.) Research has shown that students who perceive healthy interaction with teachers are more likely to engage in academics, resulting in increased participation and overall academic achievement (Klem & Connell, 2004) and that children are more likely to do well when they feel connected to school (Blum, 2005). Accordingly, Blum refers to school connectedness as the belief by students that adults in the school care about their success, their learning, and their overall well-being. Ultimately, students are more likely to engage in healthy behaviors and find academic success when they feel connected to the school.

Maslow (1954) affirmed that people are generally motivated and engaged with the fulfillment of their five basic needs. The five basic needs include physiological, safety, social, esteem, and self-actualization (Figure 2). These needs can create internal pressure on students and cause behaviors to come out. One of the ultimate goals of education is to inspire students to self-actualize and strive to reach their full potential. Once a person attains the progressive levels of need in Maslow's hierarchy theory, self-actualization is achievable. According to Maslow (1962), all people share a strong need to belong. Goodenow (1993) defines a sense of belonging as a "student's sense of being accepted, valued, included, and encouraged by others – meaning teachers and peers in an academic classroom setting and of feeling oneself to be an important part of the life and activity of the class" (p. 25).

Figure 2

Maslow's Hierarchy of Needs Theory
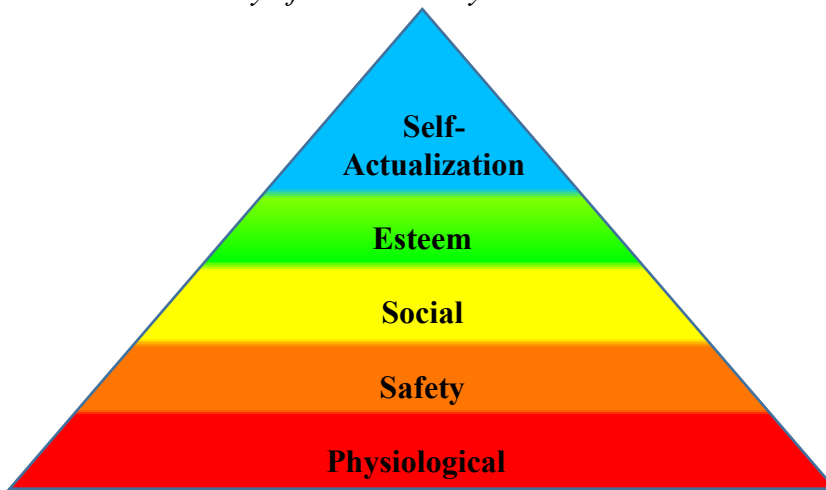
The assembled responses from students and teachers provided evidence that there was often a perceived and real disconnect between teachers and students, as well as a lack of engagement and motivation, and this contributed to general stress from students not feeling a sense of belonging in the students' classroom or school community. At Oakland School, leaders annually surveyed and periodically interviewed students about topics related to the school's climate. These surveys and interviews covered topics such as engagement, sense of belonging, relationships, engaging lessons, diversity, bullying, and motivation.

There are pros and cons of departmentalizing, and both can affect relationships. Teachers at Oakland School (21 classroom teachers and two mental health professionals) also had an opportunity to take surveys and share in an interview/focus group format. Staff observed the consequences of relationships, lessons, disengagement, behaviors, and other stressors. The method for accumulating evidence for this problem included reviewing results from previous interviews and focus groups, parent, student, and staff school climate surveys administered twice per year for the past five years, and a review of anecdotal notes. Anecdotal notes from years of

conversations and observations with teachers, parents, school mental health professionals, and administrators and notes from our previous leadership team further emphasized this topic's importance. The gathering of all of this material pointed to an intense concern regarding students' engagement, connectedness, and sense of belonging.

Among the variables that this study accounted for were the proportion of the students and staff who expressed specific needs for support or intervention, the relative frequency of behaviors that require administrative input (concerning both student and staff behaviors), and the measurement of success as the process proceeds. Independent variables that might have affected the study included CLR professional development, teacher reflection on implementation and the number of times implemented observational walkthroughs, and weekly motivational messages. The phenomena in which the study immersed, while qualitatively demonstrable, were more challenging to quantify, yet it served to inform the articulation and implementation of solutions to the problems identified by those lacking social and emotional foundations for success.

When determining the problem of practice, researchers determine the importance of performing a Root Cause Analysis to identify the problem of practice that the study will define, analyze, and address (Hinnant-Crawford, 2020). A variety of stakeholders provided different perspectives to allow for various fundamental issues causing the problem.   While gathering this information and recognizing these perspectives, the researcher identified four root causes of the lack of engagement: relationships, learning environment, classroom management, and academic and behavioral status.

Root Cause Analysis

Root Cause 1: Relationships

Relationships are a root cause derived mainly from our student and staff interviews in which 65% of students felt teachers were not culturally responsive and talked down to them (i.e., showing perceived disrespectful behavior toward students' culture and identities). Research specifies that relationship-building with students and understanding their personal stories has a direct link to academic scores and student engagement (Rabadi & Ray, 2017). Thus, addressing relationships, teachers having expectations that are either too low or too high, using language that demonstrates respect to students, and understanding cultural differences are critical areas of concern. Figure 3 represents questions and answers from the survey, which illustrate the need for consistent positive views from staff on different family cultures and backgrounds.

Figure 3

Oakland Summary Survey Data on Value Diversity of Family Background and Cultures

Results by Year
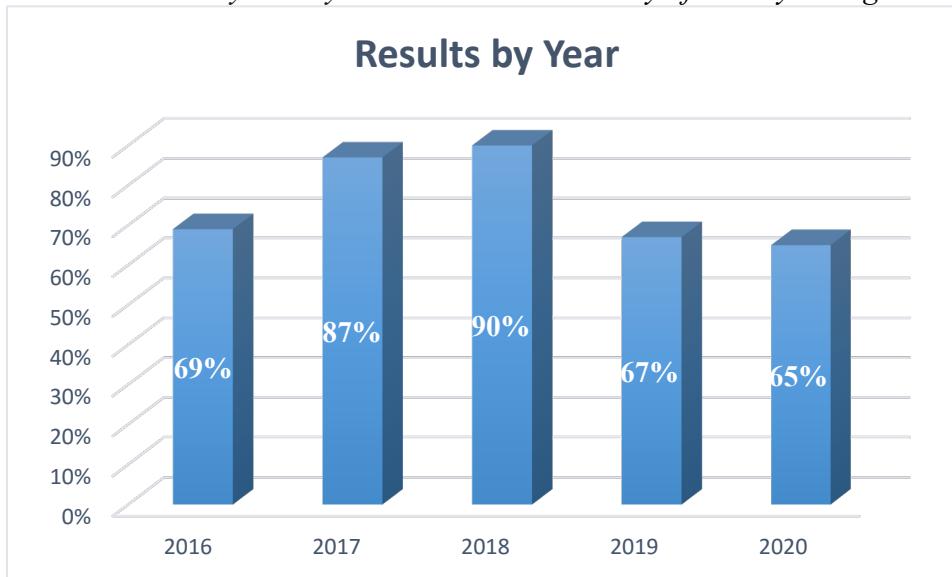
Note. Results mean the percentage that agrees with the statement.

The fact that scores went down on the survey caused the Oakland Leadership Team to ask questions directly to students in the years 2019 and 2020. There was a disconnect in relationships with these low percentages, which caused students to disengage. In addition, there was additional evidence that students did not feel connected to the teachers or school. The comments in Table 4 provide insight into students' thinking and wishes taken from student surveys and focus groups.

Table 4

Students' Comments about the Staff's Value for Diversity and Cultures

Domain	Sample Statement
Cultural Disrespect	"Teachers don't respect where I come from."
	"My friends don't respect my culture, and teachers ignore it."
Cultural Alienation	"Teachers don't understand my home life."
	"I don't expect teachers to understand my culture."
	"I don't feel connected to my teacher."
Cultural Invalidation	"I feel shame and am embarrassed when teachers yell at the way I act—it's just my way."

These quotes indicate a perception of a lack of respect from the teachers for their students' cultural backgrounds, which caused a sense of disconnect. In addition, students felt a lack of respectful relationships with their peers that some teachers ignored or failed to address. The coding process allowed for simple domain categories to be created according to the actions that happened to students by staff at Oakland. The categories chosen fit the descriptions given by the students in their surveys and focus groups, such as cultural disrespect, cultural alienation, and cultural invalidation.

Root Cause 2: Classroom Management

Another root cause is student behavior, peer relationships, and overall classroom management. Office referrals (which included student and teacher interviews) showed that eight out of ten incidents were related to a lack of kindness and empathy. These incidents needed restorative circles to repair relationships from disrespectful behavior between student to student, student to teacher, or teacher to student. Restorative circles have demonstrated success as classroom management interventions in which conflicts were likely to escalate, and typically administrators initiated them. As teachers become trained in restorative practices and more comfortable, they are more likely to initiate this intervention. These circles have reduced the recurrence of conflict scenarios among students who have participated in them. In the 2018-2019 school year, 86 out of 109 referrals needed restorative circles between students and 3 out of 109 between students and teachers. In the 2019-2020 school year, 65 out of 68 referrals needed restorative circles between students and four out of 68 between students and teachers. A staff member mostly facilitated the restorative circles. At times, children felt comfortable taking over the discussions, with the adult intervening only when necessary. Some of the incidents requiring a circle intervention were children who had disagreements that escalated when a student hurt another student's feelings, physical altercations, and arguments between teacher and students. The evidence at Oakland suggested that restorative circles became part of the building culture and had a positive influence, with data showing less than three percent of recurring incidents. Yet still, there are classroom management strategies that can further validate and affirm the student's and families' cultures that the school serves.

Observational data from 2016 to 2020 and office referrals indicate a lack of strategies to manage student behaviors. More specific noticeable behaviors appear in transitions, independent time, communication of expectations or lack thereof, and lack of consistency. As a result, staff has often requested additional training in Responsive Classroom and other behavioral approaches.

Root Cause 3: Social-Emotional Skills and Intelligence

Oakland School data on academics and behaviors show concerns in the areas of literacy, mathematics, and social and emotional regularity. Collected data on reading benchmarks and math diagnostic assessments indicated that students' scores at Oakland were below standard expectations. Office referral analysis, as seen above, indicated a need for the implementation of teaching skills such as self-awareness, self-control, self-management, empathy-building, and perspective-taking. Lack of social skills is another root cause of disengagement.

Studies reveal how teachers can produce the conditions in which learning flourishes, including positive emotional concerns and engaging lessons (Abla & Fraumeni, 2019). The data collected for this study came from Oakland's attendance records (from 2016-2017 to 2019-2020), student climate surveys, engagement observations, and student and teacher interviews. Oakland attendance data and student interviews show specific groups of students who have 25 absences a year or more describe the school as boring (Table 5). In 2016, CT state guidelines stated that "chronically absent-meaning students miss at least 15 days of school in a year are at serious risk of falling behind in school." This data is consistent with the Oakland student survey, which indicated that 52% of students felt that lessons lacked motivation, and 67% stated that lessons had a low level of interest. In response to evidence and data that implied a strong correlation

between student attendance and achievement with students feeling engaged in their learning, this project created a need to improve student engagement and motivation and social-emotional skills to strengthen self-awareness, social awareness, and relationships skills. These skills can improve attendance and academic skills (Brackett, 2019).

Table 5

Oakland Absentee History

Year	Enrollment	Average Number of Absences	Average Absentee Rate	Higher than 25 absences
2016-2017	408	3651	8.95%	49
2017-2018	404	3520	8.71%	52
2018-2019	471	4013	8.52%	55
2019-2020	471	3004	6.38%	34

Note. COVID-19 interruption in 2019-2020 no attendance was taken after March 16, 2020.

Oakland has a transient population that shows numbers up and down; tracking the number of students with 25 absences or more shows a rise in number.

Root Cause 4: Responsive Language and Learning Environment, including Instructional Materials

Research suggests that engagement in learning activities arises from the mutual interaction between learners and a learning environment (Fraser, 1998). The classroom environment needs items such as available resources, anchor charts including expectations, a warm, nurturing tone from the adults, and culturally responsive literature within the learning environment. Children need to see themselves and their families in the literature they read. Teaching materials should be culturally sensitive and versed in a variety of styles, and this suggests that the learning environment is an essential factor influencing student engagement

(Hollie, 2018). Ladson-Billings (2001) states that culturally relevant teachers employ students' cultures as a vehicle for learning, with the example of a teacher who brought in rap music while studying poetry in a 2nd-grade classroom.

The final root cause contributing to the lack of CLR in teaching is the lack of responsive language and learning environment, including materials, such as culturally sensitive books for read-aloud and independent reading. In an end-user consultation, one teacher stated,

> I'll never forget during a one-on-one conference when one African American student asked why none of my books in the classroom had characters that looked like her. I was devastated and immediately went out and bought a pile of Ezra Jack Keats books and put them in my classroom library. I really don't know why I didn't continue to build my library books to be more culturally sensitive. That child's statement was proof that it bothered her, so I'm sure it bothered many other students of color (Teacher, March 2018.)

Another teacher stated, "I pick my read-aloud books by what I've always read" (Teacher, 2018). According to Mark (2000), teachers do not vary their classroom libraries enough; they use the same texts yearly. Mark (2000) continues to share that read-aloud should allow learning new vocabulary and language and helps connect their lives and their views of themselves and others.

Phase 1: Root Cause Analysis Findings and Analysis

During the study's first phase, the NIC team gathered data such as end-user consultation, data review, and School Climate Survey to answer the guiding questions. The NIC team interviewed several staff members in the intervention in a focus group which occurred prior to the start of the school day and during after-school hours. The researcher transcribed and coded

notes from the focus group and other end-user consultations. In addition, the researcher used a triangulation method to help validate and articulate concepts and themes in the qualitative portion of this study. This mixed-method and coding enhanced the measurement of offsetting biases, providing a means to validate and sort findings.

There were two levels to the coding. In level one coding, the researcher transcribed the end-user consultations and generated initial codes by analyzing each line of the transcripts. First, the researcher identified keywords and phrases and then systematically searched the text corpus to find themes associated with in vivo categories (Bernard et al., 2009). Next, themes were identified by physically sorting the examples into similar meanings and phrases. Another theme-finding strategy used was comparing and contrasting evidence from this information. As Corbin and Strauss (2015) recommend, a careful line-by-line analysis took place while asking the question, "What is this about? And "How does it differ from the preceding or following statements?" This detailed approach helped keep the researcher focused on the data themselves rather than on unrealistic theoretical ideas (Charmaz, 1990). Level one codes and themes included culture and climate, student engagement, and valuing diversity. For example, one question and score from the student survey read, "How fairly do adults at your school treat people from different races, ethnicities, or cultures?" The score was 52%, who felt adults treated them fairly most of the time. Next, the researchers coded a second level to sort out the themes.

Level two coding included the researcher using Dedoose for part of the coding. Dedoose is a digital tool to analyze qualitative data by organizing data into categories. The themes include the absence of positive student and teacher relationships, a decrease in classroom management, the importance of social-emotional learning, and a lack of responsive language and learning

environments, including instructional materials. Some of the common statements from the focus groups included, "Some students don't treat others with kindness, and I watch the staff not respond or react," and "Some students lack empathy, self and social awareness, and self-management." Another comment was, "Our class student surveys state that some students don't feel like they have an adult they can trust at school."

In addition, some of the statements gleaned from a review of office referrals describe students sharing their feelings that teachers called them out because they were African American. The referrals further state, "Other white dudes were doing the same thing, and only I got called out." These statements highlight the significant impact of student engagement and teachers' lack of culturally responsive teaching and awareness. The NIC team used these themes to develop an intervention to support the weak areas in the school's culture and climate and social-emotional learning needs.

At the completion of the intervention using Cultural-linguistic Responsiveness (CLR) to strengthen the weaknesses identified in the theme, the researcher used a mixed-method study to analyze the impact of the intervention. As a final measuring point, the researcher triangulated the data through a convergent method to simultaneously use the collection of qualitative and quantitative data for comparisons of these multiple data sources (Creswell & Plano-Clark, 2018).

Introduction to Phase 2 Research Methodology and Design

The researcher applied an Improvement Science methodological framework approach for this study. Unlike traditional experiments that tell us if an intervention works, Improvement Science states how and under what conditions an intervention works (Hinnant-Crawford, 2020). Hinnant-Crawford (2020) describes Improvement Science as a procedural framework that

supports foundational principles. Principles that direct academic practitioners to define problems. This process is often called a problem of practice (PoP) (Perry et al., 2020). The main steps are to understand how the system produces the problems, recognize changes to repair the problem, test the usefulness of those changes, and spread the changes if the change improves (Hinnant-Crawford, 2020). This process, completed in cycles of steps, occurs quickly as each small change is tested (Hinnant-Crawford, 2020). The problem defined in this study was students' lack of engagement. The identified problem of practice was the lack of use of Cultural-linguistic Responsive strategies in lessons to support self and others' social awareness and student engagement.

Creswell and Plano-Clark (2018) stress selecting the research design is a significant and careful process. This Improvement Science methodological framework includes collecting and analyzing qualitative and quantitative data to determine the CLR impact on the teacher's perception of CLR and teaching and the schools' climate survey. Therefore, the researcher used an exploratory research type to help discover thoughts and ideas in a mixed-methods convergent design. A convergent design has three phases. Consequently, the scholarly researcher collected, analyzed, and compared quantitative and qualitative data results and then interpreted them. This process involved triangulation of data. In the social sciences, triangulating data is the reapplication and mixture of several research methods in studying the same phenomenon (Creswell & Miller, 2000). As stated above, the data triangulation included environmental interviews, end-user focus groups, and school climate data.

With the convergent mixed methods structure for this study, the researcher engaged in rigorous research, allowing for the comparison of the information from the quantitative data with

the information gathered from the qualitative observations/walkthroughs and focus groups as a way of validating the results and learning more details on the phenomenon (Creswell & Plano-Clark, 2018).

Participants/Sampling

In Phase 2 of this study, the participants were from an elementary school in New England. The researcher used nonprobability sampling to select the participants for this study. The researcher invited each teacher in grades kindergarten through six and other staff members in this New England elementary school to participate. There were 21 classroom teachers and 13 support staff and specialists.

Data Collection

The scholarly-researcher gathered qualitative data through a process of understanding focus groups and observations/walkthroughs. The focus groups, lasting no more than 30 minutes and conducted by grade level, emphasized the CLR strategies taught and the perception of their impact on students feeling connected. The researcher formulated open-ended questions such as "What is your perception of increased CLR strategies and teaching?" "What was the process, and what did I learn?" The researcher produced a protocol for the walkthroughs, an instructional leadership practice to collect data for enhancing teaching and learning (Garza et al., 2016). These observations are non-evaluative and last 10 to 15 minutes as a short snapshot of the environment used to aid in professional growth for teachers. The researcher transcribed the focus group notes and observations/walkthroughs looking for themes. The scholarly practitioner also gathered quantitative data through pre- and post-School Climate Survey data. The survey used was from Panorama Education which works with schools from kindergarten through grade 12 to collect

and analyze data (Panorama, 2017). The Panorama Education Partners focuses on school climate, SEL, and family engagement.

Research Questions & Hypothesis

The scholarly practitioner formulated questions and hypotheses. There are a few steps to data-driven decision-making. First, about the proper method of proper testing. Second, execution of testing. Finally, using the testing results for decision-making (Mandinach, 2006).

Research Question 1 and Hypothesis:

To what extent do teachers who engage in professional development (Professional Learning, Observational Feedback, Pedagogical Reflection) for Cultural-linguistic Responsiveness pedagogy significantly increase the utilization of Cultural-linguistic Responsiveness strategies?

H_o Teachers who participate in professional development will not significantly increase the average rate of their utilization of Cultural Linguistically Responsive strategies.

H_a Teachers who participate in professional development will significantly increase the average rate of their utilization of Cultural Linguistically Responsive strategies.

Research Question 2 and Hypothesis:

To what extent does the average rate of teachers' utilization of the Learning Environment construct of Cultural-linguistic Responsiveness strategies impact student engagement?

H_o Teachers' average rate of utilization of the Learning Environment construct of Cultural-linguistic Responsiveness Strategies will not significantly increase student engagement.

H_a Teachers' average rate of utilization of the Learning Environment construct of Cultural-linguistic Responsiveness Strategies will significantly increase student engagement.

Research Question 3:

What are teachers' perceptions of intentionality with the use of Cultural-linguistic

Responsiveness strategies in improving students' social awareness?

Limitations of the Study

As with all research, this Improvement Science study has some limitations in the area of

sample size, a diverse community setting, and the COVID-19 pandemic.

Participants and Setting

First, the sample size may be insufficient since it took place in one elementary school and

had limited participants. With the limited time constraints of the ISDiP, doing it at one school

was attainable but with a limited participants size.

Diverse Community

Another limitation arose from the elementary school being in a diverse suburban section

of the town, so there was possible cultural bias from staff, parents, and the researcher.

COVID-19

A third influence on the study has to do with the COVID-19 pandemic, which plagued the world

during this ISDiP, and all educators were affected and have had to adapt and respond

accordingly. Many students and staff have been working from their homes since March 2020.

Teachers are going through a tremendous amount of stress returning to the school building full-

time, teaching in the same manner they are used to while supporting the mitigation of the

pandemic. Teachers quickly realized they needed to adjust their familiar curriculum, teaching

manner, and scope and sequence of skills to meet the needs of the students' decline in academic

and behavioral skills. Also, when students re-entered their school building, reconnecting with

staff and peers, enjoying the company, and engaging with others in person likely shaped some of the positive experiences.

The Researcher and the Problem--Positionality

Being in the field of teaching for more than 25 years and 17 of those years as a building administrator before I pursued doctoral study work, I had long been interested in how to support students on an emotional level. Building connections with students and making them feel valued and vital is my desire so they can achieve success. My love of children started before I went into teaching as I volunteered at my local church, teaching Religious Education Classes to third graders. This volunteer work helped me realize how much I enjoy working with children, how important it is that each student feels a sense of belonging, and how this impacts student achievement. As strong as my faith, I believe in showing respect and accepting differences for all humanity.

I believe optimal learning for all students will not occur in environments where equality is the goal. One must demonstrate an understanding of the difference between classroom equality and classroom equity. An "equity mindset" toward ensuring that all students have equitable opportunities for success is something I strive for in each of my classrooms. Therefore, I believe educating all (especially with a diverse population, which I have been in for the past 17 years) requires cultural awareness practices in daily instruction.

These years challenged me to be a far better leader than I ever imagined I could be, which informed the content of this Improvement Science study. It is my hope that this Improvement Science study will show the need for professional development in the area of culturally responsive teaching for all educators who work in school systems. In addition, I hope this study

shows how critical it is to build relationships and a sense of belonging by learning about differences. As I will be the data collector and analyze the data for this study, I will not reflect on my personal experience but allow the data and individuals' experiences to gain CLR knowledge, perspective, and strategies. In addition, through the years, our NIC team has set the tone for learning through Instructional Walkthrough/Rounds. Our staff is familiar with a team of teachers, coaches, and school and district administrators walking through the building and their classrooms to observe teaching and learning. Usually, these walkthroughs are complete with feedback. In the past, the staff has had deeper conversations if the suggested feedback was unclear or the staff member disagreed with the comments. This routine formed a bond and trust between the staff and the NIC team, including the administration.

Definition of Key Terms

Classroom management: a method and strategy used by educators to maintain order for productive learning to occur. It allows students to feel safe in their environment.

Cultural Responsiveness: the ability to be open to differences in ideas, beliefs, and values of one's own culture; seeing others as equal in the classroom and the community.

Sense of belonging: educators providing love and acceptance within a classroom.

Social Awareness: the ability to notice others' perspectives, cultural backgrounds, and needs with constructive communication.

Social-Emotional Learning: a process to learn self-help skills such as self-control and interpersonal skills for success in school and work life.

Student Engagement: strategies adults can give to students to pursue attention, interest, and passion for showing practice and learning in education.

Professional Development: learning for the purpose of strengthening educational pedagogy while working with children.

Chapter Summary

This dissertation followed an Improvement Science framework, an Exploratory methodology, and a mixed-method design, which sought to improve student engagement by increasing teacher pedagogy using CLR. When engaged at school, students are more likely to experience social, emotional, and academic benefits (Brackett, 2019). Using data from end-user consultations, including surveys and focus groups, the researcher and NIC team recognized a lack of engagement as a concern for the school and the focus of this study. A root cause analysis, a component of the Improvement Science process, identified several causes of the lack of student engagement at Oakland School. After analyzing the root causes, the researcher selected professional development in CLR as a potential change agent, which was the focus of Phase 2 of this study.

The main goal of Phase 2 was to increase teacher practice in CLR Pedagogy through professional development to improve student engagement. The researcher used three research questions to assess CLR professional development and the increase in the utilization of CLR strategies, the extent of CLR utilization of the Learning Environment construct and its impact on students' engagement, and teachers' perception of intentionality with the use of CLR strategies in improving students' social awareness.

The researcher reviewed scholarly literature as part of the Improvement Science research study. The literature provided best practices supporting the relevant knowledge to support the importance of this dissertation's problem of practice. In the next chapter, the study focuses on this literature review.

Chapter 2: Review of Literature and Practice

The livelihood of student engagement in schools supports students in experiencing social, emotional, and academic benefits. Research has confirmed these benefits, including academic attainment, relationship building, a safe and respectful atmosphere, and reduced classroom behavior problems (Cochoran et al., 2016; Gay, 2013; Charney, 2015). Within the root cause analysis portion of this study, educators shared experiences that confirmed this research and anecdotal evidence to support the importance of student engagement. Additionally, the root cause analysis process illuminated several different mechanisms that negatively impacted student engagement and led to a selection of drivers to improve student engagement in classrooms. Consequently, this inquiry focused on using CLR to improve social awareness, student engagement, and general student experience.

Student-Teacher Relationships through Student Lens

Educators often work to ensure there are systems in place for academic support; equally important are systems to support social, emotional, and cultural support to build student-teacher relationships and a sense of connection. School connectedness can be defined as the belief by students that adults in the school care about their learning as well as about them as individuals-- including their cultural differences--and this belief can often have a positive impact on student engagement (Jones et al., 2019).

Kafele (2013) shares that when students experience a disconnect from their stories and cultural history, they lack purpose for learning. According to Kafele (2013), every student in every teacher's classroom has a story, and each one of them has a distinctive and unique story to tell. Their stories define who they are and are part of a broader collective story that created the

classroom community (Kafele, 2013). Unfortunately, many students are disconnected from their past (Ladson-Billings, 2001; Delpit, 2008). If students lack exposure to their history, culture, and background, not knowing themselves becomes the norm (Kafele, 2013). This concept is the reality for many students, especially students at risk of being underserved and marginalized within schools and society (Kafele, 2013; Delpit, 2008).

When students are not connected to their stories and history, they disengage because they lack purpose for learning (DePaoli et al., 2017; Kafele, 2013). When students become aware of the power of their history, they will have a far greater understanding and appreciation for the ability within themselves to accomplish whatever they set their visions and goals on (Delpit, 2008; Kafele, 2013). On the other hand, when teachers marginalize students' stories and histories, the students become marginalized. Consequently, students tend to disconnect from educational structures where educators systematically erase students' histories, reinforcing a message that cultures whose history is not covered in the curriculum or represented in standardized tests are unimportant.

Relationships and feeling connected allow students to discover, reflect, and interact in an educational setting in a way they often do not when those emotional bonds are absent. Students are more likely to engage in healthy behaviors and succeed academically when they feel connected and engaged at school (Jones et al., 2019). Consequentially, creating trusting and caring relationships that promote cultural sensitivity helps support student engagement. Unfortunately, many students report not feeling safe in school and not feeling like anyone cares for them (Durlak et al., 2017).

Student engagement has many definitions. Mark (2000) describes student engagement as a psychological process like interests, investment, and effort students expend in the work of learning. Connell (2004) defines student engagement as a student's behavior, emotions, and thought processes during the school day. Fredricks et al. (2004) identify three types of engagement: behavioral, emotional, and cognitive. Behavioral includes students observing community norms and participating in activities. Emotions include students' feelings of interest, boredom, happiness, sadness, and anxiety. Finally, cognitive is closely related to motivation and involves students' desire and ability to engage in a variety of strategies that enhance self-directed learning. Student engagement is a construct that is ultimately the responsibility of the adults (Marks, 2000).

Cultural-linguistic Responsive Teaching through the Adult Actions

The actions of educators can support positive relationships and the growth of student engagement through Cultural-linguistic Responsive Teaching. Compelling evidence supporting culturally knowledgeable and responsive teaching has developed over several decades (Gay, 2010; Ladson-Billings, 1994; Ladson-Billings, 2014). When a large percentage of teachers and educators lack knowledge of their students' history, limited or negligible engagement is the expected result in the classroom (Howard, 2006; Kafelle. 2013).

Ladson-Billings (1994) defines culturally responsive teaching as "a pedagogy that empowers students intellectually, socially, emotionally, and politically by using cultural and historical references to convey knowledge, impart skills, and change attitudes" (p.13). Gay (2000) defines culturally responsive pedagogy as "the use of cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make

learning encounters more relevant to and effective for them" (p. 31). Exceptional teachers respect and understand the need for students to be part of the home community and classroom community and share their stories (Ladson-Billings, 2001). Teachers can help support this dual world by having students share their stories, study them and learn from everyone (Kafele, 2013). When teachers provide students with information that reinforces the student's experiences and identity, teachers counter the prevailing forces that encourage the student to disengage.

There is consistent evidence that teachers lack strategies that amount to Cultural-linguistic Responsiveness for students from diverse cultural backgrounds and fail to listen and learn from children's stories (Delpit, 2008; Kafele, 2013; Hollie, 2012). However, teachers can learn about the student's culture and demonstrate awareness in their learning environments (Tuncel, 2017; Hollie, 2018). Every teacher of every subject has a responsibility to teach students about each other (Hollie, 2018; Kafele, 2013). Hollie (2018) and Kafele (2013) assert that it is the responsibility of educators to teach the students history without this teaching of history, marginalized students may give up hope and hold anger. Underserved and marginalized students benefit from instruction that reinforces they can achieve no matter their circumstances and have educators rooting for them (Hollie, 2012). Hollie (2018) describes educators as individuals who can make a difference and have the power to inspire students and provide them with identifiable models. For example, a teacher might introduce students to inventors such as:

- Lewis Latimer - who invented the electric lamp and wrote the first book on electric lighting,
- Granville Woods - who created the third rail of the electric railway system, or
- Jan Maatzeliger - invented the automatic shoe-lasting machine for the soles of shoes.

These models of success and achievement might be effectively introduced and taught in science classes (Hollie, 2012).

The same can be true for language arts, teaching students about writers of color, or United States history educators can expose students to brave men and women who risked their lives for a better future. Kafele (2013) asserts it is an educator's primary responsibility to teach and affect the way their students see themselves, which will ultimately reflect how they see their students: as winners, superstars, and high achievers. Educators need to give life-long skills such as problem-solving, collaborating with others, empathy for others, and self-help skills (DePaoli et al. 2017).

Cultural-linguistic Responsiveness (CLR) is an approach that teaches educators how to implement strategies to validate and affirm students' cultural differences (Hollie, 2018). Teaching through a lens of CLR, this approach asks, "To what extent is my instructional practice culturally and linguistically responsive?" (Hollie, personal communication, November 11, 2021). The CLR approach covers areas for instruction, classroom management, academic vocabulary, academic language, and academic literacy.

Given that all people have biases that cause prejudice and misconceptions, it is imperative to retrain educators' thought processes (Hollie, 2018; DiAngelo, 2018; Villegas & Lucas, 2004). A retraining process to retrain consists of checking filters (where did I get information from?,) questioning belief systems (what did I believe about the situation?,) and listening to one's deficit monitor (stop thinking of a stereotype and start thinking anew) (Hollie, 2018).

Working Theory of Improvement

Driver Diagram

Adult actions can support the growth of student engagement and contribute to the students' sense of belonging in the classroom. The researcher used a driver diagram to organize changes considered to address the identified problem of practice (Bryk et al., 2015). Figure 4 is a partial driver diagram to show adult actions the researcher hypothesized would influence student engagement (Bryk et al., 2015).

Figure 4

Partial Working Theory of Improvement
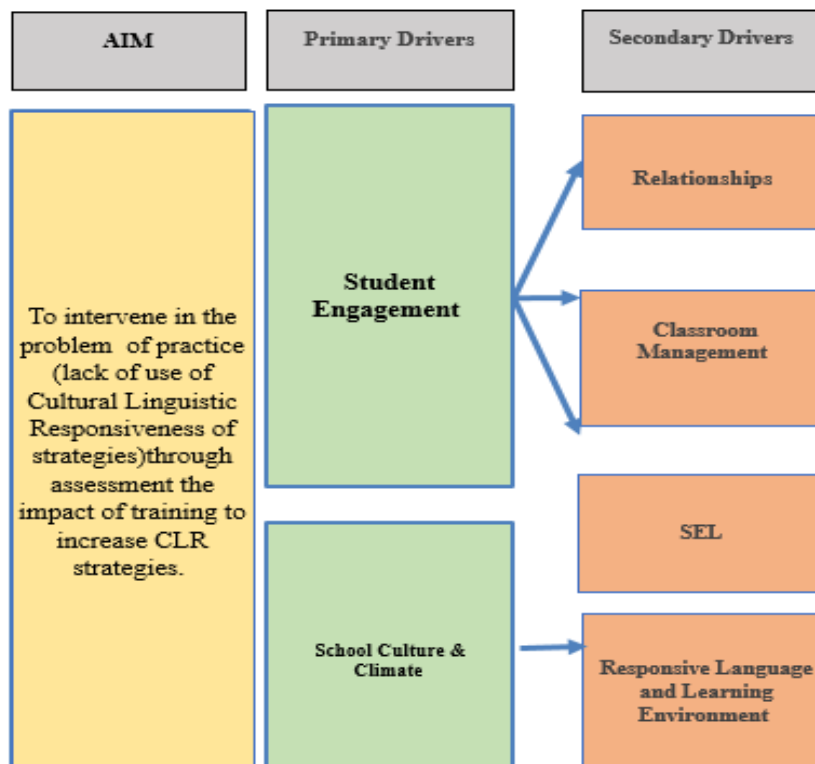
The primary drivers in this improvement science study focus on adult actions to improve the aim. The primary drivers are student engagement and school culture, and climate. Through a root

cause analysis, the researcher and NIC team identified four root causes (secondary drivers), as seen in Figure 4. Thus the working theory of improvement was that intervening on the secondary driver would partially mitigate the problem of practice and consequently improve student engagement (Bryk et al., 2015). The root causes identified were positive relationships, classroom management, SEL skills, and responsive language and learning environment. Later in this chapter, a complete driver diagram lists actions designed to influence the specific primary driver selected as the study's intervention (Bryk et al., 2015).

Relationships

Teachers' habitual strategies to build relationships provide opportunities for students to build engagement (Alexander, 2008). Additionally, meaningful and engaging pedagogy, along with personalized learning environments, support students' engagement (Klem & Connell, 2004). Schools providing such support are more likely to have students who are engaged in and connected to the school. Therefore, a caring school environment positively influences academic performance and student engagement (Klem & Connell, 2004).

Classroom Management

Charney (2015) explains that responsive teaching and management rituals build a sense of community while setting a positive tone each day. The approach provides an opportunity for children to learn and practice a variety of social and academic skills (Charney, 2015). The classroom management tools promote and sustain a sense of community and instill "habits of goodness" in children (Charney, 2015, p. 44). Charney asserts that children who are irresponsible with classroom materials, for example, might be required to repair or replace something they have ruined or broken. In addition, the responsive approach has logical consequences that

support children as they learn how to act and behave in socially responsible ways and help them make amends and fix feelings when they have hurt someone. The responsive approach has an interactive process between students and the teacher. This approach includes creating rules and goals together (Charney, 2015). The responsive approach also includes guided discoveries, which include naming the object or learning activity to establish a common vocabulary, generating ideas about its potential and use, actively exploring the ideas with the group, and making decisions about the care of materials (Charney, 2015). This approach allows for practicing social skills that promote cooperative learning, listening to one another with empathy, appreciating each other's ideas and questions, and making respectful comments (Charney, 2015). Gregory et al. (2014) share effective schools integrate racial, ethnic, cultural, gender, and sexual identities in school curricula, social-wide events, management systems, libraries, and other forums and activities.

Consistent classroom management, including language, tone, and environment, is important for cultural responsiveness and student engagement (Charney, 2015 & Hollie, 2018). Noguera (2003) states the importance of understanding how to influence behaviors and attitudes. Classroom management focused on teaching CLR will allow students a positive learning environment (Tuncel, 2017). Goldstein and Noguera (2006) found that prevention programs were likely to be effective in appealing to the sensibilities of urban youth and ultimately altering their behavior. Thus, educators need to place diversity concerning cultures, class, and environment at the center of prevention efforts.

SEL

Social and emotional learning (SEL) interventions teach students social and emotional skills considered foundational to academic learning in school and beyond (Durlak et al., 2011). Durlak et al. (2011) explain that universal school-based SEL programs delivered to students in classrooms are levers for creating school improvement. Responsive language, responsive learning environments, and instructional materials, which are culturally responsive, aid in SEL interventions and support academic learning and a sense of belonging, and improve engagement (Durlak et al., 2008; Wood, 2008; Hollie, 2012).

Allan and Crow (2018) detail social and emotional competencies that students need to be successful in and out of school, including cooperation, assertiveness, responsibility, empathy, and self-control—and a set of academic competencies—academic mindset, perseverance, learning strategies, and academic behaviors. The *RC* approach offers principles including the social curriculum is as important as the academic curriculum; how children learn is as important as what they learn: process and content go hand in hand; knowing the children we teach—individually, culturally, and developmentally—is as important as knowing the content we teach (NEFC, 2014). NEFC (2014) has guiding principles in which ten practices emanate from the principles. Some examples of these principles are Interactive Modeling—an explicit practice for teaching procedures and routines as well as academic and social skills. Teacher Language—the intentional use of language to enable students to engage in their learning and develop the academic, social, and emotional skills they need to be successful in and out of school. Logical Consequences—a non-punitive response to misbehavior that allows teachers to set clear limits and students to fix and learn from their mistakes while maintaining their dignity (NEFC, 2014). There are additional principles, including morning meetings, establishing rules, energizers, quiet

time, and closing circle, that each has a significant purpose of teaching children in a responsive manner and strengthening students' SEL skills (NEFC, 2014).

Social-emotional learning (SEL), including cultural responsiveness, benefits all children of every background (Kourea et al., 2016). All students need supportive relationships and nurturing learning environments to thrive. Kourea et al. (2016) explain how the cultural responsiveness social skills curriculum can support school-wide positive behavioral support by focusing on respect, responsibility, and safety. Durlak et al. (2017) share that a lack of SEL learning causes an increased likelihood that students will disengage from learning. In addition to producing students who are literate culturally and intellectually, and committed to lifelong learning, high-quality instruction should also teach students to interact in socially skilled and respectful ways (Durlak et al., 2017). Greenberg et al. (2003) add to this by stating for students to have the foundation for meaningful employment and be an engaged citizens, they should also practice positive, safe, and healthy behaviors, contribute ethically and responsibly to their peers, family, and school community, and possess basic competencies, work habits, and values.

Responsive Language and Learning Environment

A responsive language and learning environment, including instructional materials, is important for both cultural responsiveness and student engagement (Hollie, 2018; Charney, 2015). Consistent, responsive language helps students with routines and expectations, classroom behaviors, and academic success (Charney, 2015). While Charney (2015) focused on the power of words and responsive language, Noguera (2003) stressed ongoing attempts to understand cultural forms and ways in which educators respond and adapt to educators' and students' social and cultural environments, including responsive language. Using responsive language with a

61

responsive environment and materials helps foster a caring, respectful classroom that creates an atmosphere that makes children feel safe, supported, and respected so they can focus on their work and take the necessary risks for learning (Charney, 2015).

The goal of increasing student engagement supported this study's target of increasing teachers' CLR strategies in both mindset and skillsets to achieve the larger goals. This study applied the Improvement Science framework, exploratory research, and a mixed-method design. The researcher with the NIC team studied a significant problem found in the school, used end-user consultations, reviewed data, completed a root cause analysis, reviewed a literature review, and developed a theory of action (Bryk et at., 2015). Figure 5 shows the working theory of improvement influenced by the NIC team's data analysis, including School Climate surveys and focus groups, root cause analysis, and teacher and student actions. These items supported the critical component lack of CLR, teacher-student relationships, and student engagement as the focus of this study. When students feel connected to their teachers, this connection builds stronger relationships increasing student engagement, social awareness, and academic and behavioral skills (Blum, 2005; DePaoli et al., 2017; Gay, 2013).

Figure 5

Working Theory of Improvement

AIM	Primary Drivers	Secondary Drivers	Change Ideas	Change Function
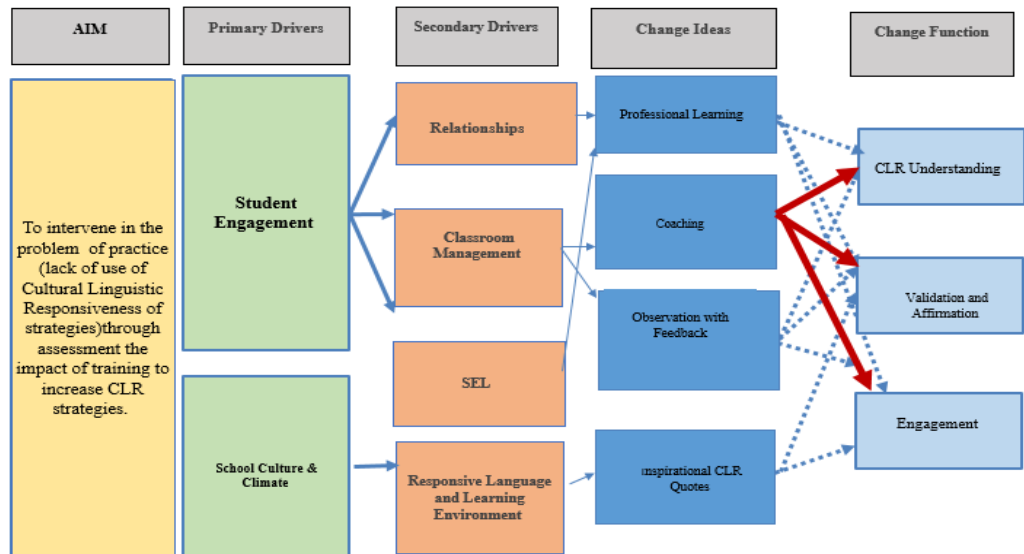
Strategies to Mitigate the Problem

To improve student engagement, the researcher, in conjunction with the NIC team, chose interventions to support strengthening cultural awareness, social awareness, and student engagement. The interventions chosen were CLR professional development, individualized coaching on CLR implementation during lessons, observations with feedback, and constant reminders through regular inspirational quotes.

CLR Professional Development

The first intervention is CLR Professional Development. There are strengths and challenges in implementing professional development for elementary school staff. One strength is that everyone receives a consistent message. Second, the entire staff would learn a CLR concept or strategy with a model and practice before implementing it with their students. Second, there are benefits to learning new pedagogy and a new way to teach something to the students in front of you, in this case, CLR. Challenges might include some teachers feeling out of their comfort zone due to the new pedagogy. This new learning can make teachers nervous about

teaching. A second challenge could include the new knowledge that might not apply equally to all educators. In addition, it can be difficult to differentiate for all the students in the classroom. Finally, the message may lose its impact over time from staff changes over time.

Individualized Coaching on CLR

Another intervention is Individualized Coaching on CLR Strategies. When teachers receive individual attention and conversations about practice, this dialogue has an increased capacity for differentiation. Coaching can also help support the individualized needs of the teacher. A challenge of individualized coaching is that the model may not be sustainable as a strategy beyond a specific period. Additionally, individualized coaching might introduce variability in messaging.

Observations with Feedback

Observations with feedback to the teachers give specific recommendations. These recommendations may consist of an explicit strategy named that the teacher implemented that made an impact on the student's learning and engagement. In addition, the researcher has confirmation that strategies are implemented. A concern is if teachers understand the feedback or need additional meetings and discussions. Also, a concern might be how the power differential between observer and teacher could negatively impact implementation.

Constant Reminders through Regular Inspirational Quotes

There are strengths in constant messages of inspirational quotes on CLR importance, pedagogy, and strategies. This reminder creates a constant reminder at the forefront of each week. A weakness is the information is there but does not teach how to implement it.

Summary

Each intervention has potential strengths and weaknesses. By combining the intervention strategies with one another, they can make a greater impact on student engagement and provide in-depth support that none can do alone. This would create a multi-pronged system to support teacher efficacy in Cultural-linguistic responsiveness.

There are many resources to support student engagement, such as personalized learning, cooperative learning, and culturally responsive teaching (Klem & Connell, 2004). When students see themselves reflected in lessons and teaching materials, they are more likely to become engaged and empowered to share their perspectives (Kafele, 2013). According to a 2015 study by the Economics of Education Review, utilizing diverse guest speakers who can introduce context that is engaging for students with whom they share a cultural background can encourage students to extend more effort into their academic endeavors. Another resource is making the curriculum more relevant by incorporating student interest in the questions or referencing diverse cultures is ideal. The 2015 Economics of Education review states that in addition to diversifying the learning materials, educators continually ask what voices are speaking in the classroom and introduce materials by under-represented groups. These culturally inclusive strategies encourage all students to value diversity. When students understand a classroom is a place for everyone, they are more likely to speak up, get involved, and meaningfully participate in the learning process (Egalite et al., 2015). Consequently, educators are encouraged to improve student engagement and validate students' cultures by intentionally interrupting traditional practices and balancing them with more responsive and culturally responsive practices to improve a sense of belonging and student engagement (Hollie, 2012; Hollie, 2018).

Chapter 3: Methodology

A study of the problem of practice, root cause analysis, and the working theory of improvement prompted Phase 2 of this Dissertation in Practice which includes intervening in the problem of practice verified through the root cause analysis. This chapter describes the study design and methods applied to answer the research questions. Embedded with the study design is the intervention focused on increasing teacher frequency and proficiency with CLR strategies. This chapter includes the purpose of the study, research design, targeted population and participants, procedure, data analysis methods, and a discussion on threats to validity.

Purpose of the Study

Given the Eurocentric context of American schooling, contextual factors often stifle engagement among racially diverse groups of students. Racialized contextual awareness should compel educators to respond in ways to increase capacity with an equity lens (Harper, 2009). Additionally, with the negative impact of COVID-19 on social and educational contexts and increased awareness of social and racial justice, there may still be a need for additional methods to support all educators' knowledge about developing an equity lens while strengthening relationship skills.

Improvement Science is a problem-solving approach centered on continuous inquiry and learning used in educational practice. Change ideas are tested in rapid cycles, resulting in efficient and valuable feedback within the community of practice to inform system improvements as the change idea is implemented (Perry et al., 2020). A core principle of Improvement Science is that a system's performance results from the design and operation of its improvement plan, not simply a result of individuals' efforts within the system. Building from

this foundation, Improvement Science helps organizations build a shared understanding of how their systems work, where breakdowns occur, and what actions leaders can utilize to improve overall performance (Perry et al., 2020).

Research Design

The researcher used an exploratory convergent mixed methods design. Research designs utilize techniques for collecting, analyzing, interpreting, and reporting data (Creswell & Plano-Clark, 2018). In addition, research designs represent different models for doing research, which helps support interpreting the study. Finally, convergent designs occur when researchers use concurrent timing to implement the quantitative and qualitative strands during the same phase of the process (Creswell & Plano-Clark, 2018). Following the Improvement Science research structure, the researcher engaged in the research in two phases. During Phase 1, the research identified and verified the problem of practice reviewed the literature, and developed an idea of improvement or change. During Phase 2, the researcher tested the theory in the stated setting of the problem of practice (Perry et al., 2020). Phase 1--the root cause analysis--consisted of interviews, surveys, and document analysis. Phase 2--professional learning--consisted of professional learning sessions, coaching, and observation with feedback.

Target Population and Participants

For Phase 1, all data was extant, and the researcher analyzed data that represented survey responses from educators employed at Stratford Public Schools. Data included archived school climate and culture data covering the academic years 2016-2017, 2017-2018, 2018-2019, and 2019-2020. The data represented responses from educators who are at least 25 years old. Study participants included those of any gender, race, or ethnicity. Inclusion Criteria include

approximately 12 participants between the ages of 25 and 61. The participants were a mixture of genders and employed in the Oakland School Participants participated in an online survey (climate survey data), end-user consultations, and classroom walkthroughs and provided district-reported data voluntarily as part of standard educational practices. Prior to Phase 2, the researcher sent out recruitment letters (Appendix A) with informed consent (Appendix B) to recruit participants.

Data Collection Instruments/Measures

This Improvement Science Dissertation in Practice followed a mixed methods convergent approach to collecting both quantitative and qualitative data. During the intervention Phase, qualitative and quantitative data was collected through the participants who engaged in a variety of job-embedded professional learning activities designed to increase the use of Cultural-linguistic Responsiveness (CLR) strategies. Job-embedded professional learning refers to learning grounded in day-to-day teaching practice (Darling-Hammond & McLaughlin, 1995; Hirsh, 2009). Educators participating in this research project were required to engage in activities outside of the contracted workday. The intervention, individualized teacher professional learning, included a combination of reflective coaching sessions, professional development sessions, observation with feedback, and weekly motivational messages (Figure 6).

Figure 6

Intervention Schedule

Phase Two

Intervention

Week 1	Week 3	Week 5	Week 7	Week 8
Intervention 1	Intervention 2	Intervention 3	Intervention 4	Summation

Professional Development / Teacher Practice / Reflection / Weekly Motivational Message / Observation / Observation

Summation: Observation / Process Understanding Focus Group

Teacher's Culturally & Linguistically Responsive Self & Social Awareness
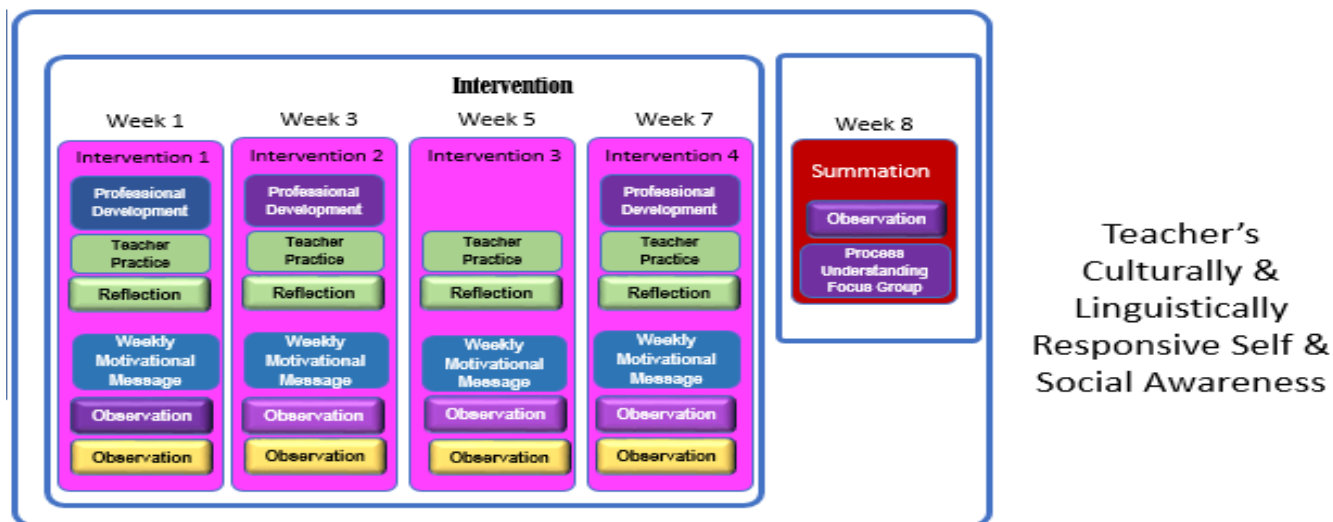
Professional development. Professional development included a group learning session designed to inform and provide teachers with current and relevant knowledge to increase their professional awareness and competency.

Reflective Coaching. Reflective coaching included five cycles with individual teachers to help move beyond a PD phase from learning to practice. This deeper level of training at the classroom level was intended to raise awareness and assist with the practical application phase of learning.

Classroom Observations. Classroom observations involved non-participant observations designed to collect and understand the phenomena of the classroom social-emotional culture by entering the social system involved while staying separate from the activities observed. The researcher utilized the Classroom Walkthrough Observation Form (Appendix C) to systematize the information gathered during observations. Additionally, classroom observations recorded and

measured teacher behavior and mastery by systematically observing them in action (Yoder, 2014).

The three domains of Learning Environment, Learning Strategies, and Literacy Supports guided classroom observations. Each domain had at least three criteria. Domain one, Learning Environment, represents how individuals in the classroom interact with each other with direct and indirect influences on student learning. It is inclusive of both how teachers interact with students and how students interact with each other. How teachers organize the setting to facilitate learning, most influences the learning environment. A combination of four criteria served as proxies for the measurement of the learning environment, incorporating:

- Active listening: the teacher uses paraphrasing, questioning, and eye contact;

- Collaboration: independence in small groups on tasks using higher-level thinking, such as synthesizing or evaluating.

- CLR discussion and response protocols used;

- Independent work: using shout-outs, silent appointments, choice opportunities, and movement allowed.

Domain 2, Learning Strategies, are the actions that students use in learning to acquire and retain information. Domain 2 consisted of five criteria incorporating:

- Interactive modeling: using Responsive Classroom (RC) seven-step modeling process to teach a new skill or behavior;

- Morning Meeting: using cultural greetings, cultures celebrated, and activities validating and affirming cultural-linguistic behaviors, student shares about cultures;

- Movement: intentionally planned to enhance and support learning;

- Voice levels: students' part of the process of determining levels for a given situation; and

- Attention signals; responding protocols.

Finally, Domain 3, Literacy Supports, included

- CLR vocabulary tools,

- Use of CLR texts,

- Effective literacy activities and

- Effective writing activities.

Counting each criterion for the frequency of the observed behaviors before and after the intervention occurred. Additionally, the researcher recorded anecdotal notes, such as specifying if a teacher used an RC signal versus a CLR signal.

In addition, the researcher recorded the amount of teacher talk versus student talk with the four categories, including:

1. 5/95 – most of the talking by the teacher,

2. 20/80 – some students are talking,

3. 50/50 – approximately equal talking between students and the teacher, and

4. 80/20 – Students display most of the talking.

An effective learning environment includes a balance of teacher and student talking. When teachers talk less, student engagement increases, and the rate of teacher talk and teacher effectiveness have an inverse relationship. Student-led discussions provide students with opportunities for active learning and increased student retention (Levi, 2015). Consequently,

classrooms geared toward language development should have more student talk versus teacher talk (Zwiers & Crawford, 2011). Furthermore, providing students with more opportunities to talk as a method of instruction allows them to benefit from doing, which is important for younger students and students learning English as a second language. Their oral language is more developed than their ability to read or read-write.

The observer also documented student engagement, an observational measure of the attention, curiosity, and interest that students exhibit during the teaching and learning process. As a construct, student engagement cannot be directly measured; however, the measure of student engagement occurs through tracking behaviors associated with engagement, such as following along during instruction, asking questions and participating in class discussions, and staying on task. Conversely, signs of disengagement might be tracked, including distraction from others during class, using a cell phone without permission, and sleeping in class. Student level of engagement included six levels:

1. all students engaged,

2. 90% of students engaged,

3. 75% of students engaged,

4. 50% of students engaged,

5. less than 50% of students engaged, and

6. almost no students engaged (see Appendix A).

Motivational messages. Weekly motivational messages included brief insights intended to remind participants of the importance of CLR and actionable strategies to help with the implementation of CLR. Actionable strategies were designed so that participants could

implement them without much preparation. Motivational messages focused on culturally relevant teaching and pedagogy.

The researcher used intervention data gathering tools--the first one being a Classroom Walkthrough Observation Form (Appendix C), and the second gathering tool was Teacher Self-Reflection Protocol (Appendix D): This self-reflection tool assists educators in reflecting upon their own growth and random sampling. Finally, the researcher performed a process of understanding measurement. This process of understanding included a semi-structured focus group interview Protocol (Appendix B): Teachers participated in focus groups to provide an articulation of their perception of CLR training and student engagement.

Phase 2 Research Questions

Research question 1*:*

> To what extent do teachers who engage in professional development (Professional Learning, Observational Feedback, Pedagogical Reflection) for Cultural-linguistic Responsiveness pedagogy significantly increase the utilization of Cultural-linguistic Responsiveness strategies?

Research question 2*:*

> To what extent does the average rate of teachers' utilization of the Learning Environment construct of Cultural-linguistic Responsiveness strategies impact student engagement?

Research question 3:

> What are teachers' perceptions of intentionality with the use of Cultural-linguistic Responsiveness strategies in improving students' social awareness?

Data Analysis Methods

Phases 1 and 2 included data analysis and handling as part of the researcher's standard educational practice as an educational consultant—qualitative data analysis through content analysis and first and second-level coding for themes in data. Analysis of the quantitative data transpired through descriptive and inferential statistics. The researcher utilized a paired t-test to determine if a statistically significant difference existed.

Data handling was secure, and all the data was password protected. The student-researcher transcribed the digital recordings of the end-user consultations and then deleted the digital files. The electronic transcriptions were also password protected. All hard copies of data remained in a secure location in the researcher's office. The use of pseudonyms occurred throughout the data collection process to assure confidentiality. Measurement methods also included observation with feedback, focus group interviews, reflection sampling, and nonprobability sampling.

Threats to Validity

Data gathered at the researcher's school and using an Improvement Science design method, a number of probable threats to the study's validity existed. The researcher needed to be aware of limitations and threats, as all educators bring a sense of bias to their teaching, which might bring some bias to the research. In addition, there was a significant stressor with COVID-19, and the impacts of this pandemic had an influence on the research. Another threat to the study was the consistency of the new learning. For teachers to increase their CLR strategies, they needed to be consistent with their implementation.

Bias. The NIC gathered data and helped the researcher with the coding and triangulation. Although the NIC had to calibrate to help determine the process, there is still some subjectivity to the coding and analysis. In addition, the observations and walkthroughs could have the same subjectivity. To increase the validity, the NIC had to again calibrate and discuss to reduce the subjectivity in the walkthroughs. The study utilized intercoder reliability based on Lombard et al. (2006) guidelines to address this possible bias further. This process helped ensure true conclusion from the data was not what the NIC hoped would be the outcome.

COVID-19. COVID-19 brought on a lot of stress on educators. This stress impacted teachers' capacity to add additional commenters to their teaching laid; thus, only five volunteers participated in the coaching portion of the study. The small population size could have impacted the depth of the qualitative and quantitative portions of the study. The administration also allowed for additional planning time to help cope with the teacher's stress. The NIC worked hard not to make it extra work but as part of the teacher's planning phase.

Sustainability of PD. Consistency and sustainability of PD are often a concern of Oakland's NIC. The researcher addressed this threat by adding weekly motivational messages to keep the CLR work at the forefront of the teachers' planning. In addition, the monthly PD allowed for continuous questions and clarification. This attempt was strategic to reduce initiative fatigue and promote the importance of CLR and the how-to, to improve sustainability.

Summary

This chapter described the methods and procedures utilized to provide insight into the perceptions of CLR and its relation to student engagement and social awareness. The chapter

includes an introduction to the theory of improvement, the purpose of the study, research design, target population, procedures, data collection instruments, research questions, data analysis, and threats to the validity of the research. The presentation and analysis of the data in this study address the research questions as well as present the aggregate teacher and school demographic information. The study includes a summary and discussion of the findings below, along with conclusions, implications, and suggestions for further research from future chapters.

Chapter 4: Findings

The researcher based the results on exploring and analyzing teacher perceptions of their Cultural-linguistic Responsiveness (CLR) and analyzing staff perception of CLR and teaching. This study analyzed the rate at which educators taught CLR and their perceptions regarding its relationship to social awareness skills and student engagement. This Improvement Science study aimed to examine a plausible solution to educators' and students' engagement challenges in the elementary school setting. This chapter presents an analysis of the qualitative and quantitative data, a description of the subject participants, a discussion of all the available data, including statistical methods used and significance levels, and finally, a summary of the results.

The researcher based the results on two phases and two research questions. Since Improvement Science focuses on problems and the systems surrounding the issue, this study formed an action plan to improve the problem (Perry et al., 2020). Phase 1 of this Improvement Science study defined the problem of practice and identified root causes utilizing historical and existing data from the school.

During Phase 2 of this study, the researcher implemented a change idea and prepared to shift if progress was not occurring during the rapid implementation phase (Bryk et al., 2015; Perry et al., 2020). In Phase 2, the researcher created and planned professional development and coaching cycles, conducted classroom observations and focus groups, and analyzed staff perceptions of Cultural-linguistic Responsiveness teaching, including the teachers' rate of CLR. The research questions guiding the study were:

1. To what extent do teachers who engage in professional development (Professional Learning, Observational Feedback, Pedagogical Reflection) for Cultural-linguistic

Responsiveness pedagogy significantly increase the utilization of Cultural-linguistic

Responsiveness strategies?

2. To what extent does the average rate of teachers' utilization of the Learning

    Environment construct of Cultural-linguistic Responsiveness strategies impact

    student engagement?

3. What are teachers' perceptions of intentionality with the use of Cultural-linguistic

    Responsiveness strategies in improving students' social awareness?

The researcher invited all staff to participate in the study, including classroom teachers,

specialists, and support staff. There were 21 classroom teachers and a combination of 13 support

staff and specialists. The researcher observed 14 participants before and after the professional

development and coaching sessions. The CLR trainer coached five of the 14 staff members for

three sessions. In addition, after implementing the intervention, 15 staff participated in focus

group sessions associated with this study's research questions. The null and alternative

hypotheses state:

H_o Teachers' average rate of utilization of the Learning Environment construct of Cultural-

        linguistic Responsiveness Strategies will not significantly predict an increase the

        student engagement.

H_a Teachers' average rate of utilization of the Learning Environment construct of Cultural-

        linguistic Responsiveness Strategies will significantly predict an increase in student

        engagement.

Description of the Sample

The participants were all employees of the Oakland School District and had some form of Responsive Classroom Training before CLR intervention and study. In addition, the participants all hold a Connecticut State Teaching Certificate, all but three have a master's degree or higher, and their years of teaching at the study site range from the first year to over 19 years of experience. Additionally, Table 6 shows that although all participants engaged in the jumpstart PD, binder study PD, and observations, not all engaged in coaching at the same level. These coaching sessions were on a volunteer basis and included three additional 1:1 sessions with a coach, including pre-observation, observation, and post-observation with feedback.

Table 6

Level of Participation in Intervention

Participants	Jump Start PD	Coaching	Binder Study	Observations
Grace	1	3	1	1
Donna	1	3	1	1
Connie	1	3	1	1
Annie	1	3	1	1
Molly	1	3	1	1
Luke	1	1	1	1
Ryan	1	1	1	1
Jenny	1	1	1	1
Steph	1	1	1	1
Penny	1	1	1	1
Kate	1	1	1	1
Toby	1	1	1	1
Julia	1	1	1	1
Margot	1	1	1	1
Kayden	1	1	1	1

Statement of the Results

Phase 1: Root Cause Analysis Findings and Analysis

As described in chapter one, the NIC team gathered data to answer the guiding questions during the study's first phase. The researcher transcribed and coded notes from the focus groups

and other end-user consultations. Triangulating the data of the two levels of coding, themes, and concepts emerged. Level one codes and themes included culture and climate, student engagement, and valuing diversity. For example, one question and score from the student survey read, "How fairly do adults at your school treat people from different races, ethnicities, or cultures?" The score was 52%, who felt adults treated them fairly most of the time. Next, the researchers coded a second level to sort out the themes. Level two themes included the absence of positive student and teacher relationships, a decrease in classroom management, the importance of social-emotional learning, and a lack of responsive language and learning environment, including instructional materials. Some of the joint statements from the focus groups included, "Some students don't treat others with kindness, and I watch the staff not respond or react," and "Some students lack empathy, self and social awareness, and self-management." Another comment was, "Our class student surveys state that some students don't feel like they have an adult they can trust at school."

Phase 2: Intervention Analysis Results and Process Understanding Survey Findings

Intervention Analysis Results

After the intervention, the researcher used focus group data to gather qualitative data. In addition, the researcher used observations to collect quantitative data to analyze changes in participants' CLR strategies to determine if there was a significant change. After the intervention phase, the researcher observed teachers' changes in participant CLR strategies to determine if there was a significant change. Quantitatively, the researcher looked for an increase in the number of CLR strategies in their lessons and if there was a significant impact on student engagement. The researcher used an observational tool prior to the intervention and post-

intervention with 14 participants. Additionally, the researcher conducted a focus group with seventeen staff members.

The researcher examined each participant's pre-observation data average to post-observation data analyzing how participants increased CLR strategies in their daily teaching (Table 7).

Table 7.

Cultural-linguistic Responsive Teaching Observation Tool

Results of Pre and Post-CLR Observation Tool

Participants (Pseudonym)	Pre-CLR Observation	Post-CLR Observation	Change	Percent (%)
Grace	7	16	9	128.57
Donna	6	11	5	83.33
Connie	4	7	3	75.00
Annie	9	*	*	*
Molly	6	8	2	33.33
Luke	12	16	4	33.33
Jenny	4	12	8	50.00
Steph	9	17	8	88.89
Penny	9	11	2	22.22
Kate	13	16	3	23.07
Toby	5	12	7	140.00
Julia	8	14	6	75.00
Margot	0	2		**
Kayden	0	1	1	**
Mean Increase			4.62	68.43

Note: *No post data due to the participant no longer being engaged in the study

** Undefined due to original input starting at zero

As demonstrated in Table 7, 13 out of 14 participants increased their number of CLR strategies from the pre and post-observation stages. A fourteenth participant no longer participated in the study for personal reasons. The average increase in CLR was 4 points is equal to a 4.62% increase. The average percentage increase was 68.43 %. Five out of the thirteen participants doubled their number of CLR strategies, one participant tripled their strategies, and four were one point away from tripling their amount of strategies in their lessons.

The researcher used a paired sample t-test to evaluate the impact of the interventions, including a Jumpstart Professional Development session, six additional professional development sessions, and three one-on-one coaching sessions designed to increase the participant's use of CLR strategies in their interaction with students. The fifteen participants were observed for approximately 20 minutes before the intervention began and again for 20 minutes after the intervention. (Table 8 and Figure 7).

Table 8

Paired t-test for Pre and Post Intervention Observation

Criteria		Mean	Std. Dev.	Paired *t*-test	
				T value	Sig (two-tailed)
Learning Environment	Pre	3.23	1.96	-3.60	.004
	Post	4.62	2.26		
Learning Strategies	Pre	2.77	2.01	-4.31	.001
	Post	4.54	2.57		
Literacy Support	Pre	.62	.77	-3.41	.005
	Post	1.85	1.52		

Figure 7

Paired t-test for Pre and Post Intervention Observation by Domain

Individual Domain Data
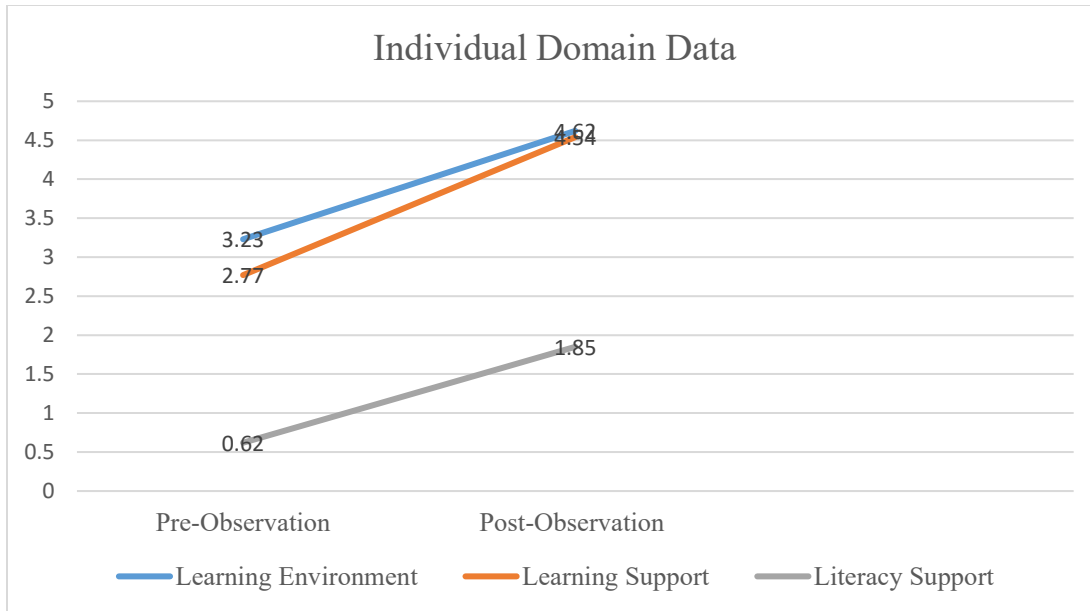
As shown in Table 8, there was a statistically significant increase in participants' use of CLR strategies. Mean values were compared between the learning environment before the intervention ($M = 3.23$, $SD = 1.96$) and the end after the intervention ($M = 4.62$, $SD = 2.26$). The difference in means (difference = 1.39) was statistically significant $t(14) = -3.60$, $p = .004$, indicating that the CLR intervention resulted in an improvement in the learning environment. Therefore, the null hypothesis is rejected. Mean values were compared for the use of learning strategies before the intervention ($M = 2.77$, $SD = 2.01$) and the end after the intervention ($M = 4.54$, $SD = 2.57$). The difference in means (difference = 1.77) was statistically significant $t(14) = -4.31$, $p = .001$, indicating that the CLR intervention resulted in an increase in the utilization of CLR learning strategies. Therefore, the null hypothesis is rejected. Mean values were compared for the level of literacy support before the intervention ($M = 0.62$, $SD = 0.77$) and the end after the intervention ($M = 1.85$, $SD = 1.52$). The difference in means (difference = 1.23) was statistically significant $t(14) = -3.41$, $p = .005$, indicating that the CLR intervention resulted in an increase in the

utilization of CLR literacy support. Therefore, the null hypothesis is rejected. There was not a significant difference between the five participants who participated in coaching sessions and those who did not base on the domains of learning environment, learning strategies, or literacy support.

The statistical analysis of the data supports the hypothesis that the increase in CLR PD, coaching sessions, and observations with weekly motivational messages increased teacher practice and CLR pedagogy. The analysis of qualitative data indicated that teachers who participated felt more confident in their CLR strategies for students to improve teaching and learning, including an improvement in student engagement.

The researcher used a simple linear regression to determine if the average rate of teachers' utilization of the learning environment construct of Cultural-linguistic Responsiveness strategies was predictive of student engagement. Teachers' use of learning environment strategies explained a significant amount of the variance in the level of school engagement, $F(1,11) = 20.77$, $p < .004$, with an $R^2 = .65$. Consequently, the regression coefficient (B = 4.89) indicated that an increase in one point on learning environment support corresponded, on average, to an increase in the kindness of 4.89 points. These data indicate that there is likely a cascading effect with professional development impacting the learning environment, which significantly impacts student engagement.

Process Understanding of Observation and Focus Group Findings.

The walkthrough data was both formative and summative. The tool was used to provide immediate feedback to the teacher as well as clarify misunderstandings in the following binder

study PD. In addition, the walkthrough tool was summative in nature to determine the extent of the implementation of the new strategies taught during PD and coaching.

Seventeen staff members volunteered to participate in the post-intervention focus group directed by another member of the NIC team. This member, not the researcher, led the focus groups, which lasted roughly 30 to 45 minutes each. Focus groups occurred at different times of the day. The NIC member conducted four different groups with three to nine members in each group. After the completion of the focus groups, the researcher engaged in the transcription and coding of the responses leading to extracted themes. The focus group questions focused on CLR-embedded strategies attempted or reasons for not incorporating them into lessons, perceptions on how CLR strategies benefit students, perception of the impact of student engagement, perception of increased CLR pedagogy, perception of CLR and social awareness, perception of CLR's impact on SEL, and perception on areas of growth and next steps in teaching with a culturally responsive lens. The researcher analyzed the open-ended focus group questions through the process of Glesne's (2016) level one and two coding systems.

Level one coding of the question responses consisted of manually coding line by line to develop broad codes (Glesne, 2016). A few level-one codes included self-awareness, choice, student-teacher relationships, connectedness, and time. The researcher performed level two coding for the qualitative findings and retracted two main themes significant to the Improvement Science study.

One theme included that the teacher skillset and pedagogy are characterized by an increase in CLR knowledge and strategies. This increased the comfort level of strategy implementation and increased the understanding of various rings of culture and validating,

affirming, building, and bridging teachers with students' diverse cultural backgrounds. A couple of sub-themes included time, described as the time needed to strategically plan for CLR implementation, and professional learning, particularly the need to continue learning in CLR and create time for collaborating with colleagues and sharing lessons, strategies, and materials such as culturally responsive literature.

The second theme has to do with student outcomes, the student's ability to show growth in social-emotional, behavioral, and academic areas based on cultural awareness and implicit bias. The sub-themes include students' emotional competency, particularly self-awareness and social awareness; connectedness, including connectedness to staff, peers, and materials such as literature; and third, student behaviors and discipline. All seventeen staff interviewed in the focus group indicated that CLR positively impacts social awareness and self-awareness for some who lack knowledge of their own culture. One interviewee stated, "Social awareness is the biggest part learned this year, and we were not being inclusive for all and had no idea we were not." Another interviewee, Donna, shared,

> I believe there was an impact on social awareness, and CLR gave space for all to explore the many different rings of culture and become aware of what can impact learning.… We all bring something valuable that can be shared and celebrated with teachers and peers, from the perspective we can take in the new learning and help to build and bridge with each other.

Likewise, another interviewee, Kate, explained how her student's ability to stop and think about peers' perspectives could impact negative behaviors in the classroom.

Fifteen out of the seventeen staff interviewed commented on CLR's influence on students feeling more connected to staff and the school environment in general. School connectedness represents the belief held by students that adults and peers in the school care about their well-being and learning and that they also care about them as individuals. For example, one interviewee stated, "The girls in my class get so excited when we read books, and they see themselves in it." She shared a statement made by one girl in her class, saying, "My hair looks like that, "and "That happened to me." Finally, fourteen out of the seventeen participants stated that CLR implementation has an impact on student discipline. It was coded in many transcribed statements and included noteworthy comments about participants' stopping to think before reacting to behaviors whose sources were cultural.

Details of the Analysis

Quantitative. The quantitative data that this Improvement Science study collected revealed that 100% of participants who participated throughout the study increased their use of CLR strategies after participating in professional development, coaching, and observations. The data proves the study's hypothesis regarding the staff perception of CLR and that, subsequently, its relationship to social awareness and student engagement among the teachers who participated yielded more confidence in CLR strategies--thus providing a path for improved teaching and an increase in student learning. However, there was not a significant difference in the teachers who participated in the three one-on-one coaching sessions.

Qualitative. The qualitative portion of this Improvement Science study supported the researcher's hypothesis that staff perception of CLR and its relationship to social awareness and student engagement was positive. In addition, the study found the alternate hypothesis that the

teachers who participated would feel more confident in their CLR strategies for students as a means to improve teaching and learning, a positive result indeed. These findings proved true for a majority of the participants. The process understanding analysis of the observations and focus groups displayed a few overarching themes, which all fall into two categories: CLR mindset and CLR skillset. Category one, mindset, had several outcomes. One, when unwanted or disruptive behaviors arise, teachers must stop and think if those behaviors could be cultural before they react in a culturally biased manner. Two, students must see resonant characters who reflect their backgrounds and identities in classroom and library literature--an inclusive measure that at least indirectly stimulates student engagement. Three, Oakland Schools' ever-changing population implies ongoing learning about and responsiveness to new cultures. Fourth and finally, teacher perception that students feel more included builds engagement. The second category, skillset, also had two outcomes. One, understanding underserved cultural behaviors aids in validating those behaviors. Two, varying traditional school behaviors aids in students becoming more responsive; therefore, building and bridging the behaviors results from the application of CLR mindset and skillset.

Summary of the Results

To examine teachers' use of CLR interventions, the researcher utilized The Cultural-linguistic Responsive Teaching observation. Additionally, focus groups provided a deeper understanding of the impact of professional development and coaching as an intervention and how to improve the process. These tools, which included a self-reflection tool, were developed and validated by the researcher following the review of the literature.

All participants included in the intervention increased their knowledge and usage of CLR language and strategies when working with students. Moreover, the participants experienced deliberate professional development and coaching and planned to embed student engagement. Participant responses in understanding the focus group delivered insight for refining the implementation of CLR strategies.

In summary, based on the qualitative and quantitative data presented in this Improvement Science study, the intervention of CLR PD and coaching is a viable intervention for increasing CLR strategies while supporting teachers' knowledge, skills, and attitudes toward implementing Cultural Responsive Pedagogy based on student engagement, student self, and social- awareness, and self-management. In addition, targeted and thorough PD increased teacher perceptions of their practices in CLR pedagogy to improve student engagement.

Finally, teacher reflection and weekly inspirational quotes built momentum, which reinforced the two-year focus on Cultural-linguistic and Responsive language and teaching. The cumulative effort helped teachers feel more confident in teaching CLR strategies to students to improve teaching and learning.

Chapter 5: Implications, Recommendations, and Conclusions

The data collected in this Improvement Science study highlights the positive correlation between Cultural-linguistic Responsive (CLR) teaching and teachers' perception of social awareness and engagement. Additionally, the research supports the importance of developing lessons and strategies to teach CLR. This chapter presents a synopsis of the entire study and discusses the findings and implications. Finally, the researcher will provide recommendations for future research, practice, and policy.

This research followed an Improvement Science study format, which included a methodology that focuses on a change agent and inquiries to improve practices (Bryk et al., 2015) which commenced in two phases. Phase 1 of the study began to understand teachers' and students' SEL, particularly social awareness and relationship skills. Next, the study focused on teachers' perceptions of CLR pedagogy, implementation, student relationships, social awareness, and engagement. After several inquiries and analyses of end-user consultations, the researcher developed an intervention to address a secondary driver of the problem of practice. Phase 2 of the study included an intervention that combined professional development on CLR pedagogy, coaching sessions, weekly motivational messages, and observations with feedback. At the completion of Phase 2, the researcher conducted focus groups with participants to understand the nature of the changes in teacher practices. The two-phase research process attempted to collaboratively understand the problem of practice and the connection between CLR instruction and students' social awareness and engagement.

Summary of the Results

This study commenced at a time when students at Oakland School were displaying suboptimal use of SEL skills, ineffective student and teacher relationships, and an absence of inclusiveness in daily lessons. The researcher identified and verified the aforementioned problems through analyses of the district school climate survey data trends. Despite a five-year, district-wide focus on SEL competencies and trauma-sensitive training for teachers, the issues amplified the risk for student outcomes. Furthermore, the onset of the global COVID-19 pandemic, coupled with the country's struggle with racialized disparities, exaggerated educational achievement concerns and obligated an immediate response to help the teachers adequately support students.

Using this ISDiP to provide immediate benefit to the community's students, the researcher organized a Network Improvement Community (NIC) to focus on precise plans and develop actionable strategies to support the teachers in improving students' social awareness and relationships. The NIC conducted a root cause analysis and designed a plan to implement a change on the premise that student-teacher relationships and culture are essential factors in students' social-emotional, behavioral, and academic success throughout their education. This study explored the question of the degree to which teachers' proficiency in the use of Cultural-linguistic Responsiveness impacted student engagement. Consequently, this study aimed to intervene in the problem of practice (lack of use of Cultural-linguistic Responsiveness strategies) by assessing the impact of training to increase Cultural-linguistic Responsiveness strategies.

Discussion of the Results

During the data analysis, several observations culminated illumination of actionable knowledge. Mainly, an increase in teaching CLR is validating and affirming for the students and will increase students' engagement during lessons. Another emergent finding is CLR builds relationships between teachers and students. Finally, students will feel understood and heard, they will feel accepted rather than invalidated, disrespected, and misunderstood, which occurred with the previous approach to teaching. With greater cultural understanding, teachers began to view behaviors as culturally normative rather than resorting to reprimand and punishment for culturally appropriate displays (Hollie, 2012).

Teachers were in the process of creating a balance to help students to value their cultural wealth while having the ability to code-switch to thrive in the current reality that may not honor the students' cultural heritage. Offering culturally responsive instruction is one strategy that begins the process of teachers recognizing the value of cultures different from their own and different from the Eurocentric norm of the American educational system (Anderson, 2015; Baker, 2012). The question becomes, "How do you balance helping students navigate without telling them that they need to act white or straight?" In essence, the present study validated the use of CLR and the manner in which it imparted to teachers the "how" so diverse ideas can be examined and understood (Allen et al., 2017).

These results are in keeping with the findings of both Gay (2013) and Allen et al. (2017) that restructuring teachers' attitudes and beliefs about cultural, ethnic, and racial diversity improves teacher and student relationships. Moreover, the results build on the work of Bowman (2013) and Irvine (2009), who assert that many teachers have a superficial understanding of

culturally relevant pedagogy, signifying the need for educators to develop a deeper cultural understanding of the students they serve. Currently, teachers have only cursory knowledge in many cases, thus, their efforts to bridge the cultural gap often fall short. While the current results indicate PD on CLR can increase teachers' learning, these data also suggest a nuanced view of how to go about CLR with resistance to cultural diversity in teacher education and classroom instruction (Gay, 2013).

The findings showed that qualitative and quantitative disaggregated analysis data helped to understand the degree and the process by which all teachers who participated in the professional development benefited from their involvement. Specifically, the Classroom Walkthrough Observation tool indicated all participants increased their use of CLR strategies after participating in the combination of professional development, coaching, and observations. Like the findings of Berryman and Wearmouth (2018), a tool designed to support culturally responsive pedagogy can help improve the process of teaching and learning.

These data prove the study's hypothesis of the staff perception of CLR on its relationship to social awareness and student engagement and that the teachers who participated felt more confident in their CLR strategies for students to improve teaching and learning. However, there was not a significant difference in results among the teachers who participated in the three one-on-one coaching sessions within this data. Given the resource-intensive nature of a weekly coaching model, it is promising that the more focused model demonstrated viability. As such, the viability of the focused model has the potential to increase the sustainability of the professional development system for CLR (Robutti et al., 2016).

All three domains assessed (Learning Environment, Learning Strategies, and Literacy Supports) increased with the number of times teachers implemented the strategies. Learning support had the most while Literacy Support had the least; however, there were consistent themes, and these suggested strategies to increase in that area. Overall, the study's quantitative data collected revealed that 100% of participants that participated throughout the study increased their use of CLR strategies after participating in professional development, coaching, and observations. While the qualitative data collected also supported the researcher's hypothesis that staff perception of CLR and its relationship to social awareness and student engagement was positive. In addition, the study found the alternate hypothesis that the teachers who participated felt more confident in their CLR strategies for students to improve teaching and learning.

There was an overwhelmingly positive response from participants indicating that they would like to have professional development continue in this area. The researcher collected the data during the process of understanding the focus groups from the exit tickets after each PD session and their personal reflection tool referred to in the focus groups. This reflection showed significant growth in the classroom teachers' planning of future lessons. In addition, they provided participants an opportunity to share their perspectives, and reflection notes allowed future professional development to offer authentic experiences that met the individual participant's needs.

Limitations

While this study produced data to support the idea that, to some degree, teachers' proficiency in the use of Cultural-linguistic Responsiveness impacts student engagement, the teacher's effect on student outcomes was the basis for this Improvement Science Dissertation in

Practice (ISDiP); including the studies aim to intervene in the problem of practice (lack of use of Cultural-linguistic Responsiveness strategies) through assessment of the impact of training to increase Cultural-linguistic Responsiveness strategies, other inevitable influences could have either produced these outcomes or been corollary to the success seen in this ISDiP. The quantifiable data presented verified overall positivity, enthusiasm, and the ability to honor students' differences. The staff could have felt these positive effects because the staff was getting back to in-person PD with an outside presenter after thirteen months of COVID-19 restrictions. This in-person PD triggers excitement in staff who enjoy continuous learning and adopting new, more effective pedagogy. Additionally, other limitations in this study beyond the control of any objective measure include individuals' personal biases, time constraints, and the study's sample size.

This study was limited to the perception of K-6 staff in a single elementary school. The inquiry excluded the perceptions of administrators, central office staff, and students themselves from this study. Likewise, the study excluded other elementary schools, which might have broadened the study's results. Additionally, this study did not take into consideration or examine the perspective of middle or high school settings or those having dissimilar demographics.

Equally important, Improvement Science consists of quick cycles of change, and therefore the time between the intervention and analysis was short (Perry, Zambo, & Crow, 2020). Thus, although it did not impact the study, it is advisable to conduct research to continue the professional development sessions for a more extended period of time and with a larger sample size. The additional time could allow the researcher to gather data concerning if the skills

and strategies were generalized, worked into lessons naturally, and determine the specific decrease in physical manifestations of behaviors and negative emotions.

Finally, implicit bias can occur when participants work closely with the study researcher, especially in a supervisor position. The researcher is also a member of the study community, potentially bringing a personal interest to the study that could bias the results. The positionality of the researcher within the context of the study site could impede the credibility of the research. Nevertheless, the researcher tried to avert personal bias using the Improvement Science approach, which uses a root cause analysis and data review for the problem of practice.

Implications

Based on the findings, this study confirms the need for future research and the refinement of CLR teaching and strategies to enhance lessons and student engagement. The results indicate that PD produced increased daily lessons with CLR embedded, which promoted positive racial and ethnic identity among students and their peers. However, in addition to strengths, there were explicit gaps and differences in teaching with a cultural lens. These results indicate a rise in CLR strategies, yet teachers' lack of a consistent set of practices persists. Numerous implications for policy and practice could be drawn from the results of this study.

First, several studies have reported CLR pedagogy empowers students intellectually, socially, and emotionally (Coffey, 2018). Teachers create a bridge between student's home and school lives while still meeting the expectations of the district and state curricular requirements (Ladiosn-Billing, 1994). Additionally, school districts should consider the use of a CLR framework that specifies shared expectations for teachers that will allow them to reflect on their practices and next steps in incorporating CLR learning strategies into daily lessons. Those who

teach using CLR utilize the students' backgrounds, knowledge, and experiences to inform the teacher's lessons and methodology (Hollie, 2018).

Second, since the teacher is still the primary determinant of the responsibility for teaching CLR, it will be incumbent upon the school leaders to produce PD on CLR teaching (Gay, 2018). Incorporating PD into improving mindset and skillsets will increase CLR lessons while improving student engagement and social awareness (Allen et al., 2017).

Finally, teachers who have stronger attitudes toward teaching with a CLR lens improve student-teacher relationships (Gay, 2013). This awareness is consistent with previous literature that found that increasing CLR lessons help with social-emotional skills and social awareness particularly (Allen & Crow, 2018; Blum, 2005).

Recommendations for Practice

While this study showed value to the K-6 Oakland School Community, members of the NIC feel confident that the data obtained in this study can also positively influence the larger field of education. Research shows that Black, indigenous, and LGBTQ students disproportionately experience teacher biases, punitive discipline, and narrow curriculum (Howard, 2006; Gay, 2010). These circumstances can explain why many students are hesitant to engage and struggle to succeed in school. By incorporating professional development for teachers and other staff on CLR, educators can enhance students' knowledge of cultures, including issues students care about, thus increasing their confidence, interest, motivation, and academic success. This study exhibited the significance of PD and increased lessons on CLR to promote positive racial and ethnic identities, self-esteem, and social-emotional well-being

(Kafele, 2013, Durlak et al., 2015.). Ultimately, and on a potentially global scale, this work may evolve to enhance student and teacher relationships.

This study demonstrates that increasing CLR in lessons effectively builds quality student and teacher relationships. Having a strategic purpose when using CLR will maximize the results for students. Therefore it is recommended that educators plan strategically utilizing a balance of the three areas, Learning Environment, Learning Strategies, and Literacy Support (Hollie, 2018). Accordingly, educators are encouraged to incorporate more active listening, various response protocols based on students' kinesthetic and learning style needs, choice opportunities, attention signals, and CLR vocabulary to enhance teacher lessons. Of equal importance, the increase in CLR tests with effective literacy activities can enhance relationships. Overall, educators should strive to include at least two domains and nine to ten activities. Once the quantity increases, educators can work on quality. CLR strategies should be done with fidelity, accuracy, and validating and affirming with intent and purpose. Focus group participants gave recommended examples of validating vocabulary, including terms such as *appreciate*, *value, love, respect, inspire, connect,* and *empathize.* The educators in Oakland School and everywhere should continue their individual and collective journeys to increase cultural and linguistic responsiveness.

Recommendations for Policy

In the field of education, broadcasting the importance of CLR and its positive effects on increased awareness and model success is essential. Each state and local district should start with crafting policies and developing curricula that incorporate CLR strategies, language, and literacy in all learning environments. At the state level, the researcher recommends that CLR

competencies be developed into standards to ensure a district curriculum covering CLR domains. These standards should include the common cultural behaviors and the use of instructional juxtaposition to intentionally pair learning activities that validate and affirm with those that build and bridge to develop students' metacognition regarding the concept of situational appropriateness (Hollie, 2015). The establishment of effective professional development by the state might help to ensure the quantity and quality of CLR instruction. Teaching quality is an essential factor in education in raising student achievement; it is crucial for teachers to participate in PD to expand their knowledge and skills to implement the best educational practices.

States should establish regulatory CLR language mandating professional development and ongoing accountability for educators. Professional development in CLR should be a district requirement for all new staff joining. A refresher course for all staff at the start of each year should also exist, much like is required for DCF (Department of Children and Families) training Sexual Harassment workshop requirements. Educators and policymakers are increasingly looking to teacher professional development and learning as an essential strategy for supporting the intricate skills students need to be prepared for further education and work in the 21st century, including cooperative group work and social skills (Hayes, 2010).

Recommendations for Future Research

Based on the Improvement Science framework and the study's findings and implications, there are two actionable next steps recommended: (1) the dissemination of the results of this study to various stakeholders, (2) the recommendation for future research to continue to explore the plausible benefits of CLR on students social awareness, classroom behaviors.

The researcher intends to disseminate this study results to various elementary school administrators within the Oakland district, to the assistant superintendent's administration office, as well as to the Office of Diversity, Equity, and Inclusion. Furthermore, the researcher will recommend that the Office of Diversity Equity and Inclusion work collaboratively with the professional development creators to present CLR and suggested implementations to other elementary schools in the district. The encouragement would not stop with just elementary but be employed and modified to share at the middle and high school levels.

Lastly, there is likely a need for more data to Improvement Science work. Consequently, the results of this study would be prominent if this study occurred in different programs and settings with larger groups of students, including those at various educational levels. Additionally, since the NIC saw anecdotal improvements in students with behavioral concerns, the NIC would like to encourage future research geared toward the specific aid that CLR can bring to specific programs for students with emotional and behavioral challenges. As noted previously, additional work is suggested in this study to determine the specific decrease in physical displays of behaviors and reactions or other emotions.

Since this study focused on professional development as the change agent, the next logical step in this line of research would be to continue perfecting and developing CLR PD structures that are impactful for individual schools. The PD may need to be tailored based on each school's demographics. Furthermore, since there is research on how PD impacts educators (Buczynski & Hansen, 2010), there should be a tool to guide applicable and valuable PD opportunities, which are vital for the professional growth of educators. To increase educational effectiveness and promote positive results for students, facilities should start with a standard

definition with essential content, conditions, and characteristics for effective professional learning and echo updated district policies.

Conclusions

In conclusion, this study aimed to investigate whose culture teachers taught and the question of the degree to which teachers' proficiency in the use of Cultural-linguistic Responsiveness impacted student engagement is impacted. Additionally, this study aimed to intervene in the problem of practice (lack of use of Cultural-linguistic Responsiveness strategies) through assessment of the impact of training to increase the use of Cultural-linguistic Responsiveness strategies. Based on school data and end-user consultation, students have demonstrated a yearning toward closer relationships with staff, acceptable cultures, and diversity over multiple years and enhanced student engagement and connectedness. Furthermore, after the murder of George Floyd in May 2020, many schools found timely research related to many initiatives aimed at countering racism and bias essential. The NIC, a diverse group of invested educators in Oakland School, put together a professional development and coaching cycle for grades K – 6 classrooms using CLR as the means of intervention. From the NIC perspective, based on quantitative and qualitative data, this Improvement in Science study has lent itself to immediate positive benefits to the context in which it took place and for its students. It has also inspired leaders to pursue future research for long-term benefits that would span beyond this study.

This inquiry established positive increases in mindset and skillset among participants and stakeholders when targeting CLR language and strategies in the Oakland School setting. The NIC will continue to be a professional leadership team committed to continuous professional

learning. There is a long-term plan to support the teachers with unique opportunities to develop and enhance their CLR skills.

Beyond the Oakland School context, this study has added to existing research in education. The researcher suggests the importance of establishing CLR and equity committees. This suggestion includes mandating diversity training for staff and incorporating more lessons on systemic racism in more than elementary classrooms. More books by Black authors and with Black and other cultures represented in their characters and story plots are recommended. Lastly, the NIC--including the researcher--felt inspired by the role CLR training had on student-teacher relationships and student engagement, and they were able to institute lasting changes in their school community by offering robust solutions to a problem that has been endemic in their organization and other educational settings for an excessively long period.

References

Abla, C., & Fraumeni, B. R. (2019). Student Engagement Evidence-based strategies to boost academic and social-emotional results. *McREL International,* 1-12.

Alexander, R. (2008). Culture, dialog, and learning: notes on an emerging pedagogy. *Exploring talk in school* (pp. 91-114). Los Angeles: Sage.

Allan, R., & Crow, C. (2018). Evidence-based practices and cultural responsiveness. *Cross-Cultural Responsiveness & Systemic Therapy*, 41–52. https://doi.org/10.1007/978-3-319-71395-3_3

Allen, A., Hancock, S. D., Starker-Glass, T., & Lewis, C. W. (2017). Mapping culturally relevant pedagogy into Teacher Education Programs: A critical framework. *Teachers College Record: The Voice of Scholarship in Education*, *119*(1), 1–26. https://doi.org/10.1177/016146811711900107

Anderson, E. (2015). The white space. *Sociology of race and ethnicity*, *1*(1), 10-21.

Aspen Institute's National Commission on Social, Emotional, and Academic Development.

Baker, M. (2012). Modernity/coloniality and Eurocentric education: Towards a post-occidental self-understanding of the present. *Policy Futures in Education*, *10*(1), 4-22.

Berryman, M., & Wearmouth, J. (2018). Development of an observation tool designed to increase cultural relationships and responsive pedagogy to raise the achievement of Māori students in secondary classrooms in Aotearoa New Zealand.

Blum, R. (2005). School connectedness Improving student lives. *School Connectedness: Improving Student Lives.* Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland

Bodur, Y. (2016). Is cultural responsiveness part of effective teacher? Preservice teacher

    perspectives. *Georgia Educational Researcher:* Vol.13: Iss 1, Article 5.

Bowman, N (2003). Cultural differences of teaching and learning: a Native American

    perspective of participating in educational systems and organizations. University of

    Nebraska Press V 27, N1&2, winter/spring 2003 pp 91-102, DOI

    10.1353/aiq.2004.0022

Boyd, F. B., Causey, L. L., & Galda, L. (2015). Culturally diverse literature: Enriching

    variety in an era of Common Core State Standards. *The Reading Teacher*, *68*(5), 378-

    387.

Brackett, M. (2019). *Permission to feel: Unlocking the power of emotions to help our kids,*

    ourselves, and our society thrive. Celadon Books.

Brackett, M., & Divecha, D. (2020). Sorry, There's No Easy Toolkit for Social-Emotional

    Learning. But It's Worth the Work. *Education Week*.

    https://doi.org/https://www.edweek.org/leadership/opinion-sorry-theres-no-easy-

    toolkit-for-social-emotional-learning-but-its-worth-the-work/2020/01

Bryk, A.S., Gomez, L.M., Gruow, A., & LeMahieu, P.G. (2015). Learning to improve: How

    America's schools can get better at getting better. Harvard Education Press.

Buczynski, S., & Hansen, C. B. (2010). Impact of professional development on teacher

    practice: Uncovering connections. *Teaching and teacher education*, *26*(3), 599-607.

Charney, R. (2015). *Teaching children to care: Classroom management for ethical and*

    academic growth, K-8. Northeast Foundation for Children.

Christenson, S., Reschly, A. L., & Wylie, C. (2013). *Handbook of research on student engagement*. Springer.

Cochran, K.F., Reinsvold, L.A., & Hess, C.A. (2016). Giving students the power to engage with learning. Springer Science Business Media Dordrecht.

Collaborative for Academic, Social, and Emotional Learning. (2021). What are the core competence areas and where are they promoted? CASEL. https://casel.org/sel-framework/

Connecticut State Department of Education (2020). https://portal.ct.gov/SDE

Connell, J. P. (2013). Self-determination theory of intrinsic motivation: Meeting students' needs for autonomy, competence, and relatedness. *Motivating Students to Learn*, 168–199. https://doi.org/10.4324/9780203858318-13

Creswell, J. W. & Plano-Clark, V. L. (2018). Designing and conducting mixed methods research. Los Angeles: SAGE.

Creswell, J. W., & Miller, D. L. (2000). Determining Validity in Qualitative Inquiry. *Theory Into Practice*, *39*(3), 124–130. https://doi.org/10.1207/s15430421tip3903_2

Davis, H. A., Summers, J. J., & Miller, L. M. (2012). *An interpersonal approach to classroom management: strategies for improving student engagement*. Corwin Press/A Joint Publication.

Delpit, L. (2008). *The skin that we speak thoughts on language and culture in the classroom*. New Press.

DePaoli, J. L., Atwell, M., & Bridgeland, J. (2017). *Ready to lead: A national principal survey on* how *social and emotional learning can prepare children and transform schools.* Civic Enterprises and Hart Research Associates for CASEL.

Durlak, J. A., Domitrovich, C. E., & Gullotta , R. P. (2015). *Handbook of Social and Emotional Learning Research and Practice*. The Guilford Press.

Effects of Poverty on Children. Effects of Poverty on Children - Compassion International. (n.d.). http://www.compassion.com/poverty/effects-of-poverty-on-children.htm.

Egalite, A. J., Kisida B., Winters M. (2015). Representation in the classroom: The effect of own- race teachers on student achievement. *Economics of Education Review*, V 45, pp. 44-52, https://doi.org/10.1016/j.econedurev.2015.01.007.

Foley, J. (2005). *Language, education, and discourse: Functional approaches*. Continuum.

Fraser, B.J. 1998. Classroom environment instruments: development, validity and applications Learning Environments Research, 1 (1998), pp. 7-33

Fredricks, J.A., Blumenfield, P.C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. Review of Educational Research, 74(1), 59-109.

Garza, R., Ovando, M., & O'Doherty, A. (2016). Aspiring School leaders' Perceptions of the Walkthrough Observations. *NCPEA International Journal of Educational Leadership Preparation*, *11*(1).

Gay G (2013). Teaching To and Through Cultural Diversity, Curriculum Inquiry, 43:1, 48-70, DOI: 10.1111/curi.12002

Gay, G. (2000). *Culturally responsive teaching theory, research, and Practice*. Teachers College Press, Teachers College, Columbia University.

Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships

> to motivation and achievement. *Journal of Early Adolescence*, 13, 21-43.

Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J. E., Fredericks, L., Resnik, H., &

> Elias, M. J. (2003). Enhancing school-based prevention and youth development

> through coordinated social, emotional, and academic learning. *American Psychologist*,

> *58*(6-7), 466–474. https://doi.org/10.1037/0003-066x.58.6-7.466

Gregory, A., Bell, J., & Pollock, M. (2016). How educators can eradicate disparities in school

> discipline. *Inequality in School Discipline*, 39–58. https://doi.org/10.1057/978-1-137-

> 51257-4_3

Guskey, T. & Yoon, K. (2009). What works in professional development? Phi Delta Kappan,

> 90, 495-500.

Hinnant-Crawford, B. (2020). *Improvement science in education: a primer*. Myers Education

Hollie, S. (2012). *Culturally and linguistically responsive teaching and learning: Classroom

> practices for student success*. Shell Education.

Hollie, S. (2018). *Culturally and linguistically responsive teaching and learning: Classroom

> practices for student success*. Shell Education.

Hollie, S., Davis, A., & Andrew, E. (2015). *Strategies for culturally and linguistically

> responsive teaching and learning*. Shell Education.

Honeychurch, S., & Ahmed, S. (2016). Using social media to promote deep learning and

> increase student engagement. *Social Media for Learning in Higher Education 2015

> Conference Proceedings*. https://doi.org/10.7190/socmedhe/2015/4

Howard, G. R. (2016). *We can't teach what we don't know: White Teachers, multiracial schools*. Teachers College Press.

Inayat, A., (2020). Influence of teaching style on students engagement, curiosity and exploration in the classroom. *Journal of Education and Educational Development*. (7)1, 87-102.

Irvine, J. (2010). Cuturally relevant pedagogy. The Education Digest. Vol. 75, Iss 8: 57-61

Kafele, B. K. (2013). *Closing the attitude gap: How to fire up your students to strive for Success*. ASCD.

Kanold, T. D. (2012). *The five disciplines of Plc leaders*. Solution Tree Press.

Klem, A., & Connell, J. (2004). Relationships matter: Linking Teacher Support to Student Engagement and Achievement. *Journal of School Health, 74*(7), 262-273. Doi: 10.1111/j.1746-1561.2004.tb08283.x

Ladson-Billings, G. (1994). *Dreamkeepers: Successful teachers of African American children*. Jossey-Bass Inc. U. S.

Ladson-Billings, G. (1995). But that's just good teaching! the case for culturally relevant pedagogy. *Theory Into Practice*, *34*(3), 159–165. https://doi.org/10.1080/00405849509543675

Ladson-Billings, G. (2014).Culturally Relevant Pedagogy 2.0:a/k/a/ the Remix. *Harvard Educational Review*,84(1),7484.https://doi.org/10.17763/haer.84.1.p2rj131485484751

Lloyd, M. H., Kolodziej, N. J., & Brashears, K. M. (2016). *Classroom Discourse: An Essential Component in Building a Classroom Community*, *26*(2).

Mandinach , E., Honey, M., & Light , D. (2006). The context of data-driven decision making. *Transforming Teaching and Learning through Data-Driven Decision Making*.

Mark, H. (2000). Student engagement in instructional activity: patterns in the elementary, middle, and high school. *Educ Res. Journal*.2000:153-184

Martin, F. & Bolliger, D.U. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. Online Learning 22(1), 205- 222. doi:10.24059/olj.v22i1.1092

Maslow, A. H. (1954). *Motivation and personality*. New York: Harper & Row.

Maslow, A. H. (1962). *Toward a psychology of being.* New York: von Nostrand Reinhold.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2000). Models of emotional intelligence. In R. J. Sternberg (Ed.), Handbook of intelligence (pp. 396–420). New York, NY: Cambridge University Press

McMillan, D. (1996). Sense of community. *Journal of Psychology.* https://doi.org/https://doi.org/10.1002/(SICI)1520-6629(199610)24:4<315::AID-JCOP2>3.0.CO;2-T

Mitchell M. Handelsman, William L. Briggs, Nora Sullivan & Annette Towler (2005). A measure of college student course engagement, *The Journal of Educational Research,* 98:3, 184-192, DOI: 10.3200/JOER.98.3.184-192

Morgan, T. L., & Cieminski, A. B. (2020). Exploring the mechanisms that influence adolescent academic motivation. *Educational Studies*, *47*(6), 770–774. https://doi.org/10.1080/03055698.2020.1729102

National Commission on Social, Emotional, and Academic Development. The Aspen Institute. (2021).https://www.aspeninstitute.org/programs/national-commission-on-social-emotional-and academic-development/.

Newman, F.M., Wehlage, G.G. and Lamborn, S.D. (1992). The significance and sources of student engagement. In: Newman, F.M., Ed., Student Engagement and Achievement in American Secondary Schools, Teachers College Press, New York, 11-39.

Noguera, P., Darling-Hammond, L., & Friedlaender, D. (2015). Equal opportunity for deeper learning.

Osher, D., & Berg, J. (2017). *School climate and social and emotional Learning: The integration of two approaches*. Edna Bennett Pierce Prevention Research Center, Pennsylvania State University.

Paris, D., & Alim, H. S. (2014). What are we seeking to sustain through culturally sustaining pedagogy? A loving critique forward. *Harvard Educational Review*, *84*(1), 85–100. https://doi.org/10.17763/haer.84.1.982l873k2ht16m77

Perry, J. A., Zambo, D., & Crow, R. (2020). *The improvement science dissertation in practice: a guide for faculty, committee member, and their students*. Myers Education Press.

Rabadi, S., & Ray, B. (2017). 5 principles of outstanding classroom management: When we ask our community for their best classroom management practices, over 700 ideas rolled in. *George Lucas Educational Foundation,* 1-23.

Raudys, J. (2018, November 19). *11 Real Ways to Build a Positive School Culture*. Prodigy

Education. https://www.prodigygame.com/main-en/blog/school-culture/.

Robutti, O., Cusi, A., Clark-Wilson, A., Jaworski, B., Chapman, O., Esteley, C., et al. (2016).

ICME international survey on teachers working and learning through collaboration:

June 2016. *ZDM Int. J. Math. Educ*. 48, 651–690. doi: 10.1007/s11858-016-0797-5

School. https://doi.org/DOI:10.13140/RG.2.2.20520.01286

Public School Districts (2020). School Improvement Plans

https://www.stratfordk12.org/nichols

Public School Districts. (2021, June) School profile and performance report for 2020-2021.

//www.stratfordk12.org/uploaded/District/Board_of_Education/BOE_minutes_agenda

s/October_1_Enrollment_Report_2020.pdf

Tal, C. (2010). Case studies to deepen understanding and enhance classroom management

skills in preschool teacher training. *Early Childhood Education J* **38,** 143–152 (2010).

https://doi.org/10.1007/s10643-010-0395-z

Teachers: An Action Research. *Educational Sciences: Theory and Practice*, *17*(4), 1317-

1344.

Thompson, E. G., & O'Brien, R. (2014). Symptoms of low blood sugar – topic overview.

Accessed at https://medmd.com/a-to-z-guides/tc/sumptoms-of-low-blood-sugar-topic-

overview on November 7, 2017.

Tomaszewski, W., Xiang, N., & Western, M. (2020). Student engagement as a mediator of

the effects of socioeconomic status on academic performance among secondary school

students in Australia. *British Educational Research Journal*, *46*(3), 610–630.

https://doi.org/10.1002/berj.3599

Tuncel, G. (2017). Improving the Cultural Responsiveness of Prospective Social Studies

Villegas, A., & Lucas, T. (2005). Diversifying the teacher workforce: A retrospective and

Prospective Analysis. Yearbook of the National Society for the Study of Education,

103(1), 70–104. https://doi.org/10.1111/j.1744-7984.2004.tb00031.x

Appendices

Appendix A: Recruitment Letter

Recruitment Letter

September 1, 2021

Dear Dynamic ▮▮▮▮ Educators,

For those of you who don't know I am an Educational doctoral candidate in the Isabelle Farrington College of Education at Sacred Heart University. I am writing to invite you to participate in a brief focus group with your colleagues for a research study about teacher perception of practices that educators utilize to support social emotional learning and cultural responsiveness in the classroom. The specific purpose of this study is to explore the degree in which student engagement is impacted by the use of Cultural-linguistic Responsiveness (CLR) strategies.

These interviews will involve as many educators from ▮▮▮▮ Elementary School that agree to participate. If you chose to participate in the focus group, you will be asked a few brief questions regarding your perception of integrating CLR strategies into the classroom and the benefits or concerns regarding student engagement. This is strictly voluntary. I understand how busy everyone is, however, if you feel this study can help us better understand how to serve you and our students, please consider participating.

The information gathered in this activity will be used for the completion of my dissertation study. This information will be completely confidential and no identifiable information will be revealed in reports.

If you would like to participate, need additional information about the study, and or have further questions, please contact me at X 5645 or email me at diioriod@▮▮▮k12.org.

With appreciation,

Diana DiIorio
Ed.D. Candidate
The Isabelle Farrington College of Education
Sacred Heart University

Appendix B: Consent for Participation

Sacred Heart
UNIVERSITY

Researcher:	Diana DiIorio	
	Phone: 203-385-4294	Email: diioriod@s███k12.org
Faculty Sponsor:	T. Lee Morgan, Ph.D.	
	Phone: 203.365.4774	E-mail: morgant2@sacredheart.edu

Study Site: ████ Elementary School ████, CT.

Purpose
You are being asked to participate in a research study. We hope to learn about teacher perspectives on building relationship skills, increasing cultural responsiveness (CR), and student engagement by doing this research.

Procedures
If you consent to be part of this research study, you will be invited to participate in an interview/focus group protocol, self-reflection protocol, and/or walkthrough protocol. The focus group protocol will last approximately 30 to 60 minutes; the walkthrough protocol will last no more than 10 minutes and focus on the dosage of attempts to CR practices.

Voluntary Participation
Participating in this research study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to participate in focus interviews for any reason without penalty. If you choose to participate in the study, you do not have to answer any questions during the interview if you do not want to answer. You will be audio recorded during the interview/focus group process. If you do not want to be audio recorded, please inform the researcher, and only hand-written notes will be taken during the interview. No part of this study will be used during the teachers' evaluation process. This is strictly for study purposes only.

Risks or Discomforts
The researcher has taken steps to minimize the risks of this study. Even so, as a participant, you may still experience some risks related to feelings that may be evoked from questions being asked in the focus group. The study may include other risks that are unknown at this time. If, however, you feel embarrassed or uncomfortable at any time to answer a question, you may decline to answer the question or end the group. You may also choose to withdraw from the study. There will be no penalty, no negative consequences, and no removal of other benefits to which you are entitled if you decline to answer any question, end the interview, or withdraw from the study.

Confidentiality

The researcher will securely store all identifiable data collected (participant names and contact information) to keep your information safe throughout this study. Your individual identity and district/school identity will be kept confidential when information is presented or published about this study. Audio recordings of interviews will have identifiable data removed before storage and will be destroyed three years after completion of the study.

The research records are held by researchers at an academic institution; therefore, the records may be subject to disclosure if required by law. The research information may be shared with federal agencies or local committees who are responsible for protecting research participants, including individuals on behalf the Sacred Heart University.

Questions
The researcher will take the data from the interviews to identify themes related to CLR, engagement, and relationships. These findings will also be presented at an academic conference and possibly be published. If published, all data will be presented in a way to ensure the confidentiality of all participants, and no names will be attached to any specific data.
Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research.
If you have any questions about this research study, you may contact me at, 203-515-7406 or diioirod@███12.org . If you have any questions about your rights as a participant in a research study, you can contact the Sacred Heart University Institutional Review Board at alpf1@sacredheart.edu or 203-396-8241.

Options for Participation
Please initial your choice for the options below:
_____ The researchers may audio record or photograph me during the interview process of this study.
_____ The researchers may NOT audio record or photograph me during the interview process of this study.

Please take all the time you need to read through this document and decide whether you would like to participate in this research study.

If you agree to participate in this research study, please sign below. You will be given a copy of this form for your records.

_____   _____
Participant Signature   Date

_____

Participant Printed Name

_____   _____
Researcher Signature   Date

Appendix C: Observation Protocol

Classroom Walkthrough Observation Form
Adapted from Hollie, 2018

Participant IDNO |__|__|__|__| Date |__|__/__|__/__|__|
No of students Present: _____   Observation Start time: _____
                                        Observation End Time: _____

Classroom/Activity:_____

Teacher vs. Student talk
- ☒ Most by teacher
- ☐ Some Student
- ☐ 50/50 student and teacher
- ☐ 80/20 student and teacher

Student Grouping
- ☒ Whole Class
- ☒ Smaller Groups
- ☒ Independent Practice

Student Engagement
- ☐ All students
- ☐ 90% student engaged
- ☐ 75% students engaged
- ☐ 50% students engaged
- ☐ Less than 50% engage
- ☐ Almost no student engagement

Domain	Criterion	Tally	Observations
1 Learning Environment	Active listening: The teacher uses paraphrasing, questioning, eye contact.		
	Collaboration: independence in small groups on task using higher level thinking, such as synthesizing or evaluating.		
	CLR discussion and response protocols used.		
	Independent work: using shout outs, silent appointments, choice opportunity, movement allowed.		
2 Learning Strategies	Interactive modeling: using RC 7 step modeling process to teach a new skill or behavior.		
	Morning Meeting: using cultural greetings, cultures celebrated, activities validate & affirm cultural linguistic behaviors, student shares about cultures.		
	Movement: intentionally planned to enhance & support learning.		
	Voice levels: Student's part of process of determining levels for given situation.		
	Attention signals used.		
	Responding protocols.		
3 Literacy Supports	CLR vocab tools.		
	Use of CLR texts.		
	Effective literacy activities.		
	Effective writing activities.		
	Total		

Appendix D: Teacher Self-Reflection Protocol

Lesson (s): _____

<div>

Step 1: Quantity: What's in your CLR Toolbox?

Check the strategies you have practiced

</div>

o   Attention Signals

o   Protocols for Responding

o   Protocols for Discussion

o   Movement

o   Extended Collaboration

o   Leveling Words

o   Context Clues

o   Personal Thesaurus/Personal Dictionary

o   Use of CLR Authentic Texts

o   Read-Alouds

o   Literacy Activities

o   Situational Appropriateness Writing

<div>

Step 2: Quality: What is my Accuracy & Fidelity in using CLR activities?

</div>

Notes (How did the strategies go? Where they successful?):

Questions you have of strategies tried or ones you would like to try:

Reflection (how comfortable were you practicing these strategies):

Step 3: Strategy: What is my intent and purpose with the use of CLR activities?

Validating & Affirming What activities v/a cultural behaviors	Building & Bridging What activities build/bridge to academic culture?
Reflection:	

Adapted from: (Hollie, 2018)

Appendix E: End-user Consultation Questions

Questions:
- Students in my school feel like they belong here? How do you know?
- My school creates opportunities for students to get to know each other? Such as?
- Teachers in this school work to actively create a safe and welcoming environment for every student?
- What percentage of students lack skills in relationship building? How do you know?
- What is the root cause of lack of relationship skills?
- To what extent have you been trained in CLR?
- What else do you want to share in regards to cultural responsiveness, student engagement, and relationship skills?

Goals:
- This simple one-page questionnaire can be used to uncover differences in teacher and student perceptions, as an activity to open professional development programs related to school climate and safety, or as part of larger school-climate assessments that also include interviews, focus groups and other tools. It also can be adapted for use with parents.

Appendix F: CITI Training Certificate

Appendix G: Dissertation District Permission

July 30, 2021

Diana DiIorio
129 Winfield Street
Norwalk, CT 06855

Dear Mrs. DiIorio,

This letter is to inform you that Stratford Public Schools has approved the project titled "A Study of Root Causes in a Stratford Elementary School to Define Student Researcher's Hypothesized Problem of Practice: Lagging Skills in Social Awareness and Relationship Skills Competencies in Relation to Student Engagement" as described as of this date. This approval is contingent on the IRB approval from the Sacred Heart University.

We have determined that this project conforms to the district's standards regarding informed consent and FERPA regulations. This letter should be available upon your first communication with school staff as it assures that the study meets the district's research protocol. District approval does not ensure research participation from the faculty, given that research subjects have the right not to participate and withdraw from the research study at any point. Also, please keep my office appraised of any change in in your described research methods, your progress, and the final findings. To publish using the district's name, you will need previous consent in writing.

Reach out if you require additional assistance. Good luck with your study.

Best Regards,

Linda A. Gejda, Ed.D.
Assistant Superintendent