

## **ABSTRACT**

Fowzighah Abdolcader, USING EQUITABLE ELL PEDAGOGY TO SUPPORT ENGLISH LANGUAGE LEARNERS IN ACADEMIC CONVERSATIONS (Under the direction of Dr. Matthew Militello). Department of Educational Leadership, December, 2023.

In the participatory action research (PAR) study, teachers in a professional learning community (PLC) acting as Co-Practitioner Researchers (CPR) used the methodologies of the improvement science (Bryk et al., 2015) and the community learning exchange (CLE) to implement instructional practices that incorporate equitable academic discourse and culturally responsiveness pedagogy for English language learners. Together, the PLC members created space to collaborate, cultivate relational trust, learn and practice ELL pedagogies, study and implement talk moves, and, as a result, improve instructional practices. This study took place in a large urban district in an elementary K-5 school over an 18-month period and three cycles of inquiry. The findings indicate that (a) relational trust contributes to collaborative decisions about instructional practices; (b) teachers play a crucial role in academic conversations; and (c) teachers use ELL-specific pedagogical tools to increase access and rigor. Classroom observations were a fundamental component of the research methodology with a specific focus on confirming that teachers were employing strategies that encouraged equitable access and rigor. The combination of observations with post-observation conversations provided dedicated support for PLC members to reflect on their pedagogical decisions and further refine their practices. The power of iterative reflection and using evidence from our work together informed our iterative next steps as we diagnosed and designed based on conversations, reflection, and evidence (Spillane, 2011). The study has implications for practice, policy, and research at the school and district levels for teachers and leaders who support English Language Learners.



USING EQUITABLE ELL PEDAGOGY TO SUPPORT ENGLISH LANGUAGE LEARNERS  
IN ACADEMIC CONVERSATIONS

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Fowzigiah Abdolcader

## **DEDICATION**

To my parents, Mohammat Abdolcader and Giamilah Dos Abdolcader

For taking the risk and leaving their homeland, Vietnam

So I can have this opportunity, to achieve my dreams and

Become the first to hold an Educational Doctorate in the family!

To my siblings Salih, Giawyrighiah, Jaynap, Yahya, and Rukayah

Thank you for being there for me!

To my husband, Faruk

Thank you for being my rock! Partners for life!

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Last, but not least, thank you to my family members for enduring the last four years with me. I am who I am because of you. This doctorate degree belongs to you.

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## **CHAPTER 1: NAMING AND FRAMING THE FOCUS OF PRACTICE**

*I came to this country at age 4, an immigrant student who did not speak English. My success as a teacher and now as a principal largely stems from the committed educators who supported my English development and believed in my capacity to learn. My goal was to "pay it forward" by nurturing educators who understand how their pedagogical decisions affect students' futures. Thus, I endeavored in this 18-month study to collaborate with four educators to study what happens when educators come together to intentionally learn how to support ELLs' participation in academic conversations.*

Too frequently, students who start their education in the United States of America (USA) with limited English proficiency are underserved because their teachers do not understand how to adequately support them. In this project and study, I focused on how teachers worked together to support English Language Learners (ELLs) in learning mathematics. I particularly focused on understanding what conditions were necessary for teachers to become more knowledgeable and skillful as partners in designing and implementing strategies that fully engage students. In the qualitative participatory action research (PAR) study, I investigated how teachers cultivated relational trust to make collaborative decisions, engaged with one another, and collectively implemented instructional practices that supported ELLs.

The context of the study was the elementary school in San Francisco where I am the principal. This setting has a long history of educating ELLs. In 1966, the National Association for the Advancement of Colored People (NAACP) in San Francisco filed a consent decree against San Francisco Unified School District (SFUSD), claiming the district had been stalling desegregation efforts. As a result of the consent decree, 2,800 Chinese-speaking students were integrated into the San Francisco Unified School District (SFUSD); however, 1,800 of the

students did not receive support in English development. Parents of Chinese-speaking students filed a class-action lawsuit against the San Francisco Unified School District (SFUSD), demanding equitable learning opportunities for non-English speaking students. The notable case, *Lau vs. Nichols* (1974), advocated for schools to provide proper education for non-English speaking students. The decision in the case stated, "the U.S. Supreme Court on January 21, 1974, ruled (9–0) that, under the Civil Rights Act of 1964, a California school district receiving federal funds must provide non-English-speaking students with instruction in the English language to ensure they receive an equal education" (p. 414). The U.S. Supreme Court mandated SFUSD to create a Lau Plan or Lau Mandate to address the inequities exposed in *Lau vs. Nichols* (1974).

Forty years later, our schools still fail to provide equitable education for ELL students. However well-meaning our efforts are, we still do not meet the academic and social-emotional needs of the students. In this project and study, I posited that we needed to internally address the issue by nurturing teachers in a professional learning community (PLC) to cultivate relational trust and make decisions guided by best practices to support academic conversations and, further, incorporate proven and effective ELL instruction (Bryk & Schneider, 2002; Tschannen Moran & Hoy, 1998; Zwiers & Crawford, 2016). Next, I discuss the focus of practice (FoP) and how I sought to advance the work to address the inequities.

### **Focus of Practice (FoP)**

In the PAR project and study, I examined what happens when teachers collaborate in a professional learning community to support ELLs' engagement in academic conversations. I heeded the claims detailed in *Lau vs. Nichols* (1974) and, by choosing this FoP, I supported educators to fully engage as collaborative thought partners and implement equitable practices for academic discourse among ELLs in math classrooms. In discussing the rationale for the PAR and

the FoP, I analyzed the assets and challenges related to the FoP; the significance that the project might have on practice, policy, and research; and connection to equity.

## **Rationale**

Too often, change efforts at schools relied on answers from outsiders. In fact, the role of outsiders, or intermediaries hired by school districts to facilitate school reform, is a contested subject because the considerable efforts frequently produced limited results (Trujillo & Woulfin, 2014; Yurkofsky et al., 2020). Rather, teachers and teacher-leaders can play crucial roles in school reform because they have in-depth knowledge of a school and the students, as well as the history and prior reform initiatives (Grubb & Tredway, 2010). The outside-in professional learning was largely unsuccessful and failed to fully engage the teachers as co-learners; we wanted teachers to have experiences in their professional learning that could be replicated with students in classrooms. While professional learning communities (PLC) promise to bolster teacher capacity, they often spend more time on community-building efforts than on attending to improving practice (Wood, 2010).

Relational trust among teachers is essential for school change efforts that address improving practices (Bryk & Schneider, 2002; Bryk et al., 2010). Wood (2010) argues that teachers need to “feel free to bring challenges or problems to a group for discussion; [however, beyond trust and safety, teachers must accept] “the hard work of actually linking teaching practices to improving student learning” (p. 122). Grubb (2009) calls trust an abstract resource, one that educators co-create to effect any lasting change. Reform efforts are unlikely to succeed without focusing on how teachers co-construct knowledge, make meaning together, and then act on those understandings to develop curriculum and make instructional decisions (Cuban, 1988).

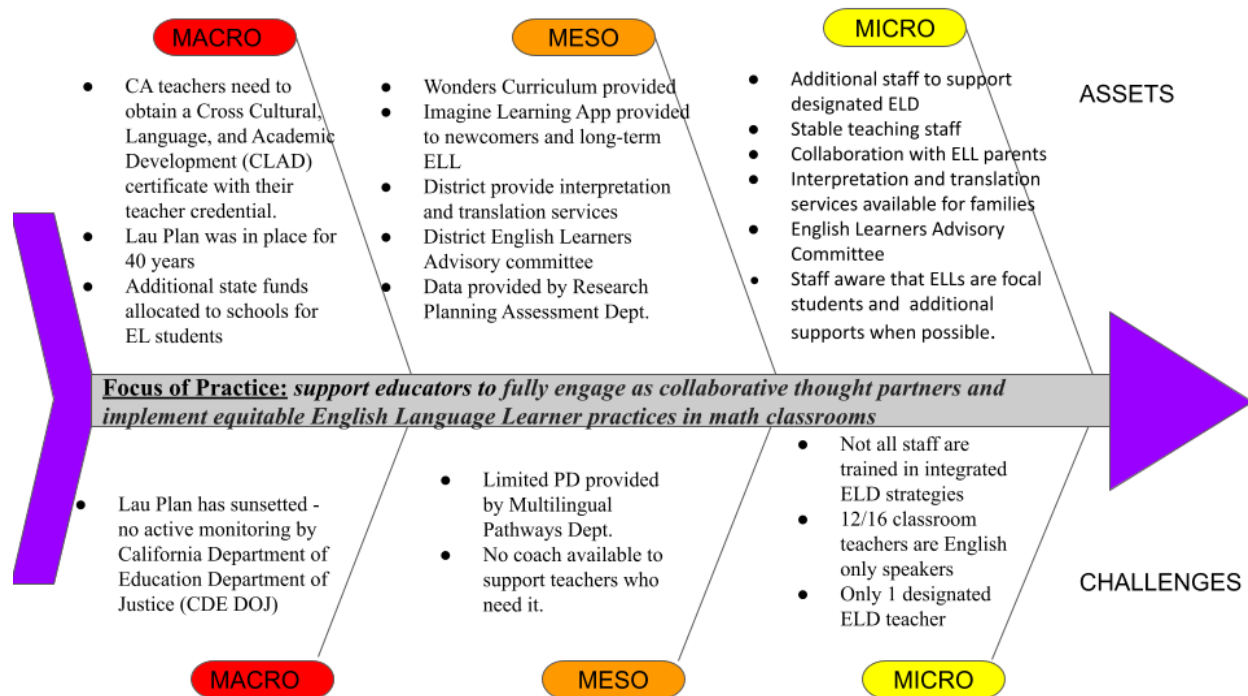
As a result, I invited teachers to participate as a professional learning community (PLC) and help steer the decisions for the PAR by centering the importance of relational trust as a necessary condition for teacher change. The participants and I participated in a professional learning community (PLC) in a public elementary school in San Francisco, California, that educates approximately 400 students per year with various language origins, the majority of whom speak Cantonese, Spanish, and Vietnamese. The goal of the PAR project and study was to identify how elementary educators could engage as collaborative thinking partners to support academic discourse for ELLs in mathematics learning.

### **Analysis of Assets and Challenges**

In determining how to address the FoP related to this project, I convened a staff meeting to develop ideas about the assets and challenges related to ELL instruction. The fishbone diagram (see Figure 1) identified those assets and challenges. I describe those assets and challenges in relation to the micro, meso, and macro levels that influenced the FoP.

#### ***Micro Assets and Challenges***

The micro level encompassed the school and the specific teachers involved in the project. Over the past five years, the staff understood that the school's focus rested on enhancing strategies for supporting ELLs. Consequently, the teachers frequently exhibited willingness to engage with students and instill a sense of inclusion within the school setting. The stable teaching staff emerged as an asset since it facilitated staff members spending more time together, connecting with shared students, and exchanging insights about the students and effective practices. This exchange of information enabled the transfer of students' assets and challenges from the departing teacher to the incoming one, contributing to ongoing student continuity.



*Figure 1. The fishbone diagram presents an analysis of assets and challenges of FoP.*

Additionally, the staff repeatedly agreed to utilize the site budget to hire an extra teacher to aid in the daily thirty minutes of designated English Language Development (ELD) instruction. This allocation allowed for a consistent connection between one staff member and ELLs, addressing their proficiency levels and offering targeted instruction. Frequently, the designated ELD teacher collaborated with the classroom teacher regarding students' progress and strategies for transferring skills to the broader class environment. Moreover, the designated ELD teacher fulfills the role of a liaison with parents of ELL students, encouraging their involvement in the English Learners Advisory Committee (ELAC), a subcommittee of the School Site Council (SSC). Lastly, the school strives to communicate in the preferred language of families whose primary language is not English.

Teachers were predominantly English-only speakers and, lacked shared experiences with ELLs. Frequently, the sole responsibility of employing ELD strategies falls on the designated ELD teacher, and teachers did not consistently utilize the strategies in the students' grade-level classes. Moreover, even though many staff members receive training in integrated ELD strategies, these strategies often fail to manifest in the classroom. Consequently, strategies that promote engagement of ELLs in academic discourse are unevenly employed by teachers.

Hence, my interest lay in focusing on developing and nurturing relational trust among teachers to foster more consistent and coherent professional learning and dialogue so that they could successfully implement academic discourse and ELL-specific strategies in classrooms. Using this approach, I aimed to elevate the levels of academic discourse in the school for ELL students and bolster the implementation of effective culturally and linguistically responsive practices (CLRP).

### ***Meso Assets and Challenges***

The meso level in the study encompassed the district, including all resources and support from various departments within the district. In the San Francisco Unified School District, the multilingual pathways department equips teachers with curriculum and online programs specifically tailored to support ELLs instruction. Additionally, the district offers data to aid teachers in tracking the academic progress of ELLs. Furthermore, parents of English learners receive information in their preferred language and are afforded opportunities to participate in the district's English Learners Advisory Committee (ELAC), contributing input to the district on how to enhance support for ELLs.

Other than these supports, teachers have limited opportunities to attend professional development. SFUSD's Multilingual Pathways Department normally provides professional development to teachers and support their knowledge of ELL pedagogy; however, due to limited staffing of the multilingual pathways department, one teacher from each school attend with the expectation that the newly trained teacher would transfer that learning to other staff members. This model was not successful; often the newly trained teacher was barely proficient in the strategies and was not yet knowledgeable or skilled enough to facilitate professional learning for other teachers. As a result, the knowledge and skills were not transferred. More importantly, for this PAR, a single teacher without support from peers rarely implements learning.

### ***Macro Assets and Challenges***

The macro level encompasses state policies and school funding, both of which are designed to uplift ELLs. In California, all teachers need to obtain a cross-cultural, language, and academic development (CLAD) certification in addition to their new teaching credentials. Therefore, all teachers received training on strategies prior to entering the classroom. Having the

Lau Plan in place for 40 years in California ensured that California schools would receive the curriculum and funds necessary to help ELLs progress in their English language acquisition. This assurance of support has been reduced, as the Lau Plan has sunsetted, resulting in no accountability for school districts to make marked progress for English learners.

### **Significance**

The PAR project and study have significance because 24% of students in the selected school were designated ELLs at the start of the study. Thus, I addressed two persistent issues—teacher collaboration and teacher practices that provided equitable student access and rigor to ELL learners in math classrooms (Hills, 2013; Thomas & Collier, 2002). While teachers work in professional learning community settings, they need to deepen their experiences to draw on their collective assets. We recognized that we were not allotting sufficient time for relational trust and thoughtful collaboration.

Secondly, each year the ELL data consistently show lower performance in English Language Arts and Mathematics on district benchmark assessments and state exams. Concurrently, ELL students often more silent, speak up far less often than proficient English learners. This is consistent with ELL language development stage (Krashen & Terrell, 1983). Thus, making language-acquisition complex. In this PAR project and study, I supported educators at the school in nurturing relational trust while identifying strategies that would support ELL students in 3rd-4th grade to improve academic discourse in mathematics (Tschannen-Moran, 2014). As PLC members learned more about each other and developed stronger bonds, they concurrently examined the practices that helped us understand ELL students' learning progression. This ensured the provision of culturally and linguistically responsive practices throughout their K-5 learning environment (Wood, 2010).



As a result, our work—the processes and tools we used and the findings of the research—could support the San Francisco Unified School District (SFUSD) in examining what the district was currently doing to help students K-5 and positively support students' growth in their primary education. The PAR had the potential for significance in school practices, district policy, and practices, and research.

### ***Practice***

As a public elementary school in San Francisco, the school is charged with supporting the equitable learning of our diverse population. To achieve this goal, we needed to examine and continue to build efficacy in practice in the PAR project. Therefore, teachers understood that it was essential to ground the work in practices supporting social-cultural belonging and inclusion, as well as advocating for and using research-based CLRP instructional practices. To accomplish this, we recognized the imperative to strengthen relational trust and challenge each other to attain another level of equity and excellence, because the tools and the processes for cultivating relational trust provide the necessary conditions for effective school change (Tredway & Militello, 2023).

### ***Policy***

The study is useful to policymakers to understand how to transfer strong equity policies to practice. For the FoP and PAR, the findings can inform policy at our school and the district, and the results should be shared with other schools. Thus, this study could inform internal policies and independent public policies supporting inclusive learning environments, professional learning resources, and structures facilitating high-quality learning for all. The areas in which this might be particularly applicable include policy for inclusion, language learning,

leadership for learning, cultural responsiveness including curriculum policies, and professional learning for teachers.

### ***Research***

Because our country encompasses such diversity, research supporting various types of learners would enhance our capacity to offer high-quality, accessible, and equitable learning opportunities for a broader range of students (Boykin & Noguera, 2011). Despite significant research on PLCs (Little, 2005; Whitford & Wood, 2010) more research is still necessary to aid teachers in building internal capacity and demonstrating how improved relational trust among colleagues influenced our ability to change classroom practice was still necessary. Finally, the research process itself—the participatory and local nature of the process—could be adopted by other schools to address different issues. The process was scalable in the sense that schools could adapt our research methods to another FoP in a school or district (Morel et al., 2019).

### **Connection to Equity**

A recurring equity issue was students’ access to the rigorous curriculum, particularly in mathematics (Boykin & Noguera, 2011). Zwiers and Crawford (2011) asserted that “[t]he formation of academic identity has a tremendous benefit for students’ confidence in school, abilities to express their thinking in writing, and willingness to contribute their ideas to class discussions” (p. 24). The FoP directly related to equity issues since ELLs often struggle with accessing the curriculum in English-only settings and need more time to process their learning than is typically the practice in schools.

Ultimately, what was at stake is students’ access to the curriculum and how that affects their opportunities to learn. The students’ elementary years anchor their future schooling

experiences—positively or negatively. Next, I discuss two frameworks, psychological and political-economic, that influenced equity in this PAR study.

### *Psychological Framework*

Students' opinions about themselves are correlated with students' academic performance. Zwiier and Crawford (2011) claimed that "being listened to and having our thoughts valued is important at all ages. Moreover, the skill of valuing other people's thoughts is highly beneficial in life" (Zwiier & Crawford, 2011, p. 24). I examined to what extent the PLC members could collectively support each other to engage in cycles of inquiry that promote ELL students' opportunities to engage in equitable academic discourse in mathematic classrooms. For this to happen, the PLC reflected on the psychological effects of schooling for an English learner and how the schooling experience influenced identity. Steele (2010) asserted that "identity contingencies—the things you have to deal with in a situation because you have a given social identity because you are old, young, gay, a white male, a woman, black, Latino—can affect students in classrooms" (p. 3). Therefore, the PLC members considered all the factors that prevented students from engaging effectively in academic discourse.

Wilkerson (2020) stated that "[y]ou cannot fix a problem until and unless you can see it" (p. 16). In this project and study, the social and cultural context of the learning environment is one that often does not fully support ELL learners. While this research included studying culturally and linguistically relevant pedagogy, Hammond (2015) insisted that:

culturally responsive teaching calls for teachers to take the 'emotional risk' to examine the deeply held beliefs that influence how they respond to students. That is a necessary psychological response to social and cultural learning. This inward reflection means

being willing to listen and change to respond positively and constructively to the student who may be culturally different in some way. (p. 56)

The psychological risk for teachers is to form the kind of interdependent relationships that include challenging each other so that they experienced what they wanted students to experience in the classroom—trusting and nurturing relationships with high cognitive demand for rigor. Deeper learning for teachers was a prerequisite to deeper learning for adults (Watkins et al., 2018); a key finding of Machado (2021) was that teachers and children require parallel learning so teachers have pedagogical experiences before they can replicate those in classrooms.

### ***Political-Economic Framework***

The political mandates at the state and district level affected our ability at the school level to be responsive to ELL learning. In California, the Lau Mandate (Lau vs. Nichols, 1974), established a set of expectations imposed on schools. Those policy expectations from the state and the district required schools to provide 30 minutes of English Language Development (ELD) instruction to students whose first language was not English. Although the mandate had been present for decades, disparities in support for English learners persisted. Many schools were out of compliance in providing the daily 30 minutes of instruction. Close monitoring by the California Department of Justice pushed San Francisco to become more serious about providing support for English learners; however, professional development for teachers and principals had been sparse.

Secondly, the district has had internal political and bureaucratic issues that influenced our ability to be consistent in ELL and ELD implementation. The district has a system in place to support ELL instruction, and the district supports teacher learning by posting professional learning opportunities at the beginning of the academic school year with a menu of available

professional development options. However, ELD professional development is offered to only a few teachers. The train the trainer model offered inadequate and unclear guidance and resulted in lackluster implementation and persistent inequities.

Rigby and Tredway (2015) contended that "when principals were explicit about inequity issues and clear about their next steps, whether it's macro or micro, disruptions to inequity occurred more often" (p. 329). By forming a PLC with a specific focus on improving outcomes for ELLs, those involved in the research had opportunities to learn from one another, deepen their trust, critique current practices, and explore explicit pedagogy that changed teachers' practices. In this study, we were more explicit about how we analyzed the inequities and planned the next steps for ELLs.

### **Participatory Action Research Design**

I engaged a group of teachers in increasing their collective knowledge and capacities for ELL instruction in math classes by using the methodology of PAR. The PAR design required the lead researcher to actively participate; thus, as the lead researcher, I facilitated a professional learning community (PLC) of four teachers to systematically utilize evidence to support their actions and act as Co-Practitioner Researchers.

According to Creswell and Creswell (2018), qualitative research involves three types of data collection procedures: (a) qualitative observations, involving the use of field notes to record activities at the study site in both organized and unstructured ways; (b) qualitative interviews, consisting of semi-structured and typically open-ended questions to elicit viewpoints; and (c) field notes, such as journal entries, emails, letters, and meeting minutes. I collected and analyzed data from PLC meetings, classroom observations, and post-observation conversations. I used protocols from the community learning exchange (CLE) process to gather CLE artifacts and

reflective memos. Throughout the PAR, as I iteratively coded data, I developed categories in the Pre-Cycle, emergent themes in PAR Cycle One that I verified in PAR Cycle Two, and findings. Next, I present the purpose statement, research questions, and theory of action for this PAR.

### **Purpose Statement, Theory of Action, and Research Questions**

The purpose of this PAR project involved using the PLC structure to fully engage as collaborative thought partners and implement practices conducive for ELLs to access and participate in academic content. I facilitated opportunities for PLC members to learn narratives about each other, nourishing their collaborative spirit, and assisting them in their understanding of ELLs equitable academic discourse in math classrooms. I invited the 3rd and 4th grade teachers to engage in the PLC. Additionally, I expected that by strengthening their understanding of culturally relevant pedagogy and academic conversations through studying the literature from Hammond (2015) and Zwiers and Crawford (2011), we could design and implement strategies aligned with the recommendations from these scholars and practitioners.

The PAR design was based on this theory of action (TOA): If teachers developed strong relational trust, they could collaborate on choosing and implementing equitable and culturally responsive academic discourse for ELLs. Thus, I wanted this project and study to fully support teachers' learning in a community so that we could collectively learn from the inside out and focus on improving instruction for ELL learners (Grubb & Tredway, 2010).

### **Research Questions**

The overarching question was: *How do teachers collaborate as thought partners to support equitable access and rigor for English Language Learners (ELLs)?*

The sub-questions on which I collected and analyzed data were:

1. To what extent do professional learning communities support teachers in developing collegiality and relational trust?
2. To what extent do teachers who participate in a professional learning community:
  - (a) collaborate to make informed pedagogical decisions about engaging ELL students in academic discourse in math?
  - (b) consistently implement strategies that support equitable access and rigor for ELL students in math classrooms?
3. How does my role as an instructional leader fully support teachers to build their capacity to engage ELL students?

I analyzed my role as an instructional leader and what I could do to support classroom teachers in their growth and development in understanding and implementing CLRP and promoting academic conversations.

### **PAR Activities and Cycles of Inquiry**

I discuss the cycles of inquiry and the proposed activities that we undertook. In Chapter 3, I examine the cycles of inquiry and the specific data I collected and analyzed. We used evidence from each cycle of inquiry to make informed decisions about the next steps.

To fully engage in the PAR, I grounded the work in two key areas—improvement science and community learning exchanges (CLE). This combination, with action and activist research, will inform the study. Next, I explain the essential qualities of improvement science and community learning exchanges (CLE).

### ***Improvement Science***

Bryk et al. (2015) recommend the following six improvement science principles:

- Make the work problem-specific and user-centered (p. 12)

- Focus on variation in performance (p. 13)
- See the system that produces the current outcomes (p. 14).
- We cannot improve at scale what we cannot measure (p. 15).
- Use disciplined inquiry to drive improvement (p. 16).
- Accelerate learning through networked communities (p. 17)

In collaboration with the professional learning community, we used six improvement science (IS) principles to guide the professional learning community (PLC) during our PAR.

Specifically, during the PAR, we used disciplined inquiry to engage in the three cycles of inquiry using the plan-do-study-act process. Secondly, we worked as a collaborative group: as I collected and analyzed data, the PLC members provided input and made decisions about the next steps.

Finally, we continued to focus on improving a system that produced different outcomes for the teachers who engaged in the project (see Table 1).

### ***Community Learning Exchange***

In addition to the improvement science processes, the Community Learning Exchange (CLE) axioms and processes were essential to the PAR project and study. The five axioms are integral components and will guide the PLC as we interact with each other. The PLC members completely comprehend how we may overcome peoples, teams, and organizations to develop the capacity and willingness to explore a world outside of our usual comfort zone. As a result, the CLE processes encourage participants to be more vulnerable to form professional connections that help them take chances in the classroom and improve their practices (see Figure 2).



Table 1

*Project Research Cycles and Key Activities*

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Research Cycle	Key Activities
PAR Pre-Cycle Spring 2022 (Jan - Apr 2022)	<ul style="list-style-type: none"> <li>● Form PLC</li> <li>● Use CLE protocols to build relationships among PLC members</li> <li>● Analyze literature and decide on strategies</li> <li>● Observe classrooms</li> <li>● Write reflective memos</li> </ul>
PAR Cycle One Fall 2022 (Aug - Dec 2022)	<ul style="list-style-type: none"> <li>● Facilitate Community Learning Exchange (CLE)</li> <li>● Facilitate PLC meetings</li> <li>● Observe classrooms</li> <li>● Write reflective memos</li> </ul>
PAR Cycle Two Spring 2023 (Jan-Apr 2023)	<ul style="list-style-type: none"> <li>● Facilitate Community Learning Exchange</li> <li>● Facilitate PLC meetings</li> <li>● Observe classrooms</li> <li>● Write reflective memos</li> </ul>

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1. Learning and leadership are dynamic social processes.
2. Conversations are critical and central pedagogical processes.
3. The people closest to the issues are best situated to discover answers to local concerns.
4. Crossing boundaries enriches development and the educational processes.
5. Hopes and change are built on the assets and dreams of locals and their communities.

*Note.* (Guajardo et al., 2016).

*Figure 2.* Community learning exchange axioms.

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## **Study Considerations: Limitations, Validity, and Confidentiality and Ethics**

I am the site administrator and lead researcher for the duration of the research. More details of the limitations, validity, and confidentiality and ethics are in the research design in Chapter 3, and I highlight those in this chapter. I took additional steps to ensure that all participants give informed consent without fear of pressure or obligation. They could withdraw their consent at any time.

### **Limitations**

The study's size is a limiting factor. A small group of teachers participated in this qualitative study, and the findings are pertinent to the school environment but may not be generalizable to other settings. My role as the administrator was a limiting factor. I evaluate teachers and took precautions to separate the observations in this study from the teacher evaluation process.

### **Validity**

In PAR, reliability and validity as criteria of methodological rigor are critical. Establishing trustworthiness required establishing credibility, reliability, and confirmability (Lincoln & Guba, 1985). Finally, I used reflective memos and member checks to triangulate the evidence (Birt et al., 2016; Miles & Huberman, 1994).

### **Confidentiality and Ethics**

Confidentiality and ethical issues are critical factors in qualitative research. For this study, I used pseudonyms to protect both the school and the research participants. The study's objective was to help teachers collaborate in a professional learning community and align their talents to help ELLs understand mathematical academic discourse. Participants completed consent forms provided by the Institutional Review Board at East Carolina University (ECU IRB). In addition, I followed research application and approval processes for San Francisco

Unified School District. Important and personal paperwork and data files were kept in a locked file cabinet; all computerized data collection forms were in a password-protected database; and I shared data and copies of reports with the PLC group for the sake of disclosure, improvement, and reflection. All documents will be destroyed after three years.

### **Summary**

In Chapter 1, I introduced the FoP and PAR. I discussed the micro, meso, and macro levels that were in place during the study period. Within the chapter, I provided insight into the psychological and political-economical frameworks that have an influence on the context and participants in the study. In Chapter 2, I present a literature review from theoretical, normative, and empirical perspectives. The three areas of emphasis are: English Language Learners (ELLs), equitable academic discourse, and PLC. In Chapter 3, I present the research design and discuss the methodology that I used during the PAR in more depth. In Chapter 4, I discuss the context and the results of the Pre-Cycle in which I coded initial data and developed categories. In Chapters 5 and 6, I discuss the emergent themes from PAR Cycle One and PAR Cycle Two and the findings. In Chapter 7, I discuss the findings considering the extant literature, the implications for practice, policy, and research, and my growth and development as a leader.

## **CHAPTER 2: LITERATURE REVIEW**

In the participatory action research (PAR), I sought to understand the strategies that strengthened teachers' instructional practices so that they could support students' academic success. To fully explore this topic, I discussed the research about English Language Learners (ELLs) and the qualities of teaching and learning that provide support for ELLs. In the first section of the chapter, I describe language acquisition, instructional strategies, and policies and funding for ELLs. Then, I examine the research on equitable academic discourse, including learning theory, talk moves, and culturally and linguistically responsive pedagogy (CLRP). Finally, I define PLC and the importance of relational trust and introduce the research behind improvement science.

### **English Language Learners: Stages of Acquisition, Practices, and Policy**

ELLs are initially identified as students who come from households that speak a language other than English; thus, knowledge of their English proficiency and specialized instruction is necessary. Due to their limited English abilities in reading, writing, speaking, and listening, ELLs are often mislabeled and misclassified as students with learning disabilities (Artiles & Ortiz, 2002). To prevent the mislabeling of ELLs, educators need a deep understanding of the stages of language acquisition, instructional strategies for English learners, and policies and funding.

### **Stages of Language Acquisition**

ELLs proceed through stages of language acquisition as they learn English. These stages of language acquisition provide educators with guidance on how to support students through learning the language. Practitioners working with children who are learning to speak a new language know that the language acquisition process takes time—the first comprehension, then

one-word utterances and then two-word sentences, and finally more complex sentences (Hill & Flynn, 2006). The five phases of learning a second language are pre-production, early production, speech emergence, intermediate fluency, and advanced fluency (Krashen & Terrell, 1988). Many factors affect how quickly students advance through the stages, including their formal education, family history, and length of stay in the country. It is important to link each student's instruction to his or her stage of language acquisition. This knowledge enables instructors to operate within the students' zone of proximal development (ZPD), the space between what students can do on their own and what they can do with the aid of more experienced people (Vygotsky, 1978).

Next, I discuss how these language development stages and how they influence students' academic performance. Hill and Flynn (2006) adapted Krashen and Terrell's (1983) research to demonstrate these five language acquisition stages. In Figure 3, Hill and Flynn (2006) represented the stages of development and the estimated time frames for each point; the amount of time students spend at each level differs as much as the students themselves. Krashen and Terrell's early work-related classroom practices to the stages ensure that teachers were not anticipating utterances from ELLs who were beyond or below their acquisition stages (Hill & Flynn, 2006).

The first stage, pre-production, lasts from zero to six months and is known as "the silent period" since students are unable to speak English during this time (Hill & Flynn, 2006). Teachers respond to or prompt students who are in the preproduction stage by using sentences such as "show me, circle the, where is, and who has." This allowed educators to provide clear direction to the students while not expecting them to produce more complex sentences that are not in their zone of proximal development (ZPD).

Stage	Characteristics	Approximate Time Frame	Teacher Prompts
Preproduction	The student <ul style="list-style-type: none"> <li>• Has minimal comprehension</li> <li>• Does not verbalize</li> <li>• Nods "yes" and "no"</li> <li>• Draws and points</li> </ul>	0-6 months	<ul style="list-style-type: none"> <li>• Show me ---</li> <li>• Circle the ...</li> <li>• Where is ...</li> <li>• Who has ...</li> </ul>
Early production	The student <ul style="list-style-type: none"> <li>• Has limited comprehension</li> <li>• Produces one or two word responses</li> <li>• Participates using key words and familiar phrases</li> <li>• Uses present-tense verbs</li> </ul>	6 months- 1 year	<ul style="list-style-type: none"> <li>• Yes/ no questions</li> <li>• Either/ or questions</li> <li>• One or two word answers</li> <li>• Lists</li> <li>• Labels</li> </ul>
Speech Emergence	The student <ul style="list-style-type: none"> <li>• Has good comprehension</li> <li>• Can produce simple sentences</li> <li>• Makes grammar and pronunciation errors</li> <li>• Frequently misunderstands jokes</li> </ul>	1-3 years	<ul style="list-style-type: none"> <li>• Why...?</li> <li>• How ...?</li> <li>• Explain ...</li> <li>• Phrase or short sentence answers</li> </ul>
Intermediate Fluency	The student <ul style="list-style-type: none"> <li>• Has excellent comprehension</li> <li>• Makes few grammatical errors</li> </ul>	3-5 years	<ul style="list-style-type: none"> <li>• What would happen if...?</li> <li>• Why do you think ...?</li> </ul>
Advance Fluency	The student has near native level of speech.	5-7 years	<ul style="list-style-type: none"> <li>• Decide if ...</li> <li>• Retell ...</li> </ul>

*Note.* (Krashen & Terrell, 1983).

*Figure 3.* Five stages of second language acquisition.

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The second language development stage, early production, occurs from six months to one year. At this stage, teachers can expect students to have limited comprehension, one-two word utterances, respond with keywords or phrases, and present tense verbs (Krashen & Terrell, 1983). At this stage, teachers can support students at their zone of proximal development by utilizing yes/ no questions, either/ or questions, questions that require one to word answers, and lists and labels.

The third stage of language acquisition, the speech emergence stage, occurs in one to three years of a student's exposure to English instruction. At this stage, teachers can expect students to have stronger comprehension, produce simple sentences, make grammatical and pronunciation mistakes, and misunderstand jokes. Teachers should use more complex prompts to assist students in answering questions that start with "why, how, and explain." Teachers can also prompt students to answer questions with phrases or short sentences (Krashen & Terrell, 1983).

The fourth stage of language acquisition is the intermediate fluency stage. At approximately three to five years of English instruction, a student can reach this level of English fluency. Students at this stage have excellent comprehension and few grammatical errors. As a result, teachers' prompts can advance students' responses by exploring more critical thinking responses. Teachers can use questions such as, "what do you think would happen if" and "why do you think" (Krashen & Terrell, 1983).

The final stage of language development is identified as the advanced fluency stage. Approximately after three-seven years of English language instruction, students will have similar speech production as native English speakers. At this level, teachers are able to use a more complex prompt such as "decide if" and "retell," which requires students to use the higher cognitive output (Krashen & Terrell, 1983).



## **Improving Instructional Practices for ELLs**

Several instructional practices are optimal for ELLs. These include scaffolding, sheltered teaching, and translanguaging. Educators can support a student's zone of proximal growth by "scaffolding" language development or providing the assistance students need as they progress (Vygotsky, 1978). According to Krashen and Terrell (1983), a speaker can progress to the next phase of acquisition when the target language, the input, contains some of the constructs that are part of the next stage of acquisition. The speaker is encouraged to use language that represents that stage. One essential instructional practice includes setting objectives. Setting objectives is particularly relevant for ELLs to minimize the incoming stimuli that students encounter as they attempt to learn a new language and acquire content knowledge (Hill & Flynn, 2006). In addition, Hill and Flynn (2006) suggest that by providing the students with the learning objectives, teachers alleviate students' anxiety and focus on what they need to learn.

Sheltered teaching, known as SDAIE in California, is the preferred method of providing material awareness in a way that fosters both conceptual understanding and academic English proficiency (Hill & Flynn, 2006). Academic material is taught to ELLs in English using sheltered teaching methods such as speaking slowly, using visual aids and manipulatives, and avoiding idioms. According to Hill and Flynn (2006), some other instructional resources that practitioners can include in their instruction are the use of body movement and pantomime, facial expressions and emotions, direct speech and articulation, short, concise sentences, eye contact with students, high-frequency vocabulary, explanation by synonyms, and provide a preview to the content introduction. These strategies would allow ELLs to access the content and promote engagement. According to studies, high levels of student participation are "a robust indicator of student achievement and behavior in school" (Klem & Connell, 2004, p. 262).

Translanguaging is a relatively new addition to the instructional practices for ELL and includes using the first language to support second language learning although persons learning languages have used the process of translanguaging in learning new languages. Translanguaging promotes language flexibly across everyday contexts; therefore, providing bilingual students the opportunity to utilize both languages in support of their learning (Garcia, 2009). Teachers can transform English-only classrooms into translingual classrooms by providing students opportunities to utilize all languages in their repertoire (Martinez et al., 2019). In content areas of math and science, using the first language to address second language learning is critical.

### **Policies and Funding**

Policies and funding are essential drivers in the advancement of ELLs educational possibilities; critical policies and funding have moved the needle for ELLs. The Elementary and Secondary Education Act (United States, 1965) shaped the educational opportunities for all learners, including ELLs. This legislation put education at the center of the nation's battle against poverty and was a significant turning point in the fight for equitable access to high-quality education (Jeffrey, 1978). The Elementary and Secondary Education Act (ESEA) is a comprehensive law that finances primary and secondary education while stressing high expectations and transparency. Title III of ESEA protected ELLs and was reauthorized in 2015 under the “Every Student Succeeds Act” (ESSA), which took the place of ESEA.

Soon after the original ESEA, the Bilingual Education Act (BEA) was signed in 1968 and assumed that the federal government had a part to play in the inclusive education of immigrant and English learner students, who had previously been largely invisible to most of the population (Gandara, 2015). The BEA's original wording was meant to draw on these students' strengths.

Nonetheless, the BEA's language restricted its effectiveness and caused confusion amongst practitioners.

In 1974, legislation entitled the Equal Education Opportunities Act required states to ensure equal participation and included language barriers for ELL students as a part of this legislation. Many years later, the No Child Left Behind Act (NCLB) of 2001 reauthorized the ESEA and mandated that schools make annual progress toward achieving student achievement goals for all students and separate groups based on race, ethnicity, poverty, disability, and limited English proficiency. In addition, the Office for Civil Rights (OCR) has been a vocal advocate for ELL students' rights to access adequate services. It first entered the fray by interpreting Title VI of the Civil Rights Act of 1964's national origin clause to ban discrimination based on language. (Gandara, 2015) This position is still valid in today's educational settings. Schools received funding to provide resources, professional development, and support for teachers to teach ELLs with the policies successfully. While funding is poured into schools to allow educators to improve students academically, educators continue to struggle with the many mandates presented to them. According to Rigby and Tredway (2015), principals find it almost difficult to dig deep with their staff and successfully contextualize district attempts at the coherence of their schools due to the changing nature of priorities. Next, I share research about equitable academic discourse that supports ELLs' grasp of key concepts and participation in classroom discussions.

### **Equitable Academic Discourse**

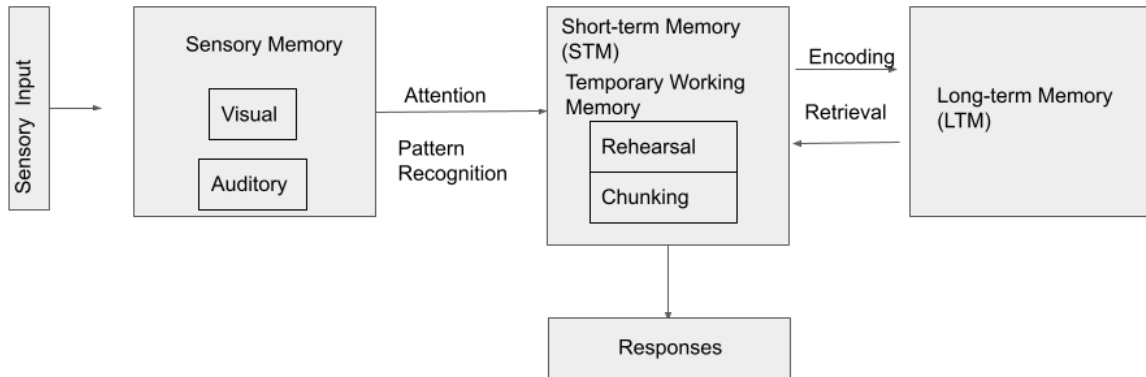
Equitable academic discourse and how it supports students' engagement in the classroom is fundamental for ensuring classroom access and rigor for ELL students. For more than four decades, school-based educational research has centered on how children make sense of what their peers and teachers mean in the classroom (Mercer & Hodgkinson, 2008). Individualistic,

cognitive theories of learning gave way to more social, culturally situated conceptions of learning at that time and redefined its meaning (Mercer & Hodgkinson 2008). According to Zwiers and Crawford (2011), conversations are encounters between people attempting to learn from one another and create new meanings. Equitable academic discourse can occur while partners alternate speaking, listening, and reacting to one another's remarks. Academic conversations are long-term, focused discussions on school-related issues. As a result, practitioners must have a strong understanding of strategies that provide students with multiple chances to enhance their communication skills. In this section of the literature review, I discuss learning theory, talk moves (teacher engagement strategies and communication), protocols that support ELLs in developing academic discourse, and culturally and linguistically responsive pedagogy.

### **Learning Theory**

Information processing and constructivism are two key learning theories that support academic discourse. Information processing is a theory of how information is transformed and stored into short-term and long-term memory. Shiffrin and Atkinson (1969) proposed a multistore, multistage theory of memory that is the foundation for most information processing models (see Figure 4). By providing students with opportunities to have academic discourse, they have the necessary support for building, growing, and refining their mental models and schemata (Driscoll, 1994). In Figure 4, Shiffrin and Atkinson (1969) demonstrate how information is processed from sensory input into sensory memory, short-term memory (STM), and long-term memory (LTM).

According to the model, sensory input can be visual and auditory. It gets stored in short-



*Note.* (Shiffrin & Atkinson,1969).

*Figure 4.* The flow of information as generally conceptualized in information processing theory.

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term memory or temporary working memory. Rehearsal and chunking of the information allow the incoming information sufficient time to be encoded into long-term memory. As a result, the new information, now stored in long-term memory, can be retrieved for responses.

Understanding information processing supports the importance of academic discourse procedures in the classroom, including different types of sensory input and opportunities for students to rehearse and chunk information in working memory so that learning occurs.

An adjunct to information processing is constructivism, a learning theory that provides opportunities for student inquiry and discovery (Driscoll, 1994). When students are encouraged to explore and discover various methods to support the concepts, Bruner claimed that this discovery process contributes significantly to intellectual growth and that only through the practice of problem-solving can students learn (Driscoll, 1994). The discovery process allows students to utilize the sensory input and activate their mental model/ schema to make sense of the teacher's question. The second element of constructivism is social interaction. As peer collaboration takes place, giving students time to either go through the process of accretion, restructuring or tuning their schemata, the students use language. The act of paraphrasing, termed intersubjectivity by Vygotsky (1978) encourages students to paraphrase learning in dyads or small groups. As they paraphrase, they are rehearsing and encoding. The students are co-constructing meaning.

When the educator is aware of learning theory, the teacher uses selective attention to notice the students who may need support in advancing their mental models. As the students verbalize understandings, educators can build on established information and address students' preconceptions, particularly when the teacher can see that the preconception of misconception is interfering with learning. Preconceptions are particularly detrimental to students' mathematics

comprehension (Donovan & Bransford, 2005). Additionally, teachers who are aware of learning theory support Piaget's theory that learning is an active rather than passive process. Students can retrieve information from their schema and working memory and encode it into their long-term memory by actively applying the concepts in the lessons. Tracking the growth of learners' conceptual models during the transition from beginner to expert can help educators decide the teachers' next steps in instruction (Driscoll, 1994).

As ELLs progress through stages of language development, the teacher's understanding of learning theory as the basis of instruction is vital. The importance of language production at any stage of development depends on multiple opportunities for student dialogue so that the teacher is consistently diagnosing and then adjusting practices to support the zone of proximal development. Next, I discuss specific talk moves that are a critical part of supporting student learning.

### **Talk Moves**

Teachers are vital to all students' success, especially ELLs because they control the discourse patterns in the classroom. Thus, how teachers utilize engagement strategies is as important as the content knowledge teachers include in their lessons. Talk moves are the choices teachers use to enhance students' opportunities to engage in and promote academic discourse. Cobb et al. (1993) claimed that, for a classroom to follow a set of social standards, the instructor must allow students to share their thoughts and teach students how and why they should share their thoughts. Language errors would eventually occur throughout the process of learning a second language, and the best way to address them as a teacher is to model accurate structures by unequivocally restating what students believe (Hill & Flynn, 2006). In addition, overtly correcting grammar and vocabulary may affect students' self-efficacy and cause anxiety, which

stifles natural language acquisition. Therefore, teachers use talk moves that model and reinforce, not correct. I discuss the importance of language objectives as a strong structure for setting up equity for students.

In addition, Hill and Flynn (2006) express that teachers teaching ELLs use clear language objectives and opportunities to practice and receive feedback. According to Wheeler (2021), each pupil should feel attached to the educational process in a high-quality early education setting, and the closeness in the classroom represents a family atmosphere. In addition, Wheeler (2021) suggests that the teacher talks with a clear and steady voice to ensure that the students comprehend. Furthermore, the instructor aids comprehension by using movements, graphics, and realia, supporting the universal design principles for ELL learners (Allen et al., 2018; Ralabate & Nelson, 2017; Rao & Torres, 2011). Teacher engagement strategies for academic discourse include teacher to student, student to student dyads, and collaborative group conversations. The effective use of think pair share or TPS (Lyman, 2004; Lyman et al., 2023), including sufficient think time, supports ELL learners in conversation so the students have processing time, and that the teacher can monitor by listening to dyads.

Hill and Flynn (2006) emphasize that ELLs must have specific vocabulary and material goals; learners of the English language must learn not only the substance of a subject but the language of that subject. Students' cognitive and metacognitive levels of school group discussions are strongly associated with students' cognitive and metacognitive results (Meloth & Deering, 1999; Veenman et al., 2005; Webb & Farivar, 1999), Six specific talk moves that promote productive academic conversation. These strategies include revoicing/ clarifying, restating, adding on, wait time, applying reasoning, and revising.



Revoicing is an instructional step in which the instructor repeats, reports, translates, rephrases, or expands a student's previous utterance (O'Connor & Michaels, 2007). However, this is not simple repetition; revoicing means restating in a way that prompts further student talk. They suggest that when a teacher revoices a student's contribution, the teacher temporarily equalizes the relationship between the teacher and the student by encouraging the student to approve or disagree with the teacher's reformulation of his or her contribution. Rather than a one-way transmission of the teacher's authoritative information, the revoicing step involves a joint attempt at constructing and explaining a dynamic idea (O'Connor & Michaels, 2007).

Wait or think time is a key factor for teachers to consider while teaching. Rowe (1986) asserts that when teachers ask pupils questions, they usually wait a fraction of a second for a response. Furthermore, teachers react or answer with another question in less than a second after a pupil stops speaking. This amount of time is insufficient for students to think and process information. Educators are encouraged to extend students' think time by utilizing "wait time 1" (pause after asking a question) and "wait time 2". According to Rowe (1986), when teachers raise the average duration of pauses following a question (wait time 1) and after a student response (wait time 2) to 3 seconds or more, students' use of language and reasoning, as well as student and teacher attitudes and expectations, improve significantly. Think-pair-share is a multimodal teaching strategy (Lyman, 1978; Lyman et al., 2023). In this strategy, the teacher elicits four steps as students listen, think, pair, and share. These steps concretely remind teachers of the importance of think time and how it can be used in the classroom.

Similarly, teachers can ask students to restate another student's answer and then add to that statement. This strategy is similar to revoicing but allows other students to listen to each other and explain what they heard. When utilizing this talk move, teachers can encourage

students to participate in the activity by restating material from the passage or repeating what the other has said. The restate and add talk move requires dialogic conversations among students. This can occur in collaborative group work where students have opportunities to build on the previous comments. One of the most common classroom systems for providing students with these opportunities is collaborative group work.

According to previous studies, teachers can influence student reasoning in the classroom by challenging students (Boaler, 1997; Cazden, 2001; Graesser & Person, 1994; Nystrand & Gamoran, 1991) to provide justifications for their work (Boaler, 1997; Lampert, 1990), and providing opportunities for argumentation (Boaler, 1997; Lampert, 1990). Furthermore, studies show that teacher activities like probing the specifics of students' explanations and encouraging students to see if they understood, agreed with each other's ideas, and described them are beneficial to students' learning (Resnick et al., 2015).

Revising is another discussion strategy that instructors may use to help students have rich, meaningful dialogues in class. Students can use the knowledge they've acquired to modify their ideas through revising. It aids pupils in reflecting on and reviewing their knowledge. Teachers might urge pupils to listen to others' views and opinions in order to revise their own (Resnick et al., 2015).

Students' ability to establish accurate and complete explanations of problem-solving methods was related to using talk moves that supported their thinking and dialogue (Resnick et al., 2015). In discussing the role of culturally linguistically responsive pedagogy (CLRP), I detail how this supports student thinking through learning theory and students' progress with their English proficiency and self-efficacy (self-esteem).

## **Culturally and Linguistically Responsive Pedagogy**

Culturally and linguistically responsive pedagogy (CLRP) is the conscious awareness of students' cultural background beyond the surface level and intentionally infusing it into the classroom environment and daily lessons. Teaching that is culturally relevant or culturally responsive uses students' cultural backgrounds and expertise as assets in the classroom (Gay, 2010). Culturally responsive teaching has been recommended to improve student achievements, particularly for students of color, but more evidence is needed. According to Hammond (2015), to know how to use culturally sensitive resources and techniques, teachers require proper context awareness and accessible content. Learning about the facets of society and the broader social, political, and economic environments that lead to inequitable educational outcomes is the first step in developing context-awareness. Hammond (2015) explains that there are varying levels of cultural awareness: surface, shallow, and deep. Surface culture limits one's knowledge of students to concrete elements of culture such as food, clothes, music, and holidays. Shallow culture includes norms and expectations for social interactions. On the other hand, deep culture involves unconscious expectations and implicit understanding that guides how people conduct themselves, beliefs systems, and cooperate with others. For educators to go beyond surface-level culture requires intentionality and desire to learn about students, which provides a safe and joyful learning environment for students.

While culturally and linguistically responsive pedagogy (CLRP) has been in educational journals and transferring to teaching practices for several decades; it has been met with resistance due to the lack of support and leadership from administrators and teachers. Neri et al. (2019) suggest that teachers must sort through a plethora of sometimes contradictory and short-lived interventions, prioritizing those that strengthen teaching and learning and resisting those that do

not. In addition, a dynamic framework of values, information, and know-how determines how and why teachers decide to accept or oppose a proposed change.

Byrd (2016), in an empirical study of 315 multi-racial middle and high school students, provides suggestions for teachers to become more culturally and linguistically responsive. Byrd (2016) noted that teachers frequently express a wish to "not notice color" and are wary of mentioning race for fear of appearing racist or stereotyping kids. Byrd (2016) suggests that teachers should prevent stereotyping by learning about the distinctions between and within cultures and getting to know their pupils on a personal basis. Furthermore, Byrd (2016) emphasizes that for many students of color, their race is a crucial element of their identity, and ignoring it means missing out on a possible point of connection. Teachers may improve relationships with students and help them to recognize the value of education by addressing the whole person. Essentially, Byrd (2016) is advocating for teachers to get to know their students on a more profound and personal level.

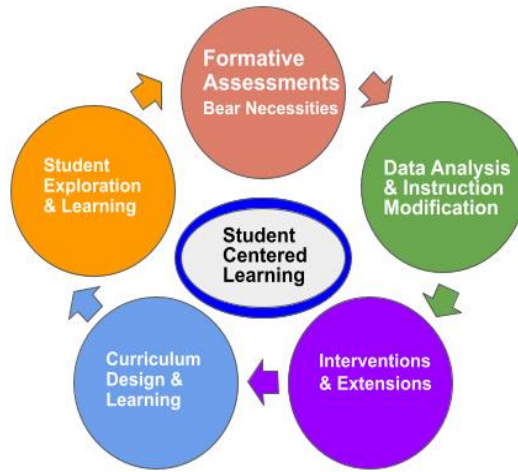
Cultural and linguistically responsive pedagogy (CLRP) can support teachers in being more responsive to ELLs. When educators are aware of students' cultural backgrounds, then deeper and personal connections can be made with students. For this to happen at schools, school administrators must provide support. In the next section, I share research around the professional learning community and promising work that supports the advancement of ELLs academic and social-emotional learning outcomes.

### **Professional Learning Communities**

Professional learning communities (PLC) are a form of teacher collaboration. A PLC is a tool of social inquiry aimed at closing the research-practice gap and increasing the likelihood of evidence-based and team-based learning practices in schools (Berwick, 2008; Langley et al.,

2009). Over the last decade, PLCs have achieved broad acceptance among educators, and PK–12 school leaders are steadily looking to implement and maintain PLC-based operational improvement programs. According to DuFour (2004), a professional learning community emphasizes collaboration among teachers at a school site, learning rather than teaching, and holding participants accountable for results.

PLCs are envisioned as interactive, networked societies where teachers use systemic collective inquiry to transform what they've experienced (Curry, 2008; Little, 2005; McLaughlin & Talbert, 2006; Newmann, 1996; Whitford & Wood, 2010). In a continual cycle of improvement, PLCs provide mechanisms for adult learning that are embedded into the workday and allow and require teachers to collectively evaluate and find solutions to practice challenges based on facts about student achievement (Woodland, 2016). PLCs are said to positively impact school culture, teacher self-efficacy, teacher isolation, organizational ability, and the development of a collaborative culture of high-quality instructional practice (Caprara et al., 2006; Talbert, 2010). According to Woodland (2016), even though PLCs are a widely accepted school improvement technique, they are often adopted locally in the absence of evidence-based research on their value and effectiveness. Simultaneously, there is a scarcity of conceptually based, methodological interventions, investigation procedures, and tried and true strategies for collecting and evaluating information regarding the mechanism of cooperation within PLCs. For PLCs to be successful, effective teacher team movement through a sequence of stages is required for instructional progress, including understanding the fact, owning the issue, identifying a response, initiating actions, and tracking the outcomes of such actions (Garmston & Wellman, 2013). In Figure 5, the PLC inquiry cycle is at the heart of PLCs and student-centered learning. At the same time, the areas that educators must engage in an inquiry process include



*Note.* (DuFour, 2004).

*Figure 5.* PLC inquiry cycle.

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formative assessment, data analysis, and instruction modification, interventions and extensions, curriculum design and learning, and student exploration and learning. PLCs must engage in using cycles of inquiry in which they collect evidence. To organize a PLC, the improvement science principles can guide the work. But any PLC that “works” is first and foremost grounded in relational trust.

### **Relational Trust**

Relational trust is fundamental to school improvement (Bryk & Schneider, 2002; Bryk et al., 2010; Ogden, 2013; Tschannen-Moran & Gareis, 2014). According to Grubb (2009), trust is an abstract resource in school reform that must be co-created by the school's organizational players. As a result, I believe that we should investigate the nature of trustworthy relationships in PLC, as they are critical to classroom practice adjustments.

Next, I discuss qualities of relational trust that would support the PAR. According to Lieberman and Miller (2008), “professional learning communities are collegial cultures where teachers develop the capacity to engage in an honest talk” (p. 18). In order for this honest talk to take place, teachers need to have time, systems, and structures that allow them to take risks and show vulnerability. Establishing norms to steer talks and elicit warm and cool responses encourages open communication. This would generate collegial relationships rather than congenial relationships (Datnow, 2011; Hargreaves, 1994; Lieberman & Miller, 2008). When trust is established, then the members of the PLC can develop capacity for supporting each other in working with all students; however, trust is necessary but insufficient for change. Rather, teachers must engage in meaningful work together. In an empirical study of 23 teachers and administrators in a PLC structure (termed an LLC), Wood (2010) found that “deep communication, inquiry, and critique intended by the LLC initiative seemed inseparable from the

quality of relationships in the professional culture” (p. 53). However, instead of devoting the necessary time to critical inquiry, the groups devoted more time to community-building efforts; without a clear connection between their work and student learning, the LLC over time did not shift teacher practice. Thus, we need stronger structures and guidelines about the inquiry process and the evidence if PLCs are to be a cornerstone of change. The improvement science processes provided that structure.

### **Improvement Science Principles**

Improvement science suggests that we use PLCs called networked improvement communities (NIC), the six principles of implementation, and the PDSA (Plan-Do-Study-Act) cycle of inquiry process. From studying this research, I explained which community of practice format lends itself to supporting ELLs in their academic growth and self-efficacy. Furthermore, I provided information from research that supports students’ self-efficacy.

Bryk et al. (2015) suggest that an effective method of reform includes distributed leadership and the following six improvement science principles. Studying Bryk et al. 's (2015) six improvement science principles can provide principals with a pathway to improving instructional practices at their respective school sites. Six Improvement Science Principles guide two mechanisms of the community of practice that are identified. For PLCs to successfully demonstrate growth and improvement, Co-Practitioner Researchers (CPR) must align their work to Six Improvement Science Principles

Faculty and staff in the twenty-first-century educational context must possess a highly specialized set of collaboration abilities. The single most critical aspect in sustaining practical school improvements may be moving toward a climate of meaningful interaction (DuFour & Eaker, 1998). DuFour (2007) cautions that in the United States, school reform initiatives have



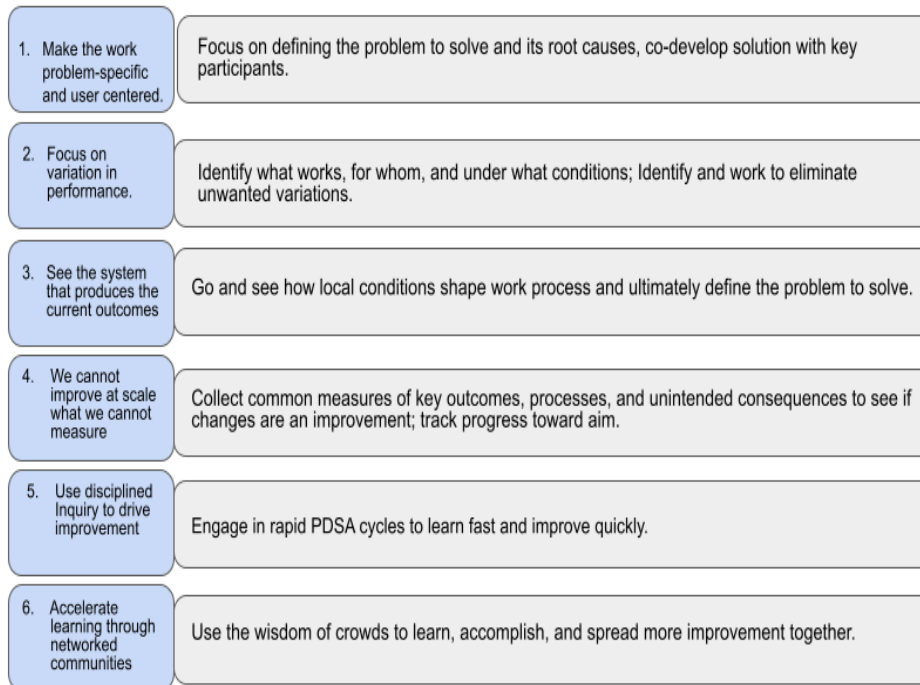
followed a typical pattern. He claims that an improvement project is begun with zeal, only to be met with misunderstanding, criticism, and complaints. Many instructors subsequently quit the program in search of a quick cure that will result in significant cultural shifts that are free of fear and anxieties (DuFour 2007). In this PAR, I used the Six Improvement Science Principles (see Figure 6) for PLCs to avoid the pitfalls identified by DuFour (2007).

### **Improvement Science Process: PDSA**

The initial step in PDSA is creating a plan. During the Plan phase, the improvement team identifies the change or intervention to be implemented, develops and records predictions about what will occur, plans a means to test these predictions, and determines relevant learning metrics for that cycle (LeMahieu et al., 2017). They assert the actual recording of predictions is crucial in this situation because it encourages team members to reveal their assumptions and compare actual results to projected ones. It tackles the risk of attribution bias in the subsequent interpretation of data and provides the possibility of disconfirmation, critical to this type of disciplined investigation.

The second step in PDSA is do. According to LeMahieu et al. (2017), the team executes the change in the Do phase, gathers data on the critical indicators defined in the Plan phase, and records observations. To determine if the modification represents an improvement in the following stages, it is crucial to follow through on the data gathering strategy. This step is vital as team members must take responsibility for actualizing the plan that the PLC discussed.

The third step in PDSA is study. After initially enacting the plan, a team needs to convene to review the findings. In the study phase of PDSA, LeMahieu et al. (2017) contend that the data are examined. Predictions are contrasted to what really happened, and hypotheses are amended



*Note.* (Bryk et al., 2015).

*Figure 6.* Six improvement science principles.

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as needed for future consideration during the study phase. By reflecting on the data, a team can inform themselves of their next steps.

The fourth step in PDSA is to act in a larger setting based on evidence and analysis of the other steps – Plan, Do, Study. LeMahieu et al. (2017) assert that in the final phase, a team determines what to do next based on what they have learned throughout the cycle; alteration can be abandoned, changed and retested, or adopted for extended testing, or PLC can replay the PDSA cycle to collect more data if the results are equivocal.

PDSA is iterative, and new cycles are conducted depending on the knowledge gained in earlier cycles. This is what makes PDSA a powerful tool for PAR. It will support the PLCs and guide them in using a process that requires strong collaboration, reflection, data collection, and analysis. All components of PDSA are essential to improvement science. Next, I will review research regarding the improvement science principles.

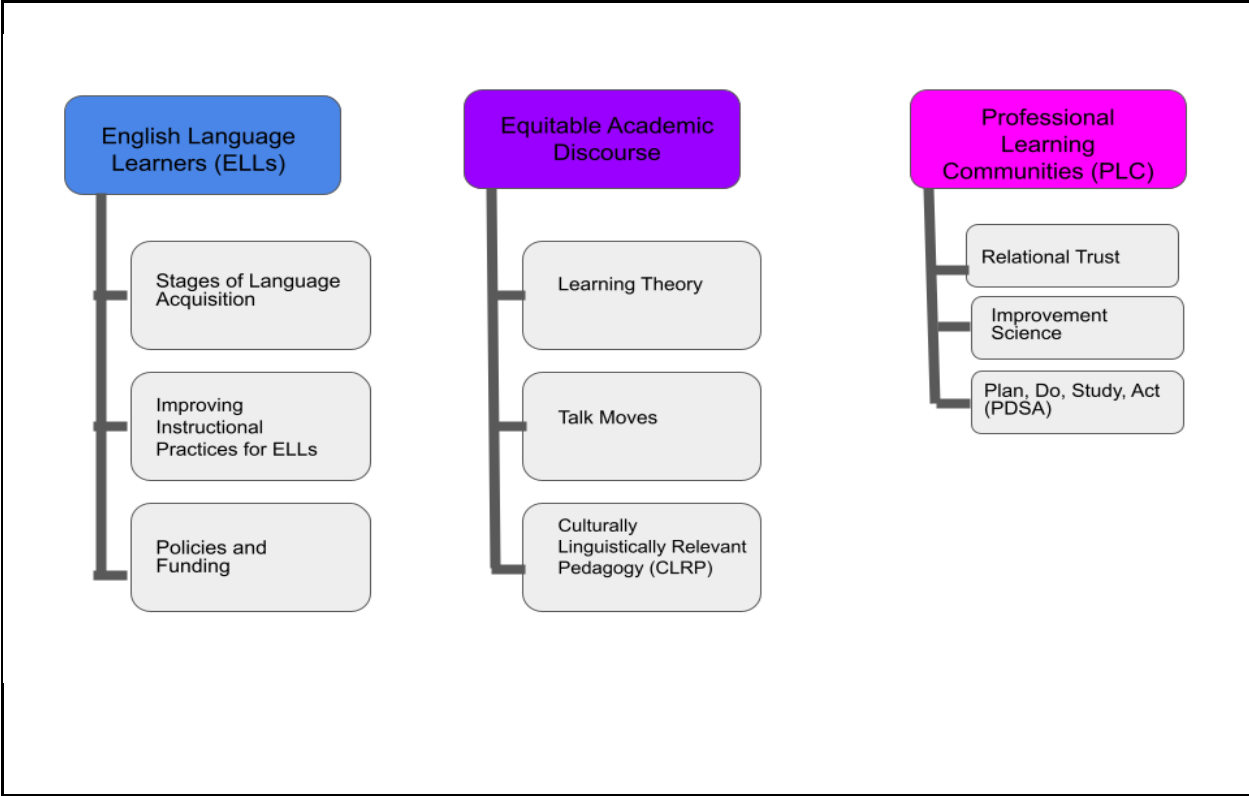
## **Summary**

The PAR seeks to understand the strategies that will strengthen teachers' relational trust so that they can provide students' academic and social-emotional success. Furthermore, this participation action research will use past research regarding ELLs, Equitable Academic Discourse, and the professional learning community (PLC). To make progress on this goal, educators must understand the history of ELLs, the stages of second language acquisition, and the policies and funding that affects schools and programs. In addition, PLCs must equip educators with the knowledge of pedagogy and instructional strategies that have been found successful for ELLs. Through the process, educators must utilize improvement science principles while adhering to the PDSA cycle within the PLC.

## Conclusion

In this chapter, I have shared literature that influences the project's main research question: *How do teachers collaborate as thought partners to support equitable access and rigor for English Language Learners?*

In the first portion of the chapter, I addressed studies on ELLs as well as teaching and learning attributes that benefit English Learners. I discussed language acquisition, instructional techniques for English learners, and policies and funding. I examined academic conversation research and its consequences. Finally, I described PLC and the improvement science process that have been demonstrated to help teachers improve their practices. In the PAR study, I am looking for ways to improve teachers' collaboration so they can better serve children's academic and social-emotional needs. The literature review that is discussed in this chapter supported me as I collaborated with the participants (see Figure 7).



*Figure 7.* Summary of literature review topics and sub-topics.

### CHAPTER 3: RESEARCH DESIGN

In the participatory action research study (PAR), I examined how teachers collaborate as thought partners to support equitable access and rigor for English Language Learners (ELLs). The PAR theory of action (TOA) is: *If teachers developed strong relational trust, they could collaborate on choosing and implementing equitable and culturally responsive academic discourse for ELLs.* This theory of action is based on substantial research that suggests that relational trust is fundamental to school improvement (Bryk & Schneider, 2002; Bryk et al., 2010; Grubb, 2009; Ogden, 2013; Tschannen-Moran & Gareis, 2014) and that teachers need to be clear and intentional about culturally responsive pedagogical practices for ELLs.

The setting for the research was a public elementary school in San Francisco, California, with approximately 400 students of different language backgrounds; the majority are students whose first language is Cantonese, Spanish, or Vietnamese. In this project and study, I invited third and fourth-grade teachers to participate; we concentrated our classroom efforts on improving their capacities to be thought partners with each other in utilizing practices that support ELLs in equitable mathematics discourse. The study took place over 18 months (Spring 2022-Spring 2023); teachers in a professional learning community enhanced their knowledge of each other, developed strong connections to authentically collaborate, developed tools for instructional improvement, and engaged in three iterative cycles of inquiry to improve their teaching practices to support ELL students.

To discuss the qualitative research study and describe the action research cycles, I detail the participants, the data collection, and data analysis. Then, I examine the study considerations: potential limitations, validity, and confidentiality and ethics. To explore the subject of this study, I applied PAR guided by activist research methods (Herr & Anderson, 2014; hunter et al., 2013).

## **Qualitative Research Process**

In this study, I used qualitative research, “the process of data collection [that] involves a dynamic relationship between the researcher, the participants, and the context under investigation” (Gerdes & Conn, 2001, p. 186). According to Creswell and Creswell (2018), qualitative research can be transformative because the research process can alter the issues addressed, inform data gathering and analysis, and generate a call to action or change. In this section, I discuss how PAR, including activist PAR, community learning exchanges, and the improvement science supported the project and study. Then, I present the research questions and the research cycles of inquiry.

### **Participatory Action Research (PAR)**

In this study, the PAR process supported teachers as they developed their collective knowledge and skills in support of ELLs with increasing equitable academic discourse in math classrooms. PAR is a type of qualitative research that relies on how teachers act and then iteratively analyze how they are functioning as professionals and how they are supporting change efforts. “While action research shares some similarities with qualitative research..., it is different in that research participants themselves are in control of the research...” (Herr & Anderson, 2014, p. 1). In this case, the PAR is driven by structures that expedite efforts in a professional learning community (PLC), which operated as a networked improvement community and was grounded by a set of cultural norms and identity markers that are congruent with the PAR’s aim (Russell, 2016). Thus, I used the tenets of action and activist research as well as community learning exchange processes and the improvement science approach as methodological approaches to the study.

### *Participatory Action and Activist Research*

The PAR approach used in this study included my participation as the lead researcher and the facilitator for a group of teachers in the PLC, who acted in roles of Co-Practitioner Researchers (CPR), a group of teachers who systematically used evidence to support their actions and provide input to the lead researcher. Thus, “[a]ction research is oriented to some action or cycle of actions that...community members...wish to take to address a particularly problematic situation. The idea is that changes occur within the setting or within the participants and researchers themselves” (Herr & Anderson, 2014, p. 4). In this case, as the participants built a stronger PLC, they designed and implemented changes for classroom experiences for ELLs. In action research, the participants generate knowledge about their specific context that can be “fed back into the setting” (Herr & Anderson, 2014, p. 6). As such, some consider action research's objective as enhancing practice or developing individuals, and others see it as changing practice, participants, organizations, or even society—the second function is an activist form of action research (Hale, 2008; Hale, 2017). In addition, an activist form of action research required us to engage in the research using an equity lens (hunter et al., 2013). The research was developed with the goal of engaging teachers to develop and implement equitable learning strategies.

The activist PAR focused on how teachers cultivate and rely on collaborative relationships so that they can support each other to fully address ELLs who have historically been underserved. In this research study, as Hale (2001) notes, activist research:

helps us better to understand the root causes of inequality, oppression, violence, and related conditions of human suffering; is carried out, at each phase from conception through dissemination, in direct cooperation with an organized collective of people who themselves are subject to these conditions; it is used, together with the people in



the question, to formulate strategies for transforming these conditions and to achieve the power necessary to make these strategies effective. (p. 14)

I worked with a group of teachers who are closest to the issues that ELL students face learning language and then applied the teacher learning to math instruction. Thus, I worked with PLC members who were willing thought partners, critically challenged each other, and extended each other's professional growth. The ELL students are currently subject to conditions that we must change if we are to address persistent issues of inequality; we must formulate responses in the form of ELL strategies to be more effective teachers of ELL students.

In addition, the principles and protocols of community learning exchanges (CLE) and improvement science supported the PLC participants as they engaged in action and activist research. We used data to enable recurring cycles of inquiry that address PAR research questions while putting the theory of action to the test.

### ***Community Learning Exchange***

The community learning exchange (CLE) process and protocols offer an appropriate method to support the research study. Guajardo et al. (2016) state that “[o]rganizers of the CLE believe that learning is a leadership act, and that leadership is at its best when it is in action” (p. 30). Within this PAR study, the PLC members used CLE processes to explore their relationships with each other and co-create ELL strategies. The artifacts from the PLC meetings in which we used the CLE protocols was one source of evidence. Our focus was fully understanding how we can overcome the isolation of people, teams, and organizations to build the capacity and willingness to explore a world outside of our everyday comfort zone (Guajardo et al., 2016). Hence, the CLE processes supported participants to be more vulnerable and, through that vulnerability, to develop professional relationships that support their ability to take risks in the

classroom to change their practices (Tschannen-Moran & Gaires, 2014). As we deepened the PLC processes, the PLC members “tuned” the FoP; co-generated assets and challenges connected to the FoP; and employed CLE protocols to completely involve participants. Because we were engaged in activist research and using CLE protocols, the role of praxis was fundamental to the PLC processes.

Freire (2010) stressed the importance of praxis as an act of deep reflection to decide about actions that further a social justice goal. He reminds us that activism is nothing if it is not accompanied by thought, and verbiage is nothing if it is not accompanied by action. We recognized that activist research involves people who “respond to place-based problems of collective learning and community capacity building” (hunter et al., 2013, p. 26). Thus, the power of iterative reflection, using evidence from our work together, informed our iterative next steps as we diagnosed and designed based on conversations, reflection, and evidence (Spillane, 2011). People can only have an impact on the world if they engage in dialogue in all these dimensions. In this study, the role of praxis was to ensure that activism was accompanied by both reflection and action. “By learning how to listen and take care of each other, the focus is on personally and collectively enacting the changes we want to see in the world on a day-to-day basis—even if such efforts are messy and imperfect” (hunter et al., 2013, p. 2). Fully incorporating Freire’s view of praxis is important to the community learning exchanges as well as the improvement science cycle of inquiry process—a crucial process that supports iterative evidence and reflection.

### ***Improvement Science***

According to Bryk et al. (2015), a successful reform strategy involves distributed leadership shared in a networked improvement community, along with the six improvement

science principles (see Figure 6), which were essential to the PLC members' growth. Thus, thoughtful understanding of the principles of these concepts offered PLC members a roadmap for enhancing instructional capacity at specific school locations and supported a professional learning community (PLC) to engage in the plan-do-study-act (PDSA) cycles of inquiry, reflect on their pedagogical practices, examine their culturally responsive teaching, and develop a robust collegial network. PDSA cycles are a useful process for making changes and keeping track of progress. The plan-do-study-act (PDSA) cycle is a mechanism for rapid loops of learning from experience in the PLC (Lewis, 2015). PDSA is accompanied by three primary questions that inform the change efforts:

1. What are we trying to accomplish?
2. How can we tell if a change would be beneficial?
3. What adjustments will we make that will improve things?

PLC members revisited these three primary questions throughout the three cycles of inquiry. The improvement science principles provided an anchor for the PLC members. We focused on a problem and its root causes of inequity. The PLC operated as a networked improvement community that can accelerate learning (Principle 6) and incrementally developed strategies to see what works and will adjust to the local context (Principles 2 and 3). These principles are pertinent to the members and were revisited frequently to remind the members of the necessary ingredients for the PAR and study. We actualized these principles through the lenses of community learning exchanges and action and activist research processes to address the research questions.

## **Research Questions**

The overarching question for this study sought to understand the following: *How do teachers collaborate as thought partners to support equitable access and rigor for English Language Learners?* The research sub-questions included:

1. To what extent do professional learning communities support teachers in developing collegiality and relational trust?
2. To what extent do teachers who participate in a professional learning community:
  - (a) collaborate to make informed pedagogical decisions about engaging ELL students in academic discourse in math?
  - (b) consistently implement strategies that support equitable access and rigor for ELL students in math classrooms?
3. How does my role as an instructional leader fully support teachers in building their capacity to engage ELL students?

PAR activities were designed to synchronize with the research questions. I utilized qualitative data collection, coding, and categorizing to respond to these research questions and, subsequently, present findings.

## **Action Research Cycles**

The time frame and tasks for each of the three improvement cycles are in Table 2. Throughout the study, I maintained the PLC with the same members. In each cycle, we applied the structure of a professional learning community (PLC) and PDSA cycles. Furthermore, the CLE processes (Guajardo et al., 2016; Militello et al., 2009) were central to the study. The PAR consisted of three action research cycles: Pre-Cycle, PAR Cycle One, and PAR Cycle Two. Each cycle included key activities designed to support the primary investigator with data collection.

Table 2

*Research Cycles and Key Activities*

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Research Cycle	Key Activities
PAR Pre-Cycle Spring 2022 Jan - Apr 2022	<ul style="list-style-type: none"> <li>● Form PLC</li> <li>● Use CLE protocols to nurture relationships among PLC members</li> <li>● Observe classrooms</li> <li>● Read literature on ELL</li> </ul>
PAR Cycle One Fall 2022 Aug - Dec 2022	<ul style="list-style-type: none"> <li>● Facilitate Community Learning Exchange</li> <li>● Facilitate PLC meetings</li> <li>● Observe classrooms</li> <li>● Write reflective memos</li> <li>● Conduct member checks on evidence: PAR Cycle One</li> </ul>
PAR Cycle Two Spring 2023 Jan-Apr 2023	<ul style="list-style-type: none"> <li>● Facilitate Community Learning Exchange</li> <li>● Facilitate PLC meetings</li> <li>● Write reflective memos</li> <li>● Conduct member checks on evidence: PAR Cycle Two</li> </ul>

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## **Participants, Data Collection, and Analysis**

I provide details on the participants, data collection, and data analysis. I explain the criteria for the selection of the participants and how I collected and analyzed data.

### **Participants**

Throughout the PAR project and study, I was the instructional leader of the school and the lead researcher. I invited classroom teachers from a public elementary school in San Francisco. Two types of participants were included in the study—the teachers who participated in the PLC and acted as Co-Practitioner Researchers (CPR) and other teachers in the school who participated in staff professional learning or CLEs. The teachers in the PLC were the participants engaged in PDSA cycles as we sought to understand how we can support ELLs to articulate their conceptual math understanding. All participants signed the adult consent form (see Appendix C).

### ***Sampling***

Due to the nature of the study, I used purposeful sampling to determine the PLC participants (Patton, 1990). I invited 3rd and 4th-grade teachers to participate in the PAR. I selected participants based on their previous interest in working with improving outcomes for ELLs and their interest in working in collaborative groups. I invited four teachers to the PLC and limited the total number of participants to 20; the other participants were members of the teaching staff at the elementary school. The participants signed the adult consent form.

To collect additional data, I used opportunistic sampling at staff meetings in which I invited those persons to participate in the study data. “Opportunistic or emergent sampling occurs when the researcher makes sampling decisions during the process of collecting data. As the observer gains more knowledge of a setting, he or she can make sampling decisions that take advantage of events, as they unfold” (Nakashain, 2008; <http://www.qualres.org/HomeOppo->

3815.html). At the staff meeting, I asked staff members to engage in the community learning exchange (CLE) protocols to solicit more information from a wider range of community members. Participants interacted in a CLE to authentically connect and hear each other's perspectives, concerns, and ideas, and prioritize objectives (Guajardo et al., 2016).

### ***Professional Learning Community***

The PLC members acted as a Co-Practitioner Researcher (CPR) group, which is a group that meets regularly and provides input to the project and study (Foulger, 2010). This group included the third and fourth-grade teachers who I invited to participate. For the past five years, I had worked with the intended participants in the same school setting. As classroom teachers, the members of the PLC were crucial in determining the best practices for ELLs, co-creating plans, utilizing the inquiry process, and determining a course of action that benefited ELL students (Bryk et al., 2015; hunter et al., 2013). As PLC members, they became Co-Practitioner Researchers because they discussed the evidence from the PDSA cycles, and I conducted member checks to ensure the validity of the data (Creswell & Creswell, 2018; Creswell & Guetterman, 2019). I informed the invited teachers that their participation is optional; they were able to discontinue participation at any time.

### ***Other Participants***

Other participants included staff members who engaged in the community learning exchanges when we had whole staff meetings. They provided the PLC members with additional information that allowed PLC members to think about possible next steps in the PDSA process. In addition, because professional learning opportunities for ELL instruction are limited in our district, the PLC members facilitated learning sessions for other teachers.

## **Data Collection Process and Tools**

According to Creswell and Creswell (2018), qualitative research entails three types of data collecting procedures: (a) qualitative observations, which entail the use of field notes to record activities at the study site in both organized and unstructured ways; (b) qualitative interviews, which entail semi-structured and typically open-ended questions to elicit viewpoints; and (c) documents, such as journal entries, emails, letters, and meeting minutes. I collected data from professional learning community meetings, staff meetings, classroom observations, and CLE artifacts. In addition, I kept field notes and wrote reflective memos that I used to triangulate the evidence from the meetings and observations.

In this qualitative study, the PLC members acted as Co-Practitioner Researchers (CPR) and examined my analysis of the evidence to help uncover shared trends across time (Creswell & Creswell, 2018). We employed a variety of qualitative data collection approaches in the PAR investigation. To reiterate, the primary data included these collection instruments: documents in the form of meeting notes and agendas, classroom observations, and community learning exchange (CLE) artifacts. In addition, I wrote reflective memos and field notes. In Table 3, I connect the sources of data to the research questions and identify the types of evidence I used to triangulate the data sources. Then I describe each data collection source.

### ***Documents***

I collected in meeting notes, agendas, and teacher lesson plans to check for alignment with PLC actions. In addition, I kept field notes and wrote reflective memos (Saldaña, 2016).

### ***CLE Artifacts***

I collected CLE artifacts from the PLC members in our meetings based on the research



Table 3

*Research Questions, Data Collection, And Triangulation*

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Overarching Question: *How do teachers collaborate as thought partners to support equitable access and rigor for English Language Learners (ELLs)?*

Research Question	Proposed Data Collection	Triangulated with
1. To what extent do professional learning communities support teachers in developing collegiality and relational trust?	<ul style="list-style-type: none"> <li>● Documents</li> <li>● CLE Artifacts</li> <li>● Observation Protocol</li> </ul>	<ul style="list-style-type: none"> <li>● Reflective Memos</li> <li>● Member Checks</li> </ul>
2. To what extent do teachers who participate in a professional learning community: <ul style="list-style-type: none"> <li>(a) collaborate to make informed pedagogical decisions about engaging ELL students in academic discourse in math?</li> <li>(b) consistently implement strategies that support equitable access and rigor for ELL students in math classrooms?</li> </ul>	<ul style="list-style-type: none"> <li>● Documents</li> <li>● CLE Artifacts</li> <li>● Observation Protocol</li> </ul>	<ul style="list-style-type: none"> <li>● Reflective Memos</li> <li>● Member Checks</li> </ul>
3. How does my role as an instructional leader fully support teachers in building their capacity to engage ELL students?	<ul style="list-style-type: none"> <li>● Reflective Memos</li> </ul>	<ul style="list-style-type: none"> <li>● Member Checks</li> </ul>

---

questions during community learning exchanges. Participants were given opportunities to dialogue and provide feedback to the members.

### ***Observations and Post-Observation Conversations (Appendix E)***

I used common observation tools (see Appendix E) to collect data in PAR Cycles One and Two to determine how PLC members are implementing ELL practices in classrooms. As members supported each other with the implementation of the plan and studied the results, PLC members improved their skill sets for supporting ELL with equitable academic discourse. In each case, because of the observational evidence, the PLC members (ELL classroom teachers) reflected and decided on the next actions. Secondly, I conducted post-observation conversations.

### ***Reflective Memos***

Kolb (1984) emphasized that reflective memos are more than just expressing thoughts or speculations. In general, reflective memos followed a cyclical pattern:

- Engage in an experience (Observe and participate)
- Reflection on the experience
- Conceptualize the Experience (within current knowledge base and perhaps changing knowledge)
- Act on the reflection

The reflective memo is similar to a journal entry, but the memo structure I used was involved more complex reflection, using the Kolb model. Freire (2010) discussed the need for praxis or reflection before action. Reflective memos assisted me in reflecting on the regular observations, connected them to literature, and considered what the researcher can do better.

### ***Member Checks***

As the primary researcher, I conducted member checks periodically to ensure that the

data analysis was accurate. Member checking, known as respondent validation or participant validation, is the process of returning a processed data to a participant (Birt et al., 2016). Member checking is a technique for validating, verifying, or assessing the reliability of qualitative data (Doyle, 2007; Creswell & Creswell, 2018; Creswell & Guetterman, 2019). For the purposes of this research, I used member checks for each PAR cycle to help triangulate the other data sources.

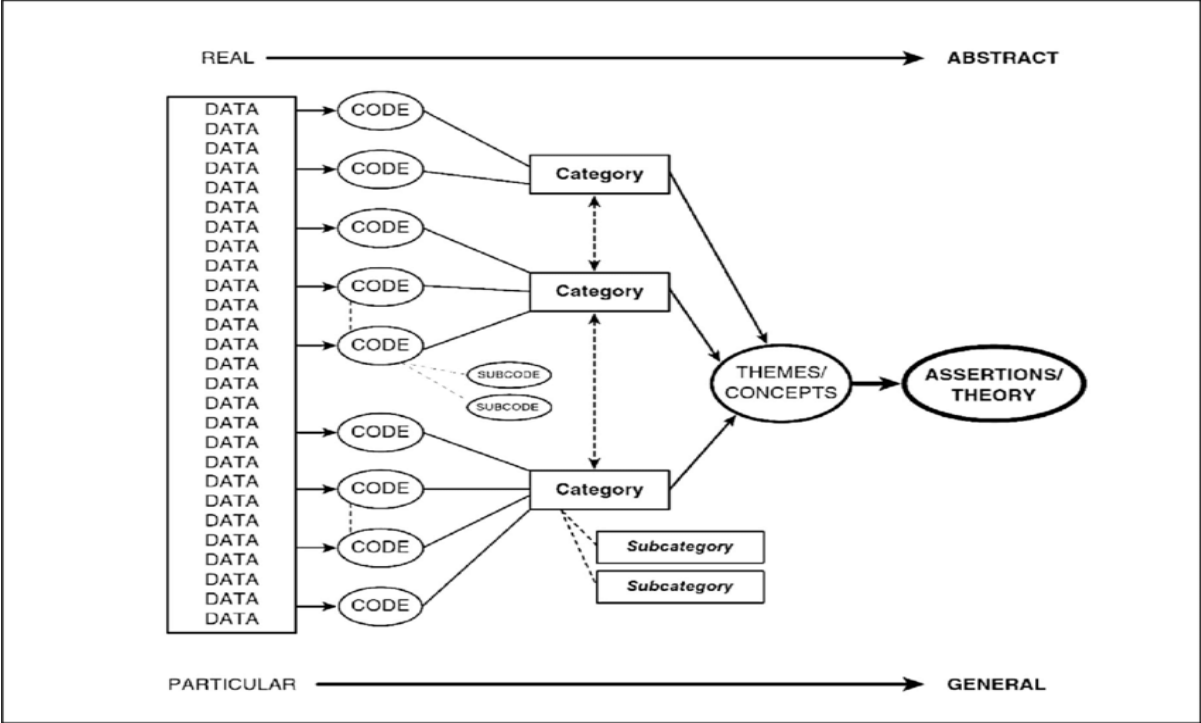
### **Data Analysis**

To conduct data analysis, I relied primarily on the qualitative processes described by Saldaña (2016). Data collection and analysis occurred iteratively throughout the study so that we had current evidence at each meeting to discuss and respond to the PDSA cycles of inquiry. First, I organized the data into data sets. Then I coded data using open coding and research-based codes that I determined from the research studies. Then I re-coded the data and developed a codebook in which I organized the codes into categories. In the Pre-Cycle, I determined the initial categories from the coded data and added to those categories as the study proceeded.

Then I analyzed the data; Figure 8 offers a streamlined codes-to-theory model for qualitative inquiry. In this model, data are coded, placed into categories and subsequent sets of data support the research to develop emergent themes. Based on PAR Cycle Two, I confirmed the themes and determined the study findings. Then I made assertions about the research questions.

### **Study Considerations: Limitations, Validity, and Confidentiality and Ethics**

As the PAR project's lead researcher, I invited PLC members who were willing to participate to join the PLC team. As a PLC team, we planned and facilitated the CLEs for other staff in PAR Cycles One and Two. Throughout the PAR cycles, I met with the PLC team, which



*Note.* (Saldaña, 2016, p. 14).

*Figure 8.* A streamlined codes-to-theory model for qualitative inquiry.

enabled many perspectives to be included in the implementation of inquiry and reflection cycles to effect change. However, there were certain limitations, validity concerns, and confidentiality and ethics requirements that I attended to as the lead researcher.

### **Limitations**

Throughout the study, I had a prominent position as a site administrator, which prompted me to take extra precautions to guarantee that all participants gave informed permission without the possibility of coercion or obligation. The participants were free to withdraw consent at any time without fear of retaliation. While I observed classrooms for the purpose of growth and development of the teachers, I was the supervisor for purposes of teacher evaluation. I took precautions to differentiate between the data collection tools we used for observation and the district process for evaluation.

Secondly, another limitation was the size of the study. As a qualitative study, a small group of teachers participated, and the results of the study are applicable to the school context but are not necessarily generalizable to other contexts. However, the processes we used in a PLC to systematically build relational trust and then implement ELL strategies in classrooms are useful in other contexts. Because of these limitations, I ensured the validity of the study by examining internal and external validity.

### **Internal Validity**

Reliability and validity as norms of methodological rigor are crucial in participatory action research. Establishing credibility, reliability, and confirmability are all indicators of trustworthiness (Lincoln & Guba, 1985). First, credibility is confirmed by multiple sources in which I used open coding and multiple sources of evidence to code. Because I coded data over three cycles of inquiry, I conducted multiple coding to ensure consistency and produce reliable

findings. Since the research took place over eighteen months and three inquiry cycles, I had multiple opportunities with participants to collect iterative qualitative data. As a result, I built internal validity for results over time. With this time span, we had more accurate or legitimate results (Creswell & Creswell, 2018). Finally, I triangulated the evidence by using reflective memos and member checks (Birt et al., 2016; Miles & Huberman, 1994).

Hale (2001) provided two examples of questions that had to be answered as we questioned the validity of the research: "Is it understandable to a certain group of individuals, and does it work for them?" (p. 14). Activist researchers contend that the major standard of validity for that type of action research is the usefulness of the study and the evidence to the participants (Hale, 2008). Participants said on multiple occasions how useful the PLC processes were to their improved practices. Continuous discourse about data analysis and making meaning, member checks, and the PLC field notes assured the integrity of data gathering and analysis (Creswell & Creswell, 2018).

### **External Validity**

According to Creswell and Creswell (2018), the value of qualitative research is determined by the distinctive description and themes created in the context of a certain place. The method may have transferability or external validity to other SFUSD schools, but there are no particular outcomes that could be used by the schools. The effort started as part of a single elementary school's study in the San Francisco Unified School District (SFUSD). The conclusions of the research may be applied to the work of SFUSD, but caution should be used when extending them to other schools or districts. The methodology of the study might be replicated in various schools or districts; however, the findings may only apply to the actual site of research.

## **Confidentiality and Ethical Considerations**

I made a formal request for the research to the school district's Research Department, and the district letter is appended (see Appendix C). To comply with the ethical rules regulating human research, I was approved by the ECU Institutional Review Board (see Appendix A) and completed the IRB Collaborative Institutional Training Initiative (IRB CITI) certification in December 2020 (see Appendix B).

Confidentiality and ethical considerations were considered for this research. The following entailed the precautions utilized to address concerns with confidentiality and ethics. I have a certificate from the CITI training for working with human subjects. To protect both the school and the participants in the study, pseudonyms are utilized. Participants signed consent forms that are provided by the Institutional Review Board at East Carolina University (ECU IRB). The participants were aware that their participation was completely voluntary, and they could decide to terminate participation at any time without reprisal (see Appendix D).

The study's participants were site-based practitioners interested in working with a collaborative group and dedicated to assisting ELLs in their academic development. According to Creswell and Creswell (2018), I took the actions to ensure confidentiality. I stored important and personal paperwork and data files in a locked file cabinet for three years and maintained password-protected database for all computerized data collection. I shared all data and copies of reports with the PLC group for the sake of disclosure, improvement, and reflection. To curb bias, I used artifacts from CLEs and member checks as a tool for triangulation.

## **Conclusion**

In this chapter, I described the PAR study's research design and methods to address the project's main research question: *How do teachers collaborate as thought partners to support*

*equitable access and rigor for ELLs?* The PLC members participated in the PAR study by engaging in three inquiry cycles and connected with ELLs utilizing PDSA cycles. PAR required the researcher to participate with those that are closest to the issues—in this case, teachers. The process of observing teachers in PLC and conducting post-observation dialogues allowed administrators and teachers to collect more systematic and relevant evidence to make iterative decisions about how to improve relational trust within a PLC. The research provided viable methods for improving PLC that have substantive discussions about practice; by developing the interpersonal relationships, teachers can improve their classroom practices of equitable academic discourse for ELLs.



## CHAPTER 4: PAR PRE-CYCLE

*The most valuable resource that teachers have is each other. Without collaboration, our growth is limited to our own perspectives.* Robert John Meehan

In the PAR project and study, I analyzed how teachers collaborated in a professional learning community (PLC) to support English Language Learner (ELL) students in understanding mathematics. I was particularly interested in determining what professional learning community (PLC) conditions were optimal for teachers to become more aware and skilled as collaborators in developing and implementing practices that fully engage students in mathematics classrooms. Thus, I examined how teachers built and fostered relational trust both to participate in a professional learning community and to collectively implement math discourse practices that benefit ELLs. To do this, I engaged a group of teachers who acted as Co-Practitioner Researchers (CPRs), though I use the term PLC members to refer to them as that is more familiar in our context.

In this chapter, I focus on the PAR Pre-Cycle process. I collected field notes and data from PLC meeting artifacts. In addition, I wrote reflective memos. First, I describe the context of the setting and the study participants. Next, I detail how I collected and analyzed data iteratively. In order to analyze the data, I used Saldaña's (2016) coding methods to guide me. In particular, I used in-vivo and descriptive coding to code the data collected at professional learning community (PLC) meetings and reflective memos. Afterward, I developed a codebook from the data and organized the codes into emergent categories. As we analyzed the data, PLC members and I used information from the Pre-Cycle to support timely planning for PAR Cycle One. Finally, I reflect on my role as lead researcher in the PAR.

### **Context: San Francisco Elementary School**

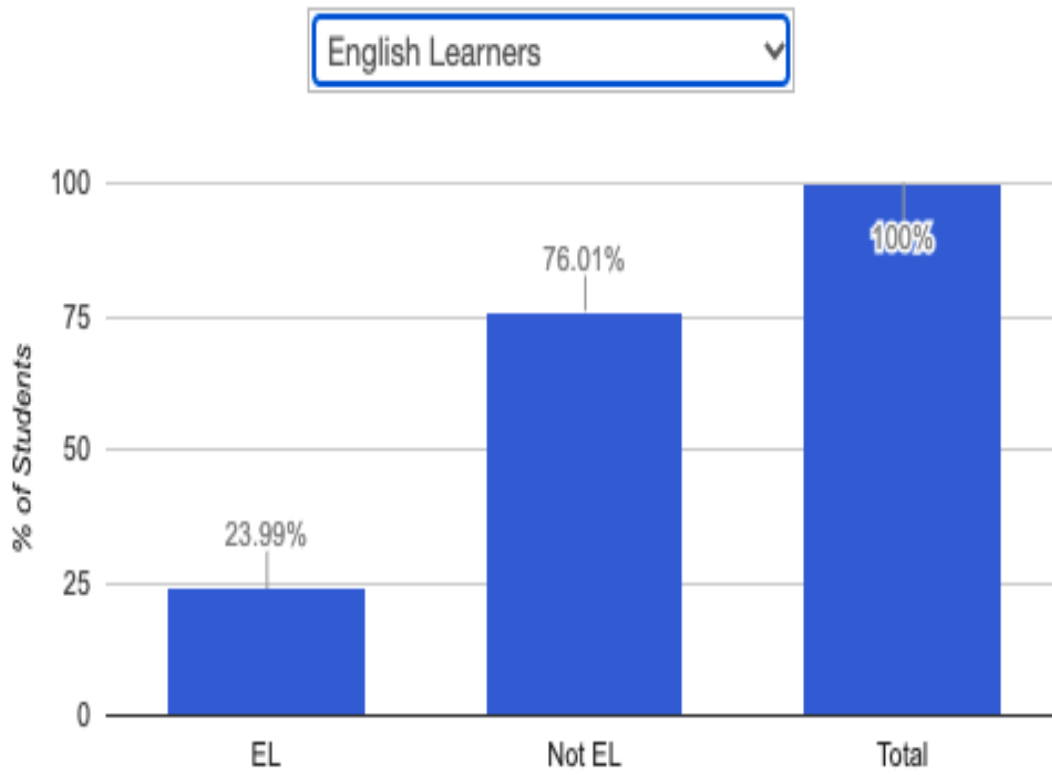
The PAR project and study took place at an elementary school in the San Francisco Unified School District (SFUSD), where I serve as principal. Since the beginning of my principalship at this school in 2016, I have prioritized and addressed a persistent equity challenge: providing quality and accessible instruction to ELLs. The school has one administrator, sixteen classroom teachers, and one designated English Language Development (D-ELD) teacher. Our student body consists of a diverse population: 43% Asian, which includes Chinese, Vietnamese, Korean, and Japanese language-speaker; 25% White; 14% mixed with two or more races; 8% Hispanic/ Latinx, 4% African American, and 6% other. Of the students, 24% are categorized as ELLs based on the home language survey completed by their parents or guardians. Four years ago, teachers decided to utilize an additional site budget to hire an extra teacher to focus on the California state-mandated daily thirty minutes of focused instruction of designated ELD for all ELLs. In Figure 9, I included a snapshot of the school's demographics based on English Learners, Not English Learners, and their home languages.

### **Context: People**

The PLC members in this study included four teachers from this school who agreed to participate in the PAR. Each of the teachers varies in background and experience. The names in this study are pseudonyms to protect the anonymity of the participants. In Table 4, I offer the demographics of the participants and include their age, gender, race, and years of experience. I confirmed with the PLC members that the information was accurate.

Next, I share the profiles of the PLC members. The people who have agreed to participate in the PLC bring many years of experience in education and our school to their work. All are

## Demographic Distribution



*Figure 9.* Percentage of English language learners (2020-2021).

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Table 4

*Demographics of Professional Learning Community (PLC) Participants*

Teacher	Age	Gender	Race	Years of Experience in Education	Years of Experience at the School
Amy Martin (AM)	Mid 50s	Female	African American	29	25
Lisa Hoper (LH)	Mid 30s	Female	Asian American	7	3
Candace Kirkham (CK)	Early 50s	Female	White	9	8
Destin Kinder (DK)	Mid 50s	Male	White	21+	15

veteran teachers with a range of experience from seven to twenty-nine years in education, and from three to twenty-five years at this school. They bring expertise in key areas, including literacy, Mathematics, special education, and ELL. They all share a commitment to students and to improving their practices as educators to better serve our diverse population.

Amy Martin (AM) has taught for 29 years. She consistently built close relationships with numerous teachers throughout that time. Amy is a team player who appreciates working with her peers from the same grade level and assisting the school's initiatives. Amy worked as a math and science teacher leader, a health advocate, and in other leadership roles. Amy said she enjoys seeing pupils pick up new knowledge.

Lisa Hoper (LH) is one of the school's younger teachers, known among her colleagues for her friendly disposition and attitude of cooperation. Lisa is the only individual at this school with the title of English Language Development (D-ELD) instructor; therefore, she has students in common with all general education classroom instructors. Lisa is passionate about helping ELLs and frequently speaks up for pupils. In meetings, she showed ELD strategies to the staff. She frequently assists teachers when they require it. Lisa participates in the Coordinated Care Team (CCT) and School Site Council (SSC).

Candace Kirkham (CK) has a varied educational background. First, as a special education teacher, she supported the school's inclusive practices for all students, especially students with individualized education plans (IEPs). Then, she became a general education classroom teacher when a position became available. Candace appreciates the opportunity to work collaboratively to support the school's growth. Candace held leadership positions at the school, including participating as an instructional leadership team member, contributing to the personalized learning environment pilot program and supporting social committee efforts.

Destin Kinder (DK) worked as an educator for the past twenty-one years, with fifteen of those years at the current school. is a white male in his late forties who became interested in pursuing a career in education in his twenties. As he was growing up, he felt school was a safe space. Later in life, he found teaching as an opportunity to use his skills in creativity, problem-solving, and service to others. He shared that his experiences in a PLC include learning with teachers from other schools, and he enjoyed the organic quality of it. In this experience, he felt that the PLC structure presented opportunities for people to bring lessons and contribute ideas. He expressed that his prior PLC experience consisted of a good balance of learning while allowing the PLC members to feel productive. Destin advocates for students and colleagues and is a team play. The four members of the PLC worked together in this Pre-Cycle to develop a shared understanding of how they would operate as a PLC. Next, I discuss the PAR Pre-Cycle process and shared the activities and plans. The Pre-Cycle process included recruiting potential participants, obtaining agreements to participate in the research, scheduling monthly meetings to build relational trust, and creating a common understanding of academic conversations and how they could better support English learners in acquiring and accessing content. The information in the PAR Pre-Cycle process provided guidance for future plans for PAR Cycle One.

### **PAR Pre-Cycle Process**

The PAR Pre-Cycle process (January 2022 to April 2023) was an opportunity to understand the PLC members and build foundational knowledge of academic discourse in ELL. In September and October, I recruited and prepared the professional learning community (PLC) members for beginning the work of the Pre-Cycle in November. Next, I describe activities during the PLC and the evidence I collected and analyzed. I share the dates, activities, and timelines during the PAR Pre-Cycle (see Table 5).

Table 5

*PAR Pre-Cycle Activities*

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Date	PAR Pre-Cycle
January 2022	Recruit PLC members. Introduce the PAR study.
February 2022	Read a research-based article on academic conversations. Read about the community in think pair share.
March 2022	Develop relational trust by learning about PLC members. Each PLC member creates and shares their emulation poem. Get research consent.
April 2022	Use personal narrative protocol to continue to build relational trust. Initiate understanding of 8 talk moves. Model and discuss 8 talk moves. Discuss PAR and PDSA cycle and what that will look like in Fall 2022.

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In January 2022, I invited teachers to participate as PLC members. I explained why the FoP is relevant to our school's plans, how the FoP supports teachers in decreasing inequities at our school, and how the FoP could help with their professional growth. In this preliminary process, teachers had the opportunity to read an article and pose questions. They considered these key attributes for an effective PLC:

- Autonomy
- Alignment
- Professional choice to collaborate
- Room for creativity
- Prioritizing standards and assessments
- Differentiation of practices

They recognized that the PLC is not simply for the students but could improve their roles as educators and could be a place of creativity and innovation. Because the PLC would be ongoing and constantly evolving, we would engage in iterative cycles of inquiry.

In February 2022, we used Aguilar's (2018) *Onward Workbook* for guidance on community building. Potential PLC members used think-pair-share to reflect and discuss three questions:

- What does community mean to you?
- What do you need in a community to feel that it's a source of strength and support for you?
- Describe how would you describe a community in which you've felt accepted and supported?



Potential PLC members reflected on the questions in writing talked to a partner and shared their reflective responses with the whole group. Some responses from the potential PLC members offered hope for moving forward. They felt that they were already part of many different types of communities, but that they could develop stronger bonds through hardships and working through challenges together. In deciding to be a part of the PLC, they agreed on these attributes of an effective PLC structure:

- Make connections
- Honesty
- Trust
- Communication
- Supporting each other

In March 2022, four teachers officially consented to participate in the PAR. I invited them to share about themselves with other PLC members by drafting an emulation poem to share their past, present, and future outlooks. During the first meeting, I invited the members to read their emulation poems; three of the four members agreed to share. After we used and explained the personal narrative process, I gave the PLC members time to discuss possible agreements or conditions that help them thrive during the PAR study. In Table 6, I detail the January 2022–April 2022 Pre-Cycle activities.

The members contributed ideas for working agreements and addressing disagreements. In addition, I captured the responses from the members to develop PLC Agreements and How to Work Through Disagreements. Bryk and Schneider (2002) share why this process is important to a group:

Table 6

*Activities: PAR Pre-Cycle*

Activity	Week 1 2/14- 2/18	Week 2 2/21- 2/25	Week 3 2/28-3/4	Week 4 3/7-3/11	Week 5 3/14-3/18	Week 6 3/21-3/25	Week 7 4/4-4/8	Week 8 4/11-4/15	Week 9 4/18- 4/22	Week 10 4/25- 4/29
Meetings with PLC	X		X		X		X		X	
Reflective Memos	X		X		X		X		X	
Member Interview	X									
Member Checks			X				X			

Each party in a role relationship maintains an understanding of their role obligations and holds some expectations about the role obligations of the other. Maintenance (and growth) of relational trust in a given role set requires synchrony in these mutual expectations and obligations. (p. 20)

The agreements for the PLC included:

1. Everyone has things they are “good” at and all bring to the table;
2. We are lucky to have a good community, do things differently, and appreciate each other’s differences.
3. It is important to allocate time to explore ideas in the *groan zone*.

Finally, we decided on one key statement about autonomy that might help us work through disagreements: Have common goals but allow people to do things their own ways.

The exercise in generating working agreements and disagreements encouraged PLC members to articulate their expectations of each other. This helped to create trust among the group. Next, I share the codes and emergent categories from the data gathered at PLC meetings. I explain the codes and the coding process. Then, I share how these codes provided insight into the research status and our next steps.

### **Codes and Codebook Process**

As a novice at coding, I found the process challenging, and I had multiple iterations before I could decide about codes. In mid-May 2022, I reviewed emulation poems (personal narratives), interviews, and agendas from PLC meetings. While coding the data, I used the steps Saldaña (2016) offers for in-vivo coding, using the actual text provided in the data. During the initial coding round, I highlighted the words and phrases that seemed significant to the research but found it difficult to determine what to code. Everything seemed important. I sought advice

from research practitioners in the same situation to compare how they approached the process. Based on this conversation, I revisited Saldaña (2016) for the in-vivo coding process to better understand research-based coding strategies. In essence, I practiced coding with the research questions in mind. This time around I felt more comfortable; however, it was still challenging and required me to read things literally in order to interpret the data. I knew that the more I practiced coding, the more familiar I would become with the process. I realized that if I kept my research questions in mind, then the data would be more understandable to me. Richards and Morse (2013) exemplify this by stating, "If it moves, code it" (p. 162). Auerbach and Silverstein (2003) remind us that we should keep our research questions in mind when making coding decisions. In this iteration, the codebook was at a stage that supported the PAR study. I included participants' responses, code, and emergent categories. The data sources are emulation poems, interviews, and Google Jamboard responses from PLC meetings. I color-coded the data to distinguish the source. Each color represents the source of the data and showcases how I clustered the codes from the data to create the emergent category. In the codebook, I used pink/red shades to represent data from the emulation poems, blue shades to represent data from interviews, and green to represent data from Jamboard's response.

### **Data Analysis: Developing Categories**

Members of the PLC engaged in activities during the Pre-Cycle process that helped them build relational trust and an understanding of academic discourse. They engaged in the creation of emulation poems, interviews, and responses to articles. After coding the data and determining emergent categories, I counted the frequency of each emergent category. In Table 7, I share the frequency of each emergent category. Tallying the frequency of each emergent category helped me develop the categories that seemed to be more significant to teachers. Three categories—

Table 7

*Pre-Cycle One Frequency Table*

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Emergent Categories	Frequency
Life can flourish in challenging environments	1
Change in home life	1
Family partnership	1
Co-exist	1
Identify social expectation	1
Peer support	1
Self-Perception and Others' Perceptions	3
Observing social communication	2
Characteristics of a PLC	4
Teacher attitude and beliefs towards students	1
Teacher strategies to promote students' discourse	10
Social emotional traits/ components for student engagement in academic discourse	1

---

perceptions of identity, teacher efficacy, and PLC characteristics—emerged in the Pre-Cycle after data analysis. This solidified for me the three categories to further investigate for analysis; the frequency of the table helped me understand which emergent category was most prevalent in the Pre-Cycle One. This process supported me in understanding my next steps. Next, I share the process and analysis that I took to narrow down to three emergent categories.

### **Perceptions of Identity**

One emergent category was self-perception because of changing circumstances and others' perceptions. The PLC team used emulation poetry as a personal narrative to convey their life experiences in their communities. PLC participants identified their childhood, adolescence, and adult self-perception as well as perceptions others had of them. In one example, a PLC member referenced the loss of his mother. This resulted in his grandma and his dad becoming his guardians. When he relocated to the suburbs from the city, this altered his way of life. Another PLC participant spoke about how others in her neighborhood perceived her. She was raised in a small town where the residents commonly referred to her, a mixed-race person, as a "banana." Her perception of herself changed as she moved from the suburbs to the city where mixed race was common. Another PLC member remarked that, when she travels abroad, people think of her as American rather than African American. These encounters impacted the PLC members' perceptions of themselves, and their social perceptions of who they are as persons and as teachers.

### **Teacher Strategies to Promote Academic Discourse**

In the interviews, teachers were asked about themselves, why they chose to become teachers, how they feel about PLCs, and what they think needs to happen to support the research and study. In another PLC meeting, the members read an article about academic conversation. In

this scenario, the PLC members generated responses to the articles and created digital post-its on the online application Google Jamboard. As a result, a second emergent category with high frequency (n=13 or 48% responses) was teacher strategies to promote academic discourse. This reflects the common practice of teachers sharing approaches and strategies that have been or could be successful. Two data sources, interviews, and Google Jamboard responses produced codes that lent themselves to the emergent category.

The PLC members shared the approaches and specific strategies that could generate academic conversations. Responses among the PLC members included the following strategies for supporting student dialogue in classrooms: listening to the perspectives of youth, learning from the students, watching students click in, and getting students to think outside the box. All of these responses connect to strategies teachers can use to work effectively with their students. The teachers believed that attending to social-emotional learning would be a prerequisite for stronger academic conversations for ELL students. They cited the importance of family partnerships to encourage students and that teachers' attitudes and beliefs about student abilities played a role. They knew that they must approach students from different directions without bias in order to generate a hopeful outlook for the students.

In addition, the teachers listed some specific strategies that might support students, including community circles, math talks, and ELL scaffolds. Further, they committed to listening more thoughtfully so that the students would be encouraged to share their ideas. All of these responses speak to teaching strategies that would lend themselves to support students' academic discourse, particularly for ELL students. In general, however, these are aspirational responses; the ongoing question will be how teachers can translate their aspirations to classroom practice.

## **PLC Characteristics**

The third emergent category is preferred PLC characteristics. I asked PLC members about their thoughts on effective PLCs during a one-to-one interview. The members shared their previous experiences with PLCs and what they felt was necessary for the PLC to be successful. During this coding process, the words used by the PLC members indicated the key characteristics: working together, time, good balance of learning and doing, and clear expectations that lead to buy-in and collective results. One PLC member shared, “meeting to work together and have the time to do the research” (Candace Kirkham, interview, November 9, 2021). Another PLC member contributed that his prior experience with a PLC “...was productive and helpful. There was a structure to the meetings and people brought lessons and ideas to the meetings to share, and there was a good balance of learning” (Destin Kinder, interview, November 9, 2021). Furthermore, a PLC member added, “When there is a lot of buy-in from the staff, I have seen amazing results in school climate” (Amy Martin, interview, November 8, 2021). Another PLC member offered, “Clear expectations, understanding the purpose of what the group is to accomplish and in what time frame” (Lisa Hoper, interview, November 8, 2021). After reviewing the responses and coding the interviews, I concluded that an emergent category of PLC characteristics is surfacing. With this information from the data, I was able to consider how the components of each agenda can align with these PLC characteristics.

In the Pre-Cycle, I practiced coding and analysis skills. As a result, I determined three emergent categories: Self-perception and others’ perception, teacher strategies to promote academic discourse, and characteristics of a PLC. I was aware that these categories are preliminary indications of teacher knowledge and represented in some ways their aspirations for their teaching and for working with other teachers. However, I was curious about how this



prescriptive advice would translate into classrooms and our PLC meetings. I used the information gathered from the Pre-Cycle to guide the next steps.

### **Reflection and Planning**

As a participatory action researcher, I was learning with the PLC members; however, I learned how to be strategic in designing activities and processes that support the PLC members to stay focused on the research questions. In sharing my reflections on leadership, I provide a *plan to do* for PAR Cycle One based on the evidence from the Pre-Cycle.

#### **Reflections on Leadership**

Prior to the research, I relied on the banking concept to share information with the staff (Freire, 2000) and used traditional professional learning models of telling. I began to realize that this method did not lend itself to supporting the staff in collaborating and learning from one another. The banking paradigm of education compared teachers to bank tellers and saw them as depositing information into pupils as opposed to eliciting knowledge from individual learners or developing curious beings with a passion for knowledge. During the research, I realized that I was trying to deposit information in the staff and was not cultivating their thinking and input. As a result, I shifted my facilitation to become more inclusive. I needed to work on listening and utilizing the information in PLC meetings to guide the next steps for PAR Cycle One. This work taught me to step back in order for the PLC members to step forward and lead.

As I planned for PAR Cycle One, I considered the ability of PLC members to have a shared grasp of the ELL techniques and math instruction. Therefore, planning, doing, studying, and acting (PDSA) time is crucial throughout PAR Cycle One. Dewey (1938) warns, “Every experience affects for better or worse the attitudes which help decide the quality of further experiences, by setting up certain preference and aversion and making it easier or harder to act

for this or that end” (p. 38). This means the type of experience that the PLC members have at the meetings will either have a negative or positive effect on them or affect their individual and collective abilities to collaborate and implement the strategies.

In order for PLC members to have a positive experience, I needed to develop my facilitation skills so that we could effectively engage in reflection in order to act or achieve praxis, ultimately building on that collaborative reflection before acting. As a result, I began to facilitate PLCs to be collaborative and inclusive of all PLC members. By using the CLE approach, I am developing the facilitation skills to support PLC members to improve their practice; thereby, increasing members’ proficiency in applying academic conversations in mathematics classrooms. Effective facilitation requires truly listening to PLC members, setting up the conditions for equitable input, reflecting on members’ suggestions, and utilizing this information to guide the PLC through the PDSA process respectfully. Dewey (1938) advocates for learners to learn through experience. At the same time, he believes that structure is essential. Therefore, I needed to have a balance of structure to informal conversation while cultivating an experience for the PLC members.

### **Planning for PAR Cycle One**

In PAR Cycle One, I planned to support the PLC members to develop a deeper understanding of academic conversations through reading articles, including Zwiers and Crawford (2015), and engaging in thoughtful dialogue that allowed PLC members to co-plan, reflect, and receive peer feedback. The PAR Cycle One goal was to listen and observe carefully so each PLC meeting was meaningful for those involved. I intended to collaborate with them to better understand the improvement science of using a PDSA cycle in order to engage more ELLs in academic conversations. The PDSA cycle included working together to plan our next course

of action, do the action, study the outcome of it, and revise the action. During the PDSA cycle, I planned to observe lessons and schedule time to discuss the lessons with the CPR members. This check-in with the individual members was intended to help them reflect on their implementation of ELL strategies. Thoughtful probing and questioning helped PLC members consider what took place, what they learned, and what they wanted to revise in order to support the students. By undergoing this process, the team had an opportunity to work together to continue to build relational trust while improving instructional practices. In Table 8, I share the proposed plans for PAR Cycle One. I created this plan with the intention of supporting the PLC members to continue to build relational trust, collaborate, and help each other reflect on their practices to become stronger practitioners of ELLs.

This proposed plan for PAR Cycle One built on the learning that took place in the Pre-Cycle and supported PLC members to plan, do, study and act (PDSA) for a lesson/ goal that is created by the team. Team members used the critical friend tuning protocol acting as both presenter or discussant, to clarify and receive peer feedback on their lessons. Each process (introduction, presentation, clarifying questions, probing questions, and discussion) was designed to support the team member in reflecting on and refining their lesson plan before implementing it with their students.

Throughout the cycle, I had the members check the norms and agreements to assure that the experience matched their needs. I utilized the member check as a quality assurance measure. Quality assurance is provided that all members are allowed time to process the information and share it. I planned to conduct a member check to verify that the information I have written is accurate and free from bias. I used reflective memos to help triangulate the data.

Table 8

*PAR Cycle One Plans and Activities*

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Date	PAR Cycle One Plans
August 2022	Revisit what we did in the Pre-Cycle. Use Chalk Talk to Review Examples of Academic Conversations and PDSA.
September 2022	Plan and Work together to plan a math lesson that is inclusive of Academic Conversation. Check for understanding on questioning strategies. Schedule observations and post-observation meetings.
October 2022	Discuss and study results of PDSA Cycle Bring evidence of work and study the results and consider revising actions. Provide time for peer observation and feedback.
November 2022	Wrap up PAR Cycle One - Discuss learnings from PDSA
August 2022 – November 22	Write weekly reflective memos

---

## **Conclusion**

As I delved into the data, I received more insight into how the Co-Practitioner Researcher role could support me to create more useful agendas for the PLC members for PAR Cycle One. The goal for the Pre-Cycle was to develop relational trust with PLC members and build foundational knowledge for the research. The time spent in the Pre-Cycle was essential and set the stage for deeper PLC work as we moved to PAR Cycle One. It was quite clear to me from the initial data collection and analysis that I needed to be more consistent and thoughtful about the data collection so that I could, through CLE artifacts, PLC meetings notes, field notes, and conversations and observations, have more data to analyze in addressing the research questions and ensuring that teachers were cultivating stronger ELL practices.

In assessing the activities that the PLC members engaged in for the Pre-Cycle, I was able to develop solid topics to concentrate on for the PLC members for PAR Cycle One. For the following cycle, I intend to help the PLC move toward a clearer understanding of academic conversation through the process of co-planning, peer input, and observations. Through listening and observing PLC members, I discovered that not all PLC members completely comprehend academic discourse practices or how these practices support ELLs. Thus, my goal is to support them to create a common understanding of the pedagogy of academic discourse. Collaboratively, members of PLC can work together and share knowledge to bridge the gap in understanding so they can implement the strategies more effectively.

## CHAPTER 5: PAR CYCLE ONE

*Every system is perfectly designed to get the results that it gets.* W.E. Deming

Many researchers use participatory action research (PAR) as a methodology to support school-based changes that rely on cycles of inquiry to address iterative evidence. Lin's (2013) PAR addressed the challenges ELLs faced in understanding and participating in academic conversations and involved collaborative work between the researchers, teachers, and students. In addition, Lin (2013) discussed the benefits of using a PAR approach, including increased student engagement and ownership of learning, and argues that PAR is particularly well-suited to addressing the challenges faced by ELLs in academic conversations because the process promotes a collaborative and participatory approach to teacher learning. In Lin's study, teachers, students, and researchers worked together to identify the specific challenges that ELLs faced in understanding and participating in academic conversations to develop strategies to address those challenges. In the study, the participants engaged in a collaborative approach that resulted in increased student engagement and ownership of learning as well as improvements in academic language skills and participation in classroom discussions. That is precisely what we hoped to facilitate in our PAR work.

In this chapter, I focus on the PAR Cycle One process and how the PLC members continued the collaborative efforts initiated in the Pre-Cycle. I facilitated monthly PLC meetings to support the understanding and implementation of academic conversation and the connection between talk moves—the use of ELL specific pedagogy—and academic conversation. According to Zwiers and Crawford (2011), “...rich conversations in school are rare...Sadly, academic talk is most scarce where it is most needed—in classrooms with highly linguistically and culturally diverse students” (pp. 7-8). To create richer conversations, PLC members discussed ways to

enrich their classroom discussions. PLC members learned to utilize talk moves during their math lessons and reflect on their practices. This process provided a way for PLC members to develop a deeper understanding of academic conversations and how to embed them into the classroom.

### **PAR Cycle One Process**

In this section, I detail the PAR Cycle One activities, coding, and analysis processes. As a result, I name emergent themes and reflect on my leadership. The PAR Cycle One (August-December 2022) was an opportunity to collaborate with the PLC members to continue to develop our foundational knowledge of academic discourse in support of ELLs, make connections between talk moves and academic discourse, apply talk moves in the classroom, and reflect on the lessons. In PAR Cycle One, we endeavored to disrupt the inequity in the PLC members' classrooms by promoting increased opportunities for students to engage in academic conversations, especially with English language learners. First, I scheduled the PLC meetings to continue working with the team to provide a shared understanding of academic conversations for ELLs. Next, I conducted four observations in each PLC member's classroom and conducted post-observation conversations, coded the selective verbatim notes, and iteratively analyzed data for emergent themes. I collected field notes and data from PLC meeting artifacts, observed individual teachers, held post-observation conversations, and wrote reflective memos to capture the experience and reflect on the process. Finally, I reflected on my leadership and considered the essential next steps for PAR Cycle Two.

Next, I share the activities that took place during this PAR Cycle One. The complete chart of PAR Cycle One activities is captured in Table 9 and the frequency of the activities in Table 10. During PAR Cycle One, I facilitated two community learning exchanges (CLE) to gather ideas from other staff in the school. PLC members met monthly to deepen and extend

Table 9

*Chart of PAR Cycle One Activities and Data*

Meetings	Date (Aug-Dec 2022)	Activities	Data Collected
CLE Meeting 1	August 11	Poster & Discussion Regarding a Belonging Classroom	Chalk Talk Posters from each grade level K-5
PLC Meeting 1	August 31	Dynamic Mindfulness Reading of Academic Conversation Dialogue on Classroom Implementation	Agenda Meeting Notes Reflective Memo
PLC Meeting 2	September 21	Dynamic Mindfulness Reading of Academic Conversation Dialogue on Classroom Implementation	Agenda Meeting Notes Reflective Memo
Observations Round 1	September 29 (n=4)	Calling On Observation Tool	Selective Verbatim Observations Reflective Memo
Post observation Conversation Round 1	October 14 (n=3) October 17 (n=1)		post observation conversation Transcript
PLC Meeting 3	October 12	Dynamic Mindfulness Reading of Academic Conversation Dialogue on Classroom Implementation	Agenda Meeting Notes Reflective Memo



Table 9 (continued)

Meetings	Date (Aug-Dec 2022)	Activities	Data Collected
Observations Round 2	October 14 October 18 October 20 (n=2)	Calling On Observations tool	Selective Verbatim Observation Data Reflective Memo
Post observation Conversation Round 2	October 24 (n=2) October 26 (n=2)		post observation conversation Transcript
Observations Round 3	October 20 October 21 (n=2)	Calling on observation tool	Selective Verbatim Observation Data Reflective Memo
Post observation Conversation Round 3	October 26, 28 November 1		post observation conversation Transcript
PLC Meeting 4	November 2	Dynamic Mindfulness Reading of Academic Conversation Dialogue on Classroom Implementation	Agenda Meeting Notes Reflective Memo
Observations Round 4	October 28 (n=2) November 1 (n=2)	Calling on observation tool	Selective Verbatim Observation Data Reflective Memo
Post observation Conversation Round 4	November 28 December 3, 9, 13		post observation conversation Transcript

Table 9 (continued)

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Meetings	Date (Aug-Dec 2022)	Activities	Data Collected
CLE Meeting 2	December	Dynamic Mindfulness Read Document Regarding Beyond Turn and Talk Dialogue on Classroom Implementation, Obstacles and Possible Solutions	Agenda Meeting Notes Reflective Memo

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Table 10

*Summary of Activities of PAR Cycle One (August 14 – December 9, 2002, by Weeks)*

WEEKS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PLC Meetings (n=5)	•				•	•		•		•	•				
CLE (n=2)	•														•
Observations (n=12)		•	•	•	•	•	•	•	•	•			•		•
Post-Observations						•	•	•	•	•	•		•		•
Conversations (Formal) (n=12)															

their understanding of academic conversations and discuss how they are implementing them in their classrooms. Staff contributed to the CLE by helping the CPR members understand the comfort level of using talk moves in the school. I observed lessons conducted by PLC members, held post-observation conversations with them, and helped them reflect on their practices in providing academic discourse for all their students, especially their ELLs. In August 2022, I invited all K–5 teachers in the school to attend a community learning exchange (CLE). I began the CLE with dynamic mindfulness, which allowed participants to de-stress and settle into the meeting. Next, teachers connected with their grade-level teams to watch a video entitled *Building a Belonging Classroom* (Edutopia, 2019). After watching the video, participants compared the information to their own grade-level practices and brainstormed as a grade-level team on what belonging might mean for students in their grade level. The teachers developed posters (see Figure 10, 11 and 12) which showcases the posters generated by the participants during the August 2022 CLE) that showcased how they would set up their classrooms as they started the school year. The CLE participants used the chalk talk protocol to provide comments, questions, and suggestions without the influence of other members. Then, all teachers displayed their posters and used the chalk talk protocol, a collaborative learning technique that involves participants silently responding to a prompt or question by writing their thoughts or ideas on a chalkboard or whiteboard. The chalk talk protocol is often used in group discussions or brainstorming sessions, an effective way to generate ideas and encourage participation from all group members (Killion & Todnem, 1991). I convened a second CLE with school staff on December 7, 2022. The goal of that session was to focus on gathering input from more staff about implementing talk moves. The CLE participants reviewed a document titled, *5 Teacher Strategies to Go Beyond Turn and Talk*

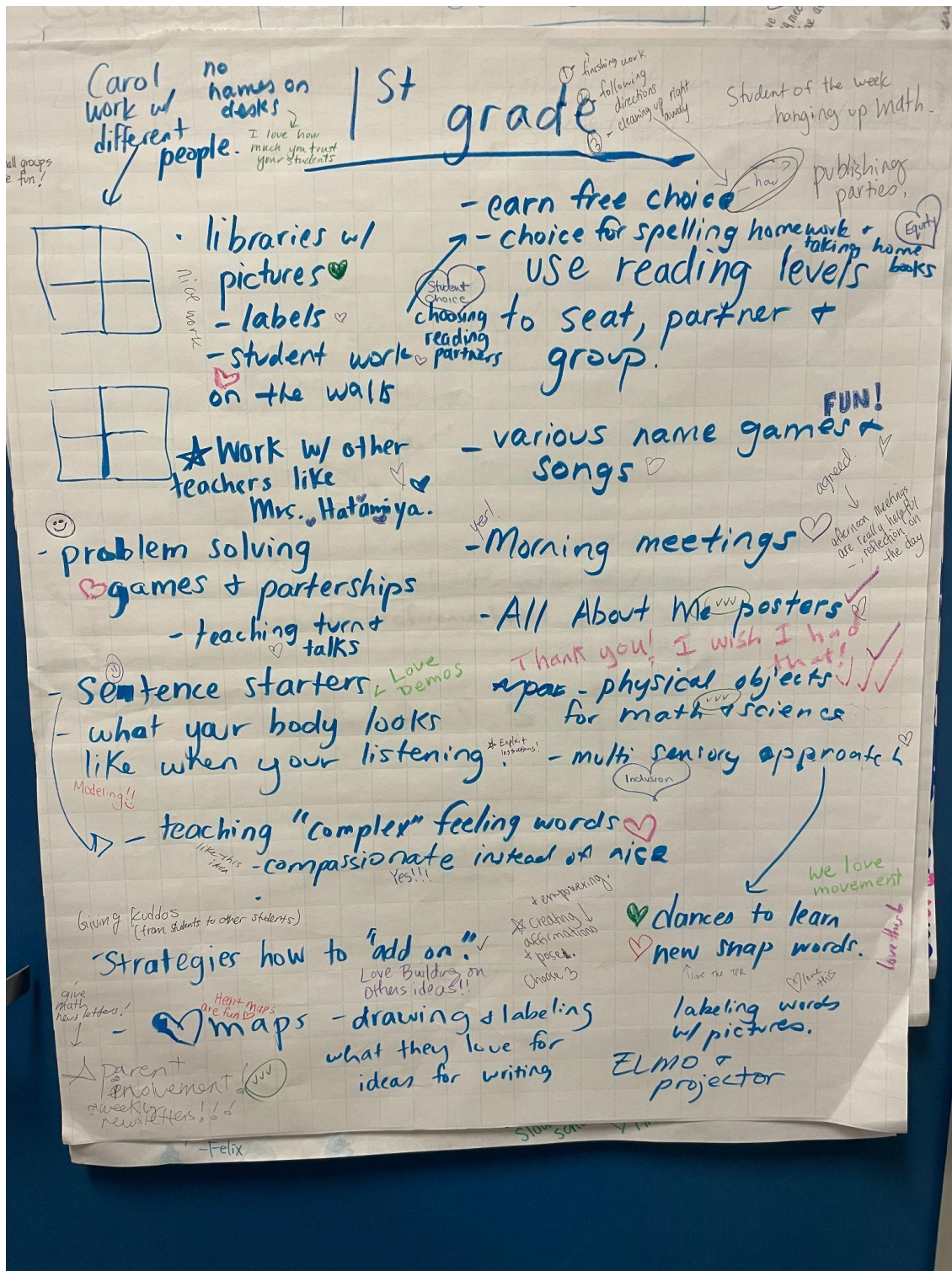


Figure 10. First grade belonging posters.

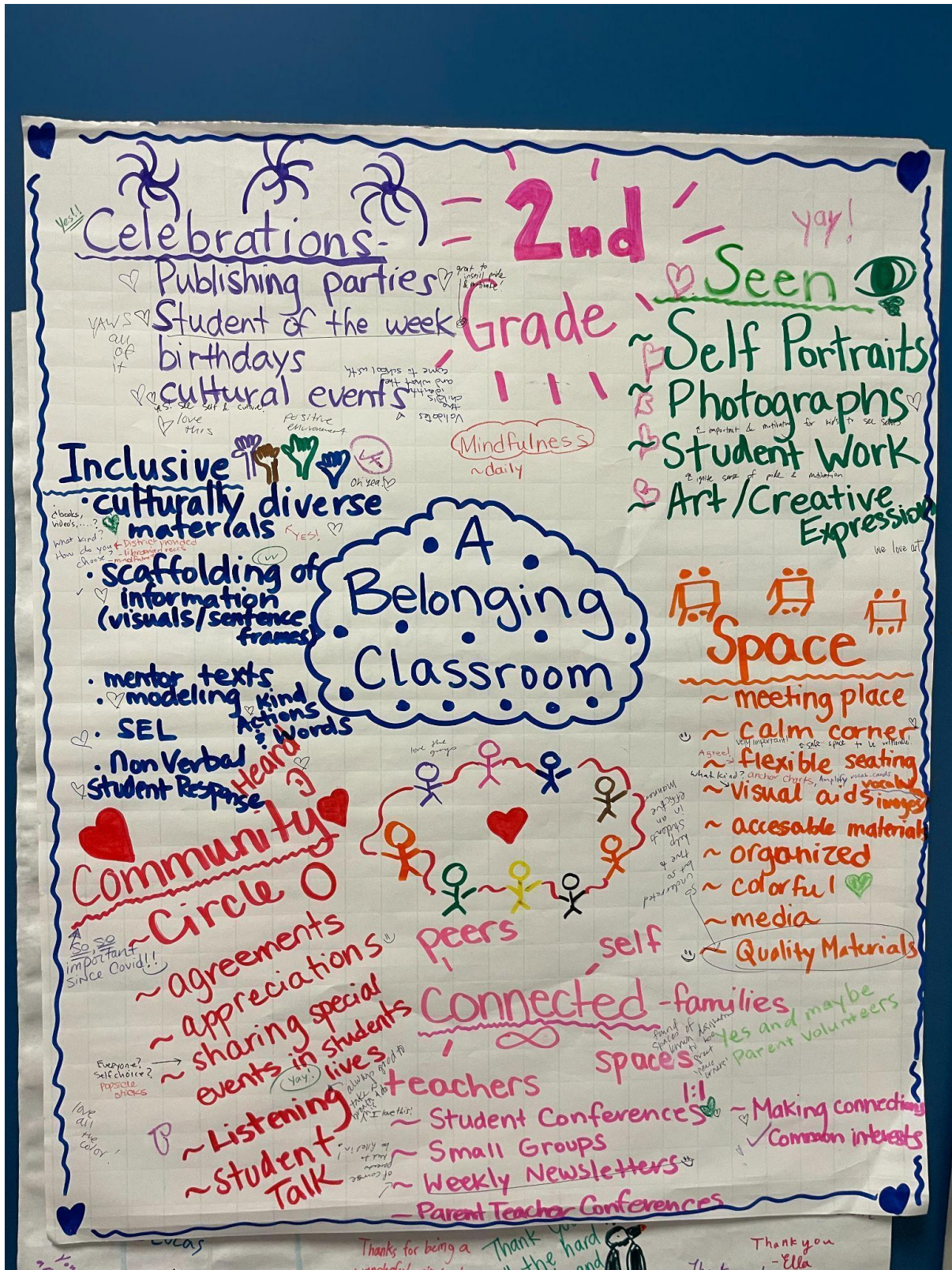
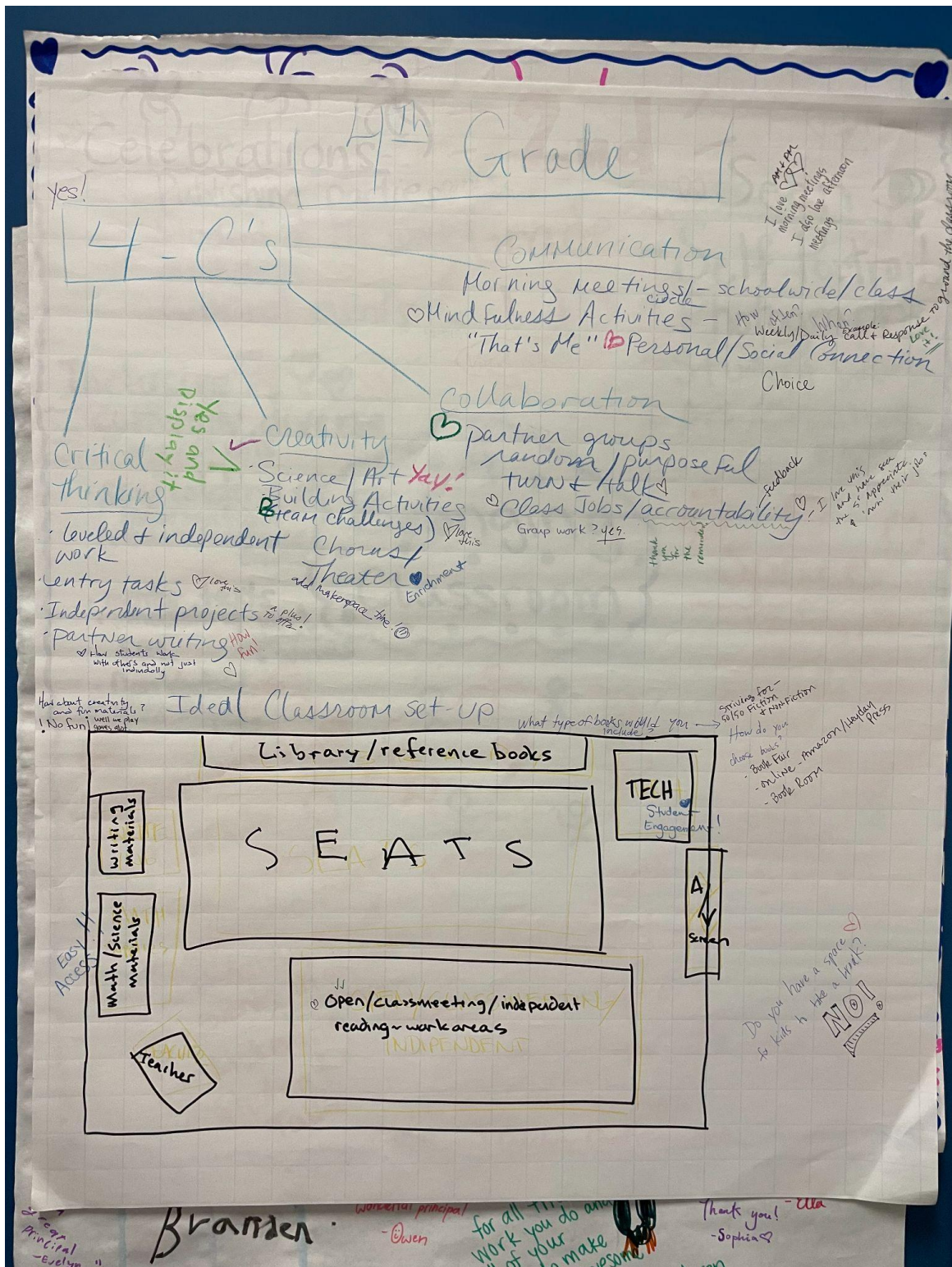


Figure 11. Second grade belonging posters.



Library/reference books

**TECH**  
Student Engagement!

SEATS

Writing materials

Math/Science materials

Teachers

Open/classmeeting/independent reading ~ work areas

INDEPENDENT

How do you choose books?

- Book Fair
- online - Amazon/Local Press
- Book Room

Figure 12. Fourth grade belonging posters.

(DeLoza, 2019). After reading the document, they responded to three prompts that encouraged PLC members to have dialogue with colleagues and

In addition to the two CLE meetings, four PLC members met monthly (September 2022 – December 2022) to connect, learn, and share their thoughts for the research. The monthly meetings provided space for members to continue the dialogue about academic conversation, share their experiences with academic conversations, share problems they encountered, and support each other to create possible changes to their practices. Each meeting was designed to support the PLC members in understanding the purpose of using academic conversation and how to implement it.

The members watched two videos for the first PLC meeting in September 2022 to re-engage with academic conversations. The first video, *The Power of Literacy: Academic Conversations* (FCPS ISD Language Arts, 2017), provided an understanding of the purpose of academic conversation and why it is essential. The second video, *Encouraging Academic Conversations With Talk Moves* (Edutopia, 2018) This video provided teaching practices that enhance academic conversations. During the meeting, a PLC member DK shared that this learning space supported vulnerability and taking risks (PLC Meeting, September 2022).

For the second PLC meeting in October 2022, a PLC member, LH, demonstrated to other teachers how she used the talk moves to engage her learners. She shared the importance of utilizing talk moves and how it increases students' confidence (PLC Meeting, October 12, 2022). Another PLC member, AM, added, “I used to call on hands, but now I see the usage of equity sticks and equity spinners” (PLC Meeting, October 12, 2002). The PLC members worked together to co-develop an understanding of the importance of talk moves.



In the third PLC meeting on November 3, 2022, PLC members discussed when they use talk moves and how they extended their students' academic conversations using other talk moves. CK shared that her students use agreed hand gestures (PLC Meeting, November 3, 2022). DK added that his students used talk moves, too, but he used other strategies, such as whiteboards and group talk, to support his students with academic conversations (PLC meeting, November 3, 2022).

Another component of PAR Cycle One included classroom observations and post-observation conversations with PLC members. These observations and post-observation conversations provide opportunities for PLC members to think about the possible benefits of academic conversations. “Conversations can be powerful ways to see content understandings or holes in students’ understanding...[and] talkers walk away with much more than they could have thought up on their own” (Zwiers & Crawford, 2011, p. 189). Zwiers and Crawford emphasize that “conversation fosters all three language learning processes (listening, talking, and negotiating meaning)” (p. 12). By providing opportunities for academic conversations, the teachers suggest that conversations help students to refine and enrich their knowledge (Alvermann et al., 1987). Table 9 Chart of PAR Cycle One Activities and Data displays the meeting, date, activities, and data collection.

For data collection, I used selective verbatim to capture the lesson observations and post-observation conversations with the PLC members. Each observation averaged approximately fifteen minutes and was followed by a post-observation conversation the same week or the following week. With the consent of the PLC members, I recorded the post-observation conversations and transcribed them. Once the data from the observations and post-observation conversation meetings were collected, I used the in-vivo coding Saldaña (2016) recommended to

code the data. I searched for patterns and organized codes in the PAR Cycle One codebook. I used codes to determine possible categories, subcategories, and themes based on the connections I found in the data. In the Pre-Cycle, I had an opportunity to practice coding and find emergent categories. For this cycle, I used what I learned from the Pre-Cycle to support emergent themes. The data analysis procedure required multiple iterations as I developed my coding abilities and improved at distinguishing between a code, a category, and a topic by honing my skills as a practitioner-researcher. The data sources included PLC agendas and notes, selective verbatim notes from classroom observations, and transcribed notes from post-observation conversation meetings. I added this cycle's coding to my previous codebook and arrived at the emergent themes I discuss in the next section. I determined emergent themes based on the data collection and analysis, which provided more insight into the next steps for the PAR.

### **Emergent Themes**

In this research, I continued to work with PLC members in a professional learning community and collectively implement math discourse practices that benefit ELLs. Michaels et al. (2007) discuss the importance of accountable talk in elementary classrooms, a form of academic conversation that emphasizes reasoned arguments, evidence-based claims, and respectful dialogue. The authors provide examples of how accountable talk can support learning across various subjects. In this research, I looked for the presence of academic conversations, how teachers collaborated to enhance their implementation of ELL strategies, and how they used such strategies with students, especially ELLs. As I analyzed the data collected from PAR Cycle One, I used a frequency table to determine the prevalence of each of these three themes: (1) teachers' influence on academic conversations; (2) pedagogy for ELLs; and (3) relational trust. Table 11 shows the emerging themes, categories, and codes. While these themes may evolve as

Table 11

*Emerging Themes, Categories, and Codes*

Emergent Theme (n=232)	Categories	Codes
Teacher Influence on Academic Conversations (n=150 or 65%)	General Teacher Moves (n=103 or 44%)	Turn and Talk = 19 Wait/Think Time = 10 Acknowledge Students = 10 Encourage Kids to Explain Thinking = 10 Students calling on students = 6 Hand Raising = 8 Wheel Spinner = 5 Cold Call = 4 Survey Students = 5 Teacher Revoicing = 4 Partnership Work = 6 Choral Response = 6 Equity Stick = 10
	Teachers' Mindsets (n=27 or 12%)	Value Students' Voices = 17 Encourage Growth Mindsets = 10
Pedagogy of ELLs (n=52 or 22%)	ELL Scaffolds (n=16 or 7 %)	Vocabulary Wall = 4 Sentence Starters/ frames = 4 Labeling words with pictures = 2 Mentor Texts = 1 Highlight Key Vocabulary = 5
	ELL Talk Moves (n=37 or 16 %)	I agree = 10 I disagree = 2 Building On/ Add On = 25
Relational Trust (n=30 or 13%)	Norms, Routines, Community Building (n=11 or 5 %)	Set up math norms = 5 Community Building = 6
	Understanding Students (n=19 or 8 %)	Look for Students' Readiness = 8 Building confidence = 5 Shy Students = 6

we continue with PAR Cycle Two, I determined their importance by relying on the frequency in the data (see Figure 13 for graphic of emergent themes and categories).

### **Teachers' Influences on Academic Conversations**

Throughout this PAR cycle, teachers worked on improving their comfort with academic conversations. Through reading articles on academic conversations from Zwiers and Crawford (2011) and engaging in conversations with PLC members, the PLC members gained a common understanding; however, implementation requires a series of shifts in teacher practices. Mercado and Motha (2019) report that teachers can support academic conversations by helping students develop language practices appropriate for academic contexts and by creating a classroom culture that values and supports dialogue. Thus, teachers can design classroom interactions that will influence academic conversations in the classrooms. In this research, I observed teachers' influence on classroom dialogue in teacher moves and teacher mindsets.

### ***Teacher Moves***

Teachers influenced students' engagement in academic conversations primarily through concentrating on think time and changing calling-on strategies to be more equitable. In classrooms in which teachers encouraged students to use talk moves and respond to their peers, student-to-student engagement increased; conversely, in classrooms in which students were only expected to use talk moves and gestures in isolation, student engagement was limited.

**Think Time.** Think time in education refers to the intentional pause or period of silence provided to students after a question, or a prompt is posed by the teacher. Think time is an essential component of effective classroom discourse and promotes deeper learning (Lyman et al., 2023). Lyman (1981) discussed the importance of incorporating think time in instructional practices, emphasizing that it encourages active student engagement, critical thinking, and

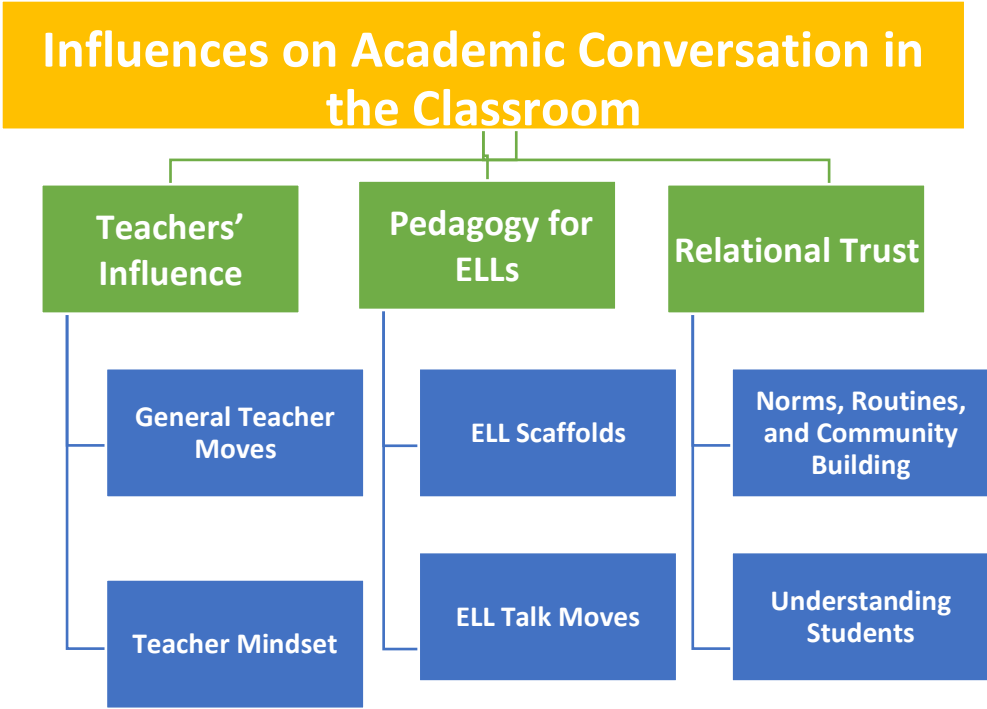


Figure 13. Influences on academic conversations in the classroom.

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higher-order cognitive processes. By fostering student think time, teachers provide students adequate time to process information, reflect and develop their ideas, construct arguments, and make connections to prior knowledge. Think time supports students' metacognitive skills and fosters a classroom culture where thoughtful and deliberate thinking is valued.

PLC members intentionally worked on providing adequate think time. In their study, Goldstein and Conrad (1990) found that increasing the amount of think time given to students during science instruction improved their understanding of science concepts and their ability to express their ideas in English. In post-observation conversation with each PLC member, this pedagogical choice emerged as a necessary instructional tool for students to process information. LH shared, “I forget to think about the time essential for them to make connections” (post-observation conversation, November 1, 2022). During an observation, I noticed that LH used a timer to ensure that students had adequate think time before sharing their thoughts. When asked about this, LH explained that she had become more intentional about giving students ample think time after her consideration of both a previous post-observation conversation and discussions in the PLC. By providing students with more time to process their thoughts, LH hoped to encourage deeper thinking and prevent students from simply blurting out. In addition, the teachers noted that language learners need longer processing time. AM explained that she now, “gives them time to think in their head...Then they have time to process. I give them a chance” (post-observation conversation, October 28, 2022). In another post-observation conversation session, she had previously not given students much think time, but after discussions and readings during the PLC meetings, she was encouraged to incorporate this technique of time to think in their heads into her teaching practice.

**Equitable Calling-On Strategies.** Equitable calling-on strategies in elementary classrooms are instructional techniques used by teachers to engage students in active participation and promote equal opportunities for all learners to contribute. These strategies aim to ensure that every student has a chance to share their thoughts, ideas, and answers during classroom discussions. By employing equitable calling-on strategies, teachers create an inclusive learning environment where all students feel valued and have the opportunity to contribute to the collective learning experience. Webb (2009) highlights the significance of purposeful and systematic calling-on strategies to enhance student engagement and learning outcomes.

During the PAR Cycle One, PLC members discussed using different equitable calling-on strategies to engage learners. The four PLC members recognized the importance of having equity of voice in the classroom, but they differed in how they applied calling-on strategies. In classroom observations, I observed positive teacher connections with students, but inconsistent calling-on practices. Teachers did not use the same equitable calling-on strategies throughout the lesson, but tended to go from one strategy to another based on the teachers' decision on what was appropriate in the moment. PLC member CK used the method of students calling on students (n=6). She explained, "I give students some autonomy for calling on each other so students who do not self-select to participate will participate if another student calls on them" (post-observation conversation, October 26, 2022). Hand raising (n=8) was seen in all four classrooms. Most PLC teachers initially looked for raised hands to call on students but changed strategies once they saw the same hands raised repeatedly. Three out of four PLC teachers used equity sticks to diversify responses of students. CK noted that she color codes her equity sticks, "...when I'm pulling on a certain color equity stick, I may give ELL students two choices to give them a positive experience and for them to feel successful" (post-observation conversation,

October 26, 2022). AM discovered a wheel spinner device at a professional development and used it (n=5) as an alternative to equity sticks (n=10). Cold call (n=4) was observed in DK's classroom to keep students attentive. Both CK and DK commonly surveyed students (n=5) to check students' understanding of the lessons. Teacher revoicing (n=4) was used in LH, DK, and AM's classrooms to ensure students statements were heard or understood by other students. Partnership work (n=6) and choral response (n=6) were used to engage all learners and were particularly effective in increasing participation by more reticent students.

To promote equal participation, teachers can provide students with multiple opportunities to participate by applying a variety of equitable calling-on strategies such as random selection, think-pair-share, and wait time. AM shared, "When I see the same kids raise their hands, I'll change to the equity sticks or wheel spinner" (post-observation conversation, October 14, 2022). Implementing more equitable calling-on strategies ensures that all students have an equal opportunity to contribute and engage in classroom discussions. A study by Tognozzi (2013) supports this notion, highlighting the importance of equitable calling-on strategies in fostering inclusive participation. Teachers who purposefully diversify their calling-on strategies provide each student with a fairer chance to share their thoughts and ideas. In contrast, teachers who rely on traditional calling-on methods like hand-raising may inadvertently privilege certain students while marginalizing others. Through intentional and equitable calling-on strategies, teachers can create an environment that fosters equal participation and promotes a sense of belonging for all students.

### ***Teacher Mindset***

Teacher mindset refers to the beliefs, attitudes, and perceptions that teachers hold about their own abilities and the potential of their students and plays a vital role in shaping



instructional practices and student outcomes in education. A growth mindset (Dweck, 2006) is particularly significant in promoting positive learning experiences. Teachers with growth mindsets believe that intelligence and abilities can be developed through effort, perseverance, and effective strategies. They view challenges as opportunities for growth, embrace mistakes as learning opportunities, and are more likely to provide constructive feedback and support to their students. Teachers' mindsets influence their instructional choices, classroom climate, and student motivation and achievement (Yeager & Dweck, 2012). By cultivating a growth mindset, educators can create a supportive and empowering learning environment that encourages students to take on challenges, develop resilience, and reach their full potential. If teachers have a growth mindset, they use that perspective to interact with students and value students' voices; they believe students can learn through their effort and through teacher actions to support their growth. Johnson and Smith (2021) explore the relationship between teacher mindsets and student motivation and achievement, highlighting the importance of adopting growth-oriented mindsets in promoting positive educational outcomes. The study by Johnson and Smith (2021) provides empirical evidence supporting the significance of teacher mindsets in shaping student experiences include valuing student voice and encouraging a growth mindset.

**Valuing Students' Voices.** In this PAR Cycle One, PLC members valued students' voices (17 occurrences, or 7 %). PLC member CK shared how she recognizes the importance of creating an inclusive and participatory classroom environment (post-observation conversation, October 26, 2022). PLC members discussed how they wanted their classrooms to feel comfortable. PLC member AM shared that she actively seeks and values student input, opinions, and perspectives (post-observation conversation, October 28, 2022). She purposely uses the wheel spinner and equity sticks to encourage students to express themselves.

**Encouraging a Growth Mindset.** In this PAR Cycle One, PLC members encouraged a growth mindset (10 occurrences or 4%). LH shared that she encourages her students to have a growth mindset (post-observation conversation, October 14, 2022). LH firmly agrees that learning from mistakes is crucial to growth. She stressed the importance of embracing mistakes as opportunities for learning and encouraged her students to adopt a growth mindset. DK echoed this sentiment, expressing his belief that his students can improve their skills with practice (post-observation conversation, October 24, 2022). The teachers' mindsets play a significant role in fostering a growth mindset among their students. This theme emerged multiple times during the PAR Cycle One, underscoring the need for further exploration into how teachers' beliefs and valuing students' voices can promote a growth mindset.

Based on the findings of PAR Cycle One, it appears that teacher mindset is a crucial factor in promoting a growth mindset among students. The members of the PLC emphasized the importance of valuing student voice and learning from mistakes, both of which are necessary for growth. It is clear that teachers' beliefs play a significant role in shaping their students' mindsets, and further exploration of methods to encourage a growth mindset in the PAR is needed.

### **Pedagogy of English Language Learners (ELLs)**

Throughout the PAR cycle, the particular pedagogical strategies useful for ELLs emerged as a significant theme. The pedagogy of ELLs is a multifaceted and intricate field that involves teaching the English language to students who are non-native speakers. This entails various approaches and strategies aimed at enhancing ELL students' English language proficiency while helping them learn academic content. I discuss the particular talk moves necessary for ELL and the scaffolding processes that teachers use. A crucial element of the pedagogy of ELLs is the use of language instruction customized to the individual student's specific needs; therefore, in math

classrooms, teachers still must attend to instruction in English grammar, vocabulary, and syntax, as well as teaching strategies for reading, writing, and speaking in English. I discuss the particular talk moves necessary for learning language and the scaffolding processes that teachers used.

### ***ELL Talk Moves***

Teachers use deliberate strategies to promote meaningful classroom discussions and facilitate student engagement, including talk moves. Talk moves include a range of techniques that encourage students to articulate their ideas, listen to others, and build on one another's contributions. These moves help create an inclusive and collaborative learning environment. Chapin et al. (2009) emphasize the significance of talk moves in supporting students' mathematical reasoning. Their research highlights specific talk moves such as revoicing, restating, and asking probing questions that foster deeper understanding and promote critical thinking. Talk moves enable students to explain their thought processes, justify their reasoning, and consider alternative perspectives. By implementing effective talk moves, teachers can elevate the level of discourse in the classroom, encourage active participation, and enhance students' ability to communicate and think critically.

During PAR Cycle One, PLC members met once a month to learn specific strategies that promote increased academic conversations for ELLs. The area of focus was ELL talk moves (n=37 or 16 % of the data). The particular ELL talk moves support students' language development while engaging them in meaningful discussions. While general talk moves for academic conversations (think time and calling-on processes) apply to ELLs, PLC members learned about strategies that are specific to ELL students. They include clarify and elaborate,

repeat and rephrase, build on ideas, paraphrase and summarize, ask for evidence, seek clarification, and connect to personal experience.

PLC members had a particular interest in working with students on how to express agreement or disagreement with other speakers in the classrooms. As a result, they selected the building on ideas as the ELL talk move that would generate more academic conversations. They wanted to encourage students to build on each other's ideas by adding information or making connections. The goal was to teach students hand gestures and corresponding sentence starters like, "I agree with [student's name] because..." or "Adding to what [student's name] said, I think..." This promotes collaboration and helps students develop their speaking and listening skills.

Throughout all the PLC meetings, the members placed a strong emphasis on both generic and specific ELL talk moves. During PLC meetings, every teacher expressed a shared belief in the significance of talk moves and their potential impact on student participation and engagement. We used posters featuring teacher prompts and student responses during the meetings to promote teacher transfer to classroom practice. As a result, the teachers became proficient in using talk moves such as, "I agree," "I disagree," and "I would like to build on/add on." Teacher CK mentioned that teachers would have to start in their comfort zone (post-observation conversation, December 13, 2022) and this was observed in the classrooms. However, the implementation of talk moves was largely confined to each individual teacher's influence and engagement preferences. Across all four classrooms, students utilized the "I agree" hand gesture. In two of the classrooms, two PLC members encouraged the students to elaborate on why they agreed with a peer's response. Conversely, in the remaining two classrooms, students were only expected to utilize the "I agree" hand gesture. The level of

student engagement in academic conversations during the math observations seemed to correspond with the teacher's chosen instructional strategies. Although both talk moves enhanced student participation, more conversation was observed when students were asked to elaborate. Teachers used scaffolding techniques in the same way to enhance academic discourse.

### *Scaffolding*

Scaffolding is a valuable instructional approach in education that involves providing temporary support to learners as they develop new skills or knowledge. Scaffolding is designed to bridge the gap between a student's current abilities and the desired learning outcomes and entails the teacher or more knowledgeable others providing guidance, modeling, and breaking down complex tasks into smaller, manageable steps. This support gradually diminishes as the learner gains competence and independence. According to Wood et al. (1976), scaffolding helps learners engage in tasks beyond their current capabilities, allowing them to acquire new skills and knowledge in a supportive and structured environment. I share the instructional techniques and strategies that I observed and discussed with the PLC members during the PAR cycle.

Throughout the cycle, I noticed that two of the four PLC members consistently provided sentence frames and vocabulary to support ELLs in their academic conversations. By doing so, these teachers helped the students produce more complex sentences and express themselves more effectively. Additionally, these teachers modeled how to have a two-way conversation, which enabled the students to utilize the resources provided and emulate the language. During our post-observation conversation sessions, LH shared, “Sometimes they have to tell their partner, ‘Okay, well you go first,’ and hear those sentence frames modeled in another way” (post-observation conversation, November 1, 2022). PLC LH talked about how she supports her ELL students successfully participating in classroom discussions by providing sentence frames that model the

language objective she has for her students, thereby extending their sentences and helping them to elaborate.

Thus, the identification of effective pedagogy for ELL students built on generic academic discourse and fortified our knowledge and skill with specific strategies for ELL learners. By choosing particular foci for learning and implementing, teachers supported each other to include ELL talk moves and scaffolding in their classroom practices.

### **Relational Trust**

Relational trust emerged during this PAR cycle and played a crucial role in fostering a positive and productive learning environment. Relational trust referred to how the students, teachers, administrators, and parents develop a sense of confidence in one another's abilities, intentions, and commitment to educational goals. Trust is built on open communication, mutual respect, and consistent support, and positively impacts student achievement, teacher job satisfaction, and overall school effectiveness (Bryk & Schneider, 2002; Bryk et al., 2010). In their work, Bryk and Schneider emphasized the significance of relational trust by highlighting its influence on collaborative decision-making, risk-taking, and the establishment of a shared vision for educational success. By nurturing relational trust, educational institutions can enhance student engagement, teacher-student relationships, and ultimately, educational outcomes. I discuss two aspects of building and sustaining relational trust —norms and routines that enhance community building and the importance of understanding students.

### ***Norms, Routines, Community Building***

I observed that relational trust between teachers and students was a result of establishing conversation norms and routines. By consistently implementing norms and routines, teachers helped create a safe and predictable environment for students, which in turn fostered trust and a

sense of community within the classroom. While this factor is a small part of the data (5%), it suggests that established routines improve the possibility for increased academic discourse; In intentional relationships, the teacher's relationship with the student sets up the conditions for student effort. Another way that teachers fostered relational trust was through frequent check-ins with students. Teachers took the time to ask students how they were doing, both academically and emotionally, and provided support when necessary. This helped students feel seen and valued and allowed them to develop a deeper level of trust with their teachers. In addition, relational trust was evident in the teachers' recognition of students' comfort level with public speaking. Rather than forcing students to speak in front of the class if they were uncomfortable, teachers provided alternative opportunities for students to participate and demonstrated a willingness to accommodate the students' individual needs. Teachers are always aware that they occupy the dual role of warm demander and instructor, and therefore stressed relationships with and alternative participation for ELLs to maintain equitable access and academic rigor (Boykin & Noguera, 2011; Delpit, 2012; Ware, 2006).

During post-observation conversations, PLC members shared the math norms that they had worked on with their students. These norms emphasized the importance of taking risks and de-emphasized the value of getting the right answer. By focusing on the process of problem-solving and encouraging students to explore different strategies, teachers were able to foster a growth mindset and create an environment in which students felt safe to take risks and learn from their mistakes. AM shared, "Before a lesson, I talk about norms and make sure they feel comfortable to participate. I emphasize that it is important to explain their thinking" (meeting notes, October 18, 2022).

### *Understanding Students*

During the PAR cycle, PLC members were aware of the importance of student comfort level in public speaking. CK and DK noted that they did not want to make students feel uncomfortable or embarrassed, so they asked questions based on what they believed would generate a successful answer. The teachers created opportunities for students to engage in partner or group talk instead of sharing with the whole class. By doing this, the teachers established a classroom culture that values risk-taking and deemphasizes the importance of getting the right answer. As a result, students were less likely to tease each other for having incorrect answers and felt more comfortable participating in academic conversations. CK explained that she sometimes gives students “multiple choices to give them a positive experience and to feel successful” (meeting notes, October 26, 2022). AM contributed, “The kids are kind of shy. I check and see if they want to add on. I want to know that they feel comfortable and will not feel embarrassed about it. They are kind of quiet” (meeting notes, October 28, 2022). Sometimes, teachers intentionally asked close-ended questions to ELL students in order to help them feel successful; In some cases, this limited the students’ responses. In addition, PLC members interacted with ELLs to encourage and support students' lesson engagement. During lesson observations, I noticed that all four PLC members actively moved around the classroom to provide feedback to students. This was one of the ways that the teachers supported students before calling on them to share with the whole class. PLC member DK made a conscious effort to check in with his ELL students while other students worked independently. He reported an increase in participation among his students from August to November, estimating that only 30% of students engaged in academic conversation at the beginning of the school year, but that number had risen to 70% by November (post-observation conversation, October 15, 2022).



During the first PAR cycle, three emergent themes emerged as crucial factors shaping the academic conversations in the classrooms. The first prominent theme, observed in 65% of the data (n=150), was the influential role of teachers in facilitating academic conversations. Teachers employed a range of effective strategies, referred to as General Teacher Moves, to foster and enrich these discussions. Moreover, their attitudes and beliefs, termed Teacher Mindsets, played a significant role in shaping the quality and depth of these academic interactions. The second theme, which accounted for 22% of the data (n=52), centered on the pedagogy for ELLs. This theme highlighted the importance of teachers integrating ELL scaffolds—targeted supports and tools—to help ELL students engage more effectively in academic conversations. Additionally, they utilized ELL Talk Moves, specific techniques that encouraged participation and effective communication among ELLs during these discussions. The third pertinent theme, Relational Trust within the classroom, was found in 13% of the data (n=30). Teachers recognized the significance of establishing a positive and supportive environment. This was achieved through the development of shared Norms and Routines, which provided students with clear expectations and predictable structures. Additionally, fostering Community Building activities strengthened a sense of belonging and collaboration among students. A key aspect of building trust involved teachers seeking to better understand students, including their backgrounds and individual needs, which further promoted a positive and respectful learning environment. In conclusion, these three emergent themes—teachers' influence on academic conversations, pedagogy for ELLs, and relational trust—were fundamental to the success of the first PAR cycle. Teachers' influence on academic conversations, the pedagogy for ELLs, and the cultivation of relational trust collectively contributed to creating an inclusive and engaging classroom environment that supported the academic growth and social development of all students.

## **Leadership Reflection and Action Steps for PAR Cycle Two**

Prior to starting PAR Cycle One, I sought to address the overarching question: How do teachers in a professional learning community (PLC) build the capacity to fully engage as collaborative thought partners to support ELLs in conceptual mathematical thinking?

The research questions included:

1. To what extent do professional learning communities support teachers in developing collegiality and relational trust?
2. To what extent do teachers who participate in a professional learning community collaborate to make informed pedagogical decisions about engaging ELL students in academic discourse in math and implement consistent strategies that support equitable access and rigor for ELL students in math classrooms?
3. How does my role as an instructional leader fully support teachers to build their capacity to collaborate and implement equitable academic discourse?

The research questions guided the PAR as I worked with the PLC members in PAR Cycle One. I collaborated with the PLC members through iterative meetings, observations, and post-observation conversations. I found it challenging to schedule monthly PLC meetings because of conflicting school meetings and parent conferences. Thus, I prioritized classroom observations and post-observation conversations, and worked to establish predictable schedules for these activities. The PLC members' flexibility and willingness to meet during their prep times demonstrated the importance of building relationships. Additionally, their openness to feedback helped me improve post-observation conversation skills by allowing me to practice listening and ask probing questions. The post-observation conversations highlighted the significance of effective communication in collaborative research.

In PAR Cycle One, I focused on collaborating with the PLC members through regular meetings, classroom observations, and post-observation conversation meetings to address our research questions. Collaboration within PLCs is a powerful approach that promotes continuous professional growth and improves educational practices (Steger, 2018). PLCs bring together educators who share a common purpose of enhancing student learning outcomes. Through collaborative efforts, teachers engage in meaningful discussions, share expertise, and collectively solve problems to improve their instructional strategies. Vescio et al. (2008) discuss the significance of collaboration within PLCs, highlighting its positive impact on teacher efficacy, student achievement, and school culture. By working collaboratively, educators benefit from diverse perspectives, support one another's professional development, and ultimately create a culture of continuous improvement within their schools. At the outset, I obtained consent from the PLC members, who were supportive and willing to open their classrooms to me. However, scheduling PLC meetings proved challenging due to other school commitments, but the flexibility of the PLC members allowed us to find mutually convenient times to meet. I prioritized classroom observations and post-observation conversations.

Through this cycle, I grew as a leader and gained a deeper understanding of ELL pedagogy and how to collaborate with colleagues to promote active participation in academic conversations. I was intentional and respectful of the teachers' time and made sure to greet them, rephrase their thoughts, push their thinking, and express gratitude for their participation. Overall, this cycle provided a valuable approach to studying ELLs and academic conversations.

The PAR Cycle One gave me the chance to collaborate with the PLC members and explore effective strategies and interventions to cater to the specific needs of ELLs. This necessitates regular face-to-face interactions with the PLC members, such as attending PLC

meetings, studying academic conversation strategies, observing and discussing talk moves, and analyzing classroom lessons. Through this collaborative process, I witnessed a more inclusive and equitable learning environment for all students in the classroom. For example, PLC member DK noted an increase in student engagement in math lessons since implementing more talk moves and equitable calling strategies, while PLC member AM has observed improved student confidence, especially among those who are typically quiet. With each post-observation conversation session, I remain optimistic that this research will positively impact both teachers and students.

Based on my experience with PAR Cycle One, I have come to understand the importance of using the improvement science of plan-do-study-act. This iterative process provides a framework that supports PLC members in working together to develop a deeper understanding of pedagogy, reflect on their practices, and adjust their strategies to meet their students' needs. In PAR Cycle Two, I plan to continue working iteratively with the PLC members by facilitating PLC meetings, engaging in reflective dialogue, and planning the next steps for implementation. Additionally, I aim to enhance my facilitation skills by considering my role in supporting the PLC participants. I recognize that strong, dependable relationships among PLC members are essential to the success of the research. These relationships allow for vulnerability and risk-taking, which are necessary for growth and improvement. Another crucial element is the use of ELL pedagogy that promotes student engagement, which requires giving PLC members sufficient time to review relevant information, share successful practices, and ask questions. I must concentrate on gathering pertinent information in line with PAR Cycle One. The following issues needed further exploration during PAR Cycle Two:

- What are the conditions and crucial elements that encourage genuine dialogue and feedback among PLC members?
- How do talk moves and think time encourage and support the deliberate sharing of ideas in math classes?
- How do the teacher's pedagogical decisions affect the involvement and engagement of students in classroom discussions?

As a result of the activities I participated in for PAR Cycle One, I had a better grasp of the issues that the PLC members should focus on for PAR Cycle Two. The data suggested that the PLC participants need more guidance toward comprehending pedagogical choices that foster academic discourse.

## **CHAPTER 6: PAR CYCLE TWO AND FINDINGS**

During the participatory action research (PAR) project, I used data from previous cycles to guide the iterative process of implementation and research. In the PAR Cycle One, I identified three emergent themes: (1) teachers' influence on academic conversations; (2) pedagogy for ELLs; and (3) relational trust. I used the themes to guide the PAR Cycle Two and develop themes and findings for the research. After analyzing the data for PAR Cycle Two, I determined that the three emergent themes discussed in Chapter 5 continue to apply to PAR Cycle Two. In this chapter, I describe the activities in PAR Cycle Two, share the data analysis from the cycle of inquiry, and showcase the data from PAR Cycle One and Cycle Two. Finally, I share the findings and present how the evidence substantiates the claims.

### **PAR Cycle Two Process**

Professional learning community (PLC) members met from January 2023 to April 2023 to continue learning about academic conversations and how they contribute to student learning. During our monthly PLC meetings, PLC members practiced dynamic mindfulness, which provides helpful techniques, including mindful movement, breathing exercises, and meditation, to manage stress and promote self-care. By practicing dynamic mindfulness, the PLC members grounded themselves and prepared for the meeting. In addition, we discussed articles that focused on ELLs. I conducted three rounds of observations and post-observation conversations with each PLC member. In March, all staff members participated in a community learning exchange (CLE) to learn more about academic conversations. In this section, I share the activities in the PLC meetings, the CLE, observations, and post-observation conversations in PAR Cycle Two (January-April 2023). Next, I share the activities and dates that took place during PAR Cycle Two (see Tables 12 and 13).

Table 12

*PAR Cycle Two Activities and Data (January-April 2023)*

Meetings/Dates	Activities	Data Collected
PLC Meetings January 11 February 8 April 5	<ul style="list-style-type: none"> <li>● Dynamic mindfulness</li> <li>● Read articles</li> <li>● Reflect on practices</li> <li>● Decide on classroom strategies</li> </ul>	Meeting Notes
DK Lesson Observations and Post-Observation Conversations February 22 March 17 April 11	Observations and Individual Conversations	Selective Verbatim Notes
AM Lesson Observations and Post-Observation Conversations February 15 March 3 April 7	Observations and Individual Conversations	Selective Verbatim Notes
CK Lesson Observations and Post-Observation Conversations February 15 March 23 April 18	Observations and Individual Conversations	Selective Verbatim Notes
LH Lesson Observations and Post-Observation Conversations February 22 March 23 April 12	Observations and Individual Conversations	Selective Verbatim Notes
CLE Meeting March 1	Dynamic Mindfulness Lesson Demo from LH and Video Demo	Meeting Notes

Table 13

*PAR Cycle Two Activities (by weeks)*

Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PLC Meetings	●		●									●		
Community Learning Exchange								●						
Classroom Observations (n=12)					●	●	●			●	●	●	●	●
Post-Observation Conversations (n=12)					●	●	●			●	●	●	●	●



## **PLC Meetings**

In the first PLC meeting, we revisited PAR Cycle One. At each PLC meeting, we read articles and discussed specific talk moves to promote academic conversations for ELL students. We watched demonstration videos produced by the district's multilingual department. In March, we canceled the PLC meeting and had a CLE meeting with other staff members. In April, we had our final PLC meeting and shared what we had learned and what we felt we would continue using beyond the time of data collection for the dissertation.

## **CLE Meeting**

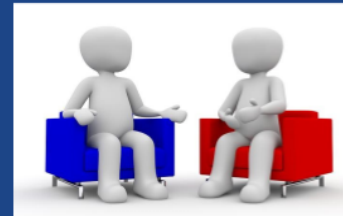
We invited all staff members and a teacher on special assignment from the multilingual department to the March 1 CLE. PLC member LH facilitated and demonstrated some ways she promotes academic conversations with her students. CLE members dialogued and shared their practices. We used a personal narrative as an equity opener to initiate the CLE (see Figure 14). In addition, participants had an opportunity to use turn and talk vs. more structured academic conversations. The participants discussed the differences between these two instructional strategies and based on their personal experiences with both, validated our reasons for moving toward specific intentional strategies for academic conversations rather than using the simpler turn and talk (see Figure 15).

After viewing a demonstration video on academic conversations in an SFUSD classroom, CLE members shared their responses to these questions: What happened during the academic conversation? and What norms, skills, and “conversation moves” are required for students to engage and make meaning? Table 14 incorporates responses from CLE participants.

# Equity Opener

4

With a partner share an experience when you were in the language minority group.



SAN FRANCISCO UNIFIED SCHOOL DISTRICT

[Collaboration Structure Numbered Heads Link](#)



*Figure 14.* CLE equity opener.

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# Turn and Talk

An *instructional practice* that focuses on students answering a question or responding to a prompt and sharing their answer or response with a peer. This instructional strategy provides opportunities for **student output**.

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vs.

# Academic Conversations

11

An *instructional practice* that goes beyond student output focused on **student interaction**. This practice provides time and support for two or more students to discuss meaningful topics in order to **co-construct meaning**.



Figure 15. Turn and talk vs. academic conversation.

Table 14

*Norms, Skills, and Conversation Moves in Academic Discourse: CLE Meeting*

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Norms	Skills and Conversation Moves
● Use of sentence frames	● Student time to talk.
● Use of talking chips—one voice	● The teacher paraphrased.
● Intentional groups—collaborative partnerships	● Frontloading vocabulary
● When students are talking write down what they are saying.	● The teacher checked in with students - the ability to engage in conversation and accountability.
	● Hearing candid conversations and making changes to planning.

---

The responses guided CLE members in looking for the essential components of academic discourse.

### **Observations and Post-observation Conversations**

During PAR Cycle Two, January 2023 to April 2023, I scheduled three rounds of observations and post-observation conversations with each PLC member, resulting in a total of twelve classroom observations and twelve post-observation conversations. Each PLC member determined the date, and the classroom observations produced different outcomes. Observations ranged from fifteen to thirty minutes in length. During these observations, I used selective verbatim to note calling-on strategies and ELLs talk moves used by the classroom teachers. Afterward, I facilitated post-observation conversations directly related to the observation during which PLC members could reflect on their teaching and how they support students' engagement in academic conversations. With the consent of the teachers, I voice-recorded the post-observation conversations in order to pay closer attention to the teachers. The recordings were transcribed and coded for analysis.

### **Analysis of PAR Cycle Two Data**

During PAR Cycle Two, I continued to work with the PLC members to develop a stronger understanding of academic conversations and to implement talk moves in the classroom that promote student engagement. I collected data from PLC meetings, lesson observations, and post-observation conversations. I used the selective verbatim method for data collection (Saldaña, 2016), and highlighted keywords, used those words as possible codes, and analyzed the codes to determine categories and themes. As noted in Table 15 and Figure 16, the three themes verified the emergent themes from PAR Cycle One: (1) teachers' influence on academic conversations; (2) pedagogy for ELLs; and (3) relational trust. The data were consistent with the

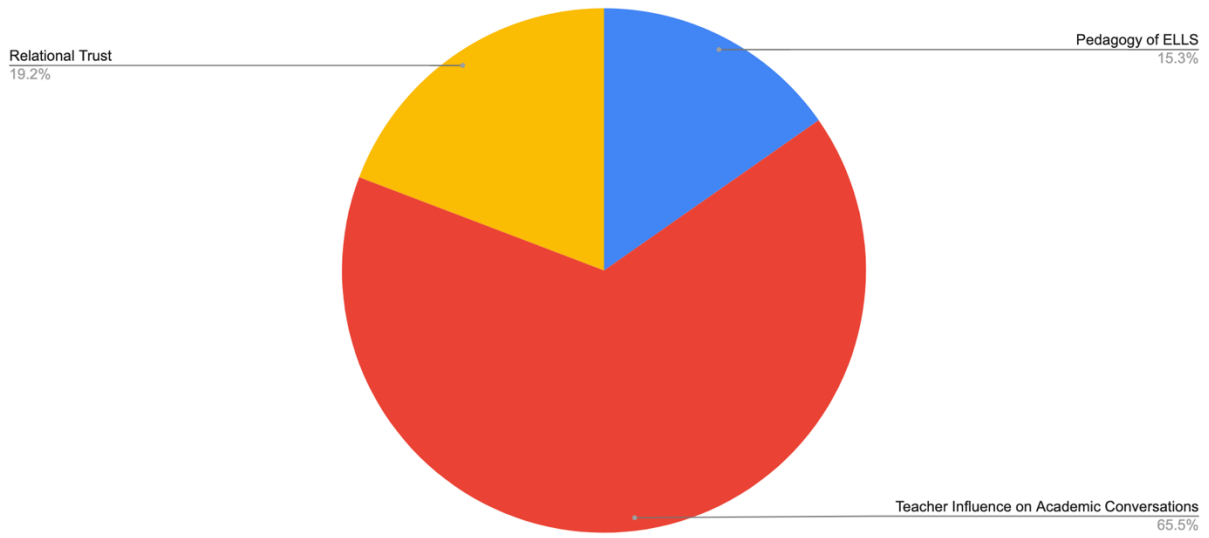
Table 15

*PAR Cycle Two Data*

Emergent Themes	Categories	Codes
Teacher Influence on Academic Conversations (n=158 or 67%)	General Teacher Moves (n=136 or 57%)	Turn and Talk = 12 Wait/ Think Time = 10 Acknowledge Students = 4 Encourage Kids to Explain Thinking = 8 Students Calling on Students Hand Raising= 18 Wheel Spinner =4 Cold Call =2 Survey Students =4 Teacher Revoicing = 6 Partnership Work = 12 Choral Response = 4 Equity Stick/ Chips =20 Whiteboards = 12 Independent Work Time = 10 Teacher Demonstration = 10
	Teachers' Mindsets (n= 22 or 9%)	Value Students' Voices =8 Encourage Growth Mindsets =4 Keep things Equitable = 2 Awareness of Students' SEL = 8
	ELL Talk Moves (n= 14 or 6%)	I agree/I disagree = 6 Building on/ Adding On = 2 Elaborate/ Clarify = 4 Main Idea/ Supporting Reasons = 2

Table 15 (continued)

Themes	Categories	Codes
Pedagogy of ELLs (n=44 or 19%)	ELL Scaffolds (n=30 or 13%)	Vocabulary Wall = 4 Sentence Starters/ Frames =6 Labeling words with pictures = 8 Mentor Texts Highlight Key Vocabulary =6 Math Tools = 6
Relational Trust (n=35 or 15%)	Norms, Routines, Community Building (n= 8 or 3%)	math norms =4 community building =4
	Understanding Students (n=27 or 11%)	Students' readiness =15 Building confidence = 4 Shy students = 2 Connect with parents = 1 Five students' responsibility/ roles = 5



*Figure 16.* Emergent themes for PAR Cycle Two.

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previous PAR cycle. I note down the emergent themes and frequency of the categories and represent that in a circle graph.

### **Teacher Influence on Academic Conversations**

In PAR Cycle Two, teachers continued to influence academic conversations through their choice and use of calling on strategies to promote academic conversations; the data indicate a total of 158 instances or 67% of the evidence from PAR Cycle Two. The use of equitable strategies for calling on student think time increased and strategies that provided less equitable access decreased. At the PLC meetings, teachers read about the importance of having equitable methods to provide access for all learners. Teachers discussed how using Think Pair Share consistently with all steps, particularly think time, supports learners in processing the information, collaborating with other students, and supporting students' expressive language.

For example, the use of equity sticks increased from 10 instances in PAR Cycle One to 20 instances in PAR Cycle Two. Conversely, turn and talk decreased from 18 instances to 12 instances. However, hand raising, which does not promote equity, was more difficult for teachers to abandon. Calling on raised hands is a long-entrenched classroom strategy PLC members continued to use it, increasing increased from 8 instances to 18 instances. During a post-observation conversation, AM shared that she called on students with both equity sticks and raised hands (post-observation conversation, March 3, 2023). Another PLC member, CK, contributed how she has adapted calling on to provide differentiation, "I have [equity sticks] color-coded and markings on them to tell me what type of students I am calling on. I know which students are ELLs. I have dots for students who need choices for answers," (post-observation conversation, March 3, 2023).

## **Pedagogy of ELLs**

PLC members worked together in PLC meetings to understand how to support ELLs and co-developed key instructional strategies that they intended to use to support student learning. The data indicate 44 instances or 19% of the data. The two areas of concentration for ELL pedagogy were scaffolding and specific ELL talk moves.

Members of the PLC met monthly to engage in a common understanding of scaffolding strategies that supported ELL learning (n=30). In general, the scaffolding should be both oral and visual so that learners can see and hear language. The members agreed to use vocabulary walls, sentence starters/frames, pictures with captions, mentor texts, and emphasis on key academic vocabulary words. In the PLC meetings, we focused on ELL talk moves (n=14), and PLC members made agreements to experiment with talk moves such as I agree/I disagree, building on/adding on, elaborate/clarify, and main idea/supporting reasons.

In the classroom observations, the PLC members all had ELL talk moves posters; however, the posters were only referenced in two out of twelve classroom observations. All PLC members used the I agree/I disagree talk moves when engaging students in academic conversations. PLC member LH shared how she would like to extend the talk moves by “Help[ing] them explain and support their thinking. This would make their argument valid and stronger. They have used some of these skills in writing their persuasive arguments such as the topic of chocolate milk” (post-observation conversation, April 12, 2023).

## **Relational Trust**

Relational trust remained critical to the PAR study. Because we concentrated on cultivating relational trust in our PLC in particular ways, teachers used practices from our PLC work to establish and sustain relational trust in classrooms. I was vigilant about using facilitation

practices that promoted teacher trust with one another and with me and modeled the practices we wanted to see in classrooms. We consistently used meeting norms, engaged in community building through stories, and read and discussed articles that supported our learning and choice of ELL strategies. In turn, the teachers transferred those strategies to the classroom to promote relational trust, including assessing student readiness, building confidence, supporting reticent students to engage, connecting with parents, and helping students take responsibility for learning. The teachers recognized in our PLC meetings that promoting strong academic student talk was a primary goal, and they recognized the social-emotional component of achieving that goal. Students need to form relationships with the teacher and each other in order to trust the classroom culture and take risks. PLC member DK shared,

I think it would be good but hard because some of them are not confident in public speaking. I have many kids who do not like public speaking, but possibly speaking at a table might be easier. I have noticed that more kids are talking to their peers and getting assurance from their peers. (post-observation conversations, April 18, 2023)

In summary, PAR Cycle Two spanned a four-month period from January to April 2023. All four PLC members earnestly participated in PLC meetings, conducted lessons with the research questions in mind, and engaged in post-observation conversations. The learning that took place amongst PLC participants provided data for the PAR findings.

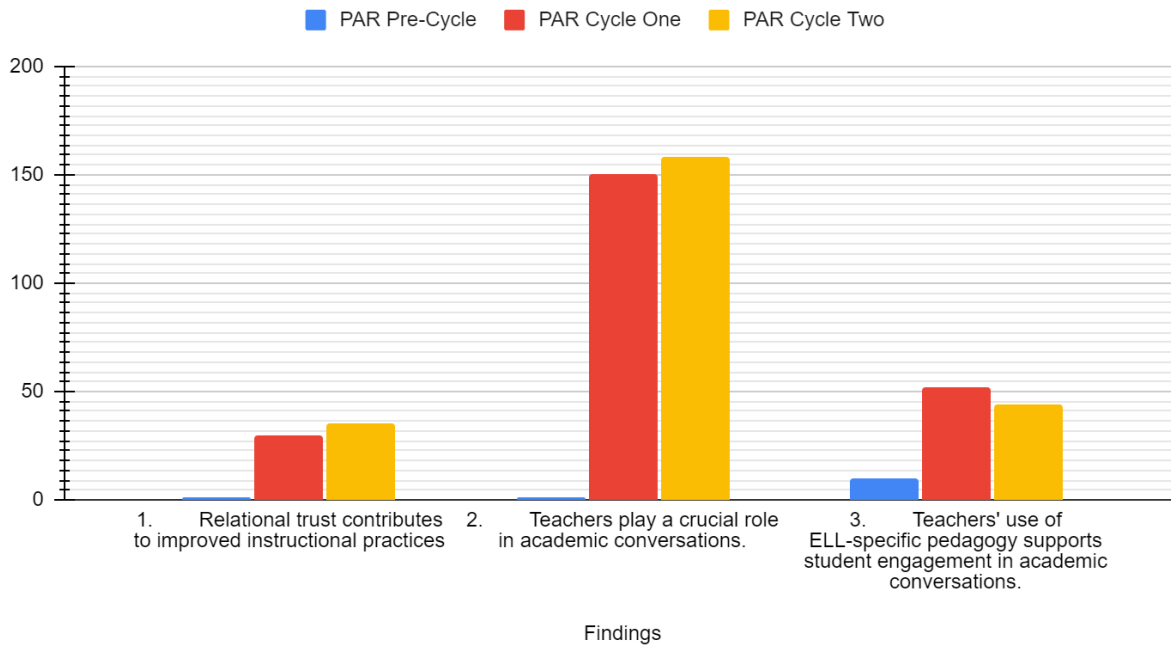
### **Findings**

Intentional facilitation of PLC meetings, consistent observations, and post-observation conversations were instrumental in supporting and validating the findings. In Figure 17, I share data across the entire 18-month project and study as I observed the gradual development and refinement of three research findings.

1. Relational trust contributes to collaborative decisions about instructional practices.
2. Teachers play a crucial role in academic conversations.
3. Teachers use ELL-specific pedagogical tools to increase access and rigor.

In Figure 17, I combined the frequency data from the PAR Pre-Cycle, PAR Cycle One, and PAR Cycle Two into a bar graph for comparison. To evaluate the changes over 18 months, I revisited the frequency data from Table 7, Table 11, and Table 15. During the Pre-Cycle, most of our efforts concentrated on establishing the Professional Learning Community (PLC). As the PLC members cultivated deeper relationships, we made progress and I collected more data in the areas of relational trust, pedagogy of English Language Learners (ELLs), and the influence of teachers on academic conversations. In PAR Cycle One, I observed notable changes in the frequency data: Relational trust (n=30,) pedagogy of ELLs (n=52), and teacher influence on academic conversations (n=150.) In PAR Cycle Two, I observed further developments. Relational trust increased (n=35), and teacher influence on academic conversations grew (n=158). However, the pedagogy of ELLs showed a slight decline (n=44). This decline can be attributed to some teachers reverting to previous practices, with ELL pedagogy sometimes being relegated to secondary consideration, and teachers used practices only when reminded. Liu and Phelps (2020) highlight an important aspect to consider. The impact of professional development may diminish relatively quickly, with effects fading in as little as 37 days. This finding may help explain the decline in ELL pedagogy between PAR Cycle One and PAR Cycle Two. To maintain progress in critical areas and address the challenge of professional development decay, I recognize that supporting the PLC members to maintain their implementation of ELL pedagogy is critical. Strategies for sustained improvement within the PLC need to go beyond the PAR study.

## PAR Pre-Cycle, PAR Cycle One and PAR Cycle Two



*Figure 17.* Data from three cycles of inquiry to determine findings.

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## **Relational Trust Contributes to Improved Instructional Practices**

Relational trust emerged as a key theme during the PAR cycles, underscoring its pivotal role in education. Relational trust refers to the confidence and trust that students, teachers, administrators, and parents have in each other's abilities, intentions, and commitment to educational goals. As a result, teachers who develop relational trust with each other can collaborate to make informed decisions about instruction. The PLC members established relational trust through open communication, mutual respect, and consistent support. Bryk and Schneider (2002) demonstrated that relational trust has a positive impact on student achievement, teacher job satisfaction, and overall school effectiveness. They emphasize its significance by highlighting how relational trust fosters collaborative decision-making, encourages risk-taking, and establishes a shared vision for educational success—all of which the teachers in the PLC did. In addition, Bryk et al. (2010) determined that relational trust is a critical factor in promoting student improvement. Grubb (2009) named relational trust as an abstract resource that is foundational to improving student outcomes. Tredway and Militello (2023) cite relational trust garnered through dynamic mindfulness and the use of personal narratives as a necessary condition for school improvement. By prioritizing the cultivation of relational trust, educational institutions enhance student engagement, strengthen teacher-student relationships, and ultimately improve educational outcomes. Relational trust was evident at PLC meetings and in post-observation conversations, and the teachers' trust in each other supported them to transfer experiences and learning from the PLC meetings to the classroom.

### ***Relational Trust in PLC Meetings and Post-Observation Conversations***

PLC members met monthly on average 4-5 times during each PAR Cycle (Pre-Cycle, Cycle one, and Cycle Two). In a total of 15 PLC meetings, members learned together and then

used what they had learned to make instructional decisions about how to prompt students to engage in academic conversations. PLC members worked together in PLC meetings and were genuinely interested in improving their practices. Attendance was consistent among members. All PLC members reported that they felt comfortable with sharing at the PLC meetings because of the relationships cultivated between the PLC members. This was most evident when PLC members referenced previous conversations or learnings from PLC meetings during our post-observation conversations. DK acknowledged, “We have been talking about ways to get students to be more involved in academic conversations,” (PLC meeting, February 8, 2023). AM shared, “We have been talking about wait time at the PLC. I know before I didn’t give my students enough time to think. Now I set a timer, and this reminds me that some kids need more time to think” (PLC meeting, February 8, 2023). The disclosure by AM is an example of how PLC members experienced the meetings as a place that was safe and comfortable to talk to one another.

In addition, relational trust was evident in the post-observation conversations. As teachers and I discussed data, the teachers began to see the usefulness of the data-driven observations and could make decisions about what to change. By focusing on coaching instead of giving feedback or telling teachers what to do, I fostered autonomy in decisions. A PLC member disclosed, “I have noticed more kids talking to their peers and getting assurance from their peers. I don’t think that would have happened two months ago” (DK, post-observation conversation, April 18, 2023). He also shared, “I feel I’ve set up a system where if they don’t know something, it’s ok,” (post-observation conversations, March 3, 2023).

### ***Relational Trust in the Classroom***

PLC members openly shared their practices and created space for me to observe them and their students in action. I scheduled observations with each PLC member according to their availability. Relational trust was evident in the classroom between the teachers and students. Teachers demonstrated norms, routines, and community building in PAR Cycle One (n=11 or 5%) and PAR Cycle Two (n=8 or 2%). Teachers demonstrated understanding of students in PAR Cycle One (n=19 or 8%) and PAR Cycle Two (n=27 or 5%). Teachers cultivated relational trust by attending to students' readiness levels, building their confidence, being aware of students they deemed shy, connecting with students' parents, and giving students responsibilities in the classroom.

### **Teachers Play a Crucial Role in Academic Conversations**

Teachers in the PLC played a crucial role in shaping academic discourse within the elementary classrooms. Through their deliberate attention to techniques like tailored think time, strategic talk moves, and equitable strategies for calling on students, they created inclusive and engaging learning environments. This approach not only fosters critical thinking and elevates higher-order cognitive processes, but nurtures students' metacognitive skills. As noted in the PAR, the teacher's influence is pivotal, and their efforts are crucial for both teachers and students alike. PLC members used think time, talk moves, and calling-on strategies to promote equitable discourse in the classrooms. In documenting teachers' influence over PAR Cycle One and PAR Cycle Two, the data were consistent and similar.

### ***Think Time***

Think time in education is a valuable tool that can help students engage more deeply with the material they are learning. By intentionally pausing after asking a question or providing a



prompt, teachers can give students the time they need to process information, reflect on their thoughts, and construct well-rounded arguments. Incorporating think time into instructional strategies fosters critical thinking and elevate students' metacognitive skills, creating a classroom environment that values purposeful and deliberate thinking. Lyman (1981) and Lyman et al. (2023) noted that think time is a critical part of effective classroom discourse; think-pair-share (TPS) benefits teachers and students when teachers pause after posing a question. During the PAR, PLC member LH became more intentional. In the beginning, LH shared, “I forget to think about the time essential for them to make connections” (post-observation conversation, November 1, 2022). Later in PAR Cycle Two, LH demonstrated more understanding of the value of think time when she used a timer at every observation in PAR Cycle Two. Similarly, AM shared that she now “gives them time to think in their head...Then they have time to process. I give them a chance” (post-observation conversation, October 28, 2022). Both LH and AM became more thoughtful of think time, and they shared how this provides more time for ELLs to process the information prior to engaging in academic conversations.

### ***Talk Moves: Generic and ELL-Specific***

By applying both generic and ELL-specific talk moves, such as encouraging students to use specific language, revoicing, and restating, teachers can enhance students' engagement in academic conversations. Fisher and Frey (2008) emphasize the positive impact of intentional talk moves for improving student-to-student engagement. In classrooms where teachers promote the use of talk moves and encourage students to respond to their peers, students demonstrate increased levels of active participation and meaningful dialogue. Conversely, in classrooms where students are only expected to use talk moves and gestures in isolation, student engagement is uneven and hinders the depth and quality of academic conversations. In the classroom

observations, the PLC members all had ELL talk moves posters; however, only two teachers referenced the posters in the twelve classroom observations I conducted. All PLC members used the I agree/I disagree talk moves when engaging students in academic conversations.

During each PLC meeting, teachers learned about talk moves and their relevance to helping promote academic conversations for students. During the PAR, teachers were most comfortable prompting student-to-student dialogue with the I agree/disagree talk move to engage students in the conversation. Often, teachers relied on this prompt because of a reluctance to push students beyond their comfort zones. PLC member LH was intentional about the talk moves she wanted students to use. She states in a lesson, “Students, you are going to use *elaborate and clarify* today. When someone talks to you today, I want you to ask them to elaborate and clarify by asking them to say more,” (classroom observation, March 21, 2023). Some PLC members had good intentions; however, characterizing students as “shy” limited those students from demonstrating their learning and supported the status quo. DK shared, “I have many kids who are not confident in public speaking,” (post-observation conversations, April 18, 2023). Only one PLC member found success in building on, clarifying, and explaining to support students in utilizing more robust language to support their opinions.

Calling on strategies in elementary classrooms are instructional techniques that teachers use to fully engage students in active participation and promote equitable opportunities for all learners to contribute (Boykin & Noguera, 2011; Tredway et al., 2019; Tredway & Militello, 2023). These strategies aim to ensure that every student has a chance to share thoughts, ideas, and answers during classroom discussions. Webb (2009) highlights the significance of purposeful and systematic calling on strategies to enhance student engagement and learning outcomes. Webb (2009) emphasizes the importance of using random selection, think-pair-share,

and wait (or think) time to provide students with equitable opportunities to participate. By implementing effective calling-on strategies, teachers can create an inclusive learning environment in which all students feel valued and can contribute to the collective learning experience.

During the previous and current PAR cycles, PLC members discussed using different strategies to engage learners. The four PLC members recognized the importance of having equity of voice in the classroom, but they differed in how they used calling-on strategies. In classroom observations, I observed positive teacher connections with students, but inconsistent calling on practices that promote academic discourse. Teachers did not use the same calling-on strategies throughout the lesson; instead, teachers tended to go from one strategy to another based on what they deemed appropriate. AM shared, “When I see the same kids raise their hands, I’ll change to the equity sticks or wheel spinner” (post-observation conversation, October 14, 2022). For example, PLC member CK noticed a lack of equity of voice in her classroom and shared with the students, “I’m hearing a lot of the same voices, so let me pick a stick,” (classroom observation, March 21, 2023). Some of the PLC members demonstrated a change in their pedagogical practices because of the PAR. AM disclosed, “The whiteboard gives them time to think mathematically. It makes sure they have time to process the problem. Giving students time to think allows them time to think about the problem and process it,” (post-observation conversation, April 11, 2023).

In Table 16, I showcase the calling-on strategies that teachers utilized during PAR Cycle Two. The use of equity sticks (n=20) became more dominant toward the end of the PAR. Teachers still used hand-raising (n=18), which was the dominant method in PAR Cycle One. As

PLC members became familiar with think pair share (n=12) and call and response (n=4), they began to use these strategies. Tognozzi (2013) supports the importance of equitable calling on strategies in fostering inclusive participation. As the teachers became more familiar with equitable calling-on strategies, they were more inclined to use them. If teachers purposefully diversify their calling on strategies, such as by using random selection or structured turn-taking, students have a fairer chance to share their thoughts and ideas. In contrast, when teachers rely on traditional methods like hand-raising, they may inadvertently privilege certain students while marginalizing others. Through intentional and equitable calling on strategies, teachers can create an environment that fosters equal participation and promotes a sense of belonging for all students.

### **Teachers' Use of ELL Specific Pedagogy: Supporting Access and Rigor**

Throughout the PAR process, the professional learning community (PLC) members demonstrated a clear progression in their understanding of ELLs and how to make pedagogical decisions that support the students' engagement in academic conversations. In both PAR Cycle One and PAR Cycle Two, PLC members actively utilized specific ELL strategies to design their lessons for improved access and rigor. In particular, they used ELL scaffolds and talk moves designed to facilitate ELL students' participation in classroom discussions. Quiroz and Greenfield (2017) emphasize the significance of ELL pedagogy in promoting inclusive participation. By intentionally diversifying calling on strategies, employing language development techniques, and providing scaffolds for ELLs' contributions, teachers create an environment that supports the active involvement of all students. This approach was evident in the PLC members' practices.

Table 16

*Calling-On Strategies: PAR Cycle Two*


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Calling-On Strategies	When	Frequency
Hand Raising	February 15, March 17, March 21, April 17, and April 18, 2023	18
Equity Sticks	February 15, March 17, March 21, April 17, and April 18, 2023	20
Think Pair/ Group Share	Feb 11, Feb 15, Feb 22, March 17, March 23, April 7, April 11, April 12	12
Call and Response	Feb 11, Feb 22, March 17, March 21, March 23, April 11, April 7, April 12 and April 18	4

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In one classroom observation on March 21, 2023, LH showcased her awareness of ELL pedagogy. She incorporated sentence frames, set timers for think time, used think pair share activities, and employed two talk moves (agree/disagree and elaborate and clarify) to support ELL students' participation. During a post-observation meeting with AM on April 11, 2023, she demonstrated her attentiveness to ELLs' participation and stated that when students needed more time, she made sure to set a timer. AM also shared her intentional approach to modeling and showing ELLs how to explain their thinking.

Similarly, during a post-observation conversation on April 18, 2023, DK said that he believed students would retain information better if they explained it to each other rather than solely relying on his explanations. Another PLC member, CK, expressed that she was aware of which students were ELLs and used visual cues, like dots on her equity sticks, to identify students who needed answer choices instead of open-ended questions.

Overall, the PLC members' dedication and thoughtful implementation of ELL pedagogy were evident through their intentional strategies and care for their students. The frequent utilization of ELL scaffolds and talk moves showcased their commitment to creating an inclusive and supportive learning environment for all students, including ELLs.

### **Conclusion**

In this chapter, I provided a comprehensive account of the emergent themes for PAR Cycle Two and the findings of the PAR study. I highlighted how the PLC members utilized insights gained from PLC meetings, observations, and post-observation discussions to foster more equitable opportunities for students to engage in academic conversations. Throughout the PAR project, data from previous cycles guided the iterative process of implementation and research. The findings confirm that teachers can learn to plan and implement equitable structures

for academic discourse in elementary school classrooms. In the PAR process, the PLC members had opportunities to build relational trust, reflect on their pedagogical practices, and gain awareness of strategies that support ELLs. I documented the PLC members' shifts in practice that occurred because of these opportunities throughout the 18-month study.

As the lead Co-Practitioner Researcher (CPR) and principal of the school involved in the study, I have actively engaged in studying the data, analyzing its relevance to the research, and supporting the growth of PLC members. Supovitz and Turner (2000) emphasize the significance of the principal's role in promoting and sustaining effective PLC. Furthermore, Supovitz and Turner (2000) highlight that principals who actively engage in the PAR process create a supportive environment that encourages teacher collaboration, fosters professional growth, and has the promise of improving student outcomes. In the subsequent chapter, I discuss the extant literature related to the findings, discuss the PAR's implications and limitations, and reflect on my leadership.

## CHAPTER 7: DISCUSSION AND IMPLICATIONS

In *Pedagogy of the Oppressed*, Paulo Freire discusses his philosophy of education and proposes a liberatory pedagogy that empowers learners and challenges oppressive structures. His ideas have had a profound impact on educational theory and practice, including the development of participatory and collaborative research methodologies like PAR. In this project and study, I used the PAR approach, a collaborative research method that emphasizes the active involvement of community members throughout the research process. This approach proved to be highly effective in investigating equity issues in my local school community. The community of practice (CoP) model (Wenger, 1998) supported the professional learning community (PLC) that I formed to investigate how we could improve teacher practices for equitably engaging ELL students. By incorporating elements of a community learning exchange (CLE) and focusing on the local knowledge and expertise within the community, I fostered a mutual learning environment that empowered the PLC members to take part in the research process. Moreover, the PAR aligns with one CLE axiom which confirms that learning is a dynamic and interconnected process (Guajardo et al., 2016). In the context of PAR, community members become Co-Practitioner Researchers; we used the term PLC members to designate the participants in the study. The four teachers in the study contributed their unique perspectives and insights, enriching the learning experience for all involved. This approach challenges traditional research power dynamics and enhances the authenticity and relevance of the research outcomes.

In this 18-month PAR study, I collaborated with four teachers in an elementary school in San Francisco where I am the principal. We formed a professional learning community (PLC) that embraced the tenets of a community of practice and co-practitioner research. Together, we



worked to shift practices as we sought to make changes that would lead to improved teacher practices, a first step to improving outcomes for ELLs.

In an effort to provide opportunities for an exploration of how academic conversations can effectively engage ELLs, members of the professional learning community (PLC) convened monthly; additionally, I conducted observations and post-observation conversations with PLC members. During the meetings and conversations, teachers learned together with a specific emphasis on fostering academic conversations within their classrooms. Subsequently, the teachers applied what they learned in the PLC meetings and worked to become better at their teaching craft. Through this collaborative approach, the educators not only reinforced their understanding of pedagogical techniques related to academic discourse but recognized its crucial role in creating more equitable and effective learning environments. Freire (1998) emphasized the transformative power of education and stated that "education is an act of love, thus an act of courage" (p. 38). By participating in PAR, the teachers demonstrated their love for their students as they developed the knowledge and skills to teach differently.

As an equity leader, I consistently prioritized building on teacher assets and facilitating teacher discussions. I understand the importance of respecting each teacher's pace of change and responded by providing a safe space for praxis, reflection, and action. By embodying the community learning exchange axiom that the people closest to the work are best positioned to solve dilemmas of practice (Guajardo et al., 2016), our community of practice exemplified this philosophy. Throughout our PAR process, I ensured that we focused on promoting equitable academic discourse in our meetings so that teachers could apply these practices in the classroom. By establishing the right processes and trusting teachers to make decisions that directly affect

them, we empowered the teachers to make decisions about how to improve their practices and ultimately promote equity for all students.

The PAR study consisted of three distinct PAR cycles, Pre-Cycle, PAR Cycle One, and PAR Cycle Two. In Table 17, I share an overview of the PAR activities, which were designed to enhance both individual and collective capacities for implementing equitable academic discourse strategies in the classroom. A crucial aspect of our approach involved building relational trust among professional learning community (PLC) members. By sharing personal narratives, we gained valuable insights into each PLC member's experiences and perspectives. Moreover, I conducted interviews, maintained regular PLC meetings, and embraced conversations that delved into teachers' existing understanding of equitable academic discourse. In addition, classroom observations, with a specific focus on employing strategies that encourage academic conversations, were a fundamental component of the research methodology. The combination of observations with post-observation conversations provided dedicated support for PLC members to reflect on their pedagogical decisions and further refine their practices.

In this chapter, I connect the findings from our three PAR cycles to implement equitable academic discourse strategies in the classroom to the extant literature and respond to the research questions. I conclude the study by providing a framework for changing teacher practice based on the findings, sharing implications for educational practices, research, and policy, and reflecting on my leadership development. Overall, the PAR process was successful in building relational trust through personal narratives, interviews, and consistent meetings and observations, ultimately leading to the development of effective strategies for promoting academic conversations in the classroom.

Table 17

*Key Activities: Three PAR Cycles of Inquiry*

Activities	PAR Pre-Cycle Spring 2022 (Jan - Apr 2022)	PAR Cycle One Fall 2022 (Aug - Dec 2022)	PAR Cycle Two Spring 2023 (Jan-Apr 2023)
Meeting with PLC members (n=12)	****	*****	***
Community Learning Exchange (n=5)	*	**	**
Classroom Observations-Formal (n=24)		*****	*****
Coaching Conversations with PLC members (n=24)		*****	*****

## **Discussion**

As I reviewed the PAR findings, I examined sources from the literature review and read additional research to better understand the findings and respond to the research questions. The analysis of the findings has proven to be insightful and informative, and I believe the framework of effective strategies for promoting academic conversations in the classroom is useful to other practitioners. The results of the PAR study indicate the following key findings:

1. Relational trust contributes to collaborative decisions about instructional practices.
2. Teachers play a crucial role in academic conversations.
3. Teachers use ELL-specific pedagogical tools to increase access and rigor.

These findings emerged through a process of three iterative cycles, demonstrating the gradual development and refinement of the research outcomes. The intentional facilitation of PLC meetings and consistent observations and post-observation discussions were instrumental in supporting and validating the findings.

### **Relational Trust: Collaborative Decisions about Instructional Practices**

The findings suggest that the depth of relational trust that we developed as a group contributed to our ability to engage in conversations and make collaborative decisions about instructional practices. In the 18-month study, the members worked together in the capacity of a professional learning community. The PLC structure was instrumental in supporting the PLC members to cultivate relational trust with each other, which supported them in formulating decisions that influenced the teachers' instructional practices. Teachers learned together in monthly meetings and engaged in critical dialogue about pedagogical strategies related to the PAR. The commitment to serve as part of the professional learning community created opportunities for collaboration, teamwork, and reflection.

### *Cultivating Trust*

The study conducted on PAR has shown a strong relationship between relational trust and collaborative decision-making in instructional practices. The participants in the study engaged in a professional learning community for 18 months where trust played a central role in their decision-making processes. For PLCs to thrive, build teacher capacity, and have an impact on student learning, relational trust must be situated at the heart of the group (Bryk & Schneider, 2002; Bryk et al., 2010). In fact, relational trust is a necessary condition for all teacher learning in the same way that teachers' relationships with students are foundational to their learning (Tredway & Militello, 2023). Grubb (2009), building on the Bryk and Schneider (2002), named trust as an abstract resource for school improvement that must be co-created by the organizational members.

As we engaged in the activities within the PAR and used specific protocols to support our work, I created opportunities for relationships to strengthen. Community learning exchanges created experiences that elicited critical exchanges of ideas. For members to freely participate, the group had to have a level of comfort. The growing trust served as a foundation upon which the PLC members and I confidently shared ideas, exchanged insights, and collectively made informed choices that benefit students and enhance the overall quality of education. Relational trust within the PAR was instrumental in promoting collaborative decision-making, especially in instructional practices.

Tschannen-Moran and Hoy (1998) identified five fundamental dimensions of trust that I use to analyze our ability to cultivate and maintain relational trust: benevolence, openness, reliability, honesty, and competence. In the context of this PAR, these five dimensions of the trust model were critical in shaping and strengthening relational trust among PLC members.

**Benevolence.** Benevolence is characterized by a genuine concern for one another and creates an atmosphere where staff members feel genuinely valued and cared for. Within the context of this PAR, members exemplified benevolence in the professional learning community (PLC); we demonstrated empathy toward each other and provided mutual support. As a result, the atmosphere of benevolence fostered a sense of belonging and emotional safety within the PLC, a critical feature of adult learning spaces in which teachers should feel held and respected (Drago-Severson, 2012). In a post-observation conversation, DK shared, “I can be vulnerable in our PLC group. You’ve created a space where we can trust each other and talk about topics without feeling we are judged” (PLC Meeting, Sept. 21, 2022).

**Openness.** Openness encourages transparent communication and sharing vital information. As PLC members became more willing to be vulnerable and share successes and issues, they demonstrated transparent sharing of information; they developed a sense of reliability from group members. The consistency of our processes led to routines that were dependable and useful. As PLC members felt increasingly comfortable sharing their thoughts, ideas, and concerns openly, they were more willing to collaborate, which creates a sense of cohesion within the school community. Being open to learning in public (Hughes & Grace, 2010) is particularly important; Whitford and Wood (2010) recommend that the key factors for an effective PLC are “adopting an inquiry stance, acknowledging limits of individual knowledge, making individual worries public, tightly focusing on teaching and learning, and collectively committing to ensuring student learning” (p. 9). During the PAR, the PLC members demonstrated openness, then they discussed the talk moves and how comfortable or uncomfortable they felt in implementing them in the classrooms. Members dialogued about their concerns and supported each other in the process.

**Reliability.** As a dimension of trust, reliability ensures consistency in actions and decisions. In the PAR, PLC members relied on each other to fulfill their commitments and obligations, creating a stable and predictable work environment. PLC members actively participated in monthly PLC meetings as we analyzed evidence from their classrooms to share with PLC members. In addition, PLC members were committed to the observations and post-observation conversations. Typically, PLC members stayed longer than the 15 minutes designated for the post-observation conversations. They took notes and tried to utilize the conversations as a platform for improving their instructional practices.

**Honesty.** Honesty that emphasizes integrity and truthfulness is indispensable in building trust among staff in schools. When members engage in interactions characterized by integrity and truthfulness, individuals can depend on the accuracy of information and the sincerity of their colleagues. In this PAR, the *truth-teller* was the data from their classrooms, and my ability to maintain the observations with consistency, accuracy, and integrity supported members to reflect and speak their truth. PLC member AM said, “I have learned a lot from being a part of this group. It has made me more thoughtful about how I choose students to participate. I want to help my students feel more confident in the classroom” (PLC Meeting, Oct. 12, 2022).

**Competence.** Lastly, competence is the ability to achieve common goals and deliver a quality education, thereby signifying the capacity to achieve set objectives and increase expertise. In elementary schools, staff members who demonstrate increased competence in their roles contribute to the overall effectiveness of the school, thereby bolstering trust in their professional abilities (Johnson & Smith, 2021). The PLC members worked together with the common goal of improving opportunities for students to engage in academic conversations in each of their classrooms, responding to the Whitford and Wood (2010) recommendation that

teachers maintain a focus on student learning. Through the PLC meetings, the members learned common talk moves and techniques that they used to bolster students' engagement in classroom activities. They made decisions about talk moves collaboratively and used the same or similar strategies, which gave us a basis for discussion and improvement.

### ***Effective Collaboration for Instructional Decision-Making***

Relational trust leads to robust collaboration. Teacher collaboration plays a pivotal role within PLCs as a driving force behind enhanced educational practices and student outcomes. As Grubb and Tredway (2000) emphasize, "collaboration among teachers encourages the sharing of insights, strategies, and experiences, ultimately leading to a more dynamic and effective educational environment" (p. 235). The PLC members came together to exchange ideas, share experiences, and collaboratively problem-solve to create a rich environment for professional growth. In this PAR, PLC members pooled their diverse expertise, insights, and innovative approaches. This resulted in collective wisdom that exceeded the capabilities of each individual PLC member.

The collaborative synergy fueled how members talked about and refined instructional strategies. Furthermore, the collaboration that took place during the PLC meetings and post-observation conversations nurtured a culture of continuous learning and improvement. Yurkofsky et al. (2020) posit that continuous improvement relies on four commitments, all of which we achieved in the PAR project and study:

- Grounding improvement efforts in local problems or needs;
- Empowering practitioners to take an active role in research and improvement;
- Engaging in iteration, which involves a cyclical process of action, assessment, reflection, and adjustment;



- Striving to spur change across schools and systems, not just individual classrooms (p. 404)

This fostered an atmosphere of ongoing professional development in the PLC in which members valued the process and transferred our commitments about practice to classrooms. Being in an effective PLC requires consistent dialogue among all members. As a group, the PLC recognized our efforts were directed toward the betterment of our students. Wenger and Wenger-Trayner (2015) suggest that through dialogue, we can learn to collaborate on evidence-based team-based learning practices and develop a culture of high-quality instructional practice. Prioritizing teacher dialogue and collaboration can lead to positive changes that benefit students.

The PLC members came together for their students' well-being. This improved their skills and interactions. During the PLC meetings, teachers strengthened their understanding of academic conversations and how they relate to ELLs. Through studying resources from SFUSD's multilingual department and studying books by Zwier and Crawford (2016) and Hammond (2015), PLC members collectively decided on how to proceed with the research. This aligns with Hammond's (2015) explanation of the two ways the brain organizes itself:

Collectivism and individualism reflect fundamentally different ways the brain organizes itself. Turns out our brains are wired to favor a communal view of the world. Humans have always sought to be in community with each other because it enhanced our chances of survival. (p. 25)

A study by Ronfeldt et al. (2015) examined the kinds of collaborations that exist in a large urban district. From their survey, they found that most of the teachers who responded identified as being a part of a team or group. In addition, about 88% of respondents felt that the team or group was either helpful or very helpful. This study aligns with the feelings of the participants in this

PAR. All the participants felt that their participation in the PLC supported their professional growth. As a methodological emphasis in action research, the usefulness of the work to the participants is a key standard of study validity (Hale, 2008). Usefulness is a result of attending to the CLE axiom of “the people closest to the issues are best situated to discover answers to local concerns” (Guajardo et al., 2016, p. 25). As they experienced relational trust, the teachers increased their roles in setting up the conditions for effective academic conversations for ELL students.

### **Teachers Play a Crucial Role in Academic Conversations**

The findings indicate that elementary school teachers play a pivotal role in fostering academic conversations because they act as facilitators and mentors in the intellectual development of young students. Because we know students learn through dialogue, academic discourse is critical for student cognition (Hammond, 2015; National Academy, 2018; Vygotsky, 1978). In particular, PLC members examined the importance of shifting typical academic discourse practices to better support ELL students. Next, I share how teachers utilized their knowledge of student learning and their role in fostering robust academic discourse in their classrooms.

### ***Student Learning***

Student learning is a complex and dynamic process influenced by various learning theories proposed by prominent educational psychologists such as Lev Vygotsky, Jean Piaget, and Jerome Bruner. All emphasize social interaction as the basis of cognitive development, and active construction and co-construction of knowledge. The National Academy of Sciences, Engineering, and Medicines (2018) explains the role of schools and how individuals learn:

School is designed to provide young people with the experiences necessary to adapt to the demands of modern society by providing a broad array of cultural knowledge of specific topics.... Individuals learn to navigate cultures based on their own experiences within their homes and communities. (p. 23)

By recognizing the importance of both social and cognitive aspects of learning, teachers facilitate student growth and development across various domains. Combining elements from these theories is critical so that educators can create diverse and effective teaching strategies that cater to the individual needs of students and promote meaningful learning experiences.

**Vygotsky's Socio-Cultural Theory.** Vygotsky emphasizes the importance of social interaction in the learning process. According to Vygotsky, learning occurs through social interactions with more knowledgeable individuals, often referred to as the zone of proximal development (ZPD). In the ZPD, students work with a teacher or peer who provides guidance and support, allowing them to achieve tasks they could not accomplish alone. Vygotsky's theory underscores the significance of collaboration, dialogue, and scaffolding in promoting student learning. Teachers can apply this theory by creating opportunities for peer teaching, group work, and collaborative problem-solving, which encourage students to build on their existing knowledge and develop higher-order thinking skills. In the PAR, PLC members applied this theory by having multiple pathways for students to interact with the lessons. PLC members allowed students to work in pairs in think pair share. In addition, PLC members encouraged students to work in groups when working on math problems.

**Piaget's Constructivist Theory.** Piaget emphasizes the idea of cognitive development through the active construction of knowledge. He proposed that students advance through distinct stages of cognitive development, such as the sensorimotor, preoperational, concrete

operational, and formal operational stages. Piaget's constructivist approach suggests that students learn best when they engage in hands-on experiences and encounter cognitive conflicts that challenge their existing schemas. Educators can apply Piaget's theory by designing curricula and activities that align with a student's developmental stage, fostering exploration, experimentation, and critical thinking. This theory encourages teachers to be facilitators of learning rather than passive transmitters of information. PLC members were observed making efforts to elicit information from students with the use of calling-on strategies. PLC members regularly used hand raising, equity sticks, and choral response to create opportunities for students to actively engage in the lessons.

**Bruner's Constructivist Theory.** Bruner places a strong emphasis on the role of cognitive structures and the importance of active learning. He introduced the concept of *scaffolding*, in which teachers provide support to students as they learn, gradually reducing assistance as students become more proficient. Bruner stressed the significance of narrative and storytelling as cognitive tools for organizing and retaining information. Teachers can apply Bruner's theory by structuring lessons that build on students' prior knowledge, providing guidance when necessary, and encouraging students to construct their understanding through inquiry-based activities. Storytelling and narrative techniques make learning more engaging and memorable. PLC members supported students to build on their previous knowledge and use various forms of showing and learning. Teachers designed math lessons to provide opportunities for students to revisit concepts that were taught in previous lessons. PLC members used reference charts that showcased key concepts and strategies.

### ***Teacher Role***

As classroom teachers, the PLC members determined the best practices for ELL, co-created plans, utilized the inquiry process, and decided on a course of action that benefited ELL students (Bryk et al., 2015; Hunter et al., 2013). Through East Carolina University (ECU) Project I<sup>4</sup>, I learned key concepts of distributed leadership which I used in the PAR. Spillane (2011) emphasizes that leadership is cognitively distributed among adults in the school. The ECU's Project I<sup>4</sup> (2019) Framework captures four equity-driven stances and practices—academic discourse, inquiry teaching and learning, culturally and linguistically responsive pedagogy, and universal design for learning.

Hogan and Pressley (1997) highlight the significance of elementary teachers in shaping and nurturing productive discussions within the classroom and emphasize that effective elementary teachers not only impart content knowledge but also nurture critical thinking skills, which are fundamental for meaningful academic conversations among young learners. Through their guidance and expertise, elementary teachers can encourage students to engage in thoughtful discussions that extend beyond surface-level comprehension.

Furthermore, Hattie and Yates (2014) underscore that PLC members' feedback and interactions with students significantly influence the quality of academic conversations. Students are more likely to engage in meaningful dialogue and develop a deeper understanding of the subject matter when PLC members actively participate in discussions, use effective think time for students to process information, pose thought-provoking questions, and offer constructive feedback. Hattie and Yates (2014) reaffirm the invaluable role that elementary teachers play in creating an intellectually stimulating environment where academic conversations thrive, ultimately enhancing the learning experiences and outcomes of young students. In this PAR, I

observed PLC members earnestly implementing calling-on strategies and talk moves that are designed to engage students. PLC members listened to their students' responses and provided feedback to encourage conversations to support comprehension of curriculum.

One talk move that increases ELL participation was extended think time. Think time is an invaluable tool in education, enhancing students' engagement with their learning material. When teachers deliberately pause after posing questions or offering prompts, they provide students with the necessary space to digest information, reflect on their thoughts, and formulate comprehensive arguments. This deliberate approach not only nurtures critical thinking but also elevates higher-order cognitive processes. Furthermore, the integration of think time into instructional strategies cultivates students' metacognitive skills, fostering a classroom environment that prioritizes purposeful and thoughtful contemplation. All of these factors are important for language learners, and extended think time as a norm in classrooms with high numbers of ELL learners increases information processing and equitable access to classroom dialogue (Hammond, 2015). In a practice article, McCarthy (2018) recommends giving 20 seconds to two minutes so that students have sufficient processing time and may even have time to write or journal their thinking before pairing with a peer or responding. As highlighted by Lyman (1981) and Lyman et al. (2023), think time stands as a pivotal component of effective classroom discourse, reaping benefits for both educators and learners alike. An example of this evolution can be seen in LH's journey during the PAR. Initially, she was not aware of the value of think time. However, as PAR Cycle Two unfolded, LH exhibited a deeper appreciation for the value of time, employing timers consistently during observations. Similarly, AM shared her newfound practice of granting students think time. She learned that think time is an opportunity for students to process the

information. This transformation underscores the growing recognition of the significance of think time in enriching the educational experience.

Teachers' role in academic conversations extends beyond facilitating discussions; they play a crucial part in cultivating a positive and inclusive learning environment. Howard and Moye (2019) emphasize that teachers have the responsibility to create a classroom culture that encourages open dialogue and respects diverse perspectives. This inclusive approach fosters a sense of belonging among students, enabling them to express their thoughts and opinions without fear of judgment. In this PAR, I observed the teachers recognizing students' diverse skills. PAR member CK intentionally color-coded her equity sticks to scaffold questions and support responses. She also revoiced students' responses to model listening and helped students understand the students' responses. In doing so, CK not only promoted academic discourse but also nurtured important social and emotional skills, such as empathy and active listening, which are essential for effective communication.

Moreover, teachers can model effective communication strategies for their students. The research of Pekrun and Linnenbrink-Garcia (2012) underscores the significance of teacher modeling in shaping students' conversational skills. By demonstrating how to construct coherent arguments, provide evidence, and engage in respectful debates, teachers enhance students' academic language and equip them with valuable life skills. PLC member LH showcased the importance of modeling effective communication strategies for her students. In each of the classroom observations in for LH, I observed that she always modeled how to use talk moves and sentence frames before sending students to work independently.

Zwiers and Crawford (2016) highlight the pedagogical strategies teachers can employ to facilitate and scaffold academic conversations effectively. Their work emphasizes the

importance of teacher guidance and support in helping students develop the skills necessary for productive scholarly discourse, emphasizing the role of teachers as key agents in academic conversation development. In summary, teachers play a critical role in academic conversations through relational trust, understanding how students learn, and assuming the critical role they play in setting up the necessary conditions for student learning. While academic discourse in general is important, teachers needed to plan and use targeted ELL strategies.

### **Teachers Use ELL-specific Pedagogical Tools to Increase Access and Rigor**

Elementary teachers play a vital role in supporting ELLs active engagement in classrooms. As we worked to increase equitable access to student dialogue in the classroom and pair that with increasing cognitive rigor, we had to be mindful of how to balance language learning, information processing for ELL students, and pushing students in terms of cognitive demand. I discuss how we must create a sense of belonging in classrooms for ELL learners as well as employ pedagogical tools necessary for effective ELL learning. Hammond (2015) emphasizes:

Teachers need adequate background knowledge and usable information in order to know how to apply culturally responsive tools and strategies. Building background knowledge begins with becoming knowledgeable about the dimensions of culture as well as knowledgeable about the larger social, political, and economic conditions that create inequitable education outcomes. (p. 21)

When teachers use ELL-specific pedagogical strategies, they can increase the access and rigor for students. In this PAR, PLC members had positive experiences in pedagogy for ELLs. First, I share how a sense of belonging is a necessary condition for student learning.



### *Sense of Belonging for English Language Learners*

Gay's (2010) perspective on recognizing and respecting diverse cultural backgrounds in the classroom resonates with a wealth of research and peer-reviewed articles. Gay (2010) found that a culturally inclusive classroom environment positively impacted the academic performance and socio-emotional well-being of students. Gay further emphasizes that when educators honor and integrate the cultural identities and experiences of their students, they create an enriching and empowering educational atmosphere. Hammond (2015) expounded on the benefits of cultural responsiveness in education. When PLC members supported ELL students' engagement, they facilitated their language acquisition and overall academic achievement. This aligns with Gay's assertion that cultural recognition and respect are pivotal in creating an inclusive and rigorous classroom environment. During the PAR, the PLC members implemented culturally responsive instructional strategies with the hope of bridging cultural and linguistic gaps among ELL students. The goal was to promote a deeper understanding of subject matter and, in so doing, bolster students' self-esteem and feelings of belonging. In conclusion, Gay's emphasis on recognizing and respecting diverse cultural backgrounds in the classroom is substantiated by other studies. These studies consistently affirm the positive impact of cultural inclusivity on ELL students' academic success, emotional well-being, and sense of belonging. Thus, it is clear that an inclusive and culturally responsive approach is essential for fostering a conducive and enriching learning environment for all students.

### *ELL-Specific Pedagogy*

During the PAR, the PLC members worked together to understand and implement ELL pedagogy. ELL pedagogy, or ELL pedagogy, refers to a set of instructional practices specifically designed to support and enhance the learning experiences of students who are acquiring English

as an additional language. These pedagogical approaches aim to create a conducive and inclusive classroom environment that fosters English language development while also promoting academic achievement. ELL pedagogy encompasses a range of strategies and techniques that consider the unique needs, linguistic backgrounds, and cultural diversity of ELL. Some key components of effective ELL pedagogy include language proficiency assessments, differentiated instruction, language and content integration, and visuals and realia.

**Language Proficiency Assessment.** ELL pedagogy often begins with assessing students' language proficiency levels to determine their individual needs and strengths. In California, each student whose parents report a home language other than English take an initial and annual English proficiency assessment called English Language Proficiency Assessments in California (ELPAC). This assessment helps the teachers tailor instruction to meet students at their level in their language acquisition journey. Based on the ELPAC, the PLC members were aware of the English proficiency levels of the students they served.

**Differentiated Instruction.** ELL pedagogy emphasizes differentiated instruction to accommodate varying language proficiency levels within the same classroom. Teachers provided modified content, scaffolded support, and employed flexible grouping to address students' specific needs. According to Thomas and Collier (2002), employing ELL-specific pedagogical tools, such as language scaffolding and differentiated instruction, can significantly improve the academic performance of ELLs. These tools help ELL students understand the content better and provide them with opportunities to engage more deeply with academic material. During the classroom observations, I noticed PLC members differentiated their instruction for ELLs by providing shorter questions for students at the beginning to intermediate level. At the primary level, distinguishing between students who have learning difficulties and students who are

learning language and need more time is often complex. Thus, it is important for teachers to differentiate with culturally responsive practices in mind (Orosco & O’Conner, 2014).

**Language and Content Integration.** Effective ELL pedagogy integrates language and content instruction. In order to do this, PLC members incorporated language learning into math lessons, thereby helping students acquire academic language skills while simultaneously learning content. In addition, Genesee et al. (2006) emphasize the significance of bilingual and dual-language programs as effective pedagogical tools for ELLs. PLC members strived to create an environment where ELLs could simultaneously develop academic skills in both their native language and English, enhancing ELLs overall educational experience. The PLC members were aware of the language that was needed to help students engage in the classroom. For example, PLC members DK and CK provided key content vocabulary for their place value unit. By doing so, they provided students with the language that was necessary to understand the math unit. PLC member AM shared key content vocabulary for her fraction unit. The teachers introduced students to numerator and denominator, halves, fourths, thirds, and eighths. In classroom observations, AM supported students in using the key content vocabulary in their academic conversations.

**Visuals and Realia.** Visual aids, real-world objects (realia), and multimedia resources are commonly used in ELL pedagogy to provide contextual support and enhance comprehension (Gibbons, 2014). Based on Bruner’s theory of iconic learning, visual representations for learning in ELLs are a central form of scaffolding. PLC members worked together to identify strategies that are conducive to ELL students. They determined that utilizing specialized pedagogical tools like vocabulary word walls, sentence frames, and visuals, would allow teachers to enhance access to both content and academic rigor in their classrooms.

Teachers were selective about choosing effective strategies for ELL learners; they chose specific strategies for implementation and did not try to use every suggested strategy. They discussed what might be most useful, implemented those selected strategies, followed up with conversations about the issues that came up, then modified again, and tried again. This incremental process of applying language strategies depended on their knowledge and skill with adapting strategies to be culturally responsive.

### ***Cultural Responsiveness***

PLC members aimed to create a culturally responsive classroom that values and respects students' diverse backgrounds. I observed teachers using culturally responsive teaching approaches to fortify students and attend to the academic and socio-emotional development of ELL students. When discussing math problems, the PLC teachers attempted to incorporate students' names. This was one way PLC members acknowledged students' identity. In another observation, LH invited students to bring examples from their home life. She used the information from the students to formulate word problems.

Moreover, Hills and Miller (2013) explored the impact of culturally responsive teaching strategies as pedagogical tools to support ELLs. By recognizing and embracing diverse cultural backgrounds in the classroom, PLC members created a more inclusive and rigorous learning environment that fostered a sense of belonging for ELL students. These culturally responsive pedagogical tools enhance access to content and promote an enriching educational experience for all students in the elementary classroom.

### ***Peer Interaction and Collaboration***

To establish and promote collaborative learning opportunities and peer interaction, teachers provided opportunities for meaningful language practice and social integration. During

the classroom observations, PLC members used multiple grouping strategies to support students' interactions. Because ELL students need to process language before responding, teachers need to attend to their think time. Based on information processing theory, ELLs need time to rehearse their responses with peers (Driscoll, 1984; Vygotsky, 1978) before they speak in a larger group. Teachers often used effective think pair share as a teaching method to help students process the questions posed by the teachers, and this respected teaching practice, adapted for ELL students, offers a productive method for increasing student dialogue, language development, and conceptual thinking (Lyman et al., 2023).

Based on the Project I<sup>4</sup> framework (see Table 18), PLC members made progress on the rubric for CLRP practices. In summary, ELL-specific pedagogy and cultural and linguistic responsiveness are key ingredients to providing a sense of belonging for ELLs. The PLC members strived to provide this during the PAR. Gay's (2010) findings highlight the importance of recognizing and respecting diverse cultural backgrounds in the classroom, which positively impacts the academic performance and socio-emotional well-being of students. Gay suggests that honoring and integrating the cultural identities and experiences of students creates an enriching and empowering educational atmosphere. Hammond (2015) supports this idea by stating that cultural responsiveness in education facilitates language acquisition and overall academic achievement.

### **Framework for Change**

Teacher practices must change to support ELLs with academic conversations. The study helped me gain insight into what is needed to support academic conversations for ELLs. In this section, I share a framework for change that includes changing teaching practices at the center. Figure 18 illustrates the drivers that fuel the flourishing of teacher practices within an

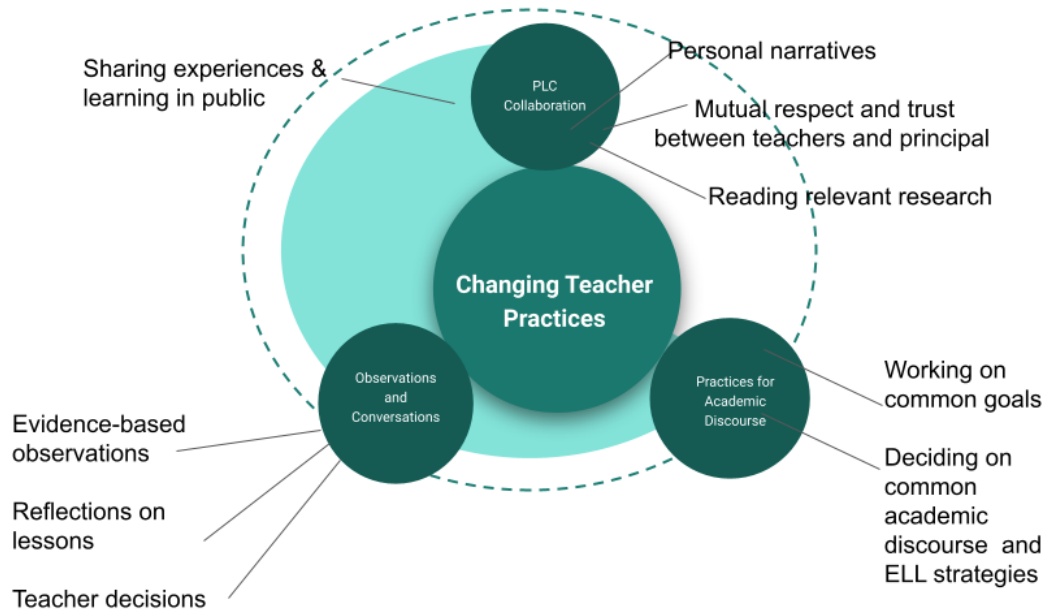
Table 18

*Analysis of Teacher Practices based on Project I<sup>4</sup> Framework of Equitable Practices*

Teacher Practices	Moderately Inclusive	Fully Inclusive
Culturally Responsive Practices	<ul style="list-style-type: none"> <li>● Relationships: Intentional relationships built &amp; sustained with some students but not all</li> <li>● Personal identity of students: Cultural &amp; linguistic identity celebrated but infrequently integrated into learning context.</li> <li>● Teacher disposition: Relationship often determined by teacher’s level of empathy for particular student situations.</li> <li>● Content: Conscious of CRP content and processes</li> <li>● Background and prior knowledge: Tapping prior &amp; background knowledge support for learning; cultural &amp; linguistic prior knowledge activated.</li> <li>● Cultural view/use: Diversity celebrated in general but sometimes viewed as a challenge.</li> <li>● Culture and classroom: Cultivated to use as starting points for students to engage.</li> <li>● Culture and community: Culture &amp; community often celebrated but seen as a challenge; connections with community focused on overcoming challenges</li> </ul>	<ul style="list-style-type: none"> <li>● Relationships Deep relationships with students and families</li> <li>● Personal identity of students: Identities validated as unique perspectives on content; integrated into the learning experience.</li> <li>● Teacher disposition: Warm demander; fully accommodating individual learning profiles.</li> <li>● Content: Community-focused with intentional connections to student experiences</li> <li>● Background and prior knowledge: Content &amp; practice internalized/embedded in relationships; student knowledge socially constructed.</li> <li>● Cultural view/use: Fully integrated into classroom; students viewed as social activists with important roles in their communities.</li> <li>● Culture and classroom: Multiple perspectives integrated in learning experiences as students engage with deeper and more complex content.</li> <li>● Culture and community: Culture and community identity of students seen as assets</li> </ul>

Table 18 (continued)

Teacher Practices	Moderately Inclusive	Fully Inclusive
Linguistically Responsive Practices	<ul style="list-style-type: none"> <li>● View of language: Home language seen as asset and used to access concepts but prefer students convert/use English.</li> <li>● Teacher knowledge of students: Some knowledge and use of cultural and linguistic context of students; some knowledge of home situations and histories</li> <li>● Expertise for learning language External experts (ESL teachers) “translate” class experience.</li> <li>● Curriculum and instruction: Some materials used in the mainstream class and supplement with other materials designed to make the tasks easier; some attention to cultural representation of class or school.</li> </ul>	<ul style="list-style-type: none"> <li>● View of language: Translanguaging key to instructional process; ability to speak multiple languages is seen as an asset.</li> <li>● Teacher knowledge of students: Deep knowledge and use of cultural, historical &amp; linguistic contexts of ELL students.</li> <li>● Expertise for learning language: Co-teaching of ELL and general ed. teachers; collaboration to determine support needed; student determination of language use.</li> <li>● Curriculum and instruction: Authentic opportunities to develop language by providing challenging grade level content for students; amplification (not simplification) to ensure rigor and engagement;</li> </ul>



*Figure 18.* Framework for change: Supporting academic discourse for ELL students.

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educational institution. The drivers for the change include PLC collaboration, practices for academic conversations, and observations and conversations.

### ***PLC Collaboration***

If effective, professional learning communities (PLC) can function as a community of practice that supports transformative work at the school. PLCs provide a structured platform for teachers to collaborate, engage in inquiry-based discussions, and share best practices. By collaborating within PLCs, teachers have the potential to mitigate their time limitations, elevate their instructional pedagogies, and foster more robust connections, consequently fostering an environment conducive to optimal learning experiences for all students. Equally significant is the proactive involvement of the school principal within these PLCs. This interconnected drivers— PLC collaboration, practices for academic discourse, and observations and post-observation conversations— collectively cultivate a functional school team dynamic, thereby yielding improved outcomes for students.

Teacher collaboration plays a pivotal role within PLCs as a driving force behind enhanced educational practices and student outcomes. As Grubb and Tredway (2010) emphasized, teachers who come together emphasize shared learning. The act of educators coming together to exchange ideas, share experiences, and collaboratively problem-solve creates a rich environment for professional growth. Within PLCs, teachers pool their diverse expertise, insights, and innovative approaches, resulting in collective knowledge that exceeds the capabilities of any individual. This collaborative synergy fuels the refinement of instructional strategies, the development of tailored interventions, and the identification of effective teaching methodologies. Furthermore, teacher collaboration nurtures a culture of continuous learning, fostering an atmosphere where ongoing professional development is both valued and practiced.

Through these joint efforts, PLCs not only empower teachers to address challenges but also cultivate a cohesive and supportive community dedicated to nurturing the academic success and holistic growth of every student.

The principal is essential to the success of a professional learning community. Militello et al. (2009) remind us that “Inquiry-guided principals act but they do not rush to implement disjointed and ambiguous programs that have worked elsewhere.” The active participation of a principal in a professional learning community (PLC) holds importance in fostering a culture of continuous improvement within an educational institution. By engaging in PLCs alongside teachers and staff, principals demonstrate their commitment to collaborative learning and their dedication to the growth of both educators and students. Principals' involvement in PLCs serves as a catalyst for open dialogue, knowledge-sharing, and the exchange of best practices. This participation validates the significance of collective learning and provides principals with a firsthand understanding of the challenges and successes faced by teachers in the classroom. Such insight empowers principals to make informed decisions that align with the evolving needs of the school community. Moreover, a principal's presence in PLCs instills a sense of shared responsibility and accountability for the school's overall performance, fostering a collaborative environment where all school members work together to drive positive educational outcomes. In essence, a principal's engagement in PLCs exemplifies a commitment to growth, collaboration, and the continuous pursuit of excellence within the educational landscape.

### ***Practices for Academic Discourse***

For academic discourse to successfully take place in the classrooms, teachers must reflect on the current practices that are in place and substitute practices that are not conducive to academic discourse. Fostering effective academic discourse is paramount to promoting critical

thinking and deep learning among students. Zwiers and Crawford (2016) emphasize the significance of certain teacher practices that are instrumental in this endeavor. Firstly, teachers play a pivotal role in creating a safe and inclusive classroom environment where students feel comfortable expressing their ideas and opinions. Encouraging active listening and respectful dialogue is key to nurturing a culture of academic discourse. Additionally, teachers must model the use of academic language and provide explicit instruction on its proper usage, as it is crucial for students to articulate their thoughts clearly and coherently. Furthermore, Zwiers and Crawford (2016) advocate for the incorporation of structured discussion protocols and accountable talk routines to scaffold students' abilities in engaging in meaningful academic conversations. Overall, effective teacher practices for academic discourse enhance students' communication skills and empower them to become more proficient and critical learners.

### ***Observation and Post-Observation Conversations***

Observations and post-observation conversations hold a vital role in changing teacher practices. These two ingredients serve as essential mechanisms for professional growth and instructional improvement. Through observations, educators gain invaluable insights into diverse teaching practices, strategies, and classroom dynamics. These observations provide an opportunity to identify effective methods, areas of improvement, and innovative approaches that might otherwise remain unseen. Post-observation meetings, where educators collaboratively engage in reflective discussions, complement and enrich the process. These discussions offer a platform for open dialogue, enabling teachers to share their observations, offer constructive feedback, and collectively analyze the observed lesson's strengths and areas for development. As Militello et al. (2009) aptly describe:

Activities that make up the collaborative inquiry-action cycle capture the complicated, nonlinear, iterative, and transformative interaction of behavior and thought. Engaging in the cycle creates a school that dialogues and acts and reflectively modifies its actions on a continual basis. (p. 43)

By critically examining instructional practices, identifying successful strategies, and addressing challenges, post-observation meetings foster a culture of continuous improvement. This iterative process of observation and discussion empowers educators to refine their teaching techniques, adapt to student needs, and align their practices with the broader goals of the educational institution. Moreover, the transparency and collaborative nature of these meetings nurture a sense of shared responsibility and mutual growth, ultimately enhancing the overall learning experience for students and reinforcing the collaborative foundation for changing teachers' practices.

### **Re-examining Research Questions**

We initiated this PAR study with this overarching question: *How do teachers collaborate as thought partners to support equitable access and rigor for ELLs?* The research sub-questions included:

1. To what extent do professional learning communities support teachers in developing collegiality and relational trust?
2. To what extent do teachers who participate in a professional learning community:
  - a. collaborate to make informed pedagogical decisions about engaging ELL students in academic discourse in math?
  - b. consistently implement strategies that support equitable access and rigor for ELL students in math classrooms?

3. How does my role as an instructional leader fully support teachers in building their capacity to engage ELL students?

Next, I revisit questions 1 and 2 which formed the beginning of the PAR and highlight key responses based on the findings. In the 18 months of the study, the four participants in the professional learning community had opportunities to connect in ways that they did not have previously. The agenda for each PLC meeting provided time for dynamic mindfulness, personal narratives, reading articles on academic conversations and ELLs, planning and revisiting talk moves, and collaboration. By participating in the PLC, the members learned more about each other's personal backgrounds and classroom experiences. In essence, the PLC supported collegiality and relational trust amongst the PLC members.

PLC members regularly engaged in making informed pedagogical decisions about engaging ELL students in academic discourse in math. During the monthly meetings, PLC members learned about strategies that support ELLs. In turn, they attempted to incorporate the strategies in their own classrooms. Classroom observations reflected the decisions that were made in the PLC meetings. Post-observation conversations provided more opportunities for PLC members to reflect and refine their pedagogical decisions.

PLC members consistently implemented strategies that supported equitable access and rigor for ELL students in math classrooms. During classroom observations, PLC members were observed utilizing talk moves that supported ELL students in agreeing, disagreeing, building on, and expanding their discourse. In addition, I observed PLC members using ELL pedagogy in the classroom. Key content vocabulary and visuals were evident throughout the PAR. I respond to the third question in the next section on my leadership development.

## Implications

Before deciding to take part in the PAR study, the members of the professional learning community (PLC) had some prior experience with PLCs in other academic settings. The PLC members expressed their interest in participating in PLCs but faced challenges related to time and location. They had previously signed up for PLCs but then did not fully engage. Moreover, they felt disconnected from these offsite PLCs and could not relate well to the other participants, which further hindered their active involvement.

However, our PAR study presented a notable contrast as our school-based structures offered a dedicated schedule. This format consistently provided opportunities for the PLC members to collaborate and make informed pedagogical decisions specifically geared toward engaging ELL students. This intentional design allowed participants to learn at their own pace. During meetings, the PLC members had the chance to revisit strategies that they were not yet comfortable implementing in their classrooms. The open and supportive environment encouraged PLC members to ask clarifying questions and share the challenges they were experiencing, fostering a culture of mutual support and collective growth.

When designing professional learning directed at changing teacher practice, I was intentional about aligning the learning experiences with specific goals and addressing identified areas of improvement. The 18-month study sheds light on important implications for educational settings. In this section, I address how this PAR can provide growth in the areas of practice, current context, local and state policies, and future research. To create a functional professional learning community in schools, I suggest a framework for supporting academic discourse for ELLs (see Figure 18) that requires three drivers: PLC collaboration, observations and post-

observations, and practices for academic conversations. This approach can help educators work together to improve their practices and ultimately benefit students.

## **Practice**

The activities in the PAR study provide a framework for principals to provide collaborative learning experiences for their staff. The PAR activities showcase that when principals have systematic and thoughtful learning experiences for teachers, learning opportunities for students improve as well. In the context of our PAR project, the profound impact of trust in schools becomes evident. Drawing inspiration from the insights of Bryk and Schneider (2002), who emphasized the significance of trust in educational settings, we have actively nurtured and cultivated a culture of trust within our Professional Learning Community (PLC). As Bryk and Schneider (2002) suggests, in schools where trust is nurtured and abundant, collaboration thrives, and a culture of continuous improvement takes root. By fostering an environment where trust is at the core of our interactions, we have witnessed the flourishing of collaborative efforts among teachers, empowering them to engage in meaningful academic discourse strategies. This collective trust paved the way for open and candid conversations during our Community Learning Exchange (CLE) sessions, where teachers freely shared their experiences and insights. The foundation of trust remains fundamental to our journey toward achieving equitable and effective classrooms for all students. Thus, schools must provide learning opportunities for educators in an atmosphere of established trust.

In our current context, teachers face several challenges that impact their professional growth and the learning environment. One significant obstacle is the lack of sufficient prep time, as heavy workloads and administrative tasks often leave little room for effective lesson planning and assessment preparation. Additionally, limited collaboration opportunities hinder teachers'

ability to share ideas and engage in meaningful professional development, particularly for those in isolated classrooms or with demanding teaching schedules. Moreover, the development of authentic partnerships with parents, students, and the community is hindered by factors such as large class sizes, resource limitations, and time constraints. These partnerships are crucial for fostering a supportive and enriching learning experience for students.

To address these challenges, educators and schools can leverage the power of PLCs. In line with the research of Bryk and Schneider (2002) and DuFour (2004), PLCs offer a structured platform for educators to collaborate, engage in inquiry-based discussions, and exchange best practices. Through active participation in PLCs, teachers can collaboratively address their time limitations, refine their instructional approaches, and cultivate more robust relationships with stakeholders. This collaborative effort, as suggested by Bryk and Schneider (2002) and supported by DuFour (2004), leads to the establishment of an enriched learning environment that benefits all students. While PLCs are effective vehicles for improvement, they are further enriched when the principal is actively involved. The principal must provide balanced guidance for teachers. Without principal guidance and oversight, teachers may revert to outdated and ineffective instruction. Alternatively, if principals dominate and do not share leadership responsibilities, then PLCs fail to become collaborative entities. PLCs require the right ingredients (sharing personal experiences, reading relevant literature, mutual respect and trust between teachers and principal, and learning in public) to function effectively.

### **Local and State Policy (Micro and Meso)**

Teacher credential programs in California play a vital role in equipping aspiring educators with the essential knowledge, skills, and hands-on experiences required to obtain a teaching credential within the state. As highlighted by Smith et al. (2005), "These programs



serve as a foundational pathway for educators to develop a comprehensive understanding of pedagogy, subject matter expertise, and classroom management, ensuring that teachers are well-prepared to meet the diverse needs of students." These programs encompass coursework on educational theory, pedagogy, subject-specific content, classroom management, and hands-on teaching experience through student teaching or internships. The ultimate objective is to prepare teachers to effectively address the diverse needs of students and foster student learning and achievement. One key aspect of facilitating teacher collaboration is the adoption of PLCs by schools and districts in California. PLCs offer teachers a structured platform to meet regularly, where they collaboratively plan lessons, share effective practices, and discuss student progress. This encourages a culture of collective learning and continuous improvement within educational institutions. To make collaboration effective, it is necessary for districts to prioritize and provide adequate time for teachers to engage in professional learning. This essential learning time allows educators to actively participate in PLCs and other collaborative activities despite the demands of their daily teaching responsibilities. By offering dedicated professional learning time, districts demonstrate their commitment to supporting teacher development and fostering a conducive learning environment for both educators and students.

## **Research**

This PAR employed community learning exchange axioms and improvement science methodology to conduct a qualitative study guided by specific principles. The project focused on being problem-specific and user-centered, seeking to accelerate improvement through the professional learning community and adopting an iterative improvement process that values teacher perspectives. Personal narratives were emphasized so participants could learn about each other deeply. These personal narratives were foundational to creating relational trust among the

PLC members, adding richness and depth to the experience. The process emphasized the power of conversation and the importance of honoring local wisdom. Further research into how these processes are embedded and used is necessary if we are to see substantive changes in teachers' practices.

PAR relies on gathering iterative evidence to inform decision-making, enabling practitioners to collect, analyze, and improve school and district practices. By using observation data, post-observation conversations, and reflections to guide actions at the school level, the researchers aimed to advocate for greater equity in academic discourse opportunities for students. The study underscores the significance of involving the school community in the improvement and action research processes. The outcomes of this study underscore the potential of PAR and the utilization of PLCs to drive learning enhancements and elevate educational practices if we pay attention to the findings.

1. Relational trust contributes to collaborative decisions about instructional practices.
2. Teachers play a crucial role in academic conversations.
3. Teachers' use ELL-specific pedagogical tools to increase access and rigor.

These findings arose from the three PAR cycles. The deliberate organization of professional learning community meetings, along with consistent observation and subsequent post-observation discussions, played a pivotal role in supporting and validating these findings.

### **Recommendations for Future Research**

During the PAR process, as principal, I assumed the role of observer and coach during the post-observation meetings. I suggest that one intriguing avenue for extending this research would involve classroom teachers observing their colleagues and in-turn provide feedback during post-observation discussions. Future research on leadership development should enhance

the leader's capacities through effective pedagogy for adults and collaborative engagement. This expansion prompts critical questions for exploration:

1. How might members within a professional learning community (PLC) engage in the practice of observing each other's teaching and subsequently offering coaching during post-observation meetings in ways that foster both professional growth and leadership development?
2. What factors and circumstances would create an environment conducive to promoting peer-to-peer observation and coaching within the context of a PLC, while also nurturing participants' leadership potential?

By delving into these questions, the potential emerges to reveal effective strategies, conditions, and facilitative factors that would enable teachers to collaboratively participate in peer-to-peer observation and coaching while also cultivating their leadership abilities. This exploration could offer valuable insights into fostering a culture of mutual learning, trust, leadership development, and professional growth within a PLC.

### **Limitations**

In this study, I considered several limitations. First, the small group size, consisting of only four participants from one school (n=4), may limit the ability to generalize the findings. Second, the study context in a large urban city may have specific resource and demographic characteristics that restrict its applicability to other locations (Guba & Lincoln, 2000). Third, my dual roles as the principal and instructional leader of the school, along with serving as both supervisor and lead researcher of the Co-Practitioner Researchers (CPR), who were the PLC members, could have introduced potential biases and influenced the dynamics of the research collaboration (Herr & Anderson, 2014).

To mitigate these potential biases, we collaboratively planned, implemented, and reviewed the research agenda and actions, ensuring that diverse perspectives and voices informed the process. Another limitation was the selection of participants, as the natural hierarchies and standards within the school required me to be the supervisor and evaluator of the PLC members. Ensuring informed consent without coercion was vital, and the community learning exchange (CLE) methodology played a key role in fostering an asset-based and collaborative approach (Guajardo et al., 2016).

Lastly, time constraints were evident in the PAR study, which spanned eighteen months with three improvement cycles. While significant growth was observed among the PLC members, a longer duration would provide a more comprehensive understanding of the study's long-term effects. Although the data proved valuable to both the participants and the school, it is important to exercise caution when generalizing the findings to other educational settings.

### **Leadership Development**

In 2019, during my fourth year as an elementary principal, I embarked on a transformative journey by joining Project I<sup>4</sup>, a collaborative initiative between East Carolina University (ECU) and the Institute for Educational Leadership (IEL). The central mission of Project I<sup>4</sup> was to achieve an equitable improvement in student access, engagement, and overall academic outcomes. This ambitious goal was pursued through the establishment of equitable classrooms that exemplified rigorous academic discourse, embraced culturally and linguistically responsive pedagogy, integrated universal design for learning principles, and fostered inquiry-based teaching and learning approaches. As a result, I had an opportunity to connect with fellow school leaders from both California and North Carolina. This participation enabled me to engage with a diverse array of educational professionals and leaders and fostered nurturing relationships.

The community learning exchange structures and learning axioms introduced by the professors became invaluable during our professional learning community meetings.

Throughout the PAR process, I found myself engaging deeply in reflective practice and dissecting my leadership style and the dynamics of my interactions within the PLC.

Collaborating closely with four dedicated classroom teachers opened windows into their experiences and viewpoints, allowing me to transcend their roles as educators and understand them as individuals with unique stories. The personal narratives they shared reshaped my approach, fostering more profound and meaningful collaborations.

Furthermore, I became a more refined researcher through this research journey. Techniques such as selective verbatim recording, coding, and data analysis transformed how I approached observations. As a result, I improved my observation skills and used the insights gathered to guide coaching discussions during post-observation meetings with PLC peers.

In essence, Project I<sup>4</sup> and the PAR experience supported a significant transformation in my leadership. The exposure to diverse perspectives, thoughtful collaborations with teachers, and honing of observation and coaching skills have collectively shaped my leadership style. These insights have profoundly impacted my personal and professional growth and have contributed to the nurturing of a more cohesive, supportive, and collaborative learning community.

### **Conclusion**

In conclusion, the 18-month PAR study has been a personally meaningful journey for me, given my background as an ELL. The process has provided a valuable opportunity to explore in-depth how to promote equitable learning opportunities for teachers, empowering them to make well-informed decisions concerning the education of English learners. Collaborating closely with

four dedicated classroom teachers during the study has been eye-opening, showcasing their professionalism and unwavering passion for positively impacting their students' lives.

In my capacity as the school's principal and the primary PAR investigator, I have found this journey to be a catalyst for my personal and professional growth as a leader by providing me with the opportunity to hone my leadership abilities and establish an educational environment that nurtures authentic learning and encourages active involvement among our dedicated classroom teachers. The valuable insights garnered from this research will unquestionably serve as a cornerstone for the ongoing refinement of my leadership philosophy and will support my overall professional development.

As I continue refining my leadership, I am committed to building on the knowledge and lessons acquired during this study. I believe that this work should not end with the conclusion of the 18-month PAR study but should serve as a foundation for ongoing efforts to support teachers and students alike. I am confident that we can continue to make a positive impact on the lives of our students by working collaboratively with educators and stakeholders, creating an inclusive and equitable learning environment for all. I am eager and hopeful that this work will not conclude with the 18-month PAR study. Instead, I envision the PAR project and study as a steppingstone toward a more comprehensive and ongoing effort to support teachers in their work to provide equitable and effective education for English learners. I am committed to building on these learnings and collaborating with teachers and stakeholders to sustain meaningful improvements that will positively impact the lives of our students.

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Zwiers, J., & Crawford, M. (2016). *Academic conversations: Classroom talk that fosters critical thinking and content understandings*. Stenhouse Publishers

## APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

### Notification of Exempt Certification

From: Social/Behavioral IRB  
To: [Fowzigiah Abdolcader](#)  
CC: [Matthew Militello](#)  
Date: 9/24/2021  
Re: [UMCIRB 21-001670](#)  
Relationships Matter: A Participatory Action Research

I am pleased to inform you that your research submission has been certified as exempt on 9/24/2021. This study is eligible for Exempt Certification under category # 1 & 2ab.

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

Document	Description
Abdolcader_Full IRB Proposal(0.01)	Study Protocol or Grant Application
Adult consent form(0.01)	Consent Forms
CALL survey(0.01)	Surveys and Questionnaires
Classroom Observation(0.01)	Data Collection Sheet
CLE artifacts(0.01)	Interview/Focus Group Scripts/Questions
Focus Group Interview(0.01)	Interview/Focus Group Scripts/Questions
Observation and Post-observation(0.01)	Additional Items
reflective memo(0.01)	Additional Items
SCRIPT FOR RECRUITMENT(0.01)	Recruitment Documents/Scripts

For research studies where a waiver or alteration of HIPAA Authorization has been approved, the IRB states that each of the waiver criteria in 45 CFR 164.512(i)(1)(i)(A) and (2)(i) through (v) have been met. Additionally, the elements of PHI to be collected as described in items 1 and 2 of the Application for Waiver of Authorization have been determined to be the minimal necessary for the specified research.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

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IRB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418  
IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418

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## APPENDIX B: CITI CERTIFICATE



Completion Date 23-Dec-2020

Expiration Date 23-Dec-2023

Record ID 40028185

This is to certify that:

**Fowzigiah Abdolcader**

Has completed the following CITI Program course:

Not valid for renewal of certification through CME.

**Human Research**

(Curriculum Group)

**Group 2.Social / Behavioral Research Investigators and Key Personnel**

(Course Learner Group)

**1 - Basic Course**

(Stage)

Under requirements set by:

**East Carolina University**

**CITI**  
Collaborative Institutional Training Initiative

Verify at [www.citiprogram.org/verify/?w8a779f63-fcc3-4c5a-93fe-6a781073c9ba-40028185](http://www.citiprogram.org/verify/?w8a779f63-fcc3-4c5a-93fe-6a781073c9ba-40028185)



## APPENDIX C: DISTRICT APPROVAL LETTER



RESEARCH, PLANNING & ASSESSMENT

[research@sfusd.edu](mailto:research@sfusd.edu)

**San Francisco Unified School District** • 555 Franklin Street, San Francisco, California 94102-5299

Dear Institutional Review Board Chair:

We understand that your institution requests letters of support from applicants seeking to conduct research in educational agencies. We appreciate the rationale for this precaution as a means of confirming that the research is consistent with district and school protocols. However, this expectation does not align with our review processes, as we approve research applications contingent on their IRB approval.

Because we are not a certified institutional review board or research ethics review committee, we require proposals to provide documentation of external IRB approval or exempt status prior to our review process. We depend on the sponsoring research organization's external IRB review to ensure compliance with federal regulations and ethical standards for research in the field. This allows our review process to focus on whether the research is aligned to district priorities and whether the procedures are feasible and consistent with district policies and practices.

If the proposal has received prior IRB approval and passes our review process, then we would permit study recruitment and data collection in accordance with the terms of the approval. Please accept this explanation of our review process as documentation of our intent to support projects that have met both external IRB and internal SFUSD review standards.

Sincerely,

Research Support Team

**APPENDIX D: ADULT CONSENT FORM**



**Informed Consent to Participate in Research**

Information to consider before taking part in research that has no more than minimal risk.

Title of Research Study: USING EQUITABLE ELL PEDAGOGY TO SUPPORT ENGLISH LANGUAGE LEARNERS PARTICIPATE IN ACADEMIC CONVERSATIONS

Principal Investigator: Fowzigiah Abdolcader

Institution, Department or Division: East Carolina University, Department of Educational Leadership

Address: 50 Darien Way, San Francisco, CA 94127

Telephone #: 415-845-3406

Study Coordinator: Dr. Matthew Militello

Telephone #:252-328-6131

Participant Full Name: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

**Please PRINT clearly**

Researchers at East Carolina University (ECU) and San Francisco Unified School District study issues related to society, health problems, environmental problems, behavior problems, and the human condition. To do this, we need the help of volunteers who are willing to take part in the research.

Why am I being invited to take part in this research?

The purpose of this participatory action research is to examine how a professional learning community at an elementary school will develop the knowledge and skills, collegial relationships, and trust to move the needle forward for English Language Learners (ELLs). You are being invited to take part in this research because you have demonstrated interest in working in collaborative teams and you have shown efforts in supporting English Language Learners. The decision to take part in this research is yours to make. By participating in this research, we hope to learn how to develop relational trust within professional learning communities so teachers feel empowered to work deeply together to fully engage as collaborative thought partners and support English Language Learners in articulating mathematical concepts and standards.

If you volunteer to take part in this research, you will be one of about 20 people to do so.

Are there reasons I should not take part in this research?

There are no known reasons why you should not participate in this research study.

**What other choices do I have if I do not take part in this research?**

You can choose not to participate.

**Where is the research going to take place and how long will it last?**

The research will be conducted at *Commodore Sloat School, San Francisco, CA*. The research will last for fourteen months.

**What will I be asked to do?**

If you agree to participate in this study, you may be asked to participate in the following:

- Collaborate with colleagues
- Read materials connected to Academic Conversation and Culturally and Linguistically Relevant Pedagogy related to ELLs
- Participate in improvement science that involves plan-do-study-act cycles
- Plan and implement strategies in your classroom
- Reflect on your experiences
- Engage in post-observation conversations.

**What might I experience if I take part in the research?**

The PAR has some minimal risk to participants because the study takes place at one school where participants are colleagues with other persons on the faculty. Thus, there may be some level of concern by participants about confidentiality. As the lead researcher, I will make every effort to establish norms for our meetings and mitigate any concerns the participants may have. Any risks that may occur with this research are no more than what you would experience in everyday life. The research will not be included in any evaluations. We do not know if you will benefit from taking part in this study. There may not be any personal benefit to you but the information gained by doing this research may help others in the future.

**Will I be paid for taking part in this research?**

The school district provides compensation to persons who meet outside of the contract day to take part in professional learning communities. The researcher will not be compensating the PLC members or other participants for participation.

**Will it cost me to take part in this research?**

It will not cost you any money to be part of this research.

Who will know that I took part in this research and learn personal information about me?

ECU and the people and organizations listed below may know that you took part in this research and may see information about you that is normally kept private.

- SFUSD Research and Planning Achievement Department
- The University & Medical Center Institutional Review Board (UMCIRB) and its staff have responsibility for overseeing your welfare during this research and may need to see research records that identify you.

**How will you keep the information you collect about me secure? How long will you keep it?**

The information in the study will be kept confidential to the full extent allowed by law. Confidentiality will be maintained throughout the data collection and data analysis process.

Consent forms and data from surveys, interviews, and focus groups will be maintained in a secure, locked location and will be stored for a minimum of three years after completion of the study and then destroyed. No reference will be made in oral or written reports that could link you to the study.

What if I decide I don't want to continue in this research?

You can stop at any time after it has already started. There will be no consequences if you stop and you will not be criticized. You will not lose any benefits that you normally receive.

Who should I contact if I have questions?

The people conducting this study will be able to answer any questions concerning this research, now or in the future. You may contact the Principal Investigator at 415-845-3406 (Monday to Friday between 8:00 am to 5:00 pm) or email [abdolcaderf@sfusd.edu](mailto:abdolcaderf@sfusd.edu)

If you have questions about your rights as someone taking part in research, you may call the University & Medical Center Institutional Review Board (UMCIRB) at phone number 252-744-2914 (days, 8:00 am-5:00 pm). If you would like to report a complaint or concern about this research study, you may call the Director for Human Research Protections, at 252-744-2914.

**Is there anything else I should know?**

The following research results will be provided to you when requested, and these results will be shared with you once the study is completed.

**I have decided I want to take part in this research. What should I do now?**

The person obtaining informed consent will ask you to read the following and if you agree, you should sign this form:

- I have read (or had read to me) all of the above information.
- I have had an opportunity to ask questions about things in this research I did not understand and have received satisfactory answers.
  - I know that I can stop taking part in this study at any time.
  - By signing this informed consent form, I am not giving up any of my rights.
  - I have been given a copy of this consent document, and it is mine to keep.

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<b>Participant's Name (PRINT)</b>	<b>Signature</b>	<b>Date</b>
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**Person Obtaining Informed Consent:** I have conducted the initial informed consent process. I have orally reviewed the contents of the consent document with the person who has signed above and answered all of the person's questions about the research.

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<b>Person Obtaining Consent/ Principal Investigator (PRINT)</b>	<b>Signature</b>
<b>Date</b>	

## APPENDIX E: DATA COLLECTION INSTRUMENT – CLASSROOM OBSERVATION

### Type One of Calling On: Make a seating chart.

Using a seating chart to determine equitable calling on is critical. Too often, some students are totally overlooked – they may not raise their hands, or, if they do, teachers ignore them. If possible, write student names if you know them. Either use STUDENT NAME or identity (F/M or race/ethnicity): AA= African American; L= Latinx; W=White; AsA= Asian American. This classroom map is of one table of 6 persons.

Make a slash mark (/) for every instance of the items in the tool. Try to indicate with short abbreviation of the type of calling on or teacher response that was used (after the slash mark). It will take a bit of practice to get used to the names of calling on (chart below), but this offers precise data with which to have the conversation with the teacher

<b>.RH1</b>	Raised hand - call on
<b>RH2</b>	Raised hand - checking for understanding
<b>RH3</b>	Raised hand/ gesture - readiness
<b>CC**</b>	Cold Call
<b>C&amp;R</b>	Call and Response: Teacher asks for group response or indicates students should “popcorn”
<b>ES</b>	Uses equity strategy (equity stick or card to call on the student)
<b>TR*</b>	Teacher repeats student response to class verbatim
<b>TRV</b>	Teacher revoices student response
<b>TPS</b>	Think and Pair and then Share
<b>TWS</b>	Think Write Share
<b>TGS</b>	Think Group Share
<b>TT</b>	Think Time
<b>GR</b>	Gradual Release
<b>ESR</b>	Every student responds
<b>TPR</b>	Teacher Praise/ Reinforcement
<b>TMA</b>	Talk Move – Agree
<b>TMD</b>	Talk Move Disagree
<b>TMB</b>	Talk Move Build On
<b>Other</b>	Any other strategy you note

<b>Teacher</b>	<b>Observer</b>	<b>Date</b>
<b>Duration of Observation</b> _____	to _____	

Student Name OR number	Raised hand CO: R	Cold Call CO: CC	Think Time	Calling out CO: C&R CO: B-A CO: B-I	Equitable method CO: ES	Simple Repetition TR	Teacher Revoicing TRV	Talk Move - Agree -	Talk Move Disagree-	Talk Move Build on	Other
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											

After the observation using selective verbatim, tabulate the number of instances of each type of calling on.

<b>Teacher</b>	<b>Observer</b>	<b>Date</b>
<b>Duration of Observation</b> _____ to _____		

	Calling On/ Protocol	Total Number
<b>RH1</b>	Raised hand - call on	
<b>RH2</b>	Raised hand - checking for understanding	
<b>RH3</b>	Raised hand/ gesture - readiness	
<b>CC**</b>	Cold Call	
<b>C&amp;R</b>	Call and Response: Teacher asks for group response or indicates students should "popcorn"	
<b>ES</b>	Uses equity strategy (equity stick or card to call on the student)	
<b>TR*</b>	Teacher repeats student response to class verbatim	
<b>TRV</b>	Teacher revoices student response	
<b>TPS</b>	Think and Pair and then Share	
<b>TWS</b>	Think Write Share	
<b>TGS</b>	Think Group Share	
<b>TT</b>	Think Time	
<b>GR</b>	Gradual Release	
<b>ESR</b>	Every student responds	
<b>TPR</b>	Teacher Praise/ Reinforcement	
<b>TMA</b>	Talk Move – Agree	
<b>TMD</b>	Talk Move Disagree	
<b>TMB</b>	Talk Move Build On	
<b>Other</b>	Any other strategy you note	

Time	Selective Verbatim	code

