#### **ABSTRACT**

Lyndsay B. Britt, CREATING A HOME: PROMOTING EQUITABLE ACADEMIC DISCOURSE BY ESTABLISHING TEACHER AGENCY AND CO-DESIGN (Under the direction of Dr. Matthew Militello). Department of Educational Leadership, May 2023.

If students are to have an equitable opportunity to talk and communicate understandings, reasoning, and ideas, teachers need to use instructional practices that promote equitable academic discourse in the students' academic home – the school. Students need to feel and know that they are challenged and supported to be their best, just like a school leader needs to challenge and support their teachers to ensure access and rigor in instruction. This qualitative participatory action research study was informed by activist research and community learning exchange (CLE) methodology and protocols. In collaboration with a team of co-practitioner researchers (CPR) composed of four teachers, the goal was to examine the extent to which teachers engaged in codesigning equitable academic discourse practices that could change their instructional practices to reflect equitable academic discourse across content areas within an Early College setting. As a result of three cycles of inquiry, the findings indicate that a well-facilitated community of practice supported teacher agency for effective collaboration and co-design. The teachers were energized and recommitted to their role in providing strong instruction for teachers. When we coupled our conversations and co-design processes with evidence-based observations with postobservation conversations using evidence, teachers transferred their learning to substantial changes to practice. Over the course of the PAR project, teachers consistently implemented equitable academic discourse protocols. In practice contexts, other leaders and teachers can replicate the process we used to form trusting a community of practice in which teachers were willing to collaborate and deprivatize their teaching practices. In the research context, these findings complement and extend other research findings: Common tools support co-constructed

teacher learning through social and material mediation (Ahn et al., 2021; Gomell et al., 2022). Teachers need time to reflect, learn together, and co-design so they build a common language and processes for the goals they set (Woo & Henriksen, 2023).

# CREATING A HOME: PROMOTING EQUITABLE ACADEMIC DISCOURSE BY ESTABLISHING TEACHER AGENCY AND CO-DESIGN

# A Dissertation Presented to the Faculty of the Department of Educational Leadership East Carolina University

In Partial Fulfillment of the Requirements for the Degree Doctor of Education in Educational Leadership

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# **DEDICATION**

for Adalyn, Wade, & Wyatt

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## TABLE OF CONTENTS

	Page
TITLE	i
COPYRIGHT	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	v
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
CHAPTER 1: NAMING AND FRAMING THE FOCUS OF PRACTICE	1
Focus of Practice	2
Rationale	3
Assets and Challenges to FoP	6
Micro Assets and Challenges	6
Meso Assets and Challenges	7
Macro Assets and Challenges	7
Context and Significance	8
Context for PAR Study	8
Significance	10
Practice, Policy, and Research	11
Connection to Equity	11
Philosophical	14
Psychological	15

Political-Economic	16
Participatory Action Research Design	17
Purpose, PAR Research Questions, and Theory of Action	18
Research Activities	19
Study Considerations: Limitations, Validity, and Confidentiality and Ethics	20
Summary	21
CHAPTER 2: LITERATURE REVIEW	22
Principal as Change Leader	23
Principal Leadership	24
School Culture	25
Trust and Collaboration	27
Distributed Leadership	28
Teacher Learning through Professional Development	29
Teacher Learning	30
Teacher Engagement	32
Communities of Practice	33
Teacher Learning Communities: Theory and Practice	34
Communities of Practice (CoP)	36
Professional Learning Communities (PLC)	37
Networked Improvement Community (NIC)	38
Attributes of Successful Teacher Collaboration	39
Shared Beliefs and Common Goals	40
Shared and Supportive Leadership in Learning Communities	40

Supportive Conditions in the School	41
Structures	41
Relationships	42
Collective Learning and Application	43
Issues of Teacher Collaboration	44
Organizational Structure	44
Individual Characteristics	44
Academic Discourse in the Classroom	45
Socialized Learning	46
Culturally Responsive Classroom Culture for Discourse	50
Instructional Practices that Foster Academic Discourse	52
Classroom Talk	52
Questioning	54
Seminars	56
Protocols	57
Chapter Summary	59
CHAPTER 3: RESEARCH DESIGN	61
Qualitative Research Process: Participatory Action Research	62
Action and Activist Research	63
Community Learning Exchange	64
Improvement Science	65
The Role of Praxis	67
Action Research Cycles	68

Participants, Data Collection, and Analysis6	59
Participants6	59
CPR Group6	59
Other Participants	71
Data Collection7	71
Observations	72
Interviews7	72
Coaching Conversations	72
Documents	72
Community Learning Exchange Artifacts	74
Reflective Memos	74
Data Analysis7	74
Study Considerations: Limitations, Validity, and Confidentiality and Ethics7	75
Limitations	75
Validity7	17
Internal Validity7	77
External Validity	78
Confidentiality and Ethical Considerations	79
CHAPTER 4: PAR PRE-CYCLE8	31
PAR Context	31
Context: Place	31
Participants8	36
Other Participants8	39

PAR Pre-Cycle Process	89
Activities	91
Coding	92
Emerging Category: Building a Collaborative Team	93
Working Agreements	94
Establishing a Trusting Environment	94
Authentic Participation	96
Reflection and Planning	99
Reflection on Practitioner Researcher Role	100
Reflection on Leadership	102
Planning for PAR Cycle One	103
Conclusion	105
CHAPTER 5: PAR CYCLE ONE	107
PAR Cycle One Process	107
Activities	107
Coding	112
Emergent Themes	112
A Collaborative Team Strengthens Change	116
Safe Space	116
Self-Awareness	119
Structures Improve Classroom Discourse	120
CPR Group Learning	121
Group Consensus	123

Group Imple mentation	125
Evidence-Based Classroom Observations Promote Rigor and Equity in the Classroom	127
Evidence-Based Observations	127
Rigor	129
Classroom Discourse	130
Leadership Reflection and Action Steps for PAR Cycle Two	132
Reflection on Leadership	132
Action Steps for PAR Cycle Two	135
Conc lus ion	137
CHAPTER 6: PAR CYCLE TWO AND FINDINGS	139
PAR Cycle Two Process and Analysis.	139
Activities	142
Analysis of PAR Cycle Two Data	144
Findings	148
Well-Facilitated Community of Practice	148
Collaborative Team	151
Establishing Safe Space and Trust for Collaboration	153
Building an Understanding through Learning Experiences	154
Teacher Reflection	156
Teacher-Facilitated Community Learning Exchange	157
Evidence-Based Observations and Post-Observation Conversations	158
Evidence-Based Observations	159
Equitable Access	161

Rigor	162
Observation Conversations	163
Conc lusion	165
CHAPTER 7: DISCUSSION AND IMPLICATIONS	167
Discussion	171
Teacher Agency	171
Evidence-Based Observations and Observation Conversations	176
Framework for Change	181
Re-Examining Research Questions	182
Implications	184
Practice	185
Policy	186
Research	187
Limitations	.189
Leadership Development	190
Conc lusion	194
REFERENCES	196
APPENDIX A:INSTITUTIONAL REVIEW BOARD APPROVAL LETTER	214
APPENDIX B: CITI TRAINING CERTIFICATE	215
APPENDIX C: DISTRICT PERMISSION	216
APPENDIX D: CONSENT FORM: CPR GROUP ADULTS	217
APPENDIX E: CONSENT FORM: CLE GROUP ADULTS	220
APPENDIX F: DATA COLLECTION INSTRUMENT: CLASSROOM OBSERVATION FORM	223

APPENDIX G: DATA COLLECTION INSTRUMENT: QUESTION FORM PROTOCOL224
APPENDIX H: DATA COLLECTION INSTRUMENT: QUESTION LEVEL PROTOCOL
APPENDIX I: DATA COLLECTION INSTRUMENT: CALLING-ON PROTOCOL227
APPENDIX J: DATA COLLECTION INSTRUMENT: INTERVIEW PROTOCOL229
APPENDIX K: DATA COLLECTION INSTRUMENT: CONVERSATION PROTOCOL230
APPENDIX L: DATA COLLECTION INSTRUMENT: COMMUNITY LEARNING EXCHANGE PROTOCOL
APPENDIX M: SAMPLE AGENDA233

# LIST OF TABLES

1.	Cooperative Innovative High School Design Principles	12
2.	PAR Project and Activities Timeline	70
3.	PAR Research Questions and Data Sources	73
4.	Five-Year State End of Course Test Proficiency Scores	84
5.	ACT Scores Average per Subject Area for Four-Year Progression	85
6.	CPR Member Profiles	87
7.	Chart of Pre-Cycle Activities and Data	90
8.	Initial Codebook	97
9.	Sample of Initial and Revised Coding	. 101
10.	Chart of PAR Cycle One Activities and Data	. 108
11.	Emerging Themes with Categories and Codes	.113
12.	Chart of PAR Cycle Two Activities and Data	. 140
13.	Key Activities: Three PAR Cycles of Inquiry	.170

## LIST OF FIGURES

1.	Fishbone diagram: Analysis of assets and challenges of focus of practice	9
2.	Conceptual framework of student learning.	26
3.	Relationship between professional development and student achievement.	31
4.	Plan Do Study Act (PDSA) Cycle of inquiry model.	66
5.	Coding and analysis process.	76
6.	Three emerging themes.	115
7.	A collaborative team strengthens change.	117
8.	Structures improve classroom discourse	122
9.	Evidence-based observations promote rigor and equity in the classroom	128
10.	PAR Cycle Two: Collaborative team strengthens change.	145
11.	PAR Cycle Two: Evidence-based observations promote rigor and equity	147
12.	Data across the PAR Cycles to determine findings (n=number of instances in the	149
13.	Categories of collaboration.	152
14.	Frequency of data for substantiating the importance of evidence-based observations	160
15.	Framework for changing teacher practice to promote equitable academic discourse	180

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

Success in college requires hard work, dedication, determination, and the academic skills learned in K-12 schools. Key academic skills for high school students include discourse and content knowledge. Since teacher classroom practices directly impact students, teachers need to understand and promote equitable access so all students can engage in academic discourse in all content areas (O'Connor & Michaels, 1993; Resnick et al., 2015). School leaders influence teacher learning and can ensure equitable access in classrooms through their work with teachers (Supovitz et al., 2010; Thessin, 2019). As recommended by Grissom et al. (2021), school leaders can enhance teachers by observations, conversations, and organizing professional learning that support their growth and development. A guiding principle for this approach is what Bateson (1994) calls learning as homecoming—"learning to learn, knowing what you know, cognition recognized, knowledge acknowledged" (p. 206).

As the principal of a small Early College High School (ECHS) in Northeastern North Carolina, I worked with four classroom teachers to conduct observations and facilitate coaching conversations that focus on improving equitable academic discourse. In my observations and conversations of student learning, principals have frequently used opinions and judgments that do not lead to sustained changes in practice (Tredway et al., 2021). We used the data from those observations to collaboratively engage in conversations about practice, and they supported each other to improve their instructional practices. In this project and study, I supported teachers to change classroom practices by co-developing an understanding of how consistent use of protocols can promote equitable academic discourse (Wise & Jacobo, 2010), implementing protocols in secondary classrooms, and discussing the dilemmas of practice they encounter as they implement.

Prior to undertaking this study, I worked with a small number of teachers at the ECHS.

Using protocols that promoted academic discourse in math classrooms, we spent a year experimenting with equity-driven tools. This process was undertaken in a funded project at East Carolina, and the project had IRB approval for the grant participants to implement the tools. In this study, I was interested in expanding the use of those tools and protocols to all the teachers in the high school, and I did so as a doctoral student doing a participatory action research study.

First, I describe the research study focus of practice (FoP) and provide a rationale for the study.

Then, I discuss the methodological design of participatory action research (PAR) study. Finally, I provide an overview of study considerations, including limitations, validity, and confidentiality and ethics.

#### **Focus of Practice**

Students learn from each other through conversations (Hammond, 2015; Vygotsky, 1978; Zwiers & Crawford, 2011). Teachers have the primary responsibility to facilitate how conversations take place in the classroom and the content of those conversations (O'Connor & Michaels, 1993). Yet, student talk in the classroom too frequently occurs in response to simple questions from the teacher, and student participation is typically inequitable. Limited time is given for students to process, understand, and reason before the answer is blurted out, and teachers typically ask low level questions instead of open-ended analytical questions that can provoke deeper thinking (Boyd & Markarian, 2011; Lyman, 1981; Rowe, 1972). These classroom practices are all too common in our schools and actually inhibit all students from gaining deeper understanding of content. Thus, promoting equitable access and rigor in classrooms so that every student has the opportunity to engage in academic discourse is the subject of the project and study. When teachers use equitable practices for classroom

conversations, students become more familiar with these processes and understand expectations, which builds coherence across the school (Forman et al., 2018; Wise & Jacobo, 2010). The focus of practice for the project was to implement equity-based protocols to foster academic discourse strategies in an Early College High School. In discussing the rationale for this study, I provide an overview of the state and local context of early college high schools as a secondary school reform to promote stronger access to college for students, the current testing data that indicate a responsibility for stronger high school experiences, and the reasons from our context that indicate a need to engage in this project and study.

#### Rationale

In 2011, the North Carolina Department of Public Instruction (DPI), North Carolina Community College System, North Carolina General Administration, and the North Carolina Independent Colleges and Universities collaboratively developed Cooperative Innovative High Schools (CIHS). Based on North Carolina Session Law 2011-145, the purpose of Cooperative Innovative High Schools is to provide qualified students the opportunity to enroll in college courses that would lead to certificates, diplomas, and degrees as well as provide entry-level job skills. Specifically, CIHS includes the Early College High Schools (ECHS) program (North Carolina Department of Public Instruction, 2017). The Early College High School in this study was founded in 2008 as a part of Hertford County Public Schools.

ECHS programs create and monitor high schools that "expand students' opportunities for educational success through high-quality instructional programming" (North Carolina Department of Public Instruction, 2017, p. 2). ECHS targets high school students who are at risk of dropping out, students with parents who did not continue education beyond high school, and

students who would benefit from accelerated instruction. Six design and implementation elements form the foundation for ECHS:

- 1. Create future-ready graduates,
- 2. Engage in collaborative partnerships,
- 3. Implement innovative design and operation,
- 4. Utilize innovative instructional practice,
- 5. Offer personalized student support, and
- 6. Develop leadership and professionalism.

Early College programs provide students with access to post-secondary opportunities in college or careers. However, "to empower dependent learners and help them become independent learners, the brain needs to be challenged and stretched beyond its comfort zone with cognitive routines and strategies" (Hammond, 2015, p. 49). In an ECHS, the goal for the teacher is to provide challenging experiences to students that allow them to read, write, think, and talk every day in every class and prepare them for college classrooms. Schools must "create the right instructional conditions that stimulate neuron growth and myelination by giving students work that is relevant and focused on problem-solving" (Hammond, 2015, p. 49). ECHS strives to create a rigorous environment by preparing students to understand various viewpoints, discuss at a high academic level, and make real world connections.

Early Colleges developed a familiar mantra: College and career ready. However, with a focus on preparing students for the next level, to what degree do Early College High Schools accomplish the goal? Are teachers implementing the right protocols in high school courses that prepare students to transition to college classes while in high school and after graduation? In 2015, nationally, only 25% of U.S. high school seniors met National Assessment of Educational

Progress (NAEP) proficiency standards in mathematics, while 37% of high school seniors met proficiency standards in reading (National Center for Education Statistics, 2015). To achieve proficiency in mathematics, a twelfth-grade student, "should be able to recognize when particular concepts, procedures, and strategies are appropriate, and to select, integrate, and apply them to solve problems. They should test and validate geometric and algebraic conjectures using various methods, including deductive reasoning and counterexamples" (National Center for Education Statistics, 2015). Mathematics achievement should be a reality for all students. Historically, in the United States, a lower percentage of students score on the high achievement levels of the Program for International Student Assessment (PISA). The Organisation for Economic Cooperation and Development (OECD) measures whether students can model complex situations mathematically and evaluate appropriate problem-solving strategies (OECD, 2018.). The gap between genders, race, and class highlights even more concerning data. Boys outperform girls, and students from advantaged socioeconomic status exceed those of low socioeconomic status.

Zwiers and Crawford (2011) propose collaborative protocols that support student academic conversations that lead to deeper learning and understanding. Teachers within the ECHS could benefit from the use of a set of protocols during the facilitation of classroom discussion that help ensure every student has a voice (Wise & Jacobo, 2010). The protocol use would support the design principle: innovative instructional practices where "daily instruction is characterized by student-centered, active learning strategies, including collaborative group work, low-stakes writing, student to student discourse, scaffolding of rigor, and intentional questioning" (North Carolina Department of Public Instruction, 2017, p. 4). To prepare students for success after high school, our teachers at Early College High School (HCECHS) need

instructional practices that meet each student's individual needs and prepares students to express themselves in a college or career setting.

#### **Assets and Challenges to FoP**

Analyzing the micro, meso, and macro assets and challenges is essential in identifying the actual need for school improvement in our context and effectively employing our assets to address the challenges. The micro level refers to the specific classrooms and teachers in the project. The meso level consists of the school level need for improvement specific to the Early College High School. The macro level encompasses the district and community. The assets and challenges identify the starting point in the context of the focus of practice.

#### Micro Assets and Challenges

The students and teachers are assets in the school. Students work collaboratively and are willing to advocate for their learning. Teachers take on many roles and responsibilities in a small school setting such as advisory, after-school tutoring, Saturday Academies, and club sponsorship. Teachers within the school put in the additional time and individual support to help students in the program. A clear asset in this work was that four teachers were willing to be a part of the study and meet regularly to inquire about their teaching practices. Their commitment to the project and study was a strong factor in the positive findings.

However, at the start of the project, challenges within the school included an inconsistent implementation of instructional practices. "We must attend to how all of this joins productively together for people charged with carrying out this work and those that they seek to serve. In short, we must make systems work better" (Bryk et al., 2015, p. 59). By identifying common instructional practices to use to provide equitable access to content, we were able to foster more productive academic discourse that was absent at the start of the project and study but gradually

improved over the project. While teachers and students were ready and willing and had good relationships with each other, we did need to identify a set of protocols that would help provide students with access to discourse within the classroom setting inclusive of Mathematics, Science, English, and Social Studies.

#### Meso Assets and Challenges

At the meso level, the administration team and a supportive school environment are assets, and the school administration regularly challenges teachers to make needed changes to improve the school. The school environment as a whole supports innovative ideas from staff and students and encourages self-advocacy. The school plan includes a commitment to innovative instructional practices.

However, even with support, there tended to be a culture of "good enough" within the school, with a concern at the start of the project towards raising the level of rigorous expectations across all content areas. In addition, we needed to find ways to connect the real world to instruction across all content areas. As a result, we addressed these challenges during the project and study by streamlining protocols to prepare students for their next step, whether that be college or a career.

#### Macro Assets and Challenges

At the macro level, ECHS serves grades 9-13 and provides students with access to college courses in an area limited in both higher education and job opportunities. The partnership with the local community college offers the community resources and options not available in a traditional high school setting. These opportunities enhance our students' college readiness.

Even with the assets, challenges remained. Several district policies ran counter to the Early College design at the macro level and steered the school toward a traditional high school

model. The local rural community does not have a strong economic base; therefore, students had limited opportunities for employment, even with certifications received from the community college.

In Figure 1, the fishbone, I present the assets and challenges within the micro, meso, and macro framework and then outline the significance of the focus of practice.

#### **Context and Significance**

Next, I discuss the context for the PAR project and the significance of the focus of practice on the Early College setting, emphasizing context, policy, and research. Many Early Colleges focus on personalization and preparing students for the next step, either college or careers. However, by using equity-based protocols, we focused on academic discourse to support teachers by ensuring that they facilitated equitable and rigorous classroom instruction. We needed to prepare all students to initiate dialogue and challenging ideas with effective reasoning.

#### Context for PAR Study

The Early College High School (ECHS), located in rural northeastern North Carolina, is on the campus of Roanoke Chowan Community College. Since opening in 2008, frequent leadership changes have occurred. Five principals led the school within twelve years. ECHS serves a diverse population of primarily first-generation college students. ECHS offers the opportunity to earn a high school diploma, Associate of Arts Degree, Associate of Science Degree, and the option to obtain a Work Ready Certificate.

The school currently has a total of eight teachers: two in mathematics, two in English, two in science, and two in social studies. Three staff members have worked at the school since 2009, while others joined more recently. The demographics of the teachers include four Black

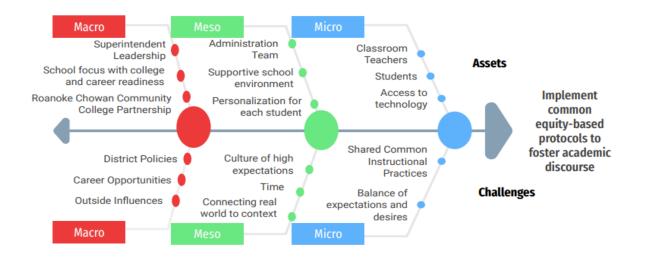


Figure 1. Fishbone diagram: Analysis of assets and challenges of focus of practice.

teachers, two White teachers, one Filipino teacher, and one Native American teacher, and the gender breakdown is three male teachers and five female teachers. The school administration team consists of the principal, college liaison, school counselor, instructional technology facilitator, and school secretary. The administration team consists of all females, with three Black and two White educators. I invited four teachers to be participants in the study and form a group termed co-practitioner researchers (CPR). Four teachers agreed to be a part of the study and offer feedback on the analysis in each cycle of inquiry; they were an intrinsic part of the project and study throughout the entire process.

The need for a common instructional framework and common instructional strategies used consistently by teachers in all content areas within the school led to the focus of practice: Implement equity-based protocols to foster academic discourse strategies in Early College. By implementing these protocols, we can create a school that feels like a home, or a safe space, for our students, with the care and support to help them best succeed. In order to prepare students for the next level, college or careers, educators need to have equity-based protocols in their toolboxes to foster academic conversations.

#### Significance

The PAR project and study are significant to the context because the process, including analysis of evidence in three cycles of inquiry, engaged teachers in a community of practice in which they co-developed instructional practices that support student reasoning and conceptual understanding. By focusing on collaboration across disciplines to use the protocols, staff engaged in reflection and worked toward improving classroom practices. While our school had pockets of excellence occurring with instruction daily prior to the study, inconsistency across content areas was evident. The teachers committed to every student, as shown in Table 1, and worked to

improve instructional practices within the school. They utilized the design principle of innovative instructional practice from the school improvement plan aligned to the CIHS model for school improvement.

#### Practice, Policy, and Research

In terms of practice, policy, and research, the participatory action research (PAR) study is significant to local practice because we were able to share our findings with other teachers at the school and foster equity-based protocols that are useful in the classroom and support the full implementation of the Design Principles from the state Department of Public Instruction. We have evidence from the PAR to enact these espoused values and principles of innovation and personalized learning so that all graduates are future ready (Argyris & Schön, 1978). Thus, the protocols and our processes could inform practices in other early college settings. In turn, while the policy is clear, this project and study can contribute to actualizing the policy principles of innovative instructional methods, equity, and academic discourse.

#### **Connection to Equity**

The focus of practice is strongly connected to issues of equity because teachers implemented equity-focused protocols to increase students' academic discourse. Protocols ensure that teachers hear each student's voice during an academic discussion. Lack of appropriate teacher facilitation and dominant student voices discourage other students from speaking up. To implement equity-based protocols, the teachers and I have learned and reflected together to build student confidence in academic rigor and reasoning to be a part of the classroom dialogue.

Since "teachers are seldom if ever given the opportunity to do active learning and engage in reflective discourse about the effects of their work" (Eubanks et al., 1997, p. 154), this PAR

Table 1

Cooperative Innovative High School Design Principles

Design Element	Description
Future Ready Graduate	All CIHS Staff members commit to ensuring every student graduate is prepared and credentialed to succeed in post-secondary education and careers as a globally engaged and productive citizen. All staff collaborate to design, redesign, and sustain a powerful school culture where the whole child is developed, challenged, and supported to succeed in his or her chosen pathway of study.
Collaborative Partnerships	Each CIHS is established and sustained through a foundational partnership with one school district and one Institute of Higher Education (IHE). A highly effective partnership between the school district, CIHS, and IHE is essential to the success of CIHS students. CIHS also develop and sustain meaningful partnership with business, industry, and community partners, and collaborate with other schools in their districts to promote innovation and the success of all students.
Innovative Design and Operations	By legislation, CIHS are designed to partner with an institution of higher education to enable students to obtain concurrently a high school diploma and begin or complete an associate degree program, master a certificate or vocational program, or earn up to two years of college credit within five years. CIHS are designed to blend secondary and post-secondary experiences in innovative ways to ensure successful implementation of other CIHS design elements.
Innovative Instrucitonal Practice	All CIHS staff members commit to ensuring every student is actively engaged, challenged, and supported, in all classes, every day, to succeed in rigorous coursework, leading to completion of high school diploma, an associate degree, two years of transferable credit, or CTE credentials, such as certificates or diplomas. All staff members commit to deep inquiry and consistent collaboration to design, facilitate, assess, and redesign learning activities that ensure these student outcomes.

Table 1 (continued)

Design Element	Description
Personalized Student Supports	All CIHS staff members commit to ensuring that every student feels known, respected, and cared for by the adults in the school, and that every student is supported to develop his or her full potential. Staff leverage strong personal relationships with students to develop their curiosity, persistence, and intrinsic motivation, as well as their support of each other, to succeed in rigorous coursework, innovative opportunities, and in college and careers.
Leadership and Professionalism	All staff members commit to a shared responsibility for the success of every student. All staff lead in areas appropriate to their role and expertise. All staff contribute to sustain inquiry and the ongoing design work of innovative secondary education.

*Note*. (NCDPI, 2017).

supported teachers to discuss dilemmas of practice and improve their teaching practices. Three equity frameworks are essential in understanding the dynamics of the early college model: (a) the philosophical framework and how it connects to its equity issues; (b) the psychological framework and the connection to Steele (2010), with the stereotype threats observed in the early college context, and; (c) the political frame and how policies can help provide students with the access they need to succeed in the early college setting. The protocols focused on the academic discourse that could be verbal or written and provide all students the access to read, write, think, and talk every day.

#### **Philosophical**

This Early College High School aims to serve students in a rural northeastern North

Carolina town by giving them access to earn a high school diploma and an Associate Degree

within a five-year window. The school community consists of:

- A racially and ethnically diverse group of students,
- A larger number of students receiving free and reduced lunch, and
- A larger number of students who are first-generation college students.

The school serves students with parents of all educational backgrounds, but the focus is on admitting first-generation college students. The early college design provides personalized learning experiences, providing students with the support needed to succeed in their high school and college classes. The early college model "seeks to account for the way things are and how they came to be that way—the descriptive—as well as the way things should be—the normative—its complaints about white political philosophy is precisely its otherworldliness, its ignoring of political realities" (Mills, 1997, pp. 10-11). The status of a student and their family should not be what dictates educational opportunities.

As part of a school leadership team, we needed to fully understand how to provide students with positive experiences and opportunities through actions and words to create the environment for improving student success. Rigby and Tredway (2015) confirm the need to have "equitable participation of students in a particular teacher's classroom" (p. 338) and to explicitly name "equity as a stated purpose of leadership action, which is more likely to lead to an increase in inequitable learning opportunities for students and communities" (p. 340). By naming equity as a centerpiece of the PAR, I provided the foundation in transforming teaching practices so that they can change the learning environment for students.

#### **Psychological**

Steele (2010) describes stereotype threats as "a standard predicament of life" (p. 5). He states that "socioeconomic disadvantage, segregating social practices, and restrictive cultural orientations have all dampened the educational opportunities of some groups more than others, historically and in ongoing ways" (p. 47). Essentially, all people face stereotype threats based on their specific identities; however, some groups of students face more barriers than others because they are often more subject to microaggressions or low expectations (Boykin & Noguera, 2011). When people are aware of stereotype threats and face a situation that could classify them in the category, people try to break the threat, which subconsciously can affect the outcome (Steele, 2010). The risk applies to many situations that students face in the early college setting. First of all, most students are from historically marginalized groups and are first generation college applicants. In addition, female students have traditionally performed lower on state mathematics tests than their male counterparts. By implementing equity-based protocols that foster academic discourse in the classroom, teachers worked to create an environment that provided all students

opportunities. Providing opportunities for all students to succeed through academic discourse allows underserved students the equitable assurances not afforded to them previously.

#### Political-Economic

who enter an early college high school.

Gutiérrez (2013) describes all teaching as political. Through this political lens, we must disrupt the narrative of how we teach students who are marginalized or underserved. By finding ways to advocate for underserved students, teachers can become more comfortable about taking risks in their teaching and in their interactions with colleagues [to] deconstruct prevailing discourses in education within a community of teachers who seek to reclaim the profession and humanize the mathematics classroom and interact with more experienced teachers who model political conocimiento. (Gutiérrez, 2013, p. 16)

Listening, speaking, and talking helps foster students' skills to be part of a democratic society (Gutiérrez, 2013). As a result, teachers can develop skill sets to change the trajectory for students

To change the dialogue in schools, schools need to move from a surface level understanding of change to a clear direction. Public schools need to account for race, class, and gender. Schools can create an organizational structure that is continually changing and growing because they continuously learn by using equity-based processes and procedures and improved student learning that should drive the school's change. Frequently, changes that take place in education do not demonstrate any substantial improvement of student learning. Through using protocols, the goal is to have conversations "about uncomfortable, unequal, ineffective, prejudicial conditions and relationships in a school...[and] create an organizational setting that is continually changing and developing because the members are continually learning" (Eubanks et

al., 1997, pp. 156-157). By having these conversations, we can work to ensure more equitable dialogue in all classrooms at the school.

Schools need organizational policies and structures to provide clear guidance to teachers on developing each student and dismantling inequities. If we honestly look at what these policies are, we can see how many factors create social, economic, and political structures harmful to people of color (Hammond, 2015). By working with the co-practitioner research group, we implemented equity-based protocols that can be useful across the content areas to foster academic discourse and include all students' voices. By implementing equity-based protocols, we continued to work to disrupt the inequities that occur in classrooms.

#### **Participatory Action Research Design**

The purpose of this participatory action research project and study was to implement equity-based protocols in an early college setting to promote academic discourse. As a result of deciding on and using the protocols, the co-practitioner group, made up of the participating teachers and myself as the principal, collaborated to implement the protocols in their classroom settings. We implemented a series of improvements through a networked improvement community (NIC), an organized group that strives to understand problems and improve practice all while focused on a specific goal (Bryk et al., 2015). In this project, I call the NIC a co-practitioner researcher (CPR) group because they worked directly with me to analyze what to improve, decide on protocols to use, and then reflected on the implementation. A CPR group is several individuals who are "close-in" members of the study and can provide consistent feedback in the research study. We used community learning exchange pedagogies (Guajardo et al., 2016) during three PAR cycles of inquiry utilizing improvement science methodologies.

#### Purpose, PAR Research Questions, and Theory of Action

The purpose of participatory action research was to work with teachers to implement equity-based protocols for classroom instruction that promote academic discourse. I engaged with teachers across all content areas in an Early College. The teachers on the CPR team participated in three action research cycles to develop and explore how equity-based protocols used in the classroom can promote academic discourse.

The overarching research focus that guided this study was on how teachers use equity-based protocols to promote academic discourse. Further refinement presented three distinct subquestions:

- To what extent do teachers demonstrate an understanding of equitable access and rigor?
- 2. To what extent do teachers choose and use protocols for promoting equitable access and rigor?
  - a. How do teachers implement instructional protocols and strategies to promote equitable access and rigor?
  - b. How do coaching conversations support teachers to implement the protocols?
  - c. How do teachers collaborate across content areas to share tools and strategies that promote equitable access?
- 3. How do I develop as an instructional leader who leads teachers to use equity-based tools to promote academic discourse?

These research questions guided the participatory action research and informed the theory of action and proposed research activities.

The theory of action assumes that if teachers co-develop an understanding of how protocols promote equitable academic discourse for students, they will consistently implement equity-based protocols in classrooms. After observing current practice, the teachers and principal discussed what methods worked in the equity-based classroom, utilized academic discourse, and determined protocols. Teachers then implemented those protocols within their classrooms. Throughout the process, I provided an analysis of classroom practices to teachers and we discussed in our CPR group the use of the protocols and made changes as needed. These protocols impacted my leadership in facilitating the teachers' work to implement these processes across the school.

#### **Research Activities**

For this PAR project, I invited four teachers to participate in the study. I chose these participants based on purposeful sampling (Patton, 2015), which I discuss in more detail in Chapter 3. I facilitated three improvement or action research cycles. During the Pre-cycle, we began the planning process, and the co-practitioner group (CPR) met to refine the focus of practice and define the changes they wanted to see. They engaged in a Community Learning Exchange (CLE). During the Pre-cycle, we organized two action cycles that followed the PDSA improvement cycle steps of Plan, Do, Study, Act.

We focused on "accelerating social learning with the methods of improvement science" (Bryk et al., 2015, p. 144). Often, the organization of school groups does not promote social and continuous learning (Forman et al., 2018). By establishing a CPR group that meets regularly, we supported collaborative efforts to address a central problem of common interest while fostering problem solving and accountability. In addition, by selecting a CPR group, we used evidence gained from each PAR Cycle to improve practices in equitable academic discourse.

During the PAR Cycle One, we implemented the equity-based protocols and collected data within the classrooms to determine how the protocols promote equitable academic discourse. As a CPR group, we analyzed how the classroom protocols worked and whether we provided equitable access to students. During the PAR Cycle Two, we continued with selective verbatim observations but added coaching conversations. The coaching conversations helped individual teachers reflect on their classroom practices and determine next steps for continued growth. The actions taken for this cycle were dependent upon the analysis of evidence from the prior cycle.

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

In qualitative research, particularly PAR, examining the roles of the researcher and participants is critical in considering the limitations, the validity of the study, and the confidentiality and ethical concerns from the outset. As the lead researcher, as well as the supervisor of the CPR group members, I had to pay close attention to my positionality and how it could impact all aspects of the study. I mitigated any issues through thoughtful reflection, careful planning, and triangulating evidence throughout the project, particularly through the use of reflective memos (Saldaña, 2016). The major limitation of the PAR study was sample size. I invited four participants to be involved directly in the study. The study is specific to my context, and as a result, generalizations to other settings may be limited. However, the processes we used offer an example to other small teams of teachers who want to collaboratively engage in improvement processes.

Qualitative research determines validity as whether the findings are accurate from the researcher and participants. I used multiple collection tools to determine validity of the study. The iterative cycles serve as a component of the study to assist with strengthening the internal

validity of the study. Internal validity is determined through "judging the trustworthiness of findings" (Guba & Lincoln, 2000, p. 376). Trust is of great value throughout the research, and all conclusions will be an accurate representation. The prolonged engagement and persistent observation in the context of the study will support credibility (Guba & Lincoln, 2000).

Finally, processes for confidentiality and ethics were vital. I secured the data in a locked office at Early College High School for a period of three years. I maintained the confidentiality of participants by using pseudonyms. None of the material co-generated with the study participants will be used in any other way. All participants signed letters of consent.

#### Summary

Teachers' understanding and use of their instructional craft can promote equitable access for all students. This PAR project and study was a collaborative improvement model, which supported four teachers in implementing changes within their classroom contexts. Using protocols provided teachers with clear methods for ensuring student voice.

In Chapter 2, I provide a comprehensive summary of previous research on the topic. In Chapter 3, I describe the action research methodology, which offers specific procedures to analyze information about the FoP. Chapter 4 provides the context of the research, including the people and place and, based on analysis of data, developed categories. In Chapters 5 and 6, I describe the PAR cycles of inquiry and, based on data analysis, develop emergent themes and findings. Finally, in Chapter 7, I conclude with implications for practice that appear from the research project.

#### **CHAPTER 2: LITERATURE REVIEW**

Every high school wishes to see all students graduate and be successful in pursuing higher education or going into the workforce and becoming active citizens and family members in their communities. Traditionally, high school is where students' complete preparation for these future endeavors. But how do we, as educators, prepare students to move beyond high school and see success in the world? Reading, writing, reasoning, and engaging in discourse every day in every class is a lofty goal to help students become twenty-first-century learners and prepared for life after high school. School leadership is a critical factor in fostering a collaborative environment for staff, ultimately impacting classroom instruction for student achievement.

Especially in schools that serve underrepresented students and are tagged as low performing, effective school leaders are critical because the school principal facilitates a culture conducive to learning (Grissom et al., 2021; Louis et al., 2010). Creating this culture requires a great deal of trust (Aguilar, 2016; Bryk & Schneider, 2002; Patton & Parker, 2017; Supovitz et al., 2010; Wood, 2010; Woodland, 2016). The Bryk et al. (2015) study of Chicago schools indicates that relational trust is a foundational pre-requisite for school improvement, and Grubb and Tredway (2010) name relational trust a necessary abstract resource for addressing school challenges. When teachers trust the leadership in an organization to influence the learning community, they implement strategies in the classroom that promote equitable discourse. Because learning is social, we recognize the need for teachers and students to collaborate (National Academies of Sciences, Engineering, and Medicine, 2018; Resnick, Asterhand, & Clarke, 2018).

This participatory action research (PAR) project and study emphasized the importance of every student in the school having a voice by thinking and talking every day in every class. The primary goal of the project and study was to shift the common notion of the teacher depositing information to students to regularly engage students in a collaborative dialogue (Freire, 1970; Zwiers & Crawford, 2011). The focus of practice (FoP) for the study was to build teacher capacity to fully engage students by developing and implementing discourse strategies focused on equitable classroom discourse practices. As a result, teachers at the Early College developed crucial resources for implementing effective, equitable procedures through three improvement cycles and developed a repertoire of pedagogical practices that promote equitable discourse. Specifically, teachers engaged in a collaborative process as a learning community and used common strategies and protocols in all classrooms across all content areas within the Early College. As a research group of co-practitioner researchers (CPR), we developed relational trust, a common understanding of equitable discourse, and implemented research-based strategies that supported equitable discourse in our adult learning community; as a result, teachers could implement those practices with students. In reviewing the literature, the focus of this chapter includes the principal as a change agent, the strengths of developing teacher learning communities, and the attributes of effective academic discourse.

# Principal as Change Leader

The role of the school principal has changed significantly since the 1983 report *A Nation at Risk* and the more recent 2002 No Child Left Behind legislation, shifting from serving as a manager of a building to being an instructional leader of the school and community (Bryk & Schneider, 2002; Fullan, 2002; Grissom et al., 2021; Louis et al., 2010; Mendels, 2012; Rigby & Tredway, 2015; Shelton, 2011). The expectations from multiple research studies call for

increasing student achievement in complex, diverse, and constantly changing social environments despite limited resources (Shelton, 2011). While the role of the principal is complex, influential leaders can implement site-based reforms that have the potential for increased student dialogue essential to improving student learning outcomes. In this section, I discuss the principal's role "today" and how the principal creates an environment for teacher learning within a school building through professional development.

### Principal Leadership

"Leadership is second only to classroom instruction as an influence on student learning." After six additional years of research, we are even more confident about this claim" (Louis et al., 2010, p. 9). While leadership does not directly impact student achievement, the leader of a school has significant indirect effects on student learning through teachers (Louis et al., 2010; Supovitz et al., 2010; Tredway et al., 2021) and can have direct effects on organizational climate, culture, and productivity (Murphy & Louis, 2018). The Bryk et al. (2015) study of Chicago schools provided a framework of essential supports necessary for school improvement and noted that leadership is the driver of school change. The Wallace Foundation (2013) linked five critical responsibilities of principals: shaping a vision, creating a climate hospitable to learning, cultivating leadership in others, improving instruction, and managing people, data, and processes, while Grissom et al. (2021) found that principal contributions are in these categories: engaging in instructionally focused interactions with teachers, building a productive school climate, facilitating productive collaboration and professional learning communities, and managing personnel and resources strategically. When a principal focuses on these responsibilities, then others begin to see leadership at work. Specific to this research project and study, three areas are pivotal: creating a school culture hospitable to learning, fostering trust and

collaboration, and cultivating leadership in others is pivotal to the school's success and student achievement (The Wallace Foundation, 2013).

#### School Culture

Creating a culture and climate hospitable to learning means that schools are safe and orderly and that principals make learning the forefront of all activities (Mendels, 2012; The Wallace Foundation, 2013). This task means establishing and sustaining trust (Bryk et al., 2015; Bryk & Schneider, 2002; Hoy & Tschannen-Moran, 1999; Tschannen-Moran, 2014); designing and supporting strong learning communities (Wood, 2010); and seeking and sharing knowledge (Fullan, 2002). When trust and collaboration are at the heart of the school organization, most likely, the principal has to be vigilant of creating and sustaining the culture (Supovitz et al., 2010), which, for teachers, typically takes place through learning communities. Teachers need opportunities for collaboration through learning communities so that they can address issues around teaching and learning. Figure 2 shows a conceptual framework used by Supovitz et al. (2010) to show how peers and principal leadership influence student learning.

By establishing and maintaining a culture of trust and collaboration, a principal reminds teachers that they are engaged in action research that helps them refine their craft of teaching. The principal needs to model being a lead learner in the school by setting the tone for and facilitating learning communities (Fullan, 2002). While the principal directly impacts certain aspects of the school, peer influence is another critical factor that can change instruction, impacting student learning (Supovitz et al., 2010). It is hard to establish authentic learning communities without trust and collaboration among all stakeholders.

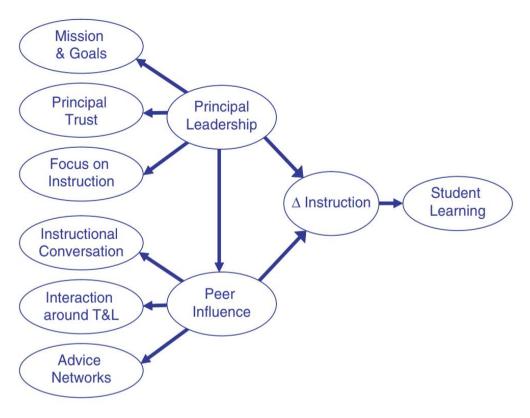


Figure 2. Conceptual framework of student learning.

#### Trust and Collaboration

Trust is a key factor in well preforming schools because trust lays the foundation for collaboration (Tschannen-Moran & Gareis, 2015). In a study from Tschannen-Moran (2014), they found that the trust teachers had for the principal set the tone for the building. A critical responsibility for leaders is setting and maintaining the tone for trust; only through this trust do instructional practices improve and thus provide the possibility of improving student learning (Louis et al., 2010; Tschannen-Moran & Gareis, 2015; Tschannen-Moran & Hoy, 2000).

To establish trust and collaboration, leaders need to be emotionally responsive. Aguilar (2016) describes the importance of leaders knowing themselves, creating a culture of trust, and learning how to develop emotional intelligence. When leaders understand who they are, they understand emotional intelligence, which is awareness about personal feelings and others. Emotional intelligence plays a huge role in creating trust within a school community, and leaders have the power to use emotional intelligence to cultivate transformative leadership. When "leaders cultivate connections, understanding, and relationships between members of a community" (Aguilar, 2016, p. 34), they help lead a group to meet their goals. Teams can build trust within the community by understanding who they are as a group, where they want to go, keeping commitments to each other, being transparent, asking for feedback, admitting mistakes, and regularly reflecting (Aguilar, 2016; Louis et al., 2010). "Principals play a major role in developing a professional community of teachers who guide one another in improving instruction" (The Wallace Foundation, 2013, p. 9). The principal must create a stable congenial climate for learning for students and staff.

# Distributed Leadership

Distributed leadership is "first and foremost about leadership practice rather than leaders or their roles, functions, routines, and structures" (Spillane, 2005, p. 145). From this perspective, leadership practice involves the interactions that leaders have with others and the acts of individual leaders (Spillane, 2005; Spillane et al., 2001). Leaders have a responsibility to act on interactions within the school building and acknowledge that it involves more people than just those at the top.

Cultivating leadership in others is critical to the improvement of schools. Effective principals are aware that they cannot do it alone; they need a team to implement change effectively. Collaborative decision-making helps foster leadership in others. Supovitz and Tognatta (2013) found higher cooperative decision-making levels when school leadership teams participated in distributed leadership. Peers influence each other, but principal leadership can affect this influence. Leadership practice looks at how leaders carry out tasks and how they interact with others in the process (Spillane et al., 2001). Supovitz et al. (2010) found that when school leadership develops a culture of collaboration, trust, and focuses on instructional improvement, it creates an environment to cultivate leadership in others. "Compared with lower achieving schools, higher-achieving schools provided all stakeholders with greater influence on decisions" (Louis et al., 2010, p. 35). Organizations need to emphasize participation from all stakeholders through learning communities to foster shared leadership (Halverson, 2006; Knapp, 2008; Spillane, 2005). The influence principals can have on ensuring distributed leadership as a component of how the principal relates to teachers is critical.

Improving instruction seems to be the most critical component of students achieving at high levels and school improvement. Effective principals know what quality instruction looks

like, so as an instructional leader, principals can provide feedback that will help teachers improve (Mendels, 2012). Principals should spend time in the classroom, make observations, discuss what they have found with the teacher, and provide feedback. Using data can improve instruction when needed. Without data from classroom observations, it is hard to make suggestions for improvement (Rosenshine, 1970). In a study by Louis et al. (2010), they describe high-performing instructional leaders as principals who, regardless of years of service, believe that teachers can grow, are visible in the classrooms, make short observations, and provide clear and direct feedback. If leaders help set a vision for "continual improvement at all levels" (Fullan, 2002, p. 5), all stakeholders can change and improve instruction. An effective principal helps guide teachers toward better instruction and improvement for everyone.

The principal has to be ready to provide learning opportunities targeted and directed to meet the needs of the teachers and the school community to make a shift in school culture. By facilitating teacher learning in the school, leaders are meeting identified and specific teacher needs. Next, I describe the value of professional learning and how principals can foster improvement through learning opportunities that include the implementation of protocols within academic discourse.

#### **Teacher Learning through Professional Development**

Professional development includes learning experiences that occur for teachers, school staff, and principals to acquire new knowledge and skills and apply those skills to improve job performance; new knowledge and skills are best situated in practice (Mizell, 2010) with the ultimate goal of improving student achievement. The principal has a special responsibility for organizing formal professional learning and promoting informal professional learning for teachers and staff. Frequently, educators think of professional development as going to a

conference, taking university classes, or participating in district-organized sessions on new curriculum. However, other types of professional learning are probably more important, such as the professional learning that principals should organize based on the context of the school (Grissom et al., 2021) and informal types of professional development, such as conversations, observations, and feedback that can cause educators to reflect on practice and implement iterative, evidence-based changes. Elmore and Burney (1999) describe characteristics of effective professional development as a concrete application for classroom practice, including opportunities to observe, critique, reflect, collaborate, and receive feedback. These qualities of effective professional development are the formal and informal ways teachers can learn within the school setting to improve practice, enhancing student achievement. Strong leaders provide teachers with learning opportunities and teacher engagement through professional development. Teacher learning includes reflection and feedback as a way to consider how to implement changes within the classroom.

#### Teacher Learning

Professional development should be content-focused, incorporate active learning, and provide sufficient time for reflection to take on new actions. When learning is focused on specific content, teachers can connect to what is currently happening in their classrooms, analyze student work, and study new pedagogy (Borko, 2004; Darling-Hammond et al., 2017; Whitcomb et al., 2009). Being content-specific allows teachers to engage deeply with their skill sets, make improvements, and engage in timely reflection because those activities are directly related to current practices.

When teachers engage with learning that directly impacts their daily teaching, then they are experiencing active learning. Active learning addresses how teachers learn and what teachers

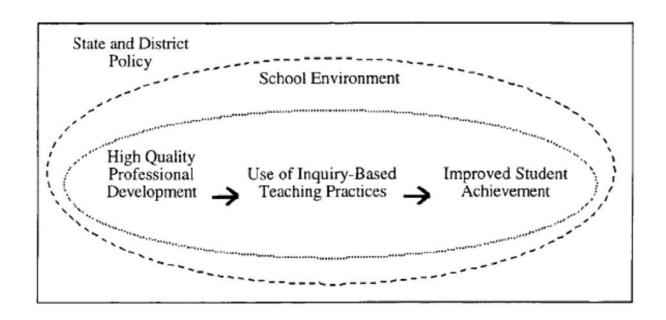


Figure 3. Relationship between professional development and student achievement.

learn (Darling-Hammond et al., 2017). Getting teachers to engage in active learning provides an entry point for them to experience learning just as they design it for students. When teachers engage in content-specific, active learning professional development that is "intensive and sustained," then teaching practices and classroom cultures are strongly affected (Supovitz & Turner, 2000). Figure 3 shows the theoretical relationship between professional development and student achievement described by Supovitz and Turner (2000). When teachers have access to high-quality professional development that is content-specific and engages them in active learning, and when teachers implement practices as learned, it can increase student achievement.

Reflection and feedback are crucial components of effective professional development. Feedback from administrators that is responsive and actionable can encourage teachers to make changes to practice (Grissom et al., 2021). Teachers need time to consider how to implement changes from professional learning, choose specific teacher actions, receive feedback, and implement additional changes in small iterative cycles of teacher inquiry (Darling-Hammond et al., 2017). For teachers to make changes and improve their teaching practices, there must be time to reflect (Morales, 2016). Through the feedback and reflection cycle, a team working together on a common goal of improvement leads to sustained changes in classroom practice and improved student achievement.

### Teacher Engagement

High-quality principals know that teacher development is significant and find ways for teachers to engage in instructional-focused collaborative learning (Elmore & Burney, 1999; Grissom et al., 2021). When teachers engage in authentic learning opportunities where understanding connects with issues that directly impact classroom practice, there will be an influence on student learning. Understanding that there is a direct link between teacher learning

and student achievement, opportunities should be provided within the school for teachers to learn and grow in their practice. In that case, structures have been in place "that provide educators with opportunities to learn as they collectively address the challenges embedded in the inevitable gap between high standards of learning and all students and actual student performance" (Hawley & Valli, 1999, p. 144). Green and Allen (2015) found that when quality professional development aligns with a high-functioning learning community, there was increased teamwork and collaboration. Learning opportunities occurred in the form of teacher to teacher classroom visits, instructional deficits, and collaborative research. Teachers can engage in effective professional development through learning communities with their peers. By analyzing data, focusing on instruction, observation, feedback, and reflection, teachers can focus on the actual development they need for instruction. Next, I discuss communities of practice and how they play an essential role in supporting teachers with the goal of increasing student achievement.

### **Communities of Practice**

Learning should continue for teachers with the goal of continuous improvement, and schools can accomplish this by organizing learning communities for teachers. The learning community sets the tone for how teachers interact to foster a culture of improvement. Learning new strategies and having the space to reflect through the learning community can help teachers change their practices.

School improvement relies on how the school staff relates to the leader and each other and support each other to foster the drive to improve student outcomes. Structures allow people to engage in collective learning, thinking, and honest exchange so that teachers can make informed decisions about changing practices (Lave, 1991; Morck, 2010; O'Connor & Allen, 2010; Wenger & Wenger-Trayner, 2015). Teachers have to come together to "share

responsibility for student well-being and achievement, and organizational scale enables sustained exchange regarding student learning" (Darling-Hammond & Sykes, 1999, p. 235). Educators can collaborate and learn together in a community when suitable structures are in place. Professional learning communities (PLC), networked improvement communities (NIC), and communities of practice (CoP) are common teacher groups where teacher learning occurs. I next introduce different types of learning communities and discuss the attributes of successful teacher collaboration that utilizes best practices from each and issues that may arise.

## **Teacher Learning Communities: Theory and Practice**

Schools tend to focus on learning for students but learning for teachers is a critical step toward improved student learning. Teacher learning directly connects to student learning. Situated learning (Lave, 1991), occurs when learning is:

a social phenomenon constituted in the experienced lived-in world, through legitimate peripheral participation in ongoing social practice; the process of changing knowledgeable skills is subsumed in the process of changing identity in and through the membership in a community of practitioners; and mastery is an organizational, relational characteristic of communities of practice. (p. 64)

By utilizing the teachers' experiences in the school, recognizing each member's diversity through full participation, and building on relational attributes (Lave & Wenger, 1991), schools can create an environment for teacher learning communities. Teachers engaged in a learning community strive to become members of a sustained community of practice, and sustaining a learning community is essential to the continued growth of total school improvement.

Learning is most successful for teachers when "situated within everyday practices" (Morck, 2010, p. 177) and should occur in a group that agrees upon common interests. By

engaging in continuous learning through a community of learners, teachers start to "become good at practices that they routinely participate in, gaining an understanding of how to successfully engage under varying conditions by flexibility adapting their performance" (O'Connor & Allen, 2010, p. 161). Communities of learning are precisely that—an organized group of teachers who recognize the importance of sharing a common goal of improvement that builds relationships and adapts to meet the school community's needs.

Teachers involved in a learning community must have the ultimate goal of improving and changing their practiced actions. The organization of learning communities has to be structured to fully engage through a mutual understanding of different perspectives to increase the knowledge of action needed to result in school improvement (Morck, 2010). By establishing organizational structures that provide a space for continuous social learning and new ideas to emerge (Lave, 1991; Morck, 2010), teachers engage in a community of learning.

Darling-Hammond (1996) describes schools that have strong teacher collaboration; these schools have "constructed shared curriculum and assessment work which cuts across teams. By including a collective of assessments of student work and analyzing their progress, teachers focus together on academic issues across the entire school" (p. 14). Strong collaborative structures help focus teachers "for success that maintains a press for ambitious teaching and academic achievement" (Darling-Hammond, 1997, p. 150) that ultimately leads to school improvement. Through focused teacher collaboration through a learning community with a common goal on student learning, change can occur.

Traditionally, the three types of learning communities used within a school are communities of practice (CoP), professional learning communities (PLC), or networked improvement communities (NIC). The types of learning communities have similarities and

differences in their inception and practices. All three types of learning communities have teachers meeting regularly, identifying student learning goals, and analyzing student achievement (Bryk et al., 2015; Darling-Hammond, 1996; DuFour et al., 2005; Fullan, 2000; Little, 2006; Wenger & Wenger-Trayner, 2015). Teachers need constant, structured, collaborative teacher groups that have specific protocols for engaging in their learning (Wood, 2010). These types of learning communities are intended to be collaborative and engage in continuous cycles of improvement in which teachers fully engage in learning (DuFour et al., 2005). CoP refers to a group being formed that uses a combination of three practices: domain, community, and practice; the group members use each practice in cultivating the group. Typically, when schools structure teachers in groups based on grade level and content area that is a PLC. An NIC is a group designed for individuals to engage in problem solving.

# Communities of Practice (CoP)

Wenger and Wenger-Trayner (2015) use the term "communities of practice" and describe teacher learning as "groups of people who share a concern or passion for something they do and learn how to do it better as they interact regularly" (p. 1). A CoP's primary goals are that teachers commit to engage in collaborative activities and discussions and are active practitioners (Wenger & Wenger-Trayner, 2015). The participants' experiences play a role in the learning community because through each teacher's experience and dialogue, new developments, knowledge, and teacher voice can emerge. Within a CoP, participants co-create knowledge that is situated in the observed practices and a participant's individual perspective on the work will be different and change as learning continues with the goal of having a shared practice (Lave, 1991). CoPs are a way to organize organizations to think internally, externally, and over the lifetime of students by thinking about learning as life itself and recognizing that learning is continuous.

Teachers involved in a learning community must have the ultimate goal of improving and changing their practiced actions. In a CoP, three characteristics are essential for the success of the practice. Members of a CoP must have a "shared domain of interest" (Wenger & Wenger-Trayner, 2015, p. 2). There should be a real sense of community among the members, helping them form relationships and enabling them to learn from one another. CoP members must be willing to use their shared experience to "address recurring problems" (Wenger & Wenger-Trayner, 2015, p. 2). The organization of learning communities has to be structured to fully engage through a mutual understanding of different perspectives to increase the knowledge of action needed to improve school improvement (Morck, 2010). By establishing organizational structures that provide a space for continuous social learning and new ideas to emerge (Lave, 1991; Morck, 2010), teachers engage in a community of learning.

# Professional Learning Communities (PLC)

Fullan (2000) reiterates that for schools to be successful, they have to collaborate with teachers and focus on pedagogy and assessment. A PLC structure can offer the main focus for improvement, and when this is successful, "deeper changes in both culture and structure can be accomplished" (Fullan, 2000, p. 3). While many schools can help facilitate this process, the PLC focuses on small tasks that apply to the classroom, where teachers learn together (Fullan, 2000). Creating a change in school structures and culture enables collaborative teacher interaction where teacher learning centers on pedagogy and student improvement which shows in student achievement.

Teacher learning plays a huge role in building a strong learning community. Little (2006) places learning at the center of teaching and stresses the importance of moving toward a "collective autonomy and teacher to teacher initiative" (p. 512) where the goal is that the

learning community will become a resource for professional learning. Teacher learning communities have to focus on embracing a "collective obligation for student success" (Little, 2006, p. 16). When teachers solve problems, analyze results, and engage in reflective dialogue together, they begin to build a strong learning community (Little, 2006). By creating a learning community where the goal is to focus on student success, teachers can take collective control over important classroom decisions.

# Networked Improvement Community (NIC)

In a NIC, the term *well-specified goal* identifies the need to create a specific, measurable common aim (Bryk et al., 2015) to which the learning community can hold themselves accountable. The aim statement in a NIC should center on a common problem that allows each participant to invest entirely in accomplishing the goal. Similar to a community of practice, Wenger and Wenger-Trayner (2015) use the phrase "share a concern or a passion for something" (p. 1) to highlight the key relationship in community members. The concern or passion that teachers share makes the goal achievable and relatable, allowing full engagement and making it results-oriented.

In the NIC levels of learning, Level A learning is described as the learning frontline workers have as they engage in the work; in Level B learning, the workers relate their experiences to others. "In essence, Level B learning augments what individuals may learn on their own (Level A). When individual insights are systematically pooled, collective capabilities grow" (Bryk et al., 2015, p. 143). Finally, Level C learning occurs across institutions. This learning is "knowledge generated as ideas are elaborated, refined, and tested across many different contexts" (Bryk et al., 2015, p. 143) which requires intentional organization. Aspiring to move to Level C learning will allow us to speed up the learning process.

In a NIC, a group of practitioners that includes teachers and administrators work to understand problems in different contexts in order to find solutions for improvement (Russell et al., 2017). As the NIC learns and tests ideas together they can more easily find patterns than if they were working alone (Bryk et al., 2015; Russell et al., 2017). Due to the deliberate efforts to build relationships and trust within the NIC, participants are likely to remain in the group and take collective action on the common goal (Russell et al., 2017; Wenger & Wenger-Trayner, 2015).

These researchers bring together important implications for establishing a successful teacher learning community. Each learning network described above contributes to school improvement through an organized opportunity for teachers to collaborate, problem-solve, discuss, and reflect on practices to influence teaching and learning in the classroom. CoPs have a goal of being committed to the common domain of interest, engaging in activities, discussions, helping each other, and sharing information. PLCs have a goal of focusing on student learning, creating a culture of collaboration, and focusing on results. NICs are focused on a "well specified focused aim," improving problems through disciplined methods that are developed and tested interventions, and are organized to accelerate improvement. By establishing a carefully defined learning community using the best practices from each, teachers can engage in an actual authentic change in the classroom and school by advocating for students.

#### **Attributes of Successful Teacher Collaboration**

Teacher collaboration can be successful when specific attributes are an integral part of the learning community. Although the three types have some distinct differences, in examining CoPs, PLCs, and NICs, I determined common attributes that would be critical to the project and study, including shared beliefs and common goals among participants, supportive leadership,

learning together and application, and supported school conditions. Each of these components plays a critical role in establishing and creating successful teacher collaboration.

# Shared Beliefs and Common Goals

Shared beliefs and common goals are the foundation of forming a collaborative teacher group. Each person in the group needs to know the goal and achieve that aim at each meeting. Hord and Sommers (2008) describe this attribute as the staff sharing a common purpose to increase student learning. By having a common focus, the group can work toward achieving that goal where they feel comfortable sharing ideas about dilemmas and expertise (Wood, 2010). When teachers have common goals, they are more likely to improve student achievement versus working by themselves.

Not only does the collaborative teacher group have to have a focus, but that focus must contribute to the overall goal of whole school improvement. By having "ambitious goals that join the needs and interests of individual teachers to the school's collective needs and interests" (Little, 2006, p. 1018), the learning community is working toward total school improvement. Communicating the school's shared belief is essential, and the principal's role is to reiterate and support the common goal of improving teaching and learning (Wood, 2010). Without shared and supportive leadership, teacher learning communities can be just another checkbox with no authentic engagement for teacher and student learning.

#### Shared and Supportive Leadership in Learning Communities

The principal plays a crucial role in shaping, developing, and sustaining learning communities in the school. Creating an authentic learning community requires a change in the way learning happens in the building. The perception that principals are the authoritative source of information in the building has to change to the principal being a learner alongside teachers in

the school learning community (Bridwell-Mitchell & Cooc, 2016; Coburn, 2001; Hord & Sommers, 2008). When a principal understands and models the importance of teacher learning, collaboration, and inquiry, the principal then sets the expectation that teachers can engage in this process as co-learners.

Shared and supportive leadership is much more than allowing a learning community to meet within a school building. To build and sustain mutual trust, the administration should foster an environment for shared decision-making (Hord & Sommers, 2008; Schecter, 2010), which can translate to classroom practices of choice for students. Leadership can frame messages from the state and district levels so that teachers and their conversations focus on learning and student growth. Bridwell-Mitchell and Cooc (2016) found that cohesion in the school learning communities was a critical factor, and principals are foundational in providing support for teachers to build relationships and cohesion among the learning community.

# Supportive Conditions in the School

The school has to support a learning community effectively by designing structures and setting up conditions for developing trusting relationships. Structural factors include scheduling and the use of effective protocols. Trust within the teacher learning community influences how staff learn together, make decisions, and engage in giving and receiving feedback (Hord & Sommers, 2008). The combination of the suitable structures in place and supported relationships within the community of practice allows learning to occur.

**Structures**. Specific structures need to be put in place for this learning to occur among the teachers and for them to effectively implement change. The goal is that the learning community structures itself so that adult learning can occur within a group of teachers to find solutions to student issues through a cycle of continuous improvement (Woodland, 2016). First,

the principal organizes a schedule during the school day to collaborate and address student concerns (Hord & Sommers, 2008; Schecter, 2010; Wood, 2010; Woodland, 2016). Finding time may be one of the most complex structures to put in place, but the principal's commitment to finding a common time demonstrates that teacher learning and collaboration are essential to the school's improvement.

In order to keep members on task, protocols can serve as a useful structure to keep teachers focused, get staff talking, spark inquiry, and elicit reflection (Wood, 2010; Woodland, 2016). A structure for effective learning and dialogue is another vital aspect of creating a collaborative learning community. Wood (2010) observed the effectiveness of effectively implementing protocols into the teacher learning community. When staff utilizes protocols during the learning community, stay focused on teaching and learning, and have open and honest conversations, learning becomes meaningful. Dialogue has to be observant and reflective because through collaboration, staff can learn and have deeper engagement (Coburn, 2001; Schecter, 2010; Wood, 2010). While protocols can help foster dialogue, relationships have to be established and respected within the group.

Relationships. A critical component in a learning community is conditions that support relationships. When members of the learning community come together and trust each other, they can bond together about a common goal. They are more likely to "adopt innovative strategies and refine these innovations in their own contexts" (Bryk et al., 2015, p. 146) and, through these trusting relationships within the learning community, they can observe change within the school (Patton & Parker, 2017; Wood, 2010; Woodland, 2016). The principal can help facilitate relationships by fostering collaboration across different groups, modeling processes for achieving personal knowledge of each other, and providing protocols for problem-solving.

Because "personal relationships are the heartbeat of reform" (Grubb & Tredway, 2010, p. 147), principals need to set the tone, consistently model how to relate, and be ready to facilitate.

Without these relationship tools as a part of the supporting conditions, the staff may not effectively engage in collective learning and application.

### **Collective Learning and Application**

Collective learning refers to how the community of practice works collaboratively to determine how they will learn, address students' learning needs, act, and evaluate the process. With a shared commitment to a common goal, the teachers can collaborate and work together to solve problems. When teachers can discuss and address their personal and professional issues, they develop a sense of efficacy (Wood, 2010). Schecter (2010) found that when teachers could engage in collective learning that teacher inquiry increased when successes in pedagogy were the focus. Both Little (2006) and Woodland (2016) showed that teacher inquiry fostered an environment for increased teacher engagement and a cycle of continuous improvement.

Learning together is essential, but so is the application and reflection of the implemented changes. Implementing new strategies takes effort and is accomplished because teachers want to improve instruction for students. When participants in the community of practice learn together, they fully engage in striving to solve problems and holding each other accountable in the learning community (Bryk et al., 2015; Wood, 2010). Schools that have a strong focus on collective learning can be a model for teachers, which can directly impact student learning. Yet, the teacher learning space has complexities, and the principal must be ready to address these before they fragment the collaborative teams or goals.

# Issues of Teacher Collaboration

Whenever a group of people is brought together with varying backgrounds, issues can arise when trying to work collaboratively. School structure and organization, individual characteristics, and lack of cohesion between the group can be issues that arise with teacher collaboration. By recognizing the problems that can occur when forming and working in a community of practice, school administrators can identify effective ways to address the issues and keep the culture positive and focused.

Organizational Structure. An organizational structure in which teachers feel that they have autonomy is essential. Despite careful planning, the regular designated time for the learning community may be usurped by new mandates or district initiatives. When this happens, the group focus suffers. Because collaborating and focusing on a common goal is critical, the principal needs to be alert to teacher reactions and subsequent needs. Other times, schools do not have schedules in place that give teachers joint planning or have the resources available that are needed to successfully organize and facilitate an influential learning community (Hord & Sommers, 2008; Spillane et al., 2012). When organizational structures do not support uninterrupted time for teacher learning, then the learning community will lose its focus on student achievement.

Individual Characteristics. Individual characteristics of teachers play a role in the learning community. These characteristics can include age, years of service, race, and gender, among others. Spillane et al. (2012) found that people are more likely to interact with those who are most similar to themselves, creating an unintentional divide among staff members in a learning community. The importance of building emotionally safe, trusting relationships among the community so that participants engage in the work together regardless of differences is

critical to the success of the learning community (Patton & Parker, 2017). The principal remains a crucial contributor in bridging participants' personalities so that everyone can learn from each other.

As described by Bridwell-Mitchell and Cooc (2016), cohesion remains one of the most critical factors in a learning community. However, school and district leaders need to be mindful of building cohesion between the work done in the classroom and mandates that come from local, state, and federal levels. By creating the structures and understanding the benefits of a strong learning community, when implemented correctly it can be used as one avenue to drive improvement within a school.

By introducing the different types of learning communities that exist and the foundation of each of those, we learn about attributes that can help schools implement effective, collaborative and reflective learning for a school community. As with any group formed, issues arise, but how the leaders, with the support of the teachers, address those issues is the most important factor in determining the group's outcome. Once a strong learning community has been implemented, we can begin to see changes that directly impact teacher practice that can then lead to improved student learning and achievement. The school community's principal plays a considerable role in creating a culture that sustains an influential teacher learning community. In the next section, I focus on how learning within the classroom is a social process, the environment that teachers must create to engage students in learning, and strategies that they can use to foster discourse within the classroom.

#### **Academic Discourse in the Classroom**

Talk is not only a social engagement but, more importantly, an academic necessity for all students in all classrooms. Student participation through academic discourse in the classroom is

vital for effective learning and critical for student engagement and understanding in all high school content areas. Vygotsky (1978) argued that through speech, children learn to engage with the world around them, plan a solution to a problem, master their behavior, and create contact with others. Learning is a social experience that students and educators create through speech. Freire (1970) describes how dialogue plays a primary role in our lives. Through conversation, we connect with others and "create and recreate ourselves" (Freire, 1970, p. 43). Educators can create an environment that encourages student curiosity and learning through the use of dialogue.

For purposes of this research, I use academic discourse interchangeably with "dialogue," "dialogic teaching," "accountable talk," and "dialogic pedagogy" and to mean the verbal interaction among individuals that facilitates a high level of communication, engages, stimulates thinking, and expands on ideas (Burbules & Bruce, 2001; Lynch, 2013; Mercer & Hodgkinson, 2008; Resnick, Asterhan, Clarke, & Schantz, 2018; Sedova, 2017). After discussing constructivist theories, I build on the research by providing approaches for educators to consider as they implement an environment conducive to academic discourse and socialized learning. Then, I describe instructional practices that can foster discourse in the classroom across all content areas.

#### **Socialized Learning**

Socialized learning originates in the theories of Bruner (1966), Freire (1970), and Vygotsky (1978). Each describes learning as a social interaction that relies on the root of culture, individuals developing within their community, and communication and that development occurs from understanding the world as an interactive learning experience. Each theory helped mold and shape the concept of socialized learning that leads to the need for academic discourse in the classroom to help engage students, mold thinking, and create a shared understanding. Alexander

(2018) coined dialogic talk as a combination of Freire and Vygotsky. Next, I describe how constructivist ideas that informed socialized learning meshed with academic discourse can create a robust learning environment.

Bruner (1966) described language as a cause of learning, not a consequence of learning. Specifically, the idea of symbolic representation and language is a primary symbol in which individuals interact and "encode and represent experience" (Driscoll, 1994, p. 209). By creating various ways for students to interact with concepts, students develop a deeper understanding. When engaged students received inquiry-based instruction through discourse, students can better reason and improve their academic performance (Moon et al., 2017). Likewise, when students have opportunities to voice ideas and hear multiple perspectives, they begin the process of engaging in learning through dialogue.

Dialogue creates a social learning environment, but as Freire (1970) describes, dialogue cannot be "deposits" or exchanging of ideas to be "consumed." Authentic dialogue cannot exist if it is not in love, humility, faith, hope, and engages in critical thinking. "Without dialogue, there is no communication and without communication, there can be no true education" (Freire, 1970, p. 86). Learning cannot be a one-way street from teacher to student; rather to make a commitment to engage in love, humility, faith, hope, and critical thinking, all individuals need to engage in reciprocal relationships to promote dialogical learning. Learning through dialogue offers each student a voice in the classroom as they co-construct knowledge and meaning. Duff (2010) identified the need for oral academic discourse socialization. Each student brings different experiences but, in particular, disadvantaged or minority students come with challenges that educators must address early on for them to thrive in the "mainstream educational culture" (Duff, 2010, p. 176). Utilizing student backgrounds and experiences can create powerful learning

opportunities for students, and, by establishing socialization through dialogue, teachers commit to a revolutionary learning process.

Vygotsky's socio-cultural theories describe the important relationships between thinking and speaking as critical pre-requisites for learning. Social interactions precede students' development, and through these interactions in the classroom, students experience cognitive development (Driscoll, 1994). In fact, without expressing learning by paraphrasing, students do not always encode information into long-term memory, and they miss opportunities for complete learning. Academic discourse is a crucial classroom strategy because it provides opportunities for social interactions with peers and the teacher. Because cultural background, community, and family can determine what people learn and how people learn (National Academies of Sciences, Engineering, and Medicine, 2018), the teachers should embed social practices that reflect the school culture. In addition, these interactions provide opportunities for students to learn to navigate academic systems. However, individuals can "rise to cultural expectations when provided with opportunities and support is impressive" (National Academies of Sciences, Engineering, and Medicine, 2018, p. 62). By facilitating academic discourse in the classroom, teaching becomes a learning process that encourages thinking and creates social interaction for all involved.

Therefore, dialogic teaching is an essential factor in socialized learning. Multiple researchers reiterate the power of talk to engage, stimulate, understand, critically think, and empower students to be lifelong learners (Lampert, 1990; Lefstein et al., 2011; Mercer & Hodgkinson, 2008). As Resnick, Asterhan, and Clarke. (2018) stated, "talk is a privileged form of learning" (p. 3). Dialogic teaching can contribute to academic learning because teachers provide space for students' voices and awareness of knowledge by effectively scaffolding lessons

(Boyd & Markarian, 2015). Through the socialization of talk in the classroom, educators can help students take the lead on their learning and promote collaborative reasoning.

Collaborative reasoning facilitated through discourse supports social and cognitive development for students. When students received the opportunity to participate in dialogic interaction, students became leaders in the classroom which "gave children the social and intellectual space to operate on their own" (Sun et al., 2015, p. 65), allowing students to become in charge of their learning. Adey and Shayer (2015) used the term "cognitive acceleration" to demonstrate the effectiveness of fully planning and implementing dialogue in lessons. As a result, the study found a substantial effect on students' intellectual development, when cognitative acceleration was implemented, reinforcing the importance of metacognition and students' need to have social interactions during learning.

Social learning through discourse is critical, and students must learn to solve problems together. Learning becomes powerful when multiple minds work on the same problem together through the whole class, small group, or in pairs (Resnick et al., 2015). Teachers can create a more open forum to discuss issues and mold thinking through peer interaction in the classroom. Eventually, the goal is to learning transfer—holding the learning in long term memory—so students are then able to share their learning beyond their current knowledge and build schema for future use (Driscoll, 1994). Through social learning, students begin to navigate the world and fully participate in a classroom culture that supports a more equitable learning environment.

As schools and classrooms create equitable learning environments using the pedagogical practices of socialized learning and dialogic pedagogy, the discourse quality grows and becomes essential to student learning (Moon et al., 2017). Teachers not only need to create a learning environment that welcomes students and responds to the needs of each individual, they need to

document and discuss how the learning environment supports student learning by using dialogue as a primary instructional mode. Teachers must be willing to take a step back and allow students to develop agency and expertise in classroom discourse. Teachers must stop "depositing" information and hoping students will learn. They need to gain skills so that students dialogue in which students think, talk, reason, and problem-solve in a culturally responsive classroom.

### **Culturally Responsive Classroom Culture for Discourse**

For students to engage in discourse in the classroom, teachers must develop a responsive classroom environment that meets students' needs. As described by the work of Gay (2000) and Ladson-Billings (1994), culturally responsive educators connect students' cultural references to academic skills and concepts, engage students in critical reflection, facilitate cultural competence, and break down oppressive systems by critiquing discourses (Aronson & Laughter, 2016). If a teacher is committed to being culturally responsive, then the teacher can create a learning environment that fosters academic discourse and is concurrently culturally responsive.

In constructing lessons that are based on academic discourse with more culturally responsive examples, teachers can better foster equitable dialogue. Language and experiences vary from home to home, and students bring those lived experiences with them in the classroom (Hammond, 2015). Through academic conversations, students can bring their social and cultural experiences into the class by "empowering students to be more independent in voicing and shaping ideas" (Zwiers & Crawford, 2011, p. 22). When teachers create a classroom environment that empowers students to become independent learners through voicing and shaping ideas, students begin to think about their own learning process.

Teachers wishing to establish real academic discourse as a classroom practice must understand the meaning and value its effectiveness. Dialogic teaching improves initial learning,

cognitive development, and higher learning gains (Adey & Shayer, 2015; Resnick, Asterhan, Clarke, & Schantz, 2018). Through the classroom environment, teachers build community and connection in the classroom that supports structures of dialogic teaching, social and emotional needs, and develop connections. Hammond (2015) describes the need for student agency and voice. Through establishing social and academic talk structures, a classroom begins to form a community, meets students' social and emotional needs, and helps learners engage in academic dialogue.

Not only do teachers have to be culturally responsive educators, they must design their lessons so that the students are the center of learning. The learning environment needs to have discourse components such as discussion boards, debates, multiple ways to reflect or summarize, collaborative group work, and classroom leadership opportunities for students to begin to establish a culturally responsive culture (Woodley et al., 2017). Applebee et al. (2003), Hiebert and Wearne (1993), and Mercer and Hodgkinson (2008) outline the importance of high-quality tasks that foster discourse so students can think and engage in conversation critically. High-level classroom tasks and academic discourse are central components of a lesson design that places students at the center.

As educators look to engage all students in their classes every day, they authorize student agency. "Authentic engagement begins with remembering that we are wired to connect with one another" (Hammond, 2015, p. 50). Through strategic conversations and positive classroom culture, students can learn. Collins and Stevens (1983) created a model of inquiry teaching, which gives guidance to starting an instructional dialogue in the classroom. This teaching model offers teachers a guide to selecting cases to model, asking questions, and correcting errors in thinking. Through problem-solving, which includes selecting the right examples and allowing

the students to struggle with counterexamples, teachers challenge student learning. Problem-solving is influenced and should reflect the culture in which it is inserted (Driscoll, 1994). Social interactions occur through intentional instructional practices that help develop student academic discourse.

#### **Instructional Practices that Foster Academic Discourse**

After establishing culturally responsive classroom environment, teachers can engage students in academic discourse by using various instructional practices. Teachers need to have a plethora of strategies and protocols in their toolboxes to facilitate discourse. Strategies are tools used by teachers that show students how to learn, process, remember, and express information. Protocols are ways to promote participation, ensure equity, increase rigor, and build on trust (McDonald et al., 2013). Through the use of both strategies and protocols, teachers can empower students to learn from each other and take charge of their learning. However, strategies are only useful if the teachers design high level academic tasks that engage students in analysis, synthesis, and evaluation instead of low-level recall or basic understanding (Boykin & Noguera, 2011) and address talk strategies that lead to more equitable access and rigor (Boyd & Markarian, 2011; Lyman, 1981; Rowe, 1972). In discussing some strategies and protocols teachers can use, I highlight how these can strategies foster and facilitate classroom discourse.

#### Classroom Talk

Classroom talk holds everyone accountable and privileges everyone's value in the classroom conversation (Resnick, Asterhan, Clarke, & Schantz, 2018). Accountable classroom talk can be an effective method to use for classroom discussion when the teachers sets clear expectations. Each student is responsible for the learning community, engages in differences, looks for explanations from others, and forms knowledge. This talk can be teacher-led, small

groups, student-led, partner talk, or computer-mediated talk (Resnick, Asterhan, Clarke, & Schantz, 2018). The goal of the accountable talk is to move the conversation from teacher-dominated to student-led. As teachers continue to push for additional explanations and justifications, students reshape their thinking (Resnick & Hall, 2012). Gutiérrez (1995) states, "students can acquire academic discourse as they become members of their academic community" (p. 34). Through the deliberate practices implemented with accountable classroom talk, students can transfer learning into a democratic society.

Classroom talk can be exploratory or presentational in every content area. The exploratory discussion gives students the flexibility to learn in a low-stakes environment, while presentational talk is more formal and relies on some evaluation to occur (Mercer & Hodgkinson, 2008). In most traditional classroom environments, teacher-dominated discourse is the main form of discourse. Instead, classroom talk should create authentic learning experiences for students and encourage deeper thinking and understanding of all contents through a variety of talk options (Reznitskaya et al., 2009). When students receive the opportunity to participate in classroom discourse, students develop a deeper understanding of disciplinary knowledge (Crawford et al., 1997; O'Connor & Michaels, 1993).

Patterns of discourse that rely on the typical Initiate, Respond, Engage (IRE) talk structures (Greeno, 2015; Mehan & Cazden, 2015; Michaels & O'Connor, 2015) need to change. Rather, the pattern structure should provide discourse opportunities that encourage students to take ownership of their learning, are open to multiple perspectives, and move away from (IRE) talk structures. Greeno (2015) describes talk sequences that can occur in the classroom by indicating that if the sequence ends with the student followed by another student, students can experience further discussion in the classroom. In addition, if students who receive the

opportunity to engage in classroom talk in which student explanations and elaborations are at the end of the sequence, they have more significant potential for learning and understanding. By establishing and maintaining accountable classroom talk structures, students are more active in the dialogue, can build their academic language and ultimately achieve at higher academic levels while concurrently learning how to be active participants in democratic processes.

Learning tasks provide opportunities for students to engage in classroom talk. Chi and Menekse (2015) found that by implementing the interactive, constructive, active, and passive (ICAP) framework when engaging in learning activities that five distinct dialogue patterns emerged. These patterns contribute to classroom talk and support significant learning when talking to others (Chi & Menekse, 2015). Having the correct learning task is critical in facilitating classroom discussion that supports robust learning for each student. Michaels and O'Connor (2015) refer to "talk moves" as a way to help teachers develop skills that help with facilitating discussions in the classroom. In order to best facilitate discussions, they found that you must have a foundational set of goals which must be planned for (Michaels & O'Connor, 2015). Effective questioning is one of the ways that teachers can use goals to engage students with constructive classroom talk.

#### Questioning

Dialogue depends on teacher questions. When authentic higher-order questions occur that require connections, students are more likely to engage in talk (Boyd & Markarian, 2011). Closed questions, which are referred to as questions that do not require or prompt much thought or have one-word answers, can elicit little response or deliberation from students. The typical closed patterns are questions that require a yes-no answer or low-level recall. These question types actually reduce student participation as often they think the answers are obvious. Fill in the

blank questions are another common low-engagement question form. On the other hand, open questioning requires a higher cognitive level (analysis or synthesis) more than one-word answers. These are questions that require analysis and usually begin with why, which, or how. "Open questions elicit the power of context and life. The open questions assume the respect for learners and for their experience and current knowledge" (Vella, 2007, p. 111). Through the power of open questions, students can engage in more authentic reflection and dialogue.

Question level plays an important role in improving critical thinking within the classroom. A study from Bibi et al. (2020) found that few questions are typically asked in the classroom and, of the questions asked, they tend to be lower level (recall, basic comprehension, basic application). They suggest that in order to move toward more rigor, teachers need to understand the importance of Bloom's taxonomy, develop an understanding of how learning occurs, develop stimulating questions to provoke higher-order thinking, and plan questions (Bibi et al., 2020; Bloom, 1956). Bloom's taxonomy offers a framework for identifying categories in the cognitive domain. The original Bloom taxonomy categories are knowledge, comprehension, application, analysis, synthesis, and evaluation and are used to enhance communication which can be used in the form of questioning (Krathwohl, 2002). However, translating Bloom's

The ThinkTrix taxonomy offers a different way for students to engage by concentrating on seven thinking actions, including recall, cause and effect, similarity, difference, idea to example (deduction), example to idea (induction), and evaluation. First teachers and then students construct questions for each other, and "as a result, they have a stronger grasp of shifting from lower to higher cognitive domains and to the thinking required to engage in more rigorous academic tasks" (Lyman et al., 2023, p. 6). Purser (2019) found in his study of seventh-

graders that using ThinkTrix put learning in the hands of students who co-developed questions using the ThinkTrix model to ask of each other, which resulted in intergroup dialogue.

A critical component of questioning is the wait time, now also commonly referred to as think time. Wait time is the time that is given for students to think about a question before being called on to answer. Rowe (1972, 1986) describes the importance of wait time and the positive effects of practical implementation. When wait time after questioning increased, student responses improved in overall quality. Increased wait time allowed students to ask more questions, engage more frequently with each other, and failure to respond decreased (Rowe, 1986). Rowe (1972) and Stahl (1994) describe how teachers can implement wait or think time in the classroom as a whole group and when working with small groups. This small amount of time, typically 3-10 seconds after a question, depending on the level of the question, becomes a critical component in effectively facilitating academic discourse through questioning.

Questioning is an essential tool for every content area. In particular, in the mathematics classroom, teachers can use questioning to help students grapple with, explain, and reflect on concepts and become a critical component of discourse (National Council of Teachers of Mathematics, 2012). Other content areas such as science, history, and English can use similar strategies to help students promote different skills (Zwiers & Crawford, 2011), focusing on classroom discourse and students explaining, thinking, and reflecting. Classroom discourse can be facilitated through seminars, which encourage students to explain, think, and reflect on a text and to each other.

### **Seminars**

Seminars incorporate dialogic teaching. Tredway (1995) describes the effectiveness of Socratic seminar, which target students' social and emotional needs by posing questions of moral

dilemmas from texts students have read and causes students to engage in active learning. Teachers can use a Socratic seminar format in any content area by offering an opening question at the synthesis-evaluation level of Bloom or Lyman. As a result of participation in seminars, students learn to agree and disagree, build on each other's ideas, defer to each other without hand-raising, and co-construct meaning about a written, oral, or visual text. Creating real-world connections for students through Socratic seminars allows them to interpret texts, synthesize multiple resources, test understanding, and engage in discussion (Resnick & Hall, 2012). Thus, as a result, we better prepare students to be active in our democratic society.

The seminar process focuses on steps to include before and after discussion. The principles of speaking, listening, and referring to texts are everywhere in the seminar's facilitation. During the seminar, participants interact with each other and teachers are the "facilitators of dialogue" (Billings & Fitzgerald, 2002 p. 910). Throughout the seminar, openended questions probe to help promote student thinking and grapple with others' viewpoints instead of only hearing the teacher's perspective. The seminar processes align with "Accountable Talk: Instructional Dialogue that Builds the Mind" core principles. Protocols in the classroom can be used to establish equity of voice and often help facilitate learning so all students can be included.

### Protocols

The National School Reform Faculty, the Institute for Educational Leadership, and School Reform Initiative aim to provide protocols for teachers to use in the classroom that support equitable voice. These protocols concentrate on equitable voice and provide students with the opportunity to move from a basic understanding of a concept to a higher level and develop listening skills (Hammond, 2015; Veugelers & O'Hair, 2005). Zwiers and Crawford

(2011) offer additional protocols that educators can use in the classroom that engage students in academic conversations. Protocols can be strategically used in the classroom and used as a way that teachers can scaffold and plan lessons.

Think-Pair-Share is a common protocol in which teachers engage students to use think time and respond first in pairs and then to the entire class (Lyman, 1978; Lyman et al., 2023). Each of these processes can be used in a variety of ways in the classroom, and they provide a process in which teachers can engage students in effective class discussion. In using think-pair-share, students were willing to speak and listen in the share mode and were satisfied with the discussion and the wait-time after each question (Lyman, 1978). This protocol is a way to provide equitable access to students in the classroom.

Lyman et al. (2023) reviewed the use of Think Pair Share (TPS) based on the wait/think time as an essential part of asking questions. Several researchers on TPS in 50 elementary classrooms showed results indicating that student responses increase and group dynamic issues decreased, students responded more equitably, student listened to their peers, and as teachers asked higher-level questions, they used longer think time for students to think and then discuss. Overall, student retention increased (Davidson & Kroll, 1991; Davie & Lyman, 1985; Lyman, 1981, 1992). Setting up clear structures for Think Pair Share in which there is think time before students' pair, and students have a process for turning to the partner to talk is essential to effective pairing. If the teacher then listens in on paired conversations from students as they rehearse their response (a key component of effective information processing), the teacher authorizes often reticent students to contribute.

In highlighting the authors and the work of socialized learning and dialogic pedagogy, we have a foundation for rethinking classroom practices and engaging all students in discourse in the

classroom. Secondly, establishing a culturally responsive classroom environment can create a space for teachers to meet students where they are. Finally, the instructional practice strategies serve as a stepping stone for how teachers can implement discourse practices into their learning environment.

## **Chapter Summary**

Within this chapter, several key points are critical to the PAR project. First, principals play a vital role in school improvement and teacher learning (Shelton, 2011). Leadership in a school directly impacts the ability to foster strong relationships among staff and students while helping implement structures that make teacher learning a core component of school improvement and success (Darling-Hammond, 1997; Louis et al., 2010). As a result, in the PAR project, the principal as the lead practitioner-researcher supported structures for teacher learning. Relationships emerged as a common thread throughout the review. Relationships between leadership and teachers impact the relationships that teachers have with their students, ultimately impacting student achievement. Teacher learning is vital to the improvement process of schools. When teachers can learn based on content and areas that affect current practices, classroom improvements are likely to be seen.

Secondly, learning communities play a crucial role in how teachers learn, interact, and improve. Through learning communities, teachers and school staff engage in a cycle of improvement with a focus on student achievement. Learning communities focus on a common goal within a group, engage in refinement, and reflect on their practice. In our learning communities, we were able to create the space for teachers to engage in authentic dialogue about the work they experienced and have an opportunity to practice the same kinds of dialogue that we know work for all learning. By utilizing learning communities within a school in which they

engage in dialogue and use the talk structures that support learning, the result of improvement for the teacher is achievable. Through discourse, we engaged more fully in three cycles of improvement. Teachers gained experience by using many strategies utilizing discourse before they implemented them in their classes. Practices that teachers implement within their classroom that utilize discourse can help students achieve high levels of thinking and learning. The use of discourse in the classroom reiterates the importance of education being social and necessary for student growth.

### **CHAPTER 3: RESEARCH DESIGN**

In the participatory action research (PAR) study, I examined the extent to which using equity-based protocols promotes academic discourse in an early college high school setting (Boykin & Noguera, 2011; Zwiers & Crawford, 2011). The PAR theory of action was that if teachers co-develop an understanding of how protocols promote equitable academic discourse for students, they will consistently implement equity-based protocols in classrooms.

The setting of the study was in a small rural early college high school in northeast North Carolina. The study involved four classroom teachers in four academic content areas. In the study, we examined the use of protocols that support equitable academic discourse. Over the course of the study (14 months), the teachers implemented protocols, and I observed classrooms and had coaching conversations with them. Concurrently, I involved teachers in working collaboratively to decide on pedagogical choices, using the analysis of data from observations and post-observation conversations to iteratively make decisions and changes.

In this chapter, I present the design for conducting a qualitative research study—the primary methodology was participatory action research (PAR) informed by activist research methodology. The community learning exchange (CLE) protocols and improvement science process provided critical components in designing and implementing the PAR process. The PAR included three iterative cycles within the 18-month time frame of the research study (Fall 2021-Fall 2022). First, I provide an overview of the qualitative research process. Then I discuss the study participants, data collection, and data analysis. Finally, I conclude the chapter with considerations for the study that include limitations, validity, and confidentiality and ethical considerations.

# **Qualitative Research Process: Participatory Action Research**

Qualitative research aims to answer questions that drive the study's design and informs the methodology (Creswell & Creswell, 2018). In a qualitative study, "the process of data collection involves a dynamic relationship between the researcher, the participants, and the context under investigation" (Gerdes & Conn, 2001, p. 186). I collected data from multiple sources including observations, conversations, interviews, documents from meetings, and reflective memos. I then organized the data in data sets and coded the data to determine categories and themes (Creswell & Creswell, 2018). In action research, the participants are coresearchers in the sense that they work in collaboration with the lead researcher to implement the actions and provide feedback to the lead researcher on the validity of the evidence (Herr & Anderson, 2014). They co-facilitated community learning exchanges (CLEs), met regularly, acted as critical friends to each other, and conducted member checks (Creswell & Creswell, 2018; Foulger, 2010). This study was based on activist action research because we consistently focused on the issues of equity, equitable access, and improved rigor for students (Hale, 2017; Hunter et al., 2013). In using this methodology, I used CLE processes (Guajardo et al., 2016) and improvement science tools (Bryk et al., 2015) to drive the research design. As a result, I was able to respond to the research questions by collecting and analyzing data.

The focus of practice was to implement equity-based protocols to promote academic discourse strategies in the Early College classroom. The overarching question was: How do teachers use equity-based protocols to promote academic discourse?

The research design supported three iterative cycles of inquiry that addressed the PAR research sub-questions, which are:

- To what extent do teachers demonstrate an understanding of equitable access and rigor?
- 2. To what extent do teachers choose and use common protocols for promoting equitable access and rigor?
  - a. How do teachers implement instructional protocols and strategies to promote equitable access and rigor?
  - b. How do coaching conversations support teachers to implement the protocols?
  - c. How do teachers collaborate across content areas to share tools and strategies that promote equitable access?
- 3. How do I develop as an instructional leader who leads teachers to use equity-based tools to promote academic discourse?

To further describe the action research process, I discuss the following: (1) participatory action and activist research (Hale, 2008; Herr & Anderson, 2014; Hunter et al., 2013); (2) community learning exchange (CLE) protocols (Guajardo et al., 2016); and (3) improvement science (Bryk et al., 2015).

### **Action and Activist Research**

I selected action research for the study because this process supported participants to explore a problem, improve practice, and use evidence to reflect through iterative cycles of improvement (Creswell & Guetterman, 2018). Herr and Anderson (2014) describe action research as "inquiry that is done by or with insiders to an organization or community" (p. 3). When paired with activist research, action research is particularly useful to our work in schools and communities because participants are engaged in "understanding and facilitating social change through research" (Hunter et al., 2013, p. 1). The PAR emphasized a research process

that contributed to change in our school community and could potentially be applied in a variety of contexts; specifically, in this study the context was a high school setting where the "focus is on improving and empowering individuals in schools, systems of education, and school communities" (Creswell & Guetterman, 2018, p. 592).

In addition, participatory action and activist research helps direct actions of participants to collaborate, exhibit effective communication, and understand what each participant brings to the work. As a result, we co-created an environment of trust and responsiveness because the participants acted with passion (Hunter et al., 2013). Hale (2017) describes activist research to better understand the root causes of inequality, oppression, and violence, which includes direct cooperation with an organized group of people subject to these conditions. We used the research process to formulate strategies for transforming inequitable classroom conditions. Through the PAR activist research, I engaged a participant group, termed a co-practitioner research (CPR) group, that had the opportunity to reflect on the root causes of inequity and rigor in classroom discourse as they made changes to address this identified issue in our context.

### **Community Learning Exchange**

The community learning exchange (CLE) methodology aligns with activist research by "acknowledging the power of place and the wisdom of people" (Guajardo et al., 2016, p. 27) and working with people who are closest to the problem and addressing local issues. In facilitating CLEs, I created experiences to engage the teachers to commit to the work of change. The five CLE axioms are critical components and guided the learning process within the PAR project. The five axioms are:

- Learning and leadership are dynamic social processes,
- Conversations are vital and central to pedagogical strategies,

- The people closest to the issues are best situated to discover answers to local concerns.
- Crossing boundaries enriches the development and educational process, and
- Hope and change are the building blocks of the assets and dreams of locals and their communities (Guajardo et al., 2016, pp. 29-34).

By using the protocols, the teacher group utilized the CLE artifacts to provide authentic evidence for qualitative analysis that was then organized and analyzed. Concurrently, I used the improvement science principles and practices to fortify the action and action research.

## **Improvement Science**

In addition to the PAR process, I built on the improvement sciences processes (Bryk et al., 2015). In Chapter 1, I analyzed the assets and challenges of the focus of practice using a fishbone protocol that originated with the improvement science process. Two other improvement science processes that were central to this study are the cycles of inquiry and networked improvement communities. I utilized the plan, do, study, act (PDSA) improvement cycle process (Bryk et al., 2015). Bryk et al. (2015) describe the PDSA inquiry cycle as a process to "move from small-scale testing to system wide implementation" (p. 121). By utilizing the PDSA Cycle, which is a systematic process, I used the inquiry method to guide rapid learning. Using the PDSA Cycle of Inquiry Model, I collected and analyzed data based on the findings from the cycles of inquiry, as shown in Figure 4. A networked improvement community, in this study termed a CPR team, is a group of persons who are "close-in" members of the study and provided consistent feedback on actions and evidence that I analyzed to make iterative decisions about next actions. I analyzed the data using Saldaña's (2016) coding methods.

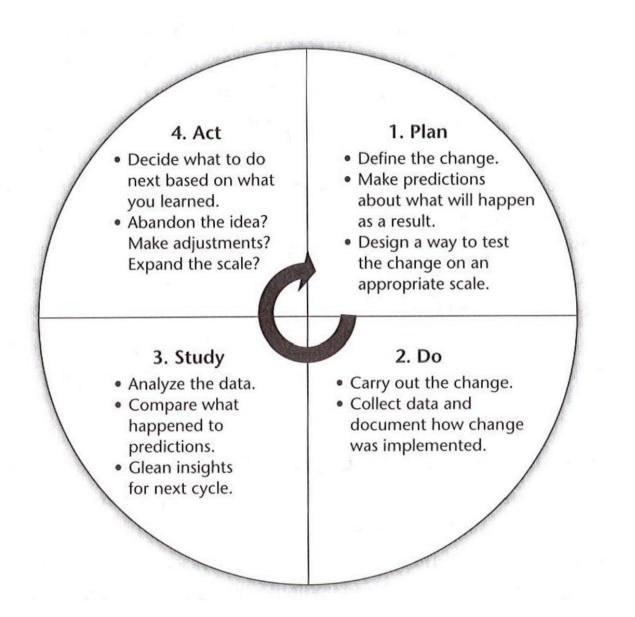


Figure 4. Plan Do Study Act (PDSA) Cycle of inquiry model.

I translated the networked improvement community (NIC) process to the PAR in maintaining NIC attributes in the CPR group. A NIC is an organized group that strives to understand problems and improve practice all while focused on a specific goal (Bryk et al., 2015). In the NIC levels of learning, Level A learning is described as the learning frontlineworkers have as they engage in the work; in Level B learning, the workers, in this case teachers, relate their experiences to others. "In essence, Level-B learning augments what individuals may learn on their own (Level A). When individual insights are systematically pooled, collective capabilities grow" (Bryk et al., 2015, p. 143). I detail the CPR group as participants in this research study in the participant section.

We engaged in three iterative cycles of inquiry. In each inquiry cycle, through careful planning and doing I assumed that if I studied the CPR actions by analyzing the evidence, then we could make decisions for the next cycle of inquiry that were systematically informed by the evidence. The cycles of inquiry were short (about 12-14 weeks) and provided us with evidence to make decisions about future actions. Finally, the next step in the process is the role that praxis plays in the research.

### The Role of Praxis

Reflection is a critical component of the improvement process and a vital part of the PAR project and study. Reflection drove the CPR group to examine the research questions and make changes as new evidence emerged. The purpose of the PDSA cycle process was to revise each cycle as further information came to light. Reflection supported our change actions to implement instructional strategies in each cycle of inquiry.

During this study, I designed activities that encouraged praxis, what Freire (1970) describes as reflection in order to act. At CPR meetings, members reflected on readings,

successes, challenges, and observation data. I found that the reflective exercises improved the CPR group's ability to determine which equity-based protocols were most beneficial to fostering equitable academic discourse. In one-on-one coaching conversations, I used the analysis of classroom observation data to reflect and co-develop next steps for the teacher. I used reflection to help support and guide the CPR group to steer improvements.

In addition, regular reflection was critical to me as the school leader. I wrote reflective memos on a regular basis that document my experiences in the community learning exchanges, classroom observations, and CPR group meetings during the PAR project. The reflections were an essential part of the PDSA cycles and informed any necessary changes in my leadership actions in the PAR cycles, activities, and data collection and analysis. I used the reflective memos to track personal leadership development throughout the study. In the final chapter of this study, I reflect in more detail on my leadership and the final research question in how my leadership changed over the course of the PAR project and study.

## **Action Research Cycles**

For this PAR project, I facilitated three improvement or action research cycles. During the Pre-Cycle, we began the planning process with the co-practitioner group (CPR) meeting to refine the focus of practice and defining the changes they wanted to see. They engaged in a community learning exchange. Following the Pre-Cycle, we organized two action cycles using the PDSA improvement cycle steps.

The focus of the CPR group was to "accelerate social learning with the methods of improvement science" (Bryk et al., 2015, p. 144). Often, the organization of school groups does not promote social and continuous learning. As a result, we established a CPR group that met regularly to support efforts to address a central problem of common interest while fostering

collaborative problem solving and accountability. In addition, by selecting the CPR group, they used evidence from each PAR cycle to improve their practices in equitable academic discourse. The project timeline was: Fall 2021 (PAR Pre-Cycle), Spring 2022 (PAR Cycle One), and Fall 2022 (PAR Cycle Two), as shown in Table 2.

# Participants, Data Collection, and Analysis

Through the PAR project, I collected data to understand the changes that occurred based on the participants implementing specific interventions. I used multiple methods of collecting qualitative data. Specifically, the data included community learning exchanges artifacts, observations, interviews, coaching conversations, documents (agendas, meeting notes), and reflective memos. I then analyzed each of the evidence components used during the cycles of inquiry to help inform future cycles. In this section, I discuss the participants and specific data collection and analysis methods.

# **Participants**

In the PAR study, I was the lead researcher working with four classroom teachers as a copractitioner researcher (CPR) group. Two types of participants were included in the study: classroom teachers in four content areas (CPR group) and other participants (teachers) who attended the CLEs. Each participant signed a consent form prior to their participation (see Appendix D).

### **CPR** Group

The CPR group played a critical role in the implementation of the PAR project by identifying problems, utilizing the inquiry process, and co-creating a course of action that uses equity-based protocols and strategies in the classrooms (Bryk et al., 2015; Hunter et al., 2013). I facilitated conversations with the CPR group on equitable academic discourse during the Pre-

Table 2

PAR Project and Activities Timeline

Research Cycle	Activities
PAR Pre-Cycle August-November, 2021	<ul> <li>Established CPR Group</li> <li>Interviewed CPR Group members</li> <li>Established Relational Trust</li> <li>Facilitated CPR group meetings</li> <li>Collected Observation Data</li> <li>Facilitated CPR group learning</li> <li>Facilitated Community Learning Exchange</li> </ul>
PAR Cycle One November, 2021-April, 2022	<ul> <li>Observed CPR Group members</li> <li>Facilitated CPR group meetings</li> <li>Reviewed observation data with CPR group</li> </ul>
PAR Cycle Two April-October, 2022	<ul> <li>Observed implementation of protocols/strategies</li> <li>Participated in One-on-One Coaching Conversations</li> <li>Facilitated CPR meetings</li> <li>Facilitated Community Learning Exchange</li> </ul>

cycle and in PAR Cycle One we added observations utilizing observation tools (see Appendices E-H). After the first cycle of inquiry, CPR members assisted in developing and facilitating a CLE for the entire school. During PAR Cycle Two, the CPR group continued with observations while adding coaching conversations with the focus on equitable academic discourse.

These participants were selected using purposeful sampling, which involves identifying the people that can "best help the researcher understand the problem and research questions" (Creswell & Creswell, 2018, p. 185). Purposeful sampling is selecting individuals who are knowledgeable, show interest, and are willing to participate in the study (Patton, 2015). Therefore, the participants were qualified and willing participants interested in improving classroom practice to create a classroom environment that promotes equitable protocols that foster academic discourse.

# Other Participants

This is a small school of eight teachers. I included four additional participants in the study who are classroom teachers. These persons participated in the CLEs. As the CPR group members became more familiar with the protocols, they co-facilitated a CLE.

### **Data Collection**

In the PAR study, qualitative data are the primary data collection used for analysis and making decisions. According to Creswell and Creswell (2018), qualitative research involves four different types of data: qualitative observations, qualitative interviews, qualitative documents, and qualitative audiovisual and digital materials. I used observations, interviews, documents, and reflective memos as the key qualitative data sources. For this study, I collected data in the form of classroom observations, interviews in the form of collecting artifacts from CLEs and coaching sessions, and documents in the format of meeting notes. I wrote and analyzed reflective memos.

Table 3 describes the research questions, data collection metrics, and the data I used to triangulate with the key data sources. According to Guba and Lincoln (2000) triangulation of data is when a variety of data sources are used to cross-reference data and interpretation.

### **Observations**

Throughout the PAR project, classroom observations were a vital component of each cycle. I used observation protocols to record information while observing. I used pre-established codes and open coding (Creswell & Creswell, 2018; Saldaña, 2016). Following the observations, I met with the CPR group and with teachers individually during PAR Cycle Two to debrief observations. Appendix F-I shows the observation protocols.

### Interviews

I recorded and transcribed all interviews for data analysis. During the interview, I asked open-ended questions to understand participants' views, opinions, and predictions. I recorded and transcribed activities using coding (Saldaña, 2016). Interview details can be found in Appendix J.

### Coaching Conversations

I recorded and transcribed coaching conversations using the coaching conversations protocol. During these sessions, I asked open-ended questions to understand participants' views, opinions, and predictions based on the observation data. I recorded, transcribed, and coded the transcriptions of the coaching conversations. The coaching conversations protocol has been included in Appendix K.

### **Documents**

In each PAR cycle, we had regular CPR meetings. At those meetings, I collected documentation, including meeting agendas, written reflections, and meeting notes. Notes were

Table 3

# PAR Research Questions and Data Sources

Overarching Question: How do teachers use equity-based protocols to promote academic discourse?

Research Question (sub-question)	Data Source (Metrics)	Triangulated with
1. To what extent do teachers demonstrate an understanding of equitable access and rigor?	<ul><li>Documents</li><li>CLE Artifacts</li><li>Interviews</li></ul>	<ul><li>Reflective Memos</li><li>Member Checks</li></ul>
<ul> <li>2. To what extent do teachers use protocols for equitable access and rigor?</li> <li>a. How do teachers collaborate across content areas to share tools and strategies that promote equitable access?</li> <li>b. How do teachers implement instructional protocols and strategies to promote equitable access and rigor?</li> <li>c. How do coaching conversations support teachers to implement the protocols?</li> </ul>	<ul> <li>Observation Protocols</li> <li>Documents</li> <li>CLE Artifacts</li> <li>Conversation Protocol</li> </ul>	Reflective Memos Member Checks
3. How do I develop as an instructional leader who leads teachers to use equity-based tools to promote academic discourst?	<ul><li>Reflective Memos</li><li>Documents</li></ul>	Reflective Memos

taken to capture the discussion, decisions, and next steps. Written reflections were captured at the end of each meeting. These documents served as a source for member checks.

# Community Learning Exchange Artifacts

I collected artifacts from Community Learning Exchanges that occurred during the PAR Pre-Cycle and PAR Cycle Two. The artifacts documented participant responses to questions or topics. As the protocol provided in Appendix L indicates, I was specific about the activities and the evidence that I collected and coded.

# Reflective Memos

I completed reflective memos modeled from the Kolb (1984) experiential learning process. The process is cyclical and includes engaging in an experience, reflecting on the experience, conceptualizing current understandings, and then using reflection to make changes. I wrote reflective memos on a regular basis.

## **Data Analysis**

For this qualitative research, I collected, organized, reviewed, and coded multiple sources of qualitative evidence. Using the PDSA cycle of inquiry model, I collected data based on the evidence from the cycles of inquiry. I used Saldaña's (2016) coding method; first, organizing the raw data from the observations, interviews, coaching conversations, documents, and reflective memos. Then, I used open coding for all documents and a set of predetermined codes for the coaching conversations and observations. I completed a first and second level of coding. Then I organized the codes into categories and subcategories. By PAR Cycle Two, I was able to determine the themes and present findings for the study, the process of which is shown in Figure 5.

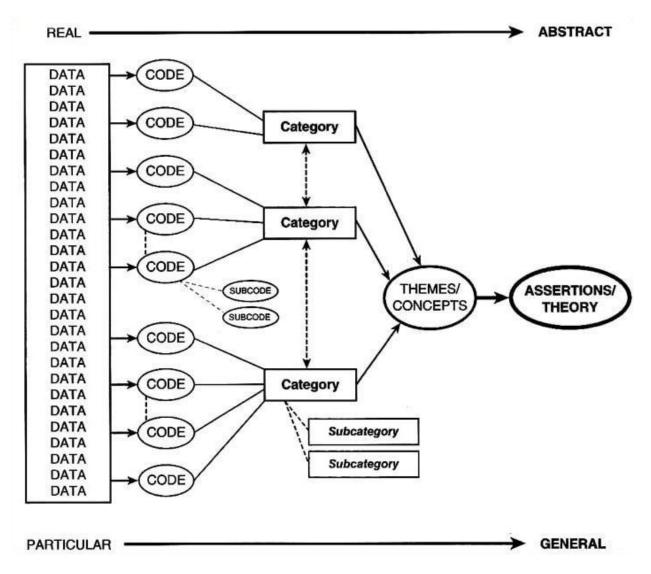
# Study Considerations: Limitations, Validity, and Confidentiality and Ethics

In qualitative research, particularly PAR, examining the roles of the researcher and participants is critical. As the lead researcher, as well as the supervisor of the CPR group members, I paid close attention to my positionality and how it impacted all aspects of the study. I attempted to mitigate any issues through thoughtful reflection, careful planning, and triangulation throughout the project. Secondly, establishing validity is a critical responsibility of the qualitative researcher, and internal validity is a primary concern, particularly for action and activist research because the participants are a part of the study process. Finally, I considered confidentiality and ethics as a crucial part of the process.

### Limitations

As the primary researcher, I came to the PAR project with ideas of what I wanted to study and potential CPR members who would be willing and benefit from participating in the research. As a CPR group, we planned and implemented CLEs, reviewed artifacts, and engaged in the PDSA cycles of inquiry. I consulted with the CPR group during each PAR Cycle. By doing so, I engaged multiple perspectives when implementing each PAR Cycle as well as various reflections. I discussed the validity of the study with the CPR group.

For this study, I considered my role as the principal in the school. I influence the CPR group because I evaluate them, however, their participation in the study was completely voluntary. All participants signed informed consent forms. If anyone decided at any time not to participate, they would have been allowed to do so without reprimand; however, as the evidence



Note. (Saldaña, 2016).

Figure 5. Coding and analysis process.

suggests in subsequent chapters, the experience became a vital part of their roles as teachers, and no one terminated their participation in the study.

As stated, the team for the study included four classroom teachers and a school leader. All of the participants worked at the same school. If other staff members wanted to join, they were able to, but the study was limited to a specific context. The results of the study may be useful to this group, but may not be generalizable to other contexts. However, the process for undertaking a site-based small qualitative study of this type is replicable in other contexts.

The school district and direct supervisor approved the request to complete the study (see Appendix C). In addition, I completed the Institutional Review Board Collaborative Institutional Training Initiative (IRB CITI) certification in December 2020 to comply with ethical requirements governing human research (see Appendix B).

## **Validity**

Qualitative research determines validity as whether the findings are accurate from the researcher and participants. Multiple collection tools and triangulation of data, prolonged time, and peer debriefing (Creswell & Creswell, 2018) support validity. Secondly, I engaged the CPR members in member checking at the end of each cycle of inquiry (Creswell & Guetterman, 2018).

# Internal Validity

The iterative cycles served as a critical component of the study to start critical conversations of change and assist with strengthening the internal validity of the study. In qualitative research, internal validity is determined through "judging the trustworthiness of findings" (Guba & Lincoln, 2000, p. 376). Guba and Lincoln (2000) describe trustworthiness as creditable, transferable, dependable, and confirmable.

Since the CPR group spent a great amount of time together throughout the study and engaged in cycles of inquiry, credibility was established throughout the study. This study took place over 14 months and, as a result, the prolonged engagement and persistent observation in the context of the study supports credibility (Guba & Lincoln, 2000). I determined credibility through repeated observations, peer debriefing, triangulation, adequacy of materials and member checks (Gerdes & Conn, 2001). Transferability and dependability of data and evidence will not occur due to the highly contextual nature of the PAR study, but, as indicated, the study process is transferable.

Finally, in action and activist research, the standard of validity is the usefulness to the participants (Hale, 2008). If participants find the evidence useful to their practices as teachers and if the participants have a high degree of transfer of the desired practices to their teaching, then the study is valid and reliable for those persons. The participants confirmed in PAR Cycles One and Two that the process was useful to improving their teaching practices; they particularly appreciated the opportunity to have evidence to support the changes and the ability of the principal to engage in reflection with them as a colleague.

# External Validity

This project took place within a small early college setting. Therefore, some caution is necessary when applying the study results to other schools or districts. This is one study in one district in one school with a small group of teachers. Replication is possible, but the outcomes may not be dependable across different contexts; however, the processes used for engaging teachers are replicable. The value of PAR research focuses on bringing about change in practices (Creswell & Guetterman, 2018). To determine the changes within this setting will be dependent on the themes developed in the context.

## **Confidentiality and Ethical Considerations**

The participants in this study were field-based practitioners committed to having equity-based protocols that promote academic discourse in the classroom. The selection of the participants was based on their experience, expertise, and current working relationships. I met with each participant to determine interest in participating in the study. Each CPR member signed a consent form before participation. The relationship I have with participants is one of trust and an understanding that we need to have honest conversations about the data from the project. The focus of the study is how this group can use equity-based protocols in the classroom to promote equitable academic discourse in early college high school.

Since the participants could have been vulnerable during the study, I protected them by using pseudonyms. I collected and presented data in a non-judgmental way and used the data transparently with the CPR group and school district to improve. Participants signed consent forms before the start of the project, but they could have terminated participation at any time without reprisal. In addition, participants knew that participation in the study was voluntary. The security of data and confidentiality of participants was a priority in this study, and I stored the data in a locked location for the length of the study and will continue to store for a total of three years.

In this chapter, I have described the research design and methodology for the PAR study. The CPR team participated in the PAR project by engaging in three cycles of inquiry in which we participate in community learning exchanges (CLE), and used equity-based protocols in classrooms to promote academic discourse. Throughout each cycle, I collected and analyzed data and reflected on my practices as a school leader. I have addressed the study considerations and discussed the limitations, sources of validity for the study, and taken care to consider and attend

to confidentiality and ethics. In the next chapter, I describe the context and the pre-cycle of the PAR.

### **CHAPTER 4: PAR PRE-CYCLE**

In the participatory action research (PAR) project, I utilized a variety of protocols and tools that evoke thoughtful and multiple data-driven perspectives of teachers. By incorporating the Community Learning Exchange (CLE) axioms and processes, which support multiple perspectives, I hoped to understand how teachers respond to equity-based protocols as they used them to promote academic discourse within their classrooms. In this chapter, I describe the context for the PAR project, including the place in which the PAR study takes place and the people who serve as co-practitioner researchers (CPR group) and participants. Then, I describe the PAR Pre-cycle process that includes activities that I facilitated and evidence that I collected and then analyzed. Next, I detail emergent categories that appeared from the initial work of the PAR Pre-cycle. Finally, by reflecting on my initial process as a researcher, I discuss the plan for PAR Cycle One.

# **PAR Context**

People and place matter to the PAR; stories emerge from the context and from the people who formed a community of practice (Lave, 1991). The context of the study and the participants of the study were valuable in developing the PAR project and then reflecting and planning for the PAR Cycle One in Spring 2022. In describing the context of the school, I provide details regarding the geographical, historical, and cultural context and then introduce the people who are engaging in this PAR project.

### **Context: Place**

Hertford County, located in Northeastern North Carolina, has approximately 23,000 residents, 61% identify as Black, 35% identify as White, and 4% who identify as Hispanic. Of this population, a quarter of the families are reported to be living in poverty (United States

Census Bureau, 2021). About 14% of the residents have a bachelor's degree or higher, while about 80% have a high school diploma or some college. The top four employers in the county are Vidant Roanoke Chowan Hospital, Duck Thru, Nucor Steel, and Hertford County Public Schools. Many employee opportunities in these organizations do not require a college degree (North Carolina Department of Commerce, 2021). The farming industry is prevalent in the county; though few people are farmers, the rural context of the county and its history are critical to the residents.

Early College High School, the school in which the study takes place, is located on the campus of Roanoke Chowan Community College (R-CCC) in Union, North Carolina. The campus was purchased in 1967 and was previously an abandoned prison compound. Roanoke Chowan Community College (R-CCC) started as Roanoke-Chowan Technical Institute, the name was changed in 1987. The community college serves three counties in the Northeast Region of North Carolina, including Hertford, Bertie, and Northampton. Students who attend the early college high school may enroll in a variety of continuing education and curriculum pathways at R-CCC. The major pathways provided at the college are in the medical field, which in return, serves the largest employer in the county, the Vidant Roanoke Chowan Hospital. Since 1987, ten persons have held the office of R-CCC president, with five of those since 2017, two in interim roles. The continuous change in leadership over the past five years has caused challenges in the ways the two institutions (R-CCC and the high school) work together collaboratively, effectively, and efficiently. As a result, this situation plays a huge role in the success of Early College High School students, since they make up a majority of the on-campus population.

Early College High School (ECHS) is part of the Hertford County

Public School (HCPS) System, one of the largest employers in Hertford County. The school began in 2008 after several years of collaborative meetings and agreeing on the terms and conditions of a memorandum of understanding (MOU) between HCPS and R-CCC and finally state approval. ECHS is on the campus of R-CCC, with the main building having been converted from a mechanics' shop and shared with the barbering program. Our enrollment has grown by 36% over the past four years; as a result, some high school teachers now have classrooms in other buildings on campus.

The ECHS program goal is to provide a pre-college experience to students who are first generation college students and need and qualify for an advanced program. ECHS is currently serving 70% first generation students, meaning one or more of their parents do not have a college education. ECHS has 34% of the students identified as academically and intelligently gifted (AIG). ECHS is designated as a Title 1 school serving an overall population of 62% who identify as Black, 32% identify as White, and 6% who identify as either American Indian, Pacific Islander, or Hispanic/Latino. Our school is representative of the county population.

Traditionally, our school performs well compared to other schools in the district and has exceeded growth all years prior to the COVID-19 pandemic. However, when compared to the state of North Carolina as a whole, the school does not always meet state averages. ECHS mathematics scores fluctuated for the past three years compared to English and Science, which had no changes (see Table 4). On the American College Test (ACT), a nationally normed test, students in ECHS scored lower on average by 1 point in mathematics than the state average. In reading and science, the students are on par with the state average (see Table 5).

ECHS has had a 100% graduation rate since the first graduating class. Students have the option to stay five years to complete the program to earn an associate degree or a certificate in

Table 4
Five-Year State End of Course Test Proficiency Scores

Year	Mathematics (Math 1)	English (English II)	Science (Biology)
2016-2017	59.3%	76%	78%
2017-2018	40.63%	75%	77.1%
2018-2019	75%	88.9%	86.7%
2019-2020	No data due to COVID	No data due to COVID	No data due to COVID
2020-2021	56.52%	70%	47.5%

Table 5

ACT Scores Average per Subject Area for Four-Year Progression

Year	Mathematics	English/Reading	Science	Mathematics State Average
2018 ACT	18.2	18.75	18.8	18.9
2019 ACT	17.9	17.8	19	18
2020 ACT	17.2	18.42	20.12	No Data
2021 ACT	17.7	19.3	20.9	18.3

addition to a high school diploma. Over the past two years, 83% of the students graduated with an associate degree and/or certificate from R-CCC. While the data and statistics describe a great deal about the context of the school, what the data can't reflect is that the people who work in the school have a deep commitment to this program and desire to see the students be successful are the critical piece that makes the school environment.

### **Participants**

The PAR participants are classroom teachers across all content areas of mathematics, science, social studies, and English who have agreed to serve as the CPR group (see Table 6). All participants were carefully selected based on their experience, expertise, and willingness to implement changes and improve their instructional practices. The participants are veteran teachers with a minimum of nine years of experience. Due to the size of the school and district, I have special relationships with the CPR group members. Two CPR members were previous colleagues, and we taught together for four years. Another participant came to the school because of a change in leadership at their previous school and knew my leadership style, and the final CPR member I have known from the community due to us both growing up in the area. Because of prior relationships, we have an advantage in building relational trust and deepening understanding together; however, participants may be choosing to engage in the PAR for personal reasons rather than changing practices.

The social studies teacher, Patrick, has been a teacher for 11 years and has been at the school for 10 years. Patrick is a key player in establishing processes and procedures in the school and has been the only social studies teacher at the school until this year. Patrick was an education major and relocated to this area after college, as Hertford County was the first place to offer him a job. He initially started teaching at ECHS; however, during some school level transitions, was

Table 6

CPR Member Profiles

Participants	Profile Details
Social Studies Teacher	<ul> <li>Veteran Teacher</li> <li>Male</li> <li>10 years at ECHS</li> <li>11 years in education</li> </ul>
Mathematics Teacher	<ul> <li>Veteran Teacher</li> <li>Female</li> <li>1 year at ECHS</li> <li>9 years in education</li> </ul>
Science Teacher	<ul> <li>Veteran Teacher</li> <li>Female</li> <li>10 years at ECHS</li> <li>20 years in education</li> </ul>
English Teacher	<ul> <li>Veteran Teacher</li> <li>Female</li> <li>3 years at ECHS</li> <li>22 years in education</li> </ul>

relocated to the 9th grade success academy for a semester before returning to ECHS. Patrick is the co-sponsor of the Student Government Association and coordinates our community service programs.

The mathematics teacher, Sam, is a nine-year teacher who is new to the Early College environment this year. Sam was chosen to be part of the CPR group because of her experience as well as the opportunity to engage in real change within the school. Sam came to Early College from teaching Middle School math in a North Carolina coastal district. After relocating, Sam taught English as Second Language for two years, before returning to the mathematics classroom. Sam began teaching immediately after college; as a North Carolina teaching fellow, she enjoys teaching, is receptive to feedback, and is always willing to learn. Sam is originally from the area and currently lives in the town in which she was raised.

Sally, a science teacher who has been in education for twenty years, is known for building relationships and cares deeply about the well-being and success of students. Sally came from a manufacturing background but returned to a university to obtain a teaching license. Sally has been at the school for ten years but previously served at the traditional high school in the county and before that served as teacher across the state line in Virginia. Sally is co-sponsor of Beta Club and is lead AIG teacher for freshman and sophomores. Sally is a graduate from the traditional high school in town and has lived in the area her whole life.

Finally, Sue, serves as an English teacher and has been on the ECHS staff for three years. Sue joined the school coming from a traditional school background and working at a 9th grade success academy. Sue has been in education for twenty-two years and has lived in the county for fifteen years. Sue has a positive spirit and is always ready to try new things for students. She is always thinking of ways to get students involved in school and has become the co-sponsor of our

Beta Club, co-sponsor of Student Government Association, and is lead AIG teacher for Juniors and Seniors.

I conducted the first member check with the participants in order to triangulate the data by having the participants read the context portion for agreement.

# **Other Participants**

Other participants engaged in the PAR project by participating in community learning exchanges. This is a small school with a total of eight teachers and a total of 12 persons who are directly involved in teaching and learning, so we wanted to ensure that the other teachers have the benefit of knowing what we are doing and learning. These participants included all other classroom teachers, school counselor, college liaison, and Instructional Technology Facilitator. Artifacts from the CLEs help guide the CPR group during each cycle.

## **PAR Pre-Cycle Process**

The PAR Pre-cycle took place over the course of one academic semester (Fall 2021) and included several activities leading up to the CLE in October 2021, as shown in Table 7. At the start of the semester, I finalized the CPR team with representatives from each content area. The group met monthly during the Fall 2021 semester and participated in a CLE that included the entire staff of twelve people. I designed the CLE to engage teachers and staff in dialogue about how they identified rigor in the classroom and how they planned in order to provide all students with access to rigor. I wrote reflective memos, interviewed the CPR group members, and had conversations with ECU coaches throughout the semester. After the CLE, I held one additional CPR meeting. During the meeting, the CPR group reflected on the CLE and began planning the next steps. Next, I provide a detailed account of the activities as well as describe the coding process I engaged in during the PAR Pre-cycle. These details provide information about the

Table 7

Chart of Pre-Cycle Activities and Data

Meetings	Date	Activities	Data Collected
CPR Meeting	September 23, 2021	<ul> <li>Personal Narrative</li> <li>Journey Line</li> <li>Gracious Space</li> </ul>	<ul><li>Agenda</li><li>Notes</li><li>Reflective Memo</li></ul>
CPR Meeting	October 12, 2021	<ul><li>Personal Narrative</li><li>Text Rendering Protocol</li></ul>	<ul><li>Agenda</li><li>Group reflections</li><li>Reflective Memo</li></ul>
Interviews	October 11, 2021	• One on One Interviews	<ul><li>Interview Data</li><li>Reflective Memo</li></ul>
Observations	September 30, 2021 October 4, 2021 November 8, 2021	<ul> <li>CPR Group: Classroom Observations</li> </ul>	<ul> <li>Selective Verbatim Observation Notes</li> <li>Reflective Memo</li> </ul>
Community Learning Exchange	October 22, 2021	<ul> <li>Personal Narrative</li> <li>Chalk Talk Protocol</li> <li>Reflection</li> </ul>	<ul><li>Posters</li><li>Reflections</li><li>Reflective Memo</li></ul>
CPR Meeting	November 16, 2021	<ul> <li>Personal Narrative</li> <li>Gallery Walk</li> <li>Learning Walk</li> <li>Reflections</li> </ul>	<ul> <li>Gallery Walk     Artifacts</li> <li>Reflections</li> <li>Reflective Memo</li> </ul>

initial process in identifying emergent categories from interviews, reflective memos, CPR group meetings, and CLE artifacts. In the last section of this chapter, I discuss in more detail what I learned from the process about coding and then using the codes to inductively decide on categories.

### **Activities**

The CPR group met twice before the CLE (see Table 7). In these meetings, we worked to establish relational trust with each other while exploring what it means to have meetings that value gracious space (Hughes, 2004). As a result, we established norms for our meetings. We started to discuss background knowledge about academic discourse in the classroom. In each CPR meeting, we engaged in dynamic mindfulness and personal narratives while utilizing other CLE pedagogies such as journey lines and protocols (a sample agenda is available in Appendix M).

After the first CPR meeting, I conducted interviews with each CPR member to gain insights to their current understandings as well as help guide the direction of the next CPR meeting. During this time, I conducted initial observations of the CPR group utilizing the selective verbatim observation tool. These initial conversations and observations helped guide the direction of the second CPR meeting. During the second CPR meeting, we utilized dynamic mindfulness, personal narrative, and engaged in a text rendering protocol in which the staff read a section about the importance of academic discourse in the classroom.

After the second CPR meeting, all staff engaged in the CLE with a focus on rigor in the classroom. During the CLE, staff engaged in personal narrative and were put into subgroups, with each subgroup having at least one CPR member to facilitate. The subgroups engaged in the

Chalk Talk protocol by responding to questions related to rigor in the classroom. The questions included:

- 1. What does rigor look like in your classroom?
- 2. What tools/protocols do you use to ensure everyone has access to rigor in your classroom?
- 3. What resources do you utilize to plan rigorous lessons?

After each group had an opportunity to respond to the questions, a CPR member reported to the full group the discussions that they had within each subgroup. Finally, each participant in the CLE was asked to write three takeaways from the conversations they had during our time together. Following the CLE, I held one additional CPR meeting. This CPR meeting focused on reflecting on the data collected during the CLE and moving forward in creating an environment that is rigorous and inclusive of all students by utilizing academic discourse. Each of the meeting agendas were shared with an ECU coach for comments in order to reflect on next steps and proper pace.

## **Coding**

I analyzed several forms of data to examine what happened throughout the PAR Precycle: CLE artifacts, meeting notes, field notes, interviews, and classroom observations. In addition, I wrote reflective memos throughout the semester. Some memos were in response to graduate school assignments while others were recordings of my thoughts after meetings or discussions with others about the research. These memos served as a running record of my ongoing meaning-making process while experiencing the PAR Pre-cycle and linking theories I was learning to my leadership practices.

I collected data from the CPR group meeting agenda and notes. From the CLE, to analyze

the data, each time a code appeared, I placed a mark in the codebook to indicate the frequency of the code. After coding several pieces of data, I completed a second round of coding and I looked for emerging patterns and adjusted them with the help of a research coach as I began to make sense of the findings. Then I continued to add marks to determine which codes appear the most. As I coded evidence, I observed patterns and placed those in an Excel spreadsheet that I used for a codebook with categories. As I completed the second round of coding and sense-making, categories began to emerge that related to the understanding of equity versus equality, classroom academic discourse, and teacher willingness to change instructional practices. I had to adjust the codes to the categories on the spreadsheet. I discuss emergent categories in the next section and present portions of the coding table.

# **Emerging Category: Building a Collaborative Team**

The initial codes led to the generation of an emergent category. Upon review of the artifacts and data collected, I recognized that the category is too broad and it evolved into a theme in the next chapter. However, in this section, I explain my initial coding and thinking, which I understand is part of the process of becoming a practitioner-researcher. Throughout the Pre-cycle, I utilized the improvement science PDSA cycle process and multiple iterations to inform and focus the work, as well as develop an emerging category of collaborative team processes which helped guide and plan for the PAR Cycle One. After determination of the initial emergent category, I met with the CPR team for input. I expand upon the emerging category and identify some initial sightings for potential categories.

During the PAR Pre-cycle, I aimed to build trust within the CPR group and identify the goals of the research. I wanted to ensure that all CPR group members felt comfortable and safe in order for us to learn and grow together. By establishing working agreements, creating an

environment where participants demonstrated vulnerability in order to establish trust, and having authentic participation by CPR members, I collected data that led to building a collaborative team. Building relational capacity and engaging in learning activities during CPR meetings during the PAR Pre-cycle laid the foundation for understanding of the overarching research question "How do teachers use equity-based protocols to promote academic discourse?"

## **Working Agreements**

During the initial CPR meeting, we established working agreements by using a gracious space protocol (Hughes, 2004) to establish norms for future meetings and consistent ways of working together. Appendix L contains the details on established norms for the CPR group and the Community Learning Exchange. As a result, during each CPR meeting, the group shared personal experiences, reviewed literature or data, and reflected on understandings from the CPR meetings. Participant engagement in the process, through establishing norms and understanding gracious space, was pivotal to establish trust and relationships within the group. CPR members' buy-in created an understanding of the group operations, and sending the agenda in advance supported their preparation. One CPR member stated, "It is nice to have the agenda ahead of time so I can wrap my head around what we are trying to accomplish." During CPR meetings and the community learning exchange, I intentionally designed personal narratives and learning activities to explore the lived experiences of the CPR group members. Establishing working agreements helped drive the improvement process when participants are part of a networked improvement community (Bryk et al., 2015).

# **Establishing a Trusting Environment**

Once the group established working agreements, I created consistent agendas for each session, including revisiting agreements, dynamic mindfulness, personal narrative, discussion,

and reflection. As we used personal narratives, participants shared prior experiences and learned from each other while building understanding about the research questions. In order to establish a trusting environment, participants needed to feel heard and valued. As we discussed personal narratives and other protocols during CPR meetings, we created a trusting environment. For example, in one CPR meeting, participants responded to a prompt about times when they felt vulnerable. Patrick stated, "Anytime you talk to someone, you are put in a vulnerable position when explaining how you feel." Each CPR member had a chance to talk and express their thoughts about topics.

The team participated in four personal narratives during the PAR Pre-cycle to understand CPR member perspectives and stories. During interviews, CPR meetings, and the Community Learning Exchange, three areas coalesced from the data (n=44 instances): the power of useful feedback, the need to increase their reflection, and questions about their current practices. Sam stated, "This sounds great, but I am not sure how to get my students to talk in class." Another participant questioned how she can teach her students to have conversations. Finally, Sue reflected, "I knew that conversations and discussions were important, but I now know that this is something that I need to work on." The openness and willingness of the CPR members to discuss with the group, build on current understanding, and reflect demonstrates an environment in which participants feel comfortable and prepared to move to the next level of understanding. My intention was to establish a trusting environment so that participants were willing to ask questions, share concerns, and reflect on their current understandings; as a result of the Precycle, we were able to begin that process as a foundation for other conversations.

## **Authentic Participation**

I conducted interviews as one of my initial steps to identify the CPR groups' current understanding of equitable discourse. Initial codes from the interviews and from the conversations in the meetings demonstrated a need to build a team willing to participate, work together to understand, and make sense in the current context. The teachers, however, did not appear to fully understand equitable academic discourse. After reviewing the initial codes in the codebook (see Table 8) from the interview, CPR members referred to instructional practices used during class to address discourse; however, they could not identify specific processes to provide equitable access to discourse and what discourse looks like in the classroom. After reviewing this evidence, I focused the second CPR meeting specifically on academic discourse. During this session, we utilized a passage from Zwiers and Crawford (2011) that focused on the importance of discourse in the classroom. Participants read the text, and we utilized a "Text Rendering" protocol from the National School Reform (National School Reform Faculty, 2019). By utilizing this protocol, CPR members collaboratively constructed meaning and expanded their thinking about the importance of classroom academic discourse. Reflections from a participant indicated that "students need to have meaningful discussions" (Sue, CLE, October 22, 2021).

Participant reflections demonstrated the importance of discourse in the classroom.

Participants pondered how to make discourse meaningful in their classes; the issues they identified were equitable participation and reticence of some students to speak. For example, Patrick stated, "My students need to talk so much more in class;" another participant quoted from the text how powerful the statement "academic conversations can develop the highly important but under tested skills and qualities" and Patrick added that "discourse is needed no matter what stage of your life you are in." Participants stated that classroom design must allow students to

Table 8

Initial Codebook

Initial Category	Code
Instructional Practices	Assignments
Instructional Practices	Assignments
Instructional Practices	Note Taking
Instructional Practices	Learning Groups
Instructional Practices	Share Responses
Instructional Practices	Group Discussion
Equality	Same Opportunity
Equality	Same Materials
Equality	Same Learning

think, talk, and build on content learning through conversations. CPR members identified the importance of talking and listening; overall, they agreed that all learning comes from conversation. While we are aware of that from the learning theory literature (Hammond, 2015; Vygotsky, 1978), identifying this as an issue in the context of their work made the topic more real and addressing it more possible. While much evidence supported what academic discourse looks like, I chose to concentrate on the aspects that helped us nurture a collaborative learning community.

Through the conversations, participants' understanding of equity indicated that they were stuck on equality or "same" as a common understanding. Based on that evidence, I structured a CPR meeting to delve more deeply into the definitions of equity and equality. As the agenda demonstrates (see Appendix M), I facilitated a conversation about educational equity in a personal narrative activity and debrief. I utilized the educational equity definition by Aguilar (2019) during the meeting: "every child receives whatever they need to develop their full academic and social potential and thrive every day" (p. 10). The teachers seemed to develop a better understanding of equity during the activity, and we agreed as a team that this would be our operational definition of equity for the PAR project. During CLE meeting conversations, teachers demonstrated understanding transferred to beyond the CPR meetings. As they discussed equity, they recognized information written during the CLE by their peers did not describe equity. One CPR member stated, "equitable doesn't always mean the same" while another member stated, "the same pot cannot be used to fill everyone the same." The CPR group continues to work towards recognizing equitable academic discourse in their classroom, but the team made huge strides in understanding the difference in equity and equality and how they

relate. As a group, we developed the capacity towards our next step: transitioning previous instructional practices toward more equitable practices.

Authentic participation occurred in efforts to build a collaborative team through data from CPR meeting notes, Community Learning Exchange reflections, and reflective memos. In initial codes, I identified relationship building, teacher behavior, CLE processes, relational trust, and feelings. Through two additional iterations, I developed the emerging category of building a collaborative team. Evidence of this occurred thirty-two times throughout the PAR Pre-cycle.

As the team developed, I learned that I had to code the evidence iteratively and use that evidence to construct the next meeting agenda. Using the evidence to plan helped me be much more targeted about the CPR agenda, a key characteristic of improvement science plan and do practices to immediately study and learn what to do next (Bryk et al., 2015; Russell et al., 2017). As a result, through further understanding of the research question, a possible category emerged of teacher willingness to plan for equitable academic discourse in the classroom.

## **Reflection and Planning**

As the PAR Pre-cycle ended, I reflected on my current understanding in order to plan for PAR Cycle One. As is clear in the cycle of inquiry model from Bryk et al. (2015), I need to utilize information gathered from the Pre-cycle to plan for next steps, just as I did after each meeting to plan for the next meeting. As I reflect on the initial cycle, I feel I captured the minds and hearts of the teachers through building a collaborative team, exploring the importance of academic discourse in the classroom, and helping teachers grasp a better understanding of equity versus equality. Each of these items plays a critical role in the understanding of the PAR project. Through analysis of initial data collection, I have a better understanding of my instructional leadership. In this reflection of my first attempts as a practitioner researcher, I revisit my

understanding of coding and developing categories so that I have a usable codebook for moving to plan for, document, and analyze the evidence in PAR Cycle One.

#### Reflection on Practitioner Researcher Role

As a researcher, I realized the importance of capturing correct and useful data that is a result of what we are currently doing and then using that data to inform our school improvement efforts. When I started documenting during the Pre-cycle, I wrote verbatim field notes on participant conversations to collect every piece of information. However, the continual disruptions impacted the flow of meetings and caused people to stop conversations. As a result, I learned I needed to listen carefully to participants and only capture the most important details of the discussion. I took time to actually listen to participants in order to reflect on the comments to make changes within the process. I planned the agenda carefully using a variety of CLE axioms and protocols to create additional artifacts for data analysis and I utilized reflective memos as a way to document my feelings immediately after the experiences.

Participants make statements about change, but ensuring actionable change occurs is another focus moving into PAR Cycle One. The data from observations should substantiate CPR members' discussions. I collected data to support how teacher intentions change their teaching practices.

However, during the coding process, I jumped immediately to broad categories using basic education jargon. I did not dig deep into the codes and therefore named categories with terms that were too large and nonspecific. As a result, I recoded the data and reorganized the codebook to dig deeper to ensure I reviewed the codes in terms of the PAR project. In Table 9, I show the initial coding attempt and the revised codes. As demonstrated from the table, the initial second coding jumped to a potential category. However, on the revised coding during the

Table 9
Sample of Initial and Revised Coding

Initial Co	oding	Revised Co	oding
Code	2 <sup>nd</sup> Coding	Code	2 <sup>nd</sup> Coding
sharing personal experiences makes you vulnerable	relationship building CPR	sharing personal experiences	feel vulnerable
vulnerable when talking to others	relationship building CPR	when talking to others	feel vulnerable
vulnerable when being asked questions	relationship building CPR	when being asked questions	feel vulnerable
asks students questions regularly	reflection of teaching practices	asks students questions regularly	feel vulnerable
does not share a lot with other people	relationship building CPR	does not share a lot with other people	feel vulnerable
put in a situation when you feel the best is not done for the child	relationship building CPR	put in a situation when you feel the best is not done for the child	feel defeated because mandated
gracious space norms	learning activity for teachers	gracious space norms	working agreements
recognizes when people aren't included	teacher equity experiences	recognizes when people aren't included	authentic participation

second coding, I was more specific about initial codes. As I reflected on my first attempt, I realized a need to narrow the second codes in order to not jump directly to categories. The second codes guided aspects of categories throughout all data collected during the PAR Precycle.

## Reflection on Leadership

I have written reflective memos throughout the PAR Pre-cycle in order to capture thoughts and feelings, but ultimately record reflections of progress throughout the semester. This work guided me to create learning experiences for the CPR members, which is a necessary form of what principals should do to support teachers (Grissom et al., 2021). We are learning what the literature says about academic discourse and equity, but we are utilizing data from community learning exchanges and CPR meetings to understand how to translate that to classroom practices. As a result, we make small, but hopefully iterative, changes in classroom instruction. Through the Pre-cycle, I focused on building relational trust and by doing so, I built capacity within the teacher group to work more effectively and closely together. As a result of leading this group, I felt more confident in how a networked improvement community should operate. I realized that when I utilized key principles, small changes are much more effective and timelier than large unreachable goals. Thus, careful chunking and small iterative changes are critical factors in change. I modeled practices in the CPR meetings and faculty meetings that I wanted to observe in the classroom so I felt better about the progress we were making on changing instructional practices.

I realized that moving slowly to go fast is so much more effective. In previous experiences, I was normally quick to complete a task, which did not always turn out as well as it could have. Throughout the PAR experience, I used feedback and reflection from interviews,

CPR meetings, and CLEs to guide the learning for the group and worked to make the learning meaningful to the CPR members. As a group of co-practitioner researchers, we were starting to address how equitable protocols could be used to improve academic discourse and rigor in the classroom. In order to make changes in practice, participants had to have time to process and understand exactly what it all means, while having time to reflect on current practice in order to make wise and appropriate instructional changes in the classroom.

# Planning for PAR Cycle One

In planning for PAR Cycle One, I needed appropriate steps to address the research questions and meet the needs and pace of change in the CPR group. I conducted member checks on data and categories to help me prepare for the next cycle. In preparing for the next cycle, the following steps were critical in successful implementation of equity-based protocols: continue to meet with the CPR group regularly, complete formal observations utilizing selective verbatim notes, and begin coaching conversations.

During the next cycle, we planned to continue to meet regularly as a group to discuss the importance and how to utilize equity-based protocols that increase academic discourse and rigor. I continued to listen and reflect on feedback from the CPR group which helped inform the next steps. The goal was that this group will work together on small actionable changes that ultimately transform practice within the classroom. The intent was that participants would be willing to share their data with each other so that we could analyze the data across content areas to see exactly where we can implement equity-based protocols and what type of protocols we could implement that increase academic discourse for students. By sharing observation data, we observed trends in subject areas and helped us as a group make informed decisions about next steps for the implementation of instructional practices as we moved forward.

In the next cycle, I completed and shared the results of formal observations using selective verbatim with the individuals. During the Pre-cycle, I initially thought observation data would be used with CPR members but upon reflection of the data and conversations, I realized they needed foundational knowledge of academic discourse, equity, and rigor. So, a critical step in the next cycle was ensuring that CPR members had time to consider the observational data so we could see trends and have discussions so we know what types of protocols to implement. At times, I mentioned current trends that I was seeing, and the CPR members were eager to see the data; they had several reflections about what they thought was happening in their classroom as it related to how they question and calling on students. Moving forward, I planned to observe teachers at least bi-weekly using selective verbatim and coding observations to really track growth over time.

In order to implement the equity-based protocols, CPR members needed to engage in coaching conversations from observation feedback. I planned coaching conversations after every observation, which I hoped would provide guidance on making decisions on ways to increase academic discourse in the classroom as well as observe trends in their current classroom practices. In the coaching conversations, I intended to analyze each participant's individual data and discuss small actionable changes that can be done in the classroom to ensure all students are having a voice through the class period. Since the goal was to have the CPR group review each other's data, hopefully we could develop ways to have coaching conversations as a whole group to encourage and provide feedback based on the data that is presented.

Reflection took place after each interview, CPR meeting, and CLE so the best next step was to support the CPR group to learn and grow. As a result, I became more confident in my leadership of the group and in the facilitation of the overall PAR project. I found myself having

more conversations with teachers related to students talking more in class, which helped increase teacher thinking about discourse in the classroom. I noticed more instances of inequitable behavior in teacher practice than before this study. The reflection of what happened in the Precycle allowed me to plan and prepare for PAR Cycle One.

#### Conclusion

In this chapter, I described the PAR Pre-cycle including the context of the research, process, and categories that emerged from initial data collection. I addressed reflection of my leadership within the Pre-cycle and current planning for the PAR Cycle One. Based on the emerging categories, this information helped me make revisions and recognize the direction in which to begin PAR Cycle One. As I moved into the next cycle, I continued to meet regularly with the CPR members to build a collaborative team. Initial steps had already been taken to do so but by continuing to have the group meet regularly, engaging in personal narratives, and engaging in different learning experiences, we created a deeper connection with each other in order to progress to the ultimate goal in improving equity-based protocols in the classroom. Feedback from the CPR members was used in order to plan appropriate experiences for them.

After reflecting on the Pre-cycle, I wanted to make sure that I implemented observations using selective verbatim notes and follow up with participants with coaching conversations. The use of observations was not a key step during the Pre-cycle so I knew that I needed to utilize the data from the observations in order for participants to move to work toward implementing equity-based protocols in their classroom. I wanted to make sure that we focused our meetings on literature about academic discourse and discussing what equity looks like in the classroom. By utilizing the observation feedback and coaching conversations during the next cycle, I thought that evidence might emerge that shifted current inequitable practices.

In the next chapter, I focus on the PAR Cycle One. I continued to write reflective memos, and used field notes to document changes over time. However, I started to utilize observation feedback to focus on the overall goal of changing practice in the classroom in hopes to increase academic discourse through the implementation of equity-based protocols.

#### **CHAPTER 5: PAR CYCLE ONE**

Throughout PAR Cycle One, I utilized data from PAR Pre-Cycle to guide the iterative process of the participatory action research (PAR) project. By examining the emerging category of building a collaborative team, the CPR group participated in a series of observations and CPR meetings to guide changes within the classroom. Through the observations I conducted as lead researcher, I wanted to develop a better understanding of how teachers promoted equitable academic discourse in their classrooms. In this chapter, first, I describe the PAR Cycle One process, which includes activities and the data collected and analyzed during this cycle. Then, I detail emergent themes from PAR Cycle One. Finally, I reflect on my leadership and discuss the plan for PAR Cycle Two.

# **PAR Cycle One Process**

PAR Cycle One occurred in one academic semester (January - March, 2022) and included several activities, highlighted in Table 10. The CPR group met to regroup and consider our learnings from the Fall 2021 semester. The group met five times throughout the semester, and I conducted three rounds of observations for each CPR member totaling twelve observations. During meetings, participants engaged in personal narratives, dynamic mindfulness, and reflection. The main discussion topic changed for each meeting as we progressed through reflecting on feedback and making changes to practice.

#### **Activities**

During our initial CPR meeting of PAR Cycle One, we reflected on the research questions and looked at emerging categories and the codebook from the PAR Pre-Cycle. Then, the CPR group reflected on literature to establish our working definition of equitable academic discourse. The CPR group decided that our working definition of equitable academic discourse

Table 10

Chart of PAR Cycle One Activities and Data

Meetings	Date	Activities	Data Collected
CPR Meeting	January 18, 2022	<ul><li>Personal Narrative</li><li>Reflection</li><li>Protocol</li></ul>	<ul> <li>Agenda</li> <li>Field Notes</li> <li>Group Reflections</li> <li>Reflective Memo</li> </ul>
CPR Meeting	January 31, 2022	<ul><li>Personal Narrative</li><li>Protocol</li></ul>	<ul><li>Agenda</li><li>Field Notes</li><li>Group reflections</li><li>Reflective Memo</li></ul>
Observations Round 1	February 9, 2022 February 14, 2022 February 16, 2022 (n=2)	<ul> <li>Questioning Level Observation</li> </ul>	<ul><li>Selective Verbatim Observation Data</li><li>Reflective Memo</li></ul>
CPR Meeting	February 21, 2022	<ul><li>Personal Narrative</li><li>Gallery Walk</li></ul>	<ul> <li>Agenda</li> <li>Gallery Walk</li></ul>
Observations Round 2	Marach 2, 2022 March 3, 2022 March 4,2022 March 7, 2022	<ul><li>Questioning Level Observations</li></ul>	<ul> <li>Selective     Verbatim     Observation Data</li> <li>Reflective Memo</li> </ul>
CPR Meeting	March 14, 2022	<ul><li>Personal Narrative</li><li>Observation Tool Review</li></ul>	<ul><li>Agenda</li><li>Field Notes</li><li>Reflections</li><li>Reflective Memo</li></ul>

Table 10 (continued)

Meetings	Date	Activities	Data Collected
Observations Round 3	March 23, 2022 (n=2) March 24, 2022 (n=2)	<ul> <li>Questioning Level Observations</li> </ul>	<ul><li>Selective Verbatim Observation Data</li><li>Reflective Memo</li></ul>
CPR Meeting	March 31, 2022	<ul> <li>Personal Narrative</li> <li>Celebrations</li> <li>Observation Reflection</li> </ul>	<ul><li>Agenda</li><li>Field Notes</li><li>Reflections</li><li>Reflective Memo</li></ul>

would be every student has access to talk and answer rigorous questions and be heard every day. I used excerpts from Zwiers and Crawford (2011), NCTM (2012), and Smith and Stein (2018) as a foundation for the CPR groups' understanding of equitable classroom conversations. During the next CPR meeting, we finalized our definition of equitable academic discourse and reviewed several observation protocol tools used to gauge equitable discourse in the classroom. The CPR team reviewed the three observation tools: Question Level, Calling On, and Question Form and decided that the Question Level tool would help us achieve our definition of equitable academic discourse in the classroom (Project I<sup>4</sup>, 2019a, 2019b, 2019c) and provide the best feedback regarding equitable academic discourse.

After the second CPR meeting, I began selective verbatim observations using the Question Level tool, available in Appendix H. I conducted the first round of observations in early February at the time and date each CPR member chose. At the third CPR meeting, participants reviewed their observation feedback. The selective verbatim notes showed the time, teacher initials, student initials, and what each person stated in the classroom. CPR members were new to this feedback method as selective verbatim observation notes are not a common practice in the district. Discussion during the CPR meeting revolved around what information they observed. I instructed the participants to put their questions on a poster that best reflected the question level. The CPR group used Bloom's taxonomy levels to choose the question levels: remember/recall, understand, apply, analyze, evaluate, and create. The CPR group noted that most of the questions asked during the observations were lower-level questions, meaning the questions fell in the recall, understand, and apply categories. Participants discussed what that meant and what was needed to improve the question levels in their classrooms. CPR members

chose to continue with the question level tool to determine growth in the next round of observations.

I conducted round two observations in early March on the dates the CPR members selected. At the fourth CPR meeting, the participants analyzed the data from the second round of observations. We compared the question level of all the questions during Observation Round 1 and Observation Round 2. Participants recognized the overall question levels from the data did not change. As a result, participants identified two specific strategies that they would each work on for the final round of observations. The focus strategies were planning questions and utilizing a think/pair/share protocol in the classroom to ensure each student has access to higher-level questions and could contribute during the class period.

The third round of observations occurred during the latter part of March. To continue to build trust as the observer, CPR members chose their selected times to continue. In discussing the final round of observations, we celebrated that each CPR member had shifted to higher question levels during this observation. Participants reflected on their third round of observation data, and we had a discussion in which participants had the opportunity to write, reflect, and talk regarding their experience through answering the questions:

- How do you feel about the overall implementation this far?
- We have defined equitable academic discourse as a school. What is working well in implementing equitable academic discourse? What do you need to do to improve implementation?
- What support is needed for better implementation?
- What barriers do you have regarding equitable academic discourse in your class?
   Participant feedback was useful in deciding on our focus for PAR Cycle Two.

## **Coding**

I analyzed several forms of data to examine what happened in PAR Cycle One: meeting notes, field notes, and classroom observations. In addition, I wrote reflective memos throughout the semester. Memos were in response to my thoughts after meetings, observations, or discussions with others about the research. These memos served as a running record of my ongoing understanding of the processes in PAR Cycle One.

I collected data from CPR group meeting agendas and notes. Next, I collected selective verbatim notes from observations utilizing the Question Level tool as a guide for classroom questions, this tool is available in Appendix H. I added to the codebook from initial codes during the PAR Pre-Cycle. Then, I inductively coded the data collected using open coding (Saldaña, 2016) and analyzed the codes from PAR Cycle One.

After coding the data, I looked for emerging patterns and adjusted them with the help of a research coach as I began to observe patterns, developing categories, and emerging themes.

Table 11 shows codes that I grouped to form categories and finally emerging themes. Figure 6 describes three emerging themes with categories. I discuss emergent themes with categories and show part of the codebook in the next section.

# **Emergent Themes**

Based on initial codes, grouped into categories, I determined three emerging themes: (1) A collaborative team strengthens change; (2) structures improve classroom discourse; and (3) evidence-based classroom observations promote rigor and equity in the classroom. I generated these emerging themes based on data from PAR Cycle One, knowing the emerging themes may shift as we analyzed the evidence during PAR Cycle Two. After determining the emerging themes, I met with the CPR team for input. Table 11 shows emerging themes with

Table 11

Emerging Themes with Categories and Codes

Emerging Theme	Categories	Codes
A collaborative team strengthens change. (n=136)	• Safe Space (n=87)	<ul> <li>Established Norms (n=64)         <ul> <li>Working agreements (n=23)</li> <li>Authentic participation (n=41)</li> </ul> </li> <li>Building Trust (n=6)</li> <li>Celebrate (n=5)</li> <li>Personal Stories (n=4)</li> <li>Teacher Personality (n=4)</li> <li>Feel heard (n=4)</li> </ul>
	• Self-Awareness (n=49)	<ul> <li>Need to Improve practice (n=24)</li> <li>Ownership (n=7)         <ul> <li>Classroom (n=3)</li> <li>Student (n=4)</li> </ul> </li> <li>Teacher Reflection (n=18)         <ul> <li>From Feedback (n=9)</li> <li>From Students (n=3)</li> <li>Current Practices (n=1)</li> <li>Self-Question (n=5)</li> </ul> </li> </ul>
Structures improve classroom discourse. (n=134)	• CPR Group Learning (n=28)	<ul> <li>Learn with others (n=1)</li> <li>Teacher learning (n=22)</li> <li>Learning through conversation (n=5)</li> </ul>
	• Group Consensus (n=25)	<ul> <li>Agreements (n=12)</li> <li>Next Steps (n=22)</li> <li>Other perspectives (n=1)</li> </ul>
	• Group Implementation (n=81)	<ul> <li>Teacher Planning (n=20)</li> <li>Observation tools (n=5)</li> <li>Instructional Strategies (n=5)</li> <li>Aspects of Discourse (n=51)</li> </ul>

Table 11 (continued)

Emerging Theme	Categories	Codes
Evidence-based classroom observations promotes rigor and equity in the classroom. (n=260)	• Evidence-based Observations (n=18)	<ul> <li>Feedback (n=9)</li> <li>Benefits of observation tools (n=3)</li> <li>Feedback helps reflection (n=2)</li> <li>Narrowed focus (n=1)</li> <li>Observation Data (n=3)</li> </ul>
	• Rigor (n=221)	<ul> <li>Question level <ul> <li>Recall (n=104)</li> <li>Understand (n=15)</li> <li>Apply (n=47)</li> <li>Analyze (n=8)</li> <li>Evaluation (n=27)</li> </ul> </li> <li>Aspects of Rigor (n=6)</li> <li>Questioning (n=11)</li> <li>Assignments (n=3)</li> </ul>
	• Classroom Discourse (n=21)	<ul> <li>Discourse strategies (n=6)</li> <li>Other perspectives through conversation (n=1)</li> <li>Mathematical Discussions (n=1)</li> <li>Learn through talk (n=4)</li> <li>Learn from students (n=4)</li> <li>Academic Discourse from students (n=5)</li> </ul>

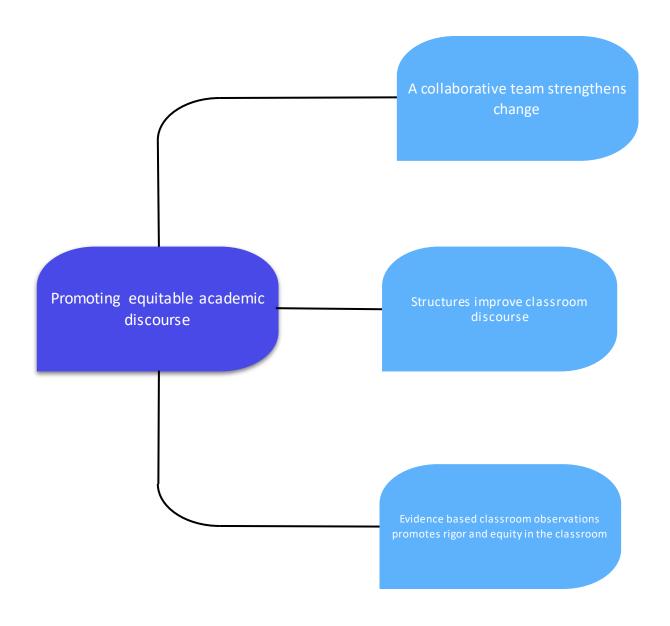


Figure 6. Three emerging themes.

categories and codes. In this section, I provide evidence to support and expand upon the emerging themes.

# A Collaborative Team Strengthens Change

During the PAR Pre-cycle, an emerging category was building a collaborative team. As we progressed through PAR Cycle One, safe space and self-awareness are the primary categories for examining how the team promoted a culture for change in their practices. Figure 7 is a visual diagram of the categories and supporting codes. Next, I discuss the categories and provide evidence that demonstrates this theme is an outcome of the categories.

# Safe Space

From the beginning of the project, I aimed to establish norms, build trust within the CPR group by creating a collaborative environment, and honor each participant's learning, background, and input. Each of these components is necessary for creating a safe space for learning and growth. Establishing norms within the group in which participants feel valued and heard is imperative if we wish to change what happens within the classroom, and the frequency of this code and practice in the evidence was high (n=64 or 74% of the coded responses about norms). Throughout PAR Cycle One, I informed participants of meetings, agendas, and goals during each meeting, honoring a norm that CPR members requested from the beginning of the PAR Pre-Cycle. Participants could provide input during each CPR meeting. While this may seem minor, their input was significant in creating a safe space in which participants found the meetings useful. Sally said, "I am so glad to be back together again as a group. We know what we need to do this semester." She stated at another meeting, "I love our rapport and conversations in our group" (and "I have enjoyed these sessions more than you know."

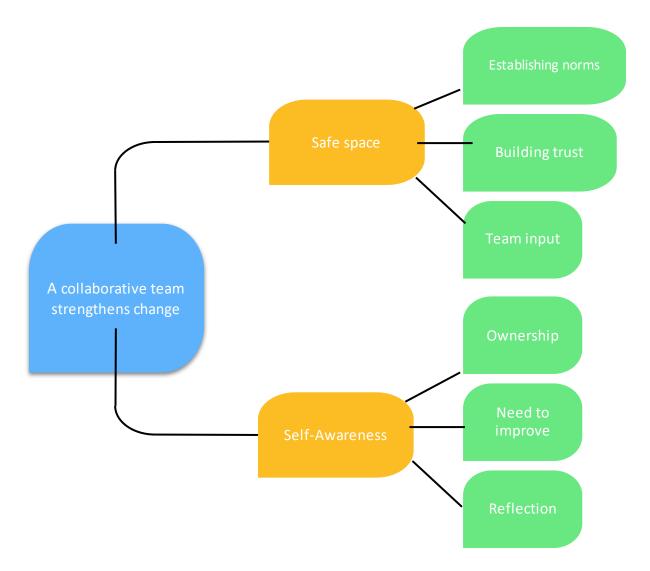


Figure 7. A collaborative team strengthens change.

During the first CPR meeting of PAR Cycle One, participants decided on the best time and day to meet and reiterated that they wanted to continue to know in advance of meetings and agendas. When a leader develops a culture of collaboration with a common focus, then leadership can be fostered in others as a way of collaborative decision-making (Grissom et al., 2021; Little, 2006; Supovitz et al., 2010). As a result, the teachers focused on improvement, which ultimately led to change because of creating a collaborative safe space. Throughout the cycle, participants chose when and what time each observation would occur, building on the safe space created during the CPR meetings to ensure that the observations feel less evaluative and more focused on growth in equitable academic discourse.

On numerous occasions, participants referenced personal stories and feelings throughout the cycle, which provided a foundation for discussing discourse evidence. One participant said, "I do not normally share personal information with others, I am reserved about what I say, however, I feel like I can talk to this group and share because I am prepared in advance." Another participant said, "I feel like when I say things you listen and offer feedback (good or bad)...my colleagues hear me and know I mean well." In addition, participants questioned each other about their understanding of information. Participant Patrick stated, "I want to push back on the number of questions that we identified as lower level after looking at the posters." Work from Louis et al. (2010) and Aguilar (2016) describes how leaders help establish spaces for teams to build trust by understanding the group, where they want to go, and helping them keep commitments, asking for feedback, and regularly reflecting. Participants shared their personal stories, questioned each other's thinking, and reflected on feedback received through observations and during conversations in CPR meetings. This identifies a safe space formed throughout this experience.

As we progressed through PAR Cycle One, participants received observation data. Participants choose to share their observation data during CPR meetings with each other.

Observation data can be personal, but the willingness of the CPR group to share data with each other helped move each participant toward more growth within the classroom and constituted a clear example of their willingness to learn in public. Patrick said, "A lot of my questions are off the cuff. I need to do a better job of preplanning." Another participant chimed in and said, "I did preplan questions [during my observation], but the content didn't lend itself to [Bloom's taxonomy] evaluate and create." Finally, Sue said, "I did [preplan questions] the first observation, and it was for groups, and they had to ask each other questions...that part was not documented." Supovitz et al. (2010) found that when school leadership develops a culture of collaboration and trust that focuses on instructional improvement, the leader can support an environment to cultivate leadership in others. The openness and willingness of the CPR members to discuss with the group reflect that a safe space can strengthen change.

### Self-Awareness

Self-awareness occurred in three areas: needing to improve practices, taking ownership for change, and reflecting together. By conducting selective verbatim observations utilizing the Question Level tool during the PAR Cycle One, participants developed a new awareness they had not experienced previously and used the evidence to talk about improving practices. Participants were able to see an exact replay of the lesson by viewing the observation notes, providing a different awareness of the classroom. Participant Sam noted, "a lot of times when you are made aware of something, you aren't given feedback." The use of observations made teachers aware of what was happening during the observation and provided them with detailed feedback on everything said in the classroom. Sue said, "I get feedback all the time. I find it

helpful because I reflect. It goes back to wait time for students." As a result, participants are beginning to develop an awareness of what is happening in the classroom and how feedback can help them take ownership of their students' learning. The CPR team started to acknowledge that, even with their years of experience and different types of feedback, the observation tool provided them with short, clear, and direct feedback. Louis et al. (2010) describes the importance of providing clear and direct feedback in his study. Utilizing the observation tool prompted the awareness of CPR members about what was happening in the classroom.

Participants throughout the PAR Cycle One indicated the need to improve their practice on multiple occasions (n=24 or 50% of the responses in this category). One participant said, "I need to start calling on more students and pushing different topics to push discussion." Another participant indicated that "[I need to] provide more opportunities for academic discourse, model academic discourse more often, use visual reminders for discourse, make time for more meaningful small groups and discussions." In additional reflections, other participants discussed the need to plan questions and make more time for lesson planning to find ways to incorporate more discourse within their daily lessons. The reflections and comments from CPR members exemplify what Darling-Hammond et al. (2017) describe as active learning; teachers who engage in learning that directly and immediately impacts their practice are experiencing active learning. Awareness from feedback and reflection is a critical step in understanding current practices to make necessary changes within the classroom to improve. Participants indicated that they know what they need to do to have more equitable academic discourse within their classroom.

### **Structures Improve Classroom Discourse**

The group collaboratively decided on structures that would improve classroom discourse.

The categories of group learning, group consensus, and group implementation identified that

when these structures are in place, then classroom discourse is improved, as shown in Figure 8.

CPR Group Learning

Throughout the PAR project, participants engaged in learning activities, supporting the importance of teacher engaging in experiences that support change in their classroom practices. Group learning was necessary to support the project's goal and collaboration across content areas. Initial evidence from interviews indicated that participants had a limited understanding of equitable academic discourse. Thus, in the group learning activities, I intentionally designed processes to use during the PAR Pre-cycle and PAR Cycle One to develop a common understanding of equitable academic discourse. During the beginning of PAR Cycle One, participants reviewed resources and literature that support equitable discourse in the classroom and using protocols helped guide participant learning. One participant said, "[we must] meet students where they are" and continued to say, "even when it comes to academic conversations when they use them, they have learned, like us." Patrick chimed in to say, "it is important to make students reflect on what they did. As we reflect on our learning, students must also." CPR members engaging in learning connect to what Schecter (2010) found: When teachers engage in collective learning, teacher inquiry and teacher change increase when pedagogical successes are the focus.

Throughout the PAR Cycle One evidence using selective verbatim observations, I observed teachers used the following strategies: spinners for calling on students, planning questions, and using think, write, pair, share protocols. Each of these strategies were based in our readings and used during our meetings. As a result, when participants learn together, they fully engage in solving problems and hold each other accountable (Bryk et al., 2015; Wood, 2010).

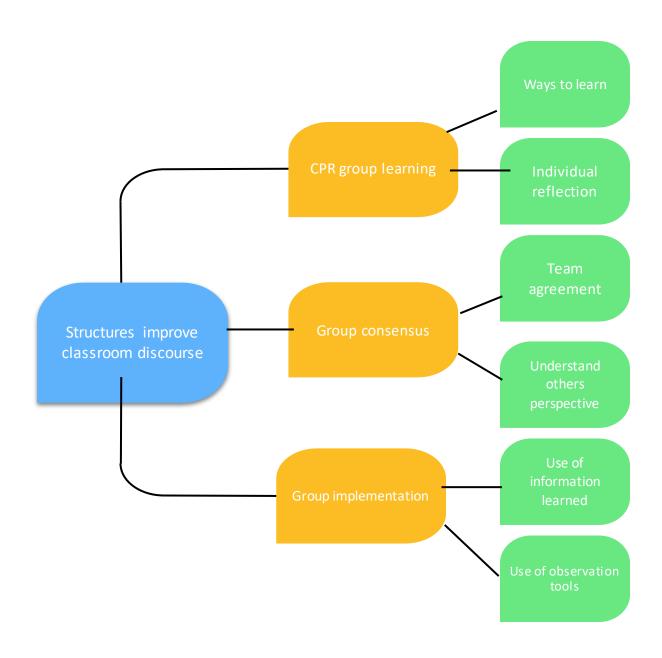


Figure 8. Structures improve classroom discourse.

Reflection played a role in group learning; they reviewed their practices to analyze whether they had supported students to engage in equitable academic discourse. CPR members openly shared their current practices and asked questions about how they could do things differently to get more students to participate. One participant said, "How do I give students a purpose to help drive conversations? The mathematical discussions example for the literature has helped me do this." Sue followed up with:

I am drawn to the skills that are needed for academic conversations. It made me think about how I have conversations in my classroom. I do not follow any steps like this [from literature] ...it is good to know what conversations should look like.

Learning together is essential, but so is the application and reflection of the implemented changes. Teachers who put in the effort to implement new strategies do so because they are committed to improving instruction for students (Bryk et al., 2015; Wood, 2010; Woodland, 2016). Participants were willing to share and reflect on their prior experiences. Each participant's reflection helped other CPR members learn and think about their practice.

### Group Consensus

Group consensus means in this context that all participants worked together and agreed upon particular strategies or tools to use in their classrooms. Throughout the PAR Cycle One, several instances of group consensus supported the collective effort. For example, at the beginning of the semester, the group developed and all agreed upon a working definition of equitable academic discourse. Initially, the definition was "every student has access to talk and answer rigorous questions." Still, after reviewing the literature, Sam suggested adding "and be heard every day" to the team's working definition. Sally, Patrick, and Sue agreed that part of

having discourse in the classroom was that students felt heard, and so the entire CPR team agreed on the changes to the definition.

Another instance of consensus with the group occurred as participants determined the observation tool that would best get us to our definition of equitable academic discourse. The observation tools provided as options were calling on, question form, and questioning level. Patrick said, "the calling on tool would be great for instant data but not address question level [rigor]" and even suggested that the tools be combined. Another participant said, "I like the wait time part of this observation tool, but I do not think it helps us reach our goal." Ultimately, all four CPR team members agreed that the questioning level would help us reach the goal of assessing rigor in the classroom and providing students with access to talk every day.

Toward the end of PAR Cycle One, after receiving two rounds of observation data that did not indicate a shift, the CPR team decided on two strategies to improve rigor and discourse in the classroom. Sally questioned, "How can we make sure this is happening? How can we move [the question level] questions up?" Two other participants discussed the need to make sure they planned questions and, at times, give students the questions ahead of time to think about their responses, especially as the question level goes up. Patrick stated, "Our kids can do this stuff, but I need to do more front loading and more prepping." From the conversations, participants reflected with a partner and developed several strategies that could help to improve the questioning level in the classroom. Ultimately participants agreed to use question stems to plan questions and use think-pair-share to get all students talking in the classroom. Each participant decided that they would plan to utilize one of these strategies before the following observation. Having group consensus held each participant accountable because they agreed to do this together, and they would be able to see the strategies reflected in the observation data.

# Group Implementation

Group implementation referred to the tools and strategies that all participants chose as a group, and this collective action was another structure that improved classroom academic discourse. Early in PAR Cycle One, participants reviewed and discussed literature on academic discourse and reviewed strategies that could be useful in the classroom to promote discourse. This process was to create and establish our working definition of equitable academic discourse as a group. The definition would drive our work throughout the remainder of the PAR project while helping establish a baseline for the school. Participants indicated that they enjoyed the literature and readings because it was a way to know "what" and "how" academic discourse should look in their classroom. One participant said, "I enjoy reading the articles with practical advice for encouraging discourse." The initial use of literature helped develop an understanding of participants about what it takes to have academic discourse in the classroom.

As a result of this understanding and learning, participants were able to internalize the strategies and determine which would be best for them to use in the classroom. The CPR group decided what strategies would work best for us as a group to implement equitable academic discourse. During the first round of observations, I observed planned questions, partner talk, and the use of a spinner to call on students. These strategies emerged from the readings and conversations held during the CPR meetings. Sue stated, "I am drawn to the skills that [students need] to have academic conversations in class." Another participant said, "I need help with question stems to make sure I am hitting all of the levels of Bloom's." After they asked rigorous questions, a participant noted later that they needed to provide time for students to think before they answered. Of course, this is in the literature (Rowe, 1972, 1986), but teachers observing the

need for this and then deciding how to change is a stronger response than being told that wait time should be longer for more complex questions (Lyman et al., 2023).

Each of these individual strategies used by participants during initial observations led the group to discussions and eventually a consensus on which strategies the team would focus on to improve discourse in the classroom. For example, in CPR meeting reflections, one participant said, "I want to do more with think-pair-share." Another participant stated, "We need to practice creating our questions ahead of instructional time," and finally, another participant said, "We need to have more questions that ask students to evaluate and create, which will mean we have to pre plan questions." During the March 14 CPR meeting, participants determined and agreed that they would focus on two strategies; the use of planning questions ahead of time and think-pair-share. During the third round of observations, all CPR members I observed used at least one of these strategies.

The selective verbatim notes provided data on how students responded and talked in class. The group decided that using this observation tool would be best as we work toward more equitable discourse in the classroom. I observed each CPR member three times throughout the cycle, with twelve observations using this tool to show group implementation. After the third observation, Patrick said, "I like the system I used," referring to how he had students using think-pair-share to answer planned questions in class. Based on observation data, another participant stated, "I have grown in my questioning and how I have students talk." When members of the learning community come together, trust each other and bond together around a common goal, they are more likely to "adopt innovative strategies and refine these innovations in their contexts" (Bryk et al., 2015, p. 146). Through these trusting relationships within the learning community, it is where we begin to see change within the school (Patton & Parker, 2017; Wood,

2010; Woodland, 2016). Group implementation of strategies to promote discourse and the observation tool was an essential structure needed to ensure students had access to rigorous questions and the ability to talk in each class.

## Evidence-Based Classroom Observations Promote Rigor and Equity in the Classroom

The next theme, evidence-based classroom observations promoting rigor and equity in the classroom, emerged from the growth observed in strategies based on feedback of the selective verbatim classroom observations. Evidence-based observations provided specific feedback causing the CPR members to reevaluate strategies in the classroom to engage students. As a result, we were able to gradually identify two levels of equity: access and rigor (Boykin & Noguera, 2011). The categories of evidence-based observations, rigor, and classroom discourse provide evidence to support the theme. Figure 9 shows a visual diagram of the categories and supporting codes.

#### Evidence-Based Observations

By utilizing evidence-based observations, CPR participants could see the benefits of the observation tool. Participants' choice of observation tool helped reinforce their agreement to use the observation tool. These observations showed real-time data that documented what teachers and students were saying in the class verbatim. Patrick said, "This is really neat, it is capturing everything, and I can remember exactly what was going on in the class by looking at this." Other participants agreed with Patrick in remembering what they were doing when the observation happened based on the notes. Some participants did not appreciate the transcript because they realized how they were speaking to students or discussed that they were talking too much. One participant said, "I feel like I talk too much," and another, "I am still talking too much." Finally, Sue said, "Something I don't like to see in the observation tool is the selective verbatim. It's not

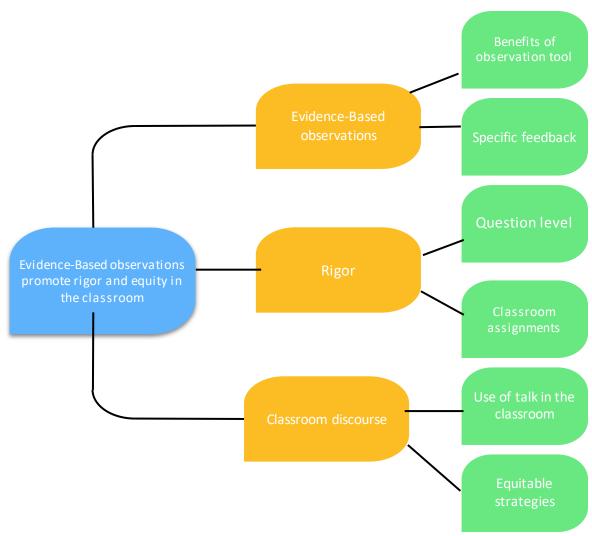


Figure 9. Evidence-based observations promote rigor and equity in the classroom.

the questions; it is hearing me ramble." Even though Sue did not always like seeing the selective verbatim notes, she recognized the benefit of the tool in helping her reflect and make changes because of the data she received from the observation.

From the beginning of the cycle, participants knew that we were working toward more equitable academic discourse classrooms. This knowledge drove the implementation of the evidence-based observation tool. Due to participants agreeing to a particular goal, the feedback from the observations became specific as a way to target improvements in equitable academic discourse. By analyzing data, focusing on instruction, observation, feedback, and reflection, our teachers focused on the actual development they needed for instruction (Elmore & Burney, 1999; Green & Allen, 2015; Grissom et al., 2021). One participant said, "It is nice to know that when we have an observation, that you are looking for one specific thing, not everything under the sun. This helps us look more specifically at what we need to work on and review instead of not knowing where to go next." Another participant stated, "Seeing the data is a tangible reflection for me" who also said, "The data today is very indicative of how we are asking questions as a whole." Participants agreed that having a specific focus area during an observation helped them make changes during each observation to improve equitable academic discourse in their classroom.

## Rigor

As participants delved deeper into their observation data individually, and, as we reviewed the data as a team, participants were more intentional in planning for question level and class assignments to promote rigor. After the initial review of observation data, few questions fell into the higher levels of Bloom's taxonomy, where students had to analyze, evaluate, and create. Boyd and Markarian (2011) state that when authentic higher-order questions require

connections, students engage in talk. Vella (2007) discusses how open questions, which require more than one-word answers, allow learners to bring in their experiences and current knowledge. By asking students to analyze, evaluate, and create, CPR members asked students to engage in open questioning and helped students make connections. Participants engaged in a protocol in which they analyzed their observation data by organizing the questions from their observations into different question levels.

Everyone agreed that most of the questions were at the lower end of cognitive level of Bloom's and did not reach the level of questioning needed in the classroom. Participants reflected on their data and they noted that they worked to improve the question level in the questions asked to students for their next observations. After additional observations, planning questions in advance became evident as a tool to enhance rigor.

After noting that most of the questions asked were lower level, Sue said, "Activities we do in the class can go in the upper level of Bloom's." CPR team members realized that if they are not asking higher-level questions, they need to make sure their assignments reflect what helps promote a rigorous learning environment for all students. As we progressed through PAR Cycle One, classroom observations indicated that participants, through planning questions, were able to ask higher-level questions. At this point in the project and research, they have established processes in the classroom that help promote rigor through academic discussions.

## Classroom Discourse

During PAR Cycle One, classroom discourse strategies improved as participants received observation data. Early in the process, few students spoke during the class period or answered questions, and, typically, the same few students answered question after question. Observation feedback helped participants see who was speaking in class and discussed strategies they could

use to have more students talk. Toward the end of the cycle, participants reflected and said, "Several students [who do not normally speak in class] were documented as speaking." "I need to shut up when I teach...it is more interesting to hear what the students have to say than what I am projecting on them." During the final observation round, three CPR members utilized a think-pair-share strategy that promoted student discourse and participation in the classroom.

From conversations about how to promote equitable academic discourse in the classroom, teachers reviewed strategies that could promote equity. Resnick, Asterhan, and Clarke (2018) discuss everyone's value in classroom conversations and the goal to move from teacherdominated to student-let conversations. In initial observations, I observed Sally using a spinner to make sure each student had the opportunity to answer questions in class. In additional observations, students received specific questions to answer to get them involved with class discussion. With participant understanding and implementation of planning questions, they ensured questions were asked equitably among their students and encouraged the participation of all students. Classroom discourse can make lessons more culturally relevant and foster equity. Language varies from home to home, and students bring those lived experiences to the classroom (Hammond, 2015; Zwiers & Crawford, 2011). Through academic conversations, students bring their social and cultural experiences into the class by "empowering students to be more independent in voicing and shaping ideas" (Zwiers & Crawford, 2011, p. 22). "Giving students questions ahead of time to think about their response helps. If you look at my first observation, if I had given them out the night before, I would have been more likely to have more participation. Then I could have done popsicle sticks, and they are prepared to have an answer," reflecting on equitable strategies in the classroom to help promote discourse.

As I continued collecting and coding data, patterns emerged that allowed me to plan the

next steps throughout the PAR project. Each emerging theme addressed the research questions and provided insight into how the CPR team progressed as a collaborative group. As I continued to understand the research questions further, my goal was to see if patterns that support my current emerging themes continued to appear. In the next section, I reflect on my leadership and action steps for PAR Cycle Two. I aimed to further understand how teachers use equity-based protocols in the classroom to promote academic discourse.

## Leadership Reflection and Action Steps for PAR Cycle Two

As PAR Cycle One ended, I reflected on my current understanding of the plan for PAR Cycle Two. As is evident in the cycle of inquiry model from Bryk et al. (2015), I need to utilize information gathered from PAR Cycle One to plan for the next steps. As I reflected on PAR Cycle One, I found ways to use a collaborative team to strengthen change, implementing structures to improve classroom discourse, and using evidence-based observations leading to increased rigor and equity in the classroom. Each of these items played a critical role in understanding the PAR project. In addition, through analysis of the data collection, I gained a better understanding of myself as an instructional leader. In this reflection on leadership, I describe what has helped me reach this point in understanding emerging themes. I then describe action steps for PAR Cycle Two.

## Reflection on Leadership

I wrote reflective memos throughout PAR Cycle One. The memos captured thoughts and feelings while serving as a record of reflections on progress throughout the semester. The PAR project provides a foundation of leadership changes I want to continue to embody to become a better leader within my school. Engaging in the work with the CPR group, I understand the value of creating a safe, collaborative environment for staff members, have witnessed the importance

of shared decision-making, and see how valuable a specific focus during observations can be for teacher growth.

During the beginning of the PAR Cycle One, I continued to build capacity within the CPR group by focusing on relational trust and incorporating more ways for group members to make decisions. We initially reviewed more literature on equity and academic discourse to create our working definition of equitable academic discourse. By starting Cycle One with a shared understanding of equitable academic discourse, we built upon current practices to align them with the desire for equitable discourse in the classroom. CPR members reviewed several observation tools that could help identify current practices that could be useful to make changes within the classroom. CPR members agreed on the question level observation tool, believing that this tool would best address our definition of equitable academic discourse. These conversations during our CPR meetings helped drive participants' next steps with the common understanding that we are all working toward this as a whole group. The decisions made during the CPR meetings show participant buy-in and shared decision making because each participant worked to implement strategies that could improve equitable academic discourse within their classroom. This process allowed me as a leader to see the value in staff taking ownership of classroom changes and not me dictating what they should do to improve.

The shared decision-making led to valuable feedback from observation data. Since participants knew what strategies I observed, they could have a specific focus on improvement. Of course, these observations were not a catch-all for everything in the classroom, but I used them to look at equitable academic discourse through the questioning level. By seeing the value that the selective verbatim observation data gave CPR members, I now know the importance of being intentional in providing feedback. As a group of co-practitioners, we are moving from

understanding equitable academic discourse to how it plays out in the classroom based on evidence-based observations. To continue to make changes in practice, participants must see what is happening in the classroom, collaborate with those who share in their desire to improve, and feel they have a safe and collaborative environment to discuss implementation.

As a researcher, I realized that what I want to happen and what I think will happen is not always reflected in the data. When I started this process, I thought I would accomplish more in this time frame. Still, as I collected data from observations and field notes, I realized that I needed to make changes based on participant feedback and the data collection. As Freire (1970) stated, the starting point for any action is the reality of the persons who are making changes; while a faster pace might be preferable, the key factor is that the teachers assumed responsibility for their teaching and the changes to their teaching. Data analysis to guide the next steps is critical in knowing when to slow down or speed up. Again, I proceeded at a pace to follow the lead and levels of understanding from the co-practitioners. I realized that in my role as a school leader, all participants need to ready for the next steps. Ensuring that things happen with teacher input is more important than pushing forward without full understanding and teacher consensus.

During this cycle, I made sure I was coding each data set collected within a timely fashion from the collection. Iterative coding allowed me to immediately see patterns within the data and use that to inform the next steps and share with the CPR group for member check. By coding along the way, when the cycle ended, I quickly saw patterns that led to categories to find emerging themes. As I think about the PAR Pre-cycle and how it relates to PAR Cycle One, I understand that to see a change in participants, I had to build a space that ensured that participants felt safe to collaborate and collaboratively become aware of their practices and needs to improve. As a researcher, I know that it is essential to keep established structures in place

while introducing the next step as part of the iterative process as we continued to progress forward. As a leader, I know that I need to continue to build on what participants have learned to gently push them toward improving equitable academic discourse in the classroom.

## **Action Steps for PAR Cycle Two**

Planning for PAR Cycle Two was essential in addressing the research questions and meeting the evolving changes in the CPR groups' learning and reflections. I conducted member checks on data and emerging themes to help me prepare for the next cycle. In preparing for the following process, meeting regularly with the CPR group, conducting coaching conversations, and having the CPR group facilitate a Community Learning Exchange with the whole staff were critical in successfully implementing equity-based protocols to promote academic discourse.

We intended to meet four times as a CPR group during the next cycle. The intention is to center our conversations from early implementation in the classroom to fine-tuning our processes while working to promote more equitable academic discourse strategies across the entire school. In listening and reflecting on feedback from the CPR group, I used that to inform the next steps. The goal of this group during PAR Cycle Two was to determine ways in which we could promote equitable academic discourse within content classrooms by focusing more on equitable practices. By continuing to build upon the collaborative team that we had established within the CPR group, we intended to bring our learning and use of observation tools to the entire school.

After completing an observation, I needed to have coaching conversations with the CPR group members. During PAR Cycle One, I thought coaching conversations would be conducted after each observation. However, we only reviewed observation data as a whole group upon CPR member feedback and conversations. Looking at the observation data from the entire group made the data less evaluative and built teacher collaboration as they discussed the project as a whole

instead of individually. Coaching conversations helped individual CPR members progress their understanding and implementation, specifically, to focus on individual teachers' use of equitable strategies. In addition, coaching conversations were a critical component to help teachers reflect and develop personal next steps for classroom implementation. We intended to analyze each participant's data through coaching conversations and discuss small actionable changes that they can make in the classroom to ensure all students have a voice throughout the class period. Moving forward, I planned to observe teachers two times during PAR Cycle Two, followed by individual coaching conversations.

While the CPR group made great strides in understanding and implementing equitable academic discourse strategies in the classroom, we decided to facilitate a Community Learning Exchange (CLE) for the entire school to hopefully broaden and deepen our learning. During the CLE the CPR members can facilitate others in their learning, growth, and reflection throughout the project. In addition, I hoped to capture the hearts and minds of others to join us in our quest to provide more students with access to rigor and the opportunity to talk in class daily.

Reflection took place after each interview, CPR meeting, and CLE and continued to be critical in the facilitation of the overall PAR project. Based on observation data, I was having more meaningful conversations with teachers about students talking more in class, which helped increase teacher thinking and understanding of equitable academic discourse in the classroom. I noticed more instances of intentional equitable academic discourse strategies in CPR members' classrooms than before this study. Reflecting on what happened in PAR Cycle One allowed me to plan and prepare for PAR Cycle Two.

#### Conclusion

In this chapter, I described PAR Cycle One, including the process and emerging themes from data collection. In addition, I addressed reflection on my leadership within the Pre-Cycle One and current planning for the PAR Cycle Two. This information supported me to make revisions and know the direction to begin PAR Cycle Two based on the emerging themes. As I move into the next cycle, I regularly met with the CPR members to strengthen a collaborative team. Processes that fostered self-awareness and provided opportunities for the team to build on their learning experiences helped us move toward more equitable and rigorous classrooms that promote academic discourse.

After reflecting on PAR Cycle One, I wanted to ensure that I implemented useful coaching conversations in PAR Cycle Two. Understanding the observation data was a crucial step in PAR Cycle One to understand the use of questioning in the classroom. In the coaching conversations in the PAR Cycle Two, I intended to build individual teacher capacity in classrooms as they focus on more individual data versus observation data as a whole group. Our CPR meetings during PAR Cycle Two changed from continuing to develop an understanding of equitable academic discourse to how we move our learning to the entire school. By utilizing coaching conversations during the next cycle, evidence might emerge that supports continued growth and change of teacher classroom practices to afford more equitable academic discourse.

In the next chapter, I focus on PAR Cycle Two. During the PAR Cycle Two, I continued to write reflective memos, use field notes, and host a Community Learning Exchange (CLE) to document changes over time. I utilized coaching conversations and used the CPR group to facilitate a CLE for the other staff members in the school. The CPR team members helped facilitate learning opportunities with the desired goal of changing practice in the classroom in

hopes of increasing academic discourse through the implementation of equity-based protocols within the school. By the end of cycle two, the focus was to utilize the data collected to find themes about the use of protocols in the classroom that promote equitable academic discourse and utilize the themes to analyze the PAR findings aligned to the research questions.

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

Throughout the participatory action research (PAR) project, I utilized data from previous cycles to guide the iterative process of implementation and research. During PAR Cycle One, three themes emerged, including (1) a collaborative team strengthens change, (2) structures improve classroom discourse, and (3) evidence-based observations promote rigor and equity in the classroom. In PAR Cycle Two, I utilized the emerging themes from PAR Cycle One to determine key themes and inform the findings for the research study. After completing data analysis from PAR Cycle Two, I determined two key findings:

- A well-facilitated community of practice supports teacher agency for effective collaboration and co-design; and
- 2. Evidence-based observations coupled with observation conversations provide teachers with data to make necessary changes to their instructional practices.

The findings contribute to using equity-based protocols that promote academic discourse in high school classrooms. In this chapter, I describe the PAR Cycle Two process, which includes activities and data analysis during this cycle, and present the themes. Then, I detail the findings from the participatory action research project and study.

# **PAR Cycle Two Process and Analysis**

PAR Cycle Two (April-October 2022) included several activities, shown in Table 12. The CPR group met four times and reconsidered learning from the Spring 2022 semester. I conducted two rounds of observations for each CPR member totaling eight observations, facilitated three rounds of coaching conversations for each CPR member totaling 12 conversations, and our CPR team hosted a Community Learning Exchange (CLE). Participants engaged in personal narratives, dynamic mindfulness, and reflection during meetings. The

Table 12

Chart of PAR Cycle Two Activities and Data

Meetings	Date	Activities	Data Collected
Coaching Conversations	April 25, 2022 April 26, 2022 April 28, 2022 May 25, 2022	Individual Coaching Conversation	<ul><li>Coaching Transcript</li><li>Reflective Memo</li></ul>
CPR Meeting	June 6, 2022	<ul><li>Personal Narrative</li><li>Reflection</li><li>Protocol</li></ul>	<ul> <li>Agenda</li> <li>Field Notes</li> <li>Journey Line</li> <li>Group reflections</li> <li>Reflective Memo</li> </ul>
CPR Meeting	July 29, 2022	<ul><li>Personal Narrative</li><li>Reflection</li><li>Protocol</li></ul>	<ul><li>Agenda</li><li>Field Notes</li><li>Group reflections</li><li>Reflective Memo</li></ul>
Community Learning Exchange	August 5, 2022	<ul><li>Personal Narrative</li><li>Protocol</li></ul>	<ul><li>Agenda</li><li>Field Notes</li><li>Group Reflections</li><li>Reflective Memo</li></ul>
Observations Round 1	August 22, 2022 August 24, 2022	<ul> <li>Questioning Level Observation</li> </ul>	<ul><li>Selective Verbatim Observation Data</li><li>Reflective Memo</li></ul>
Coaching Conversation Round 2	August 24, 2022 August 25, 2022	<ul> <li>Individual Coaching Conversation</li> </ul>	<ul><li>Coaching Transcript</li><li>Reflective Memo</li></ul>
CPR Meeting	August 30, 2022	<ul><li>Personal Narrative</li><li>Reflection</li><li>Protocol</li></ul>	<ul><li>Agenda</li><li>Field Notes</li><li>Group reflections</li><li>Reflective Memo</li></ul>
Observations Round 2	September 7, 2022 September 8, 2022 September 9, 2022	<ul> <li>Questioning Level &amp; Calling On Observations</li> </ul>	<ul><li>Selective Verbatim Observation Data</li><li>Reflective Memo</li></ul>

Table 12 (continued)

Meetings	Date	Activities	Data Collected
Coaching Conversation Round 3	September 7, 2022 September 8, 2022 September 12, 2022 September 13, 2022	<ul> <li>Individual Coaching Conversation</li> </ul>	<ul><li>Coaching Transcript</li><li>Reflective Memo</li></ul>
CPR Meeting	September 27, 2022	<ul><li>Personal Narrative</li><li>Celebrations</li><li>Observation/Coaching Reflections</li></ul>	<ul><li>Agenda</li><li>Field Notes</li><li>Reflections</li><li>Reflective Memo</li></ul>

activities in which they engaged continued to foster collaborative responsibility for teacher improvement.

#### **Activities**

I began PAR Cycle Two in April 2022 with coaching conversations for each CPR member because I realized each teacher was at a different place in understanding equitable academic discourse and how to best apply learning to the classroom. During the coaching conversations, I guided individual CPR members in making targeted goals to change classroom practice. During our initial CPR meeting of PAR Cycle Two, members reflected on their experiences since the start of this project when we used journey lines to document critical learnings. We analyzed emerging themes from PAR Cycle One and reflected on the first round of coaching conversations as a group. Finally, and significantly, the CPR group decided to cofacilitate a Community Learning Exchange to bring equitable academic discourse to all the classrooms in the school community.

At a July CPR meeting, we finalized our planning for the CLE hosted in August during our back-to-school meeting. This CPR meeting was productive as we decided what protocols to use, ensuring that we modeled practices which represented our learning of equitable academic discourse in the classroom. The CPR group wanted to inform the school community about their journeys in understanding equitable academic discourse and how they had worked collaboratively to improve their instructional practices.

During the CLE, staff engaged in personal narratives about their equity journeys. Then in small groups, CPR members shared their understandings of equitable academic discourse and solicited input from the entire staff. The CPR group wanted to ensure that the whole staff would be willing to implement protocols in the classroom to foster equitable academic discourse; thus,

input from the entire staff was a way for all staff members to calibrate what equitable academic discourse should be and how we should implement practices in our school. Next, we facilitated a fishbowl protocol to inform the staff about what the CPR group had accomplished in fostering equitable academic discourse in their classrooms. In planning for the CLE, the CPR group wanted to ensure we stressed to the school how beneficial the selective verbatim observations and coaching conversations were as tools of improving and refining their practices. The CPR members provided insight into the benefits of the data from the selective verbatim observations and coaching conversations. Careful planning helped us develop the questions that CPR members used during the fishbowl activity and that they modeled equity of voice. At the end of the meeting, each participant reflected on their learning and understanding from the session.

After the CLE, I conducted the next round of observations and coaching conversations utilizing the questioning tool. Based on our agreements, I observed CPR members at their requests, honoring the trust and safe space created throughout the process. After each observation, participants engaged in a coaching conversation focused on question levels. During the August CPR meeting, our conversation turned to who was talking in class. Thus, the group decided to focus beyond question level and wanted me to capture who was speaking in the classroom. The CPR group said they needed to determine our collective definition of equitable academic discourse: Every student has access to talk and answer rigorous questions and be heard every day. The CPR group agreed that using the question-level tool ensured that students answered rigorous questions. Still, we would not address the need for every student to speak and be heard daily without looking at who talked in the classroom and who the teacher called on.

During the next round of observations, I continued to document the questions asked in class but began to document who was speaking in class. By documenting both question level and

calling on during the observation during the coaching conversations, I was able to provide CPR members with evidence that addressed the rigor in the classroom through question level and equity of voice. After this round of observations and coaching conversations, we had one more CPR meeting.

The CPR meeting held on September 27 was a time of celebration and reflection. The group discussed the study's final round of observations and coaching conversations. The group discussed overall reflections from participation in the study and the next steps as we moved forward as a group and a school. While this CPR meeting was the last for collecting data, we will continue to meet.

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

In analyzing the data for PAR Cycle Two, I determined these themes: (1) The team process strengthened collaboration for change and (2) evidence-based observations promoted rigor and equity in the classroom. The data in this cycle helped deepen our understanding from prior cycles. The analysis and progression of the data through three cycles of inquiry influenced how the peer community of practice developed and affected each other's learning and practice.

Three interconnected factors emerged in PAR Cycle Two to confirm how the team strengthened collaboration for change. First, participants reported that the CPR was a safe space (29% of responses). Secondly, the CPR group reported that their learning was a result of collaboration (29%). Finally, the teachers developed self-awareness (42% of responses) which included teacher reflection. These factors are illustrated in Figure 10. Most importantly, the level of self-awareness of their teaching practices was apparent in their conversations and demonstrated a change in their individual and collective sense of agency. In PAR Cycle Two, CPR members shared ways in which their planning and developing equitable strategies helped

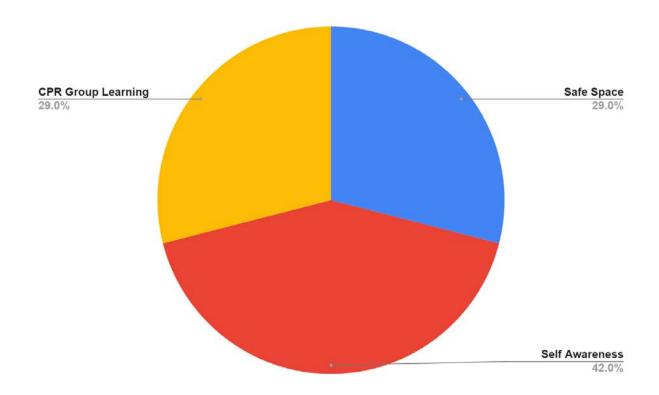


Figure 10. PAR Cycle Two: Collaborative team strengthens change.

increase rigor and discourse, deciding what I should observe and when I should observe, and gaining confidence in sharing data with each other.

Teacher evidence confirmed that evidence-based observations promoted rigor and equity in the classroom; thus, observations (21%), using equitable strategies (26%), and promoting rigor (43%) helped teachers improve their practices in the classroom, highlighted in Figure 11. While the CPR team members did not identify coaching conversations as often (only 10% of the codes), they tended to view the observation and coaching conversation as a tandem process. This data built on the evidence from the PAR Pre-Cycle and PAR Cycle One. In PAR Cycle Two, CPR members shared how the observations followed by conversations about the observation helped them view their practice differently and pointed out how teachers were choosing to facilitate learning for students and what students were being provided with a voice in the classroom.

In the end, the CPR members consistently planned and reflected about what steps to take to improve equitable academic discourse in the classroom. The data represent the power of teaming coupled with evidence-based observations and conversation to improve classroom instruction. I analyzed these data in PAR Cycle Two as well as other data sets and intersected those with PAR Pre-Cycle and PAR Cycle One data to determine the final themes and findings. The final data set for each finding includes teacher collaboration codes, evidence-based observation codes, and coaching codes. As the analysis process evolved over the three cycles, I became more specific about coding data from three cycles of inquiry to represent these two findings: (1) a well-facilitated community of practice supports teacher agency for effective collaboration and co-design; and (2) evidence-based observations coupled with observation conversations provide teachers with data to make necessary changes to their instructional practices.

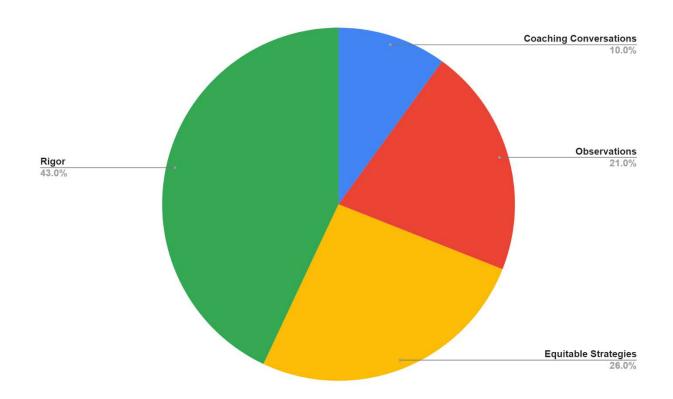


Figure 11. PAR Cycle Two: Evidence-based observations promote rigor and equity.

## **Findings**

As a result of this participatory action research (PAR) study, teachers changed their practices to improve and promote more equitable academic discourse. To change practices, as the leader, I was intentional in holding regular facilitated meetings that focused on building a safe space and meeting the needs of the participants, working together as a team to determine the next steps of classroom changes, and the intentional facilitation of learning experiences that supported teacher efforts to transform practice. Secondly, evidence-based observations with post observation conversations provided data to support teacher efforts as they implemented strategies to provide more opportunities for equitable academic discourse in the classroom. As a result of the PAR project and study, I can assert two findings: the first is that a well-facilitated community of practice supports peer agency for effective teacher collaboration and co-design, and secondly, evidence-based observations coupled with post-observation conversations provide teachers with data to make necessary changes to their instructional practices.

These findings developed through three cycles of inquiry and contributed to promoting a more equitable academic discourse in the classroom. I support these findings by providing evidence from CPR meetings, community learning exchanges, observations, and coaching conversations. Figure 12 shows the data across the entire PAR project. The combination of a well-facilitated community of practice and observation data followed by intentional conversations supported the efforts of teachers willing to change practice.

## **Well-Facilitated Community of Practice**

Principals must intentionally form and facilitate learning groups to ensure effective teacher collaboration and learning (Grissom et al., 2021; Louis et al., 2010; Yurkovsky et al., 2020). Evidence from the PAR Pre-Cycle indicated that using established norms, consistent

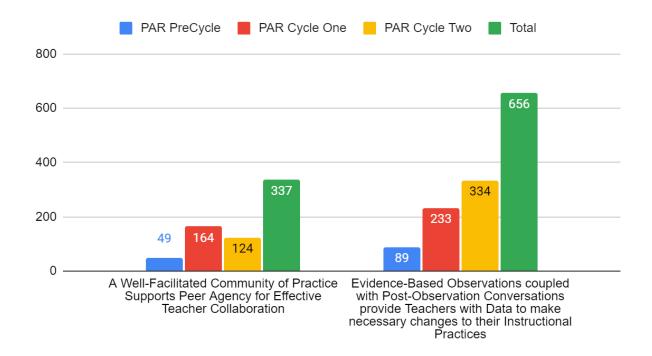


Figure 12. Data across the PAR Cycles to determine findings (n=number of instances in the data).

meetings, generous space, trust, and the need to feel heard created a safe space where teachers were willing to contribute to a common goal of improving practice related to equitable academic discourse. Collaborative activities and open discussions of knowledge and skills makes a difference in how to faciliate a community of practice (CoP) (Wenger & Wegner-Trayner, 2015). Through a shared passion focused on equitable academic discourse and evolving co-construction of knowledge, we established a well-faciliated CoP. Then, teachers were more willing to share the data from the observations to strengthen question levels in the classroom and promote more discourse. Evidence from PAR Cycle Two suggested that time and space are essential for teachers to reflect on practice with like-minded individuals.

Early on, as the principal, I realized that I could not push teachers to change their practices faster than they were willing to learn and change. I established the team by being intentional regarding learning structures and followed the teachers' lead in their change trajectories. I facilitated learning concerning the central goal, which was more equitable academic discourse in classrooms. The CPR team members were willing to examine current classroom practices by discussing and defining an equitable academic discourse classroom. When data indicated that participants had many low-level questions and few students responded to questions, they were willing to make their learning public to each other and, as a result, they gained agency as peers. The CPR group relied on each other to discuss and determine the next steps needed to improve their classroom practices; through deprivatizing their teaching practices based on the trust they had for each other and their new knowledge, they took full responsibility for change efforts. They created what Cravens et al. (2017) term peer excellence groups and further demonstrated their agency with a larger group of peers by choosing to co-facilitate learning for the entire teaching team.

#### Collaborative Team

Teachers working together in schools is not a new concept, PLCs, NICs, and CoPs established the importance of teachers working together to address school improvement, and each has value depending on the goal (Bryk et al., 2015; Darling-Hammond, 1996; DuFour et al., 2005; Fullan, 2000; Little, 2006; Wenger & Wenger-Trayner, 2015). Every teacher in the study had collaborated previously with colleagues to complete tasks assigned in previous groups, but an established group with a specific focus was new to the school. By utilizing concepts from Bryk et al. (2015) and the benefits of a networked improvement community to accelerate learning, this group's intentional design aims to bring more equitable academic discourse within the classrooms.

Teachers of all content areas brought value to the discussion about providing more equitable classroom environments and allowing for more student discourse. By building on teachers' previous understanding of collaborative groups, we established a basis of what this group would do and how we would operate. Critical to the team's success was showing a safe space and honoring agreements; as a result, we were able to co-create conditions where teachers felt comfortable sharing, trusted each other, learned through experiences, and had time to reflect on our practices. Sally stated, "we are working well as a CPR group. It has made us reflect and shift our way of teaching, wanting to see how far we will go when talking about this to the staff as a whole." By utilizing gracious space, personal narratives, and the Community Learning Exchange (CLE) axioms, our collaborative team formed where participants felt they could trust and support each other as they reflected and made minor changes to practice. Figure 13 illustrates the categories of a collaborative team with the highest frequency across three PAR cycles.

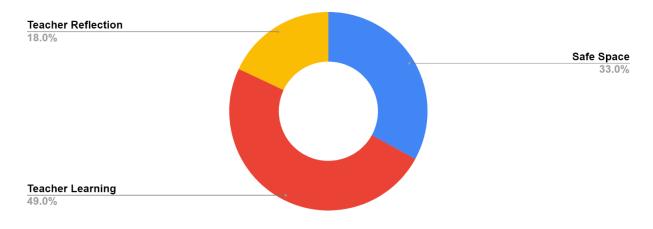


Figure 13. Categories of collaboration.

Establishing Safe Space and Trust for Collaboration. During PAR Pre-Cycle, the focus was to establish a safe space where participants could fully engage in the work. Continuing this type of environment was a focus throughout the entire PAR project. Creating a safe space for teacher collaboration was a key factor for teachers' authentic participation (51% of the evidence); in other words, participants concluded that they could authentically engage because the space was safe and welcoming. This attribute for teaming is foundational for collaboration. Another key attribute of collaboration (32% of the evidence) centered on working agreements; teachers helped create the conditions and understandings for our group. Finally, teacher's used protocols (frequency of 17%) to ensure every voice within the group felt heard and valued. By intentionally creating a safe space, we established trust within the group that supports teacher collaboration.

Teachers frequently shared personal stories, celebrated, confided in each other, and came to a place of vulnerability by opening up concerning observations and observation feedback. This environment could not be possible without establishing relational trust within the group and is critical for the success of any improvement efforts in a school (Aguilar, 2016; Bryk et al., 2015; Bryk & Schneider, 2002; Grubb & Tredway, 2010; Patton & Parker, 2017; Supovitz et al., 2010; Wood, 2010; Woodland, 2016). During monthly group meetings, I observed positive teacher-to-teacher connections building on each other's current knowledge of academic discourse. By utilizing generous space and personal narratives, teachers could share and reflect on experiences to help them connect. Sam stated:

You haven't really told us what to do, we talked and made decisions so I can tell you have listened to us, and even in these discussions everyone is really good at listening to

each other and giving feedback. Just listening to y'all has helped me think about doing things differently, but there is still room for growth.

I knew I needed trust within the group to force the participants to engage with each other fully. Still, I could provide the environment and ask the right questions in which they felt comfortable to share their understanding and learnings. By taking the time to move slowly to establish space and trust within the group, I saw the benefits of collaboration as we built an understanding through learning experiences. Establishing trust (n=23 or 32% of their responses) appeared throughout each PAR cycle. During PAR Cycle Two, participants engaged in a Journey Line around the progress. Sally indicated that building trust and rapport was most important throughout the process. Participants indicated the importance of being courageous throughout the process and taking risks. They stated that the space provided during our CPR meetings helped them work together to make changes to practice.

Building an Understanding through Learning Experiences. Understanding occurs through conversation and experiences; experiences promoting interaction and reciprocity are critical for teachers to learn in group environments (Darling-Hammond et al., 2017; Dewey, 1938; Freire, 1970; Grissom et al., 2021; Vygotsky, 1978). I understood that learning must occur at each teacher's own pace. As a reflective practitioner, I utilized protocols to facilitate learning experiences to add to teachers' current knowledge, experiences, and skills to strengthen their learning. Through three PAR cycles, I engaged teachers in community learning exchanges (CLEs), regular meetings, observations, and coaching conversations to look at and think about equitable academic discourse. In analyzing the results of the fourteen months of experimentation, I observed changes in teachers' instructional practices due to the experiences learned throughout the process.

The CPR group built an understanding through group learning experiences (18% frequency); in other words, participants could learn together regarding research and current classroom practices. This understanding is foundational in participants' knowledge of equitable academic discourse. The next frequency (20%) centered on group consensus; teachers decided together on agreements and next steps as they tried new strategies based on their learning. Finally, group implementation included aspects of discourse, strategies, observation tools, and teacher planning (62% of responses). Through conversation, teachers built an understanding of equitable academic discourse through experiences they had in their classrooms; through focusing on the daily work of classroom instruction, they together uncovered and then addressed equity concerns in their classrooms. Through protocols during our CPR meetings and conversations held among the CPR group, participants transferred what they learned and discussed to their classrooms. Sue stated:

I am using protocols to support equitable access and rigor during discussions of various literature pieces in the classroom. For example, I began using THINK-WRITE-PAIR-SHARE, collaborative annotation, and classroom talk where students respond to questions on chart paper (silently) and later find one statement or idea that resonates with them and have to have a conversation about it with a group.

During conversations, we discussed finding ways to engage more students in classroom dialogue—as a result, teachers implemented numbering strategies or used a spinner to select random students. As conditions changed for teachers to learn, teachers expressed an additional need for time to reflect on their practice individually and collectively so they could share in the failures and successes of each other. Teacher reflection is the final critical component of a community of practice that supports teacher collaboration and learning.

**Teacher Reflection.** Like forming learning communities, reflection is critical in the learning process (Freire, 1970). However, reflection should include substantial understanding of the equity concerns so that teachers can act differently. Through reflection, teachers explored what worked and what did not in their classrooms. Data from three research cycles showed that teacher reflection was necessary to learn in each cycle. We embedded reflection in each CPR meeting; sometimes, the reflection was individual, but other times, the whole group of teachers reflected on current learnings and understandings. As we moved through the project and study, teacher reflection (n=64 or 18%) became teachers questioning themselves, current practices, feedback, and understanding the need to improve practice. They took ownership of their learning.

Teachers became more committed to improving equitable academic discourse in the classroom. In the CoP, because they engaged as learners in questioning and discussing their practices, they modeled in the CoP what they wanted to transfer to thoroughly engage students. Sue said, "this information has led me to my own reflections and modifications in lessons." Patrick stated, "This 100% made me reflect on my practice, it gave me the freedom to fail...it has 100% changed how I reflect on the day—I have a voice." For a CoP to use a space in which they are willing to question practice and try new things shows a commitment to continued growth (Yurkovsky et al., 2020). This reflection allowed teachers to learn in public—their vulnerability allowed them to share mistakes, challenge each other, and offer suggestions for improvement. By utilizing reflection as a critical practice, we further established a collaborative team that led to teacher learning. All participants indicated the power of their reflection throughout the process and how it allowed them to grow and learn as educators working to provide more equitable academic discourse in their classrooms.

## Teacher-Facilitated Community Learning Exchange

CPR members demonstrated increased peer agency by taking ownership of classroom equitable academic discourse as they planned and facilitated the entire faculty in a Community Learning Exchange (CLE) for a back-to-school meeting. The CPR group recognized the importance of providing academic rigor and ensuring everyone had a voice in the classroom. They found value in understanding how they could discover equitable opportunities for students in the classroom and wanted to share their experiences with others. As a result of their learning, the CPR group could engage the staff in authentic learning, providing an opportunity for the staff to provide input on the CPR groups working definition of equitable academic discourse and provide insight into evidence-based observations and post-observation conversations affected their practice and understanding. The CPR group intentionally planned the CLE and utilized protocols facilitated in CPR meetings to engage all staff in the conversation. Most importantly, the CPR team understood the importance of reflection, and the entire staff debriefed the CLE.

CPR members shared specific examples and reflections from the PAR project. When I asked CPR members about what equitable academic discourse means to them now, Sue stated:

The first question was how do you do equitable academic discourse in your classroom...ok, equitable means kinda fair, academic-learning—so how do I do that, I do have my students discussing things every day, I was stunned when she went deeper into the questions and I had to stop, I do not want to do this but after everything was over, what stuck with me was she asked would you ask the number one in class the same question as you would a lower student and I said no. So, when you think about that and my teaching, I didn't provide those equitable opportunities.

When the teachers were asked about discourse in their classrooms and how that effected their teaching, Sally stated:

We were asking questions from the lower level of Bloom's, none were higher. I was calling the same student or the one who would yell out the answer. I started to use a spinner, and I wrote out question stems prior to teaching.

Finally, all CPR members shared the importance and value of selective verbatim observations. Sue stated, "It is 20 minutes of good information, a true snapshot of what happened....it is not evaluative, nothing to hurt you." Sam stated, "based on the observation data, now I think, let's let them struggle, give them time to think, and help each other so that is what I am trying to do more of now," and Patrick confirmed how data helps to see equitable discourse, "Selective verbatim is so much better, you are probably thinking you are equitable and that everyone talks...but you really aren't."

The CPR group set the baseline for the entire ECHS faculty to engage in authentic learning in which they directed their professional growth to push the growth of their colleagues toward providing students with more equitable academic discourse opportunities. Using evidence-based observations and observation conversations was critical in developing teacher facilitation of the community learning exchange.

#### Evidence-Based Observations and Post-Observation Conversations

By providing evidence-based observations and having conversations after observations, teachers could review observation data and decide what changes needed to happen in their classroom practices. Evidence-based observations take the evaluator's role out of the observation and provide teachers with feedback, allowing them to take ownership of the data. When teachers take ownership of data, they see the instructional changes needed in their classroom. Evidence

from the PAR Pre-Cycle indicated that narrowing the focus for the observations provided teachers with a baseline for improvement. Evidence from PAR Cycle One suggested that teachers used data from evidence-based observations to improve question levels and promote classroom discourse. Evidence from PAR Cycle Two suggested that conversations between each other and the principal helped teachers understand current practices and provide more equitable conditions in the classroom. In particular, two categories of evidence-based observations and observation conversations contributed to the finding. Figure 14 shows the categories across the three cycles of inquiry. Each of these factors contributed to the ultimate goal of refining practice to provide more equitable academic discourse in the classroom and was a focus of the overall PAR project.

#### Evidence-Based Observations

Teachers in this study previously received observations but never received evidence-based observations using selective verbatim to document what took place in the classroom with a specific focus on question level and who is being called on in the classroom. Evidence-based observations occurred during each PAR Cycle. During PAR Pre-Cycle, I conducted observations and shared the observation data with participants since this would be a new observation process. Initial reflections of the process indicated that participants were overwhelmed by the data but could see how it would be valuable. We took the initial observation data and we specifically looked at the types of questions that were asked in the classroom as a whole CPR group. The data indicated lack of rigor in our question level to students. During PAR Cycle One, teachers received three observations focused on question level as a way to improve equitable academic

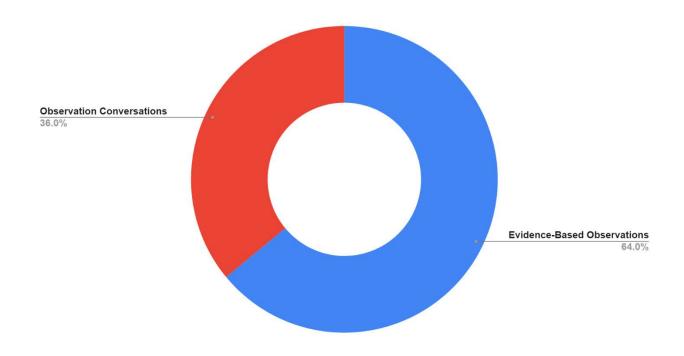


Figure 14. Frequency of data for substantiating the importance of evidence-based observations.

discourse. Although the observation focus was on question level, by utilizing the selectiver verbatim observations, the observe can collect data related to student access and rigor. During PAR Cycle Two, I conducted two rounds of observations, the first focusing on question level. The second observation included question level or cognitive complexity and data focused on equitable access through noting who the teacher calls on and if the teachers uses think time. The last observation during data collection focused on both question level and who was being called on as a result of the CPR members desire to make sure that every student had access to talk, answer rigorous questions, and be heard everyday—our groups' definition of equitable academic discourse. The category of evidence-based observations occurred at a frequency of (64.4%) and had codes such as benefits of observation tools, observation data, and factual evidence. Initial evidence-based observations focused on question level, and by looking at the question level, we could determine how rigorous the questions asked to the students.

Equitable Access. Early in the project, ideas around equity emerged as we were specifically looking at equitable academic discourse. A complete understanding of how equity played a role in the classroom occurred in PAR Cycle One, when participants looked at and discussed ways to get more students involved in discourse during our CPR meetings. As we developed our school's definition of equitable academic discourse, teachers started looking at ways to get more students talking. As we progressed through the project, I observed participants using a wide range of equity strategies to get all students to speak. For example, I observed the following strategies during both cycles of observations: spinner, think-write-pair-share, numbering system, individual and group speeches, and having students pause to think after a question. Before this project began, these strategies were rarely, if ever, observed in the classroom as regular classroom practice. Sue reflected and said:

I would let Jane answer my questions and I would think that every student in the class had it, but in reality, I was letting one student speak for the class. Now, I am intentional about how I call on students and how I ask students to respond during the class period.

During this project, as teachers used these classroom strategies to provide more equitable access to students, the students had opportunities to have their voices heard in the classroom.

Rigor. After analyzing the data from each observation using the question level observation tool, teachers changed their questions to reflect Bloom's Taxonomy question level. During PAR Cycle One, 51% of the questions asked to students were recall questions, while only 17% were at the level of analyzing, evaluating, and creating. We analyzed these data as a group and determined that we needed to ask students more rigorous questions. We decided to plan questions that reached all levels of Bloom's and make sure teachers used appropriate question stems when asking questions. When analyzing question levels during PAR Cycle Two after the implementation of planning questions, there was a decrease in the percentage of recall questions. Of the questions asked during PAR Cycle Two, only 39.7% were recall questions. There was an overall increase of 32% in analyzing, evaluating, and creating questions asked. While the percentage changes are not much, it shows improvement to practice based on data from evidence-based observations.

Teacher reflections indicated that they changed assignments and types of questions asked on assignments that were higher level questions-indicating increased rigor. Sue reflected and said:

I want to make sure my questions are there, I can easily drop the questions to recall, I did it with my seniors this morning, I felt myself going down on question level to get them

talking...I don't want any student feeling like I am dumbing it down for them (CPR meeting, August 30, 2022).

Sam indicated that she changed her practice from just giving notes with the procedures to complete problems initially to asking different questions that get students more involved with figuring out how to do it before they answer. Teacher reflection, which resulted in changed practice, provided an opportunity for more student voice and was exhibited in multiple observations. From the evidence-based observations, we could see who had the dominant voice in the classroom, causing teachers to think about and make changes to practice to provide more opportunities for all students to speak.

### **Observation Conversations**

While trends of observation conversations did not occur throughout the other cycles, at each CPR meeting, we discussed observation data. We needed to show how we continued to grow in our goal of having more equitable academic discourse in the classroom. Observation conversations happened after each observation in the last cycle focused on discussing and determining the next steps for each teacher. Observation conversations should be an inviting environment where teachers feel comfortable discussing the data and reflecting on the following steps to improve. Of the observation conversations that occurred during data collection, teachers had data in advance 100% of the time, as indicated by established codes. By providing teachers with the data in advance, they could look over and internalize what they said or did during the observation period. Codes also indicated that each conversation had a greeting and then had a quick focus on the data describing the point of the conversation. Each conversation turned the focus to equity and who was talking in class. At the June 6, 2022 CPR meeting, Sally stated, "The coaching conversations were comfortable, not evaluative, informative/reflective, and an

opportunity to see growth." Sam indicated that the feedback helped them think more about providing an environment for equitable discourse and having higher-level questions in the classroom.

During the initial individual observation conversations session, I realized that I, as the principal, did most of the talking when observing the talk time, averaging 8.5 minutes of the 10-15-minute conversation. In comparison, the teacher only spoke, on average, for 6.5 minutes. After realizing this, during the next round of coaching conversations, I asked more probing questions to get the teachers to talk more about their data. During the second round of coaching conversations, I, as the observer, averaged 6.5 minutes talking during the conversation, while the teachers averaged 8.25 minutes. During the second round of conversations, I realized through the codes that the next steps became more teacher driven than during the first round of observations. Therefore, the observation conversations also allowed me, as the principal, to reflect on how I lead teachers to make changes to practice. While observation conversations occurred throughout each PAR Cycle, individual conversations only occurred during PAR Cycle Two. There needs to be more room for exploration of how conversations can improve teacher practice and how this could impact all teacher conversations from observations.

I presented evidence across three PAR Cycles that demonstrate improved classroom equitable academic discourse when a school leader and teachers facilitate a community of practice, have access to evidence-based observations, and engage in post-observation conversations. We developed key aspects of a successful community of practice: a shared focus and passion for implementing equitable academic discourse, building an understanding through learning experiences, and teacher reflection. I engaged in leadership actions, including evidence-based observations and post-observation conversations with teachers. A well-structured CoP

with the attributes of a collaborative team, supporting teacher learning and evidence-based observations with post-observation conversations was fundamental to the study.

### Conclusion

In this chapter, I detailed the PAR Cycle Two activities and findings and provided evidence of how to effectively promote more equitable academic discourse in the classroom by fully engaging teachers. The school's principal is responsible for intentionally forming and facilitating a community of practice that leads to effective teacher collaboration and learning. As well, the school principal has the key role of ensuring equitable practices across the school (Grissom et al., 2021). The key components for substantially engaging teachers as agents in their learning and change efforts are creating a safe space or the right conditions to support learning, building an understanding through learning opportunities, and ensuring substantial teacher reflection that considers equity at the core of teaching and learning. By establishing and creating an environment for a collaborative group that is a corollary to the classroom environment we want for students, participants can learn from each other and build their capacity and agency as peers to improve their teaching practices.

The second finding, evidence-based observations coupled with post-observation conversations, provide teachers with data to make necessary changes to their instructional practices, was a critical next step in building on relational trust while also bringing the data to the teachers to make it relevant to their practice. By providing teachers with evidence-based observations and having observation conversations, we could identify rigor through the question-level protocols and establish equitable practices within the classroom after reviewing observation data. In addition, teachers could identify individual practices that needed to be changed and modified due to observation and conversations. The PAR project empowered teachers to build

relational trust while learning in a safe space to change classroom practice based on evidence-based observations and observation conversations. In the next section, I detail my reflection on leadership and its implications for practice.

### **CHAPTER 7: DISCUSSION AND IMPLICATIONS**

In the participatory action research (PAR) study, I examined how four high school teachers in different content areas developed their understanding and use of equity-based protocols to promote academic discourse in their classrooms. As a result, the teachers developed their knowledge and skills in planning and implementing lessons that provided more opportunities for access and rigor in their classrooms. I designed and facilitated the PAR process based on the theory of action that if teachers co-develop an understanding of how protocols promote equitable academic discourse for students, they will consistently implement equity-based protocols in classrooms. To a large degree, through a steady process of nurturing relational trust, developing a common understanding of academic discourse and strategies for improving more equitable academic discourse, observing classrooms using evidence-based protocols, and conversations with teachers individually and as a group, we achieved the intended outcome. To accomplish these goals, we relied on the use of Community Learning Exchange protocols and processes that have substantially changed the way I approach my role as a school leader.

The context of the PAR project and study was a rural northeastern North Carolina Early College High School. The school's goal is to provide students with access to college classes while targeting students who are at risk of not completing high school, students with parents who did not continue education beyond high school, and students who would benefit from accelerated instruction. Through a focus on peer collaboration, teachers in the study gained a reinvigorated passion about improving access and rigor in their classrooms (Boykin & Noguera, 2011), deprivatized their teaching practices (Louis et al., 2010), and shared their learning with other teachers in the school (Grissom et al., 2021). The teachers in the co-practitioner research (CPR) group wanted to improve their skills and knowledge of equitable academic discourse to provide a

more equitable environment for students where all students have opportunities to talk and discuss at a high level in their classes. As a group, they exemplified the attributes of a community of practice (CoP): commitment to engage in collaborative activities, in this case equitable academic discourse, discussions around the work that is taking place in the classroom, and being active practitioners toward improvement in classroom practice (Wenger & Wenger-Trayner, 2015). By having social co-construction of knowledge, skills, and tools, teachers gained agency over their work; they were willing to learn in public and teacher dispositions toward teaching changed through providing the structures to have a well-faciliated community of practice. A well-facilitated community of practice has these characteristics: common focus, sense of community among members, and shared experiences to address the common focus.

Throughout the study, participants' stories fostered authentic reflection and change. Because the teachers had evidence from the observations, in post-observation conversations and in CPR meetings, they found that evidence useful for shifting their practices to improve classroom instruction for their students (Hale, 2008). One reflection from a CPR member encompasses the work from the overall PAR project and study. I chose this piece because the reflection exemplifies how we promoted equitable academic discourse for teachers in a community of practice. If teachers have deep experiences in the very processes necessary for changing classroom practices, they are more likely to trust each other to engage in authentic dialogue, promote equity through collaboration, decide on the changes they need to make, and transfer them to their classrooms.

I think with liberation comes the freedom to fail, which I felt we didn't have at first, but I appreciated that part of the process, especially after the last conversation. It was very awkward to have pointed out that only the white students are talking in your class and

then only white males—it was a very gut punch pointed out to me—which made me feel worse. I couldn't defend myself but when I was designing the things the kids did last week and this week, the number one thing I said was everyone has to talk—and how do I get them to do that—so they made podcasts—every kid has a presentation—it is something where I wanted every kid to have the opportunity to speak about it. It has affected my reflection [observation data], there is a real sense of missed opportunity when I think about the day—I should have phrased the question this way or asked this question; it [observation] has 100% changed how I reflect on my practice—I have a voice.

In my role as an equity leader, I concentrated on building on teacher assets and teacher discussions; I was aware of my need to respond to each teacher's pace of change. By providing space for conversation at a deep level of reflection and action, the CPR members in our community of practice exemplified an axiom of the community learning exchange: The people closest to the work are best situated to solve their dilemmas of practice. Throughout the PAR, I ensured that we focused on equitable academic discourse in our meetings so that teachers would transfer those practices to the classroom. When we set up the right processes and trust teachers to make decisions that directly affect them, they use their autonomy to improve their practices.

The PAR, an 18-month action research project and study, consisted of three PAR cycles. In Table 13, I provide an overview of the PAR activities that supported our individual and collective capacities to implement equitable academic discourse strategies in the classroom. To achieve that goal, I facilitated interviews, consistent CPR meetings, and a community learning exchange (CLE) to examine teachers' current understanding of equitable academic discourse. In our meetings, we used CLE protocols to engage in conversation with each other to increase our knowledge and skill. Secondly, I maintained consistent CPR meetings while conducting

Table 13

Key Activities: Three PAR Cycles of Inquiry

Activities	PAR Pre-Cycle Fall 2021 (Aug-Nov, 2021)	PAR Cycle One Spring 2022 (Jan-Apr, 2022)	PAR Cycle Two Fall 2022 (May-Sept, 2022)
Meeting with CPR members (n=12)	***	****	****
Community Learning Exchange (n=2)	*		*
Classroom Observations-Formal (n=12)	****	********	******
Coaching Conversations with CPR members (n=12)			*******
Conversations with ECU Professors (n=12)	****	****	****

classroom observations focusing on question levels during the observation. Finally, while continuing with CPR meetings and observations, I added coaching conversations to reinforce our learning and respond to each teacher's needs and pace of change, modeling how a school leader can differentiate as a supervisor. In summarizing the PAR findings, I connect the findings to the extant literature and respond to the research questions. As a result of the findings, I developed a framework for changing teacher practice. Finally, I discuss implications for practice and conclude the chapter with a reflection on my leadership development throughout the PAR project.

### Discussion

In examining the PAR findings, I analyzed sources from the original literature review and additional reading I did as the themes emerged and I needed to understand what had happened in the research process; then I responded to the PAR research questions. The PAR findings are:

- A well-facilitated community of practice supports teacher agency for effective collaboration and co-design; and
- 2. Evidence-based observations coupled with observation conversations provide teachers with data to make necessary changes to their instructional practices.

After discussing how the findings connect to the literature, I present a framework for change.

# **Teacher Agency**

Throughout three iterative cycles of inquiry, CPR members engaged in a professional learning community of practice (CoP) that supported their individual and collective strengths in claiming and maintaining their agency as teachers. Agency in this case meant that teachers had more confidence in taking the necessary risks in the classroom to address the evidence from the observations and individual and group discussions. They gained, or perhaps regained, authority

over their teaching practices, and, as a result, they were eager to share their learning with all staff in the school. They exemplified what we know about change in adults – trust adults to make decisions and their increased autonomy leads to decisions about how to improve (Drago-Severson, 2012; Knowles, 1988). Unfortunately, with the move toward neoliberalism and professional learning from the outside into the school, we have often de-professionalized teachers, and, in the process, they have not had opportunities to direct their learning (Schneider & Berkshire, 2020).

Professional learning communities have a long history – some are successful in creating conditions for teacher agency and collaboration; others do not affect teacher practice (DuFour et al., 2005; Wood, 2010). Clearly, the PLCs or CoPs that "work" have some common characteristics: useful facilitation, protocols that support equitable dialogue, clear group and individual goals, iterative evidence to support goals, and teacher autonomy to make decisions (Little, 2006; Wood, 2010). The CoP format, including the use of Community Learning Exchange (CLE) protocols, improvement science processes, and an intentional focus on equitable academic discourse for teachers and students, were critical factors in our work. The evidence is clear: When teachers experience a well-facilitated CoP that involves collaboration and dialogue, a safe and trusting space, opportunities to learn, and teacher reflection, they reflect and make changes to their practices, thus offering more equitable conditions for student learning. As a result, structures changed to support and promote a collaborative CoP. Grissom et al. (2021), in a meta study of leadership practices, found that effective principals engage in instructionally focused interactions with teachers, build productive school climates, facilitate productive collaboration and professional learning communities, and manage personnel and resources strategically to accomplish these outcomes. If leaders act in this way and engage

teachers as collaborators in addressing dilemmas of practice, they fully engage in the change work. Teachers are key contributors in the design process of new instructional practices (Woo & Henriksen, 2023). If they are told what to do and monitored in ways that feel like inspection, they do not (Ingersoll, 2003). In opting for trusting the teachers to make decisions—working from the inside out, I changed as a leader, and teachers stepped up to the change plate with a commitment to change individually and collectively (Grubb & Tredway, 2010). As a result, we developed a more coherent approach to our teaching, our meetings, and our goals (Elmore, 2004).

According to Wenger and Wenger-Trayner (2015), as adults come together for student well-being, achievement, and passion, they learn how to engage and improve their interactions directly through the process of dialogue. As the school leader, I created intentional learning opportunities for teachers to gain and maintain greater agency by creating a safe space, sharing stories to build trust and collaboration, and engaging in reflection with the common goal of improving equitable academic discourse in the classroom. As a result, the teachers viewed their input and decisions as critical to making classroom discussions and learning rigorous and equitable for students.

The CoP design and activities supported adult learning; as discussed in Chapter 6, the key factors of the CoP established norms, consistent meetings, generous space, trust, the need to feel heard, and willing to contribute to a common goal of improving equitable academic discourse. According to Darling-Hammond et al. (2017), teachers need time to consider how to implement changes from professional learning, choose specific teacher actions, receive feedback, reflect, and implement additional changes in short iterative cycles of teacher inquiry. For this reason, CPR meetings centered on practice and reflection to improve teaching strategies. To address

equitable and rigorous academic discourse in the classroom, I worked with teachers on their assets while supporting practice changes. Being intentional about facilitation during our CoP meetings, I modeled practices that teachers could replicate in their classrooms. Teacher development and instructional-focused collaborative learning connect directly to classroom practice (Elmore & Burney, 1999; Grissom et al., 2021).

Lave and Wenger (1991) define learning as situated in a particular community and defined by that context. Learning is a process of shared cognition resulting in the internalization of knowledge by individuals, leading to becoming a member of a sustained community of practice. Within the CoP, when the participants co-created knowledge to observe practices, the participant's perspectives on the work changed as their learning cultivated shared goals and practices (Lave, 1991). For 18 months, we slowly developed a shared understanding of equitable academic discourse and how to change practice in teacher classrooms to reflect this vision. In the CoP, we organized the CPR group to think internally and externally so that they could consider the lifetime of students by thinking about learning as life itself and continuous. As a result, members of this CoP expanded their influence on other people within the school community, fostering exactly what Gomoll et al. (2022) advocated: teachers who co-construct a professional vision can change their practices and co-design professional learning for others.

To build and sustain trust and collaboration, the administration must foster an environment for shared decision-making (Bryk et al., 2015; Hord & Sommers, 2008; Schecter, 2010), which can translate to classroom practices of choice for students. In addition, teams can build trust within the community by understanding who they are as a group and where they want to go, keeping commitments to each other, being transparent, asking for feedback, admitting mistakes, and regularly reflecting (Aguilar, 2016; Edwards-Groves et al., 2016; Louis et al.,

2010). Throughout the process, we established a sustained, trusting, and collaborative group by maintaining a common goal, having shared decision-making and transparency, providing feedback, and designating time for reflection. During our final CPR meeting, Sue said:

I have felt liberated the entire time, you gave us readings, we were able to discuss openly about what we do in the classroom, you never said this is what we have to do but we were deciding what equitable academic discourse to add—we were able to go back and look at our planning, create our own questions, and think of our own little ways to make sure we were reaching all students.

Another CPR member stated, "We talked [as a group] and made decisions and even in these discussions everyone is really good at listening to each other, giving each other feedback. Just listening to y'all has helped me think about doing things differently." Overall as a group, the members discussed what could be done in their classrooms and then adjusted it to make it work for their teaching style. Each CPR member indicated throughout the process the importance of working together to discuss, share, and improve their classroom instruction. This is similar to what Meyer and Smithenry (2014) describe as instructional scaffolding for collective engagement. However, each CPR member indicated the importance of reflection as a way to make changes to their practice.

Freire (1970) defines praxis as the "combination of reflection and action, or reflection leading to action" (p. 86). However, his analysis of praxis is not ordinary reflection; rather, Freire sees the reflection as a generative process of coming to consciousness or conscientização in which we deeply understand inequities and take actions to correct them. The teacher's actions occurred throughout the PAR project as teachers reflected on information learned during CPR meetings, observation data, and conversations. Teachers need time to reflect, learn together, and

co-design so they build a common language and processes for the goals they set (Woo & Henriksen, 2023). As we looked at improving equitable academic discourse in the classroom, teacher reflections were about enhancing practices with this focus. They occurred as a direct result of the observations, in which the teachers used classroom evidence to have conversations and make changes. Safir and Dugan (2021) term these type of iterative data "street data", which are authentic, real-time information. Hale (2017) notes that the most important validity measure in activist research is data that is useful to participants. The participants had not experienced regular data input about their teaching in these ways; they claimed that the data and the discussions liberated them to be better teachers and stronger peers.

The link between an administrator facilitating and creating the conditions within a CoP to create learning opportunities for teachers to learn, build trust, and reflect is clear. The member checks confirmed that the continuous focus on equitable academic discourse led to more higher-level questions and multiple opportunities for students to engage in classroom conversations. If members of the CoP in this study continue to focus on equitable academic discourse, we could expect an increase in rigor. However, evidence-based observations and observation conversations were needed to support change.

### **Evidence-Based Observations and Observation Conversations**

Principals have an essential role to play as instructional leaders and leaders of equity. In my observations and conversations about student learning, principals have typically used opinions and judgments that do not lead to sustained changes in practice (Tredway et al., 2021). For this project, we used the data from those observations to collaboratively engage in conversations about practice, and they supported each other to improve their instructional practices. According to Grissom et al. (2021), one of the four domains of leadership is "engaging

in instructionally focused interactions with teachers" (p. 58), including observations and datadriven instruction. I used evidence-based observations specifically designed to foster equitable
access and rigor, such as selective verbatim documentation for determining calling-on practices
and questioning levels. By collecting data through selective verbatim on questioning level and
calling on, we addressed access and rigor throughout the process. These tools are useful and
work toward meeting teacher needs as their skill questioning levels and equitable calling on
improves. Through the use of the tools, we named what was happening in the classroom through
specific evidence from the classroom observation to assess rigor (use of question level) or access
(use of calling on). After the observations, the teachers and I had a conversation using the
qualitative evidence; each teacher decided on their changes to instructional practices. When we
focused on the question level and calling-on strategies, we were able to intentionally refocus
techniques used in the classroom to provide a more equitable environment that promoted
discourse.

Huff et al. (2018) focused on four concepts to examine principal work: personalized learning connections, systematic use of data, rigorous and aligned curriculum, and quality instruction. In this PAR, I focused on the systemic use of data through evidence-based observations and a thorough and aligned curriculum by promoting equitable access to discourse in observed classrooms. By systemically using data, we collaborated on classroom observation data, increasing teacher buy-in for equitable academic discourse. Teachers were able to see first-hand from the observation data the effects of their classroom instruction by identifying the level of questions they were asking in the classroom and what students were talking about during the observation. A rigorous and aligned curriculum describes leaders' role in ensuring rigorous content in academic areas. Through observation data and observation conversations as a CPR

group and individually, we identified the inequities in classroom instruction, such as lack of student voice and rigor in the question level. For example, during initial observation in Sue's classroom, only three people spoke in the classroom, and of the students that spoke, only girls answered questions. After viewing the data, Sue made the decision to intentionally plan assignments in class that required all student voices. Sue began to regularly use think-write-pair-share as a way to get all students in the class talking to each other. When Sue asked students to share, she used a numbering system to make sure all student voices had the opportunity to speak before having the same student answer a question again. This instructional strategy was regularly observed in three of the four CPR members classrooms. In the other CPR members' classroom, the regular use of a spinner to get students talking and answering questions was used as a way to ensure equitable academic discourse in the classroom.

Building on the need for improved observation instruments, the CPR group determined which observation tool would best meet their needs to identify equitable academic discourse in the classroom. By being specific about what we wanted to improve and measure, we identified teacher areas of improvement and discussed strategies that the teacher could implement based on the observation data. Observation data played a critical role in helping improve equitable academic discourse in the classroom, and observation conversations helped teachers reflect and make decisions about which practices to improve. Common tools support co-constructed teacher learning that is mediated by social and material factors (Ahn et al., 2021; Gomoll et al., 2022; Wong et al., 2021); in this case common tools were the material factor, and the professional conversations we had to build a professional vision of academic discourse and then collaborate on common practices led to dialogue and collaborative learning. For example, CPR member Sam, used observation data and observation conversation to reflect on the types of questions he

asked students. Sam realized through the observation data and conversation with peers about the observations that they relied heavily on recall questions during instruction. As a result, Sam intentionally planned higher order questions to ask to students at the beginning of the lesson to activate a higher cognitive demand before they took notes. They added more higher-level questions on student assignments to make sure students were asked a variety of questions during class and on class assignments. This emphasizes what Boykin and Noguera (2011) discuss about the intentionality necessary for planning and implementing equity, access, and rigor for all students.

The CLE axiom "conversations are vital and central to pedagogical strategies" (Guajardo et al., 2016, p. 30) was one I worked on modeling at all times through the PAR study. Learning becomes meaningful when staff utilize protocols during the community of practice, stay focused on teaching and learning, and have open and honest conversations. Wise and Jacobo (2010) describe how management issues can be transformed into leadership by changing the format of meetings, the principal attending staff development with teachers by becoming a learner to provide coaching, and the principal observing and providing feedback. By utilizing protocols such as think-pair-share, personal narratives, and setting the meeting "table", each CoP member had an opportunity to discuss, feel valued, and feel heard, thus showing how pivotal these conversations are with each other. Dialogue was observant and reflective because staff can learn and have deeper engagement through collaboration (Coburn, 2001; Schecter, 2010; Wood, 2010). Conversations that are "about uncomfortable, unequal, ineffective, prejudicial conditions and relationships in a school...[can] create an organizational setting that is continually changing and developing because the members are continually learning" (Eubanks et al., 1997, pp. 156-157). By applying the use of CLE protocols to develop gracious space, I respectfully discussed

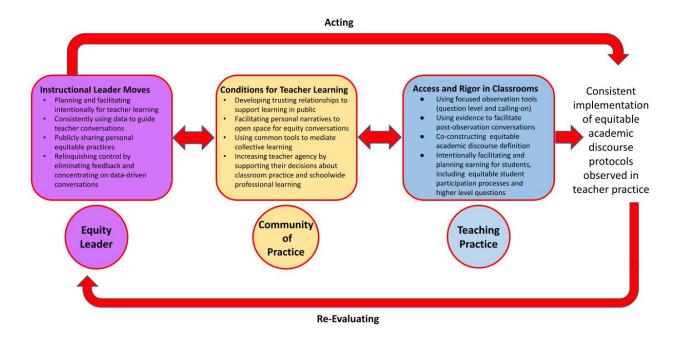


Figure 15. Framework for changing teacher practice to promote equitable academic discourse.

observation data during our CPR meetings by informing and bringing the CPR members closer to the unifying mission of the PAR, increasing opportunities for equitable academic discourse. A principal can foster the conditions for deep reflection and learning—praxis—in which a teacher can take risks to change their practice; powerful conversations can occur when we establish collaborative requirements, recognize a need to change, and celebrate growth.

## Framework for Change

As a result of this PAR project and study, I developed a framework for supporting teacher change and the implementation of equitable academic discourse. Figure 15 represents the framework for change in teacher practice based on the findings of this PAR. We engaged in focused learning to address teacher practice to increase equitable academic discourse. In this case, the focus was on equitable practices in the classroom. As an equity leader focused on improving teacher collaboration and equitable practices in the classroom, leadership moves occurred through intentional planning, use of data, publicly sharing experiences, and relinquishing control. As a leader with the desire to provide more equitable conditions in the school, I focused on the culture, trust, teacher learning, feedback, and reflection. The community of practice best supported the concentrated learning that attended to teacher learning which included developing relationships to make learning public, using common tools, using personal narratives to provide space for equity conversations, and increasing teacher agency. As the CPR group formed the community of practice, we shared common goals, supported each other, learned together, and established trusting relations. Teachers were able to increase access and rigor by using observation data which guided teachers to make changes to questioning, discourse in the classroom, and more equitable practices. Teachers also co-constructed equitable academic discourse definitions which pushed them to intentionally plan and facilitate learning for students.

Furthermore, observation conversations were critical to promoting transfer to classroom practice. The combination of leadership, communities of practice, and examining teacher practice led to changed practices in the classroom to improve equitable academic discourse.

## **Re-Examining Research Questions**

The overarching question guiding the PAR study was: How do teachers use equity-based protocols to promote academic discourse? The three sub-questions were:

- 1. To what extent do teachers demonstrate an understanding of equitable access and rigor?
- 2. To what extent do teachers choose and use protocols for promoting equitable access and rigor?
  - a. How do teachers implement instructional protocols and strategies to promote equitable access and rigor?
  - b. How do coaching conversations support teachers in implementing the protocols?
  - c. How do teachers collaborate to share tools and strategies that promote equitable access across content areas?
- 3. How do I develop as an instructional leader who leads teachers to use equity-based tools to promote academic discourse?

Over eighteen months, a group of co-practitioner researchers met regularly and engaged in collaborative learning. As a result of this PAR study, the group of teachers relied on each other to support and improve equitable academic discourse by changing classroom practices to promote more equity and rigor. While we know the components of effective academic discourse (Zwiers & Crawford, 2011), teachers needed to co-construct their collective understandings in

this group. While they can often describe what to do, they do not always know how to implement what they know about best practices. In this case, because CPR members reflected on their practices and shared with each other in our community of practice (CoP) structure, we codeveloped a common vocabulary and a set of practices that they were able to transfer to the classroom. I supported their development by facilitating regular meetings that focused on establishing a safe space, relationships, and reflection on teaching to change practice. Through selective verbatim observations and conversations, we co-created meaning and understanding of providing equitable academic discourse in teachers' classrooms. The focus on question level and calling-on strategies increased the number of higher-level questions in classroom observations. In addition, more students spoke up during the observation.

Secondly, how teachers change helps us understand the "black box" of teaching and learning. Through this project and study, we have identified what Cuban (2011) describes as "documentation and transparency about the complex mechanics and inter-relationships that occur daily in schools and classrooms" (Cuban, 2011). We definitely know that collaboration works, however, understanding how leaders facilitate and make possible teacher collaboration and how teachers then "take up" and persist in change efforts is more elusive (Cuban, 2011). In the study, the teachers perceived that equitable academic discourse happened through intentionally planning, collaborating, and utilizing protocols in the classroom. The linchpin of the change effort included leadership facilitation and useful data. When teachers used data as a mirror to analyze and engage in observation conversations with me, as the principal, and then with each other, they stepped over the classroom privacy line and made their learning public. Only then did they change their practices to improve equitable academic discourse in the classroom. Through the facilitation of CPR meetings, teachers controlled how and when to change their practices,

providing them with agency over how and when they changed their practice to offer more equitable conditions within the classroom.

Finally, teachers collaborated as a way to share practices that were working in their classroom as they implemented and made changes to instruction to provide students with access to equitable academic discourse. By focusing on teacher and researcher professional vision we were able to see how perspectives create a shared understanding as the process evolves (Gomoll et al., 2022). Through collaboration and the common efforts made by teachers we saw transformation in the classroom (Woo & Henriksen, 2023)—a shared vision and the use of common practices allowed teachers to discuss the implementation of the tools as a way to change the learning environment for students (Wise & Jacobo, 2010). It was how teachers responded to this learning as a way to design and implement new tools in their classroom—this is what Wong et al (2021) call creative collaboration. The conditions were created that regardless of teacher background and knowledge, they were able to co-design thus improving teacher agency, ownership of the data, and reflection which promoted more equitable academic discourse.

## **Implications**

The framework offers a systematic way for the school leader, as the equity leader, to promote teacher change through establishing a strong community of practice that focuses on the attention to the learning for teachers, building teacher capacity and agency. Developing a strong community of practice coupled with evidence-based observations that provide specific data for teachers about access, such as who is talking in the classroom, and rigor of the cognitive level can lead to teacher practices that improve equitable academic discourse if the school leader facilitates the process in a way that supports teacher agency and decisions. However, I cannot stress enough that the importance of the process is crucial. Even if teachers know what to do,

they do not always do it. In addition, being told what to do rarely works for adults (Drago-Severson, 2012). Every group needs to engage in this process, and the preparation work required to build trust, define common terms and practices, and then decide to implement changes is sometimes slow, but the durable results are worth the time.

While professional learning programs often support replication and fidelity, school leaders and teachers need a different model of scaling the practices of this study (Morel et al., 2019), one that continues to respect the importance of local organizational actors' processes to develop understandings and make decisions. They need to start small to model and adapt to each individual's specific context while maintaining the core principles outlined in this dissertation. The policy considerations at the micro, meso, and macro levels are critical to support teachers and principals in adapting instructional practices, including observations, to their context. While the literature on establishing communities of practice and developing a trusting environment is plentiful, there is limited evidence on the effects of evidence-based observations followed by conversations, which requires further research. A systematic examination of what Cuban (2011) calls the "black box" of teaching and learning is needed; by supporting teachers and school leaders to become researchers of their work using processes in which they co-construct and co-decide, we can better understand how teachers change practices.

### **Practice**

The PAR findings highlight promising implications to practices for leaders, teachers, and schools. As a result of their participation in this PAR, CPR members developed their skills and understanding of equitable academic discourse practices in the classroom. The framework attends to two core components: teacher agency and evidence-based observations and

observations conversations must occur for teachers to improve practices that consistently focus on equitable academic discourse.

The PAR findings offer a framework for change in teacher practice that principals and teacher leaders can mimic. The findings demonstrate that if participants engage in regular meetings in which all members share a common focus, then changes in practice can occur through conversations and data observations. The framework supports the use of the two critical components of teacher agency and evidence-based observations and observation conversations with other instructional needs within a school.

Finally, the PAR is essential to the practice community because we addressed the issue of access to instruction in the classroom. When students attending an early college desire to complete post-secondary education, in order to be prepared, students must have access to rigorous classroom instruction. Students who do not have access to thorough instruction are less likely to engage in the classroom conversation. If the teachers are not thoughtful in their planning, they do not provide every student with this essential basis of equity—access. Teachers must utilize appropriate strategies and protocols during classroom instruction to guarantee equity of voice. In this PAR, teachers and an administrator learned to work together and use observation data to provide specific feedback around equitable academic discourse to ensure a rigorous learning environment for all students. The PAR process could be useful in many school contexts to improve teacher practice.

## **Policy**

The PAR design addresses the lack of opportunities for all students to have access to rigor, including high-level questions and conversations in the classroom, and these concerns for equitable academic discourse opportunities for students are a national, state, and local district

challenge. District policy implementation recommendations include providing professional development at the administrator level in evidence-based observations, using data from observations to have conversations (not give feedback) with teachers about changing practice, and implementing effective communities of practice to strengthen teacher learning. The district closely monitors administrator walk-through data and observation data; however, they provide little input to administrators on how to use data from observations to guide teacher changes.

Districts need to establish protocols for principals to use that evidence-based data about teacher instruction rather than opinions. Principals need professional learning in using observation data to guide teacher-driven feedback, thus supporting stronger teacher agency. These recommendations support changes at the meso level and can change the way teachers view observations and feedback from administrators.

Secondly, local schools and districts must provide the necessary resources to implement an effective CoP that allows teachers to have time to collaborate, observe, and reflect. When schools and districts put structures in place to support teacher learning and collaboration, teachers build agency, which in turn supports them to make intentional changes to practice. Districts and schools can support teacher efforts to change practices by providing suitable structures (CoP) and feedback (observation and conversation data).

### Research

This PAR project used community learning exchange axioms and processes and improvement science methodology to develop a qualitative study that was guided by the following principles: make the project problem-specific and user-centered; accelerate improvement through networked communities of practice (CoP); develop an iterative improvement process and respond to teacher understandings; believe in the power of

conversation, and honor local wisdom. We rooted our practice improvement in inquiry and the use of communities of practice to drive learning (Bryk et al., 2015).

The research project and study contributes to the literature in all these areas. The participatory action research process relies on iterative evidence to make decisions, but practitioners can collect, analyze, and improve school and district practice through this process. Using observation data, post-observation conversations, and reflection to inform the next steps at the school level, we can serve as an activist dedicated to providing more equitable academic discourse opportunities for students. More research of this type is needed to better inform the school communities.

A second research recommendation would be to look more closely at how utilizing postobservation conversations supports teacher change to practice. Administrators have long been
urged to give feedback to teachers, but that feedback has not necessarily resulted in changed
practice. Still, more studies on using evidence-based observations and using observation data to
have conversations are necessary so that those practices become the standard instead of the
perceptual feedback that has not produced changes in practice. Some additional research
questions that I would offer to future researchers as a result of this study are:

- 1. How do you prepare administrators to provide evidence-based observations to teachers to provide specific data for improvement?
- 2. How do post-observation conversations affect teacher practice when teachers receive evidence-based observation data?
- 3. To what extent can a group of co-practitioner researchers promote change for an entire school focused on equitable academic discourse?

4. To what extent can an administrator help promote teacher agency and learning through communities of practice?

### Limitations

Several limitations had an impact on the study. First, in my position as the principal and instructional leader of the school in which this research took place, I served both as the supervisor and lead researcher of the co-practitioner researchers within the study. Therefore, I entered this research as an insider working in collaboration with other insiders (Herr & Anderson, 2014). Time was a limitation in the PAR study. Even though three improvement cycles spanned over eighteen months, we needed additional time to see the full effects of observation conversations on practice.

Other limitations include biases the CPR team or I held as an administrator. I combated this through research with the help of the CPR team. As a team, members planned, implemented, and reviewed the CPR/CLE agenda and actions, allowing multiple perspectives and voices to inform the CPR work.

A final limitation of the PAR was the selection of participants for the study. There are natural hierarchies and standards within the school, such as a supervisor and evaluator of the CPR members. I am in an influential role within the school, and I needed to ensure that all participants gave informed consent without coercion. The CLE methodology builds on the belief that all participants have the wisdom to share and deserve to have a voice in which to share it (Guajardo et al., 2016). Participants were invited to participate in the study and framed as asset-based and collaborative. The study size, a small group at one school (n=4), may have been a limitation. Thus, while these data were helpful to participants and the school, the generalizability is perhaps only useful for similar schools (Guba & Lincoln, 2000).

## **Leadership Development**

As I reflect on my growth as a leader of this participatory action research project, I examined my role as a researcher-practitioner and school leader. First, relying on the community learning exchange axioms was critical to the PAR and my leadership growth. I only began learning about and implementing the CLE axioms when I joined Project I<sup>4</sup> during the Summer of 2019. The CLE axioms provided a foundation for my leadership work as I set out to complete the PAR study. As I incorporated the axioms throughout the PAR, I understood them more and realized how they had become fully embedded in my work. These became my values as I learned to enact them in new ways throughout the PAR study (Guajardo et al., 2016):

- Learning and leadership are dynamic social processes as the CPR group participates
  in a community of practice, building on each other's strengths through personal
  narratives and authentic listening,
- Conversations are critical, and central pedagogical processes became evident as
  participants shared stories and understandings of promoting equitable academic
  discourse in the classroom.
- The people closest to the issues are best situated to discover answers as the CPR
  group collaborated to figure out how to promote more equitable discourse in their
  classrooms and across the school,
- 4. Crossing boundaries enriches development and the educational process as we cogenerate knowledge to address equitable academic discourse, and
- 5. Finally, hope and change are built on the assets and dreams of locals and their communities when teachers, over three cycles of inquiry, established the agency to make changes to practice.

As a result of this learning and research project, I became a stronger practitioner-researcher and a better school leader. Through the adoption of these axioms, I developed a facilitative role as a leader. Although I could determine from observations what I thought teachers needed to do, changing how we had the conversations from providing direct feedback to guiding teachers as they reflected and decided on changes was critical. The incremental process was, at first, a challenge, but, as I observed the changes in teacher agency and passion about their practices, I found that the teachers were then proponents and leaders of change in the school. This is the essence of distributed leadership—counting on the knowledge and skills already distributed among the teaching staff to diagnose and design for reform efforts (Spillane, 2013).

As a researcher, I designed an action research project focused on equitable academic discourse in the classroom. This project design supported me to empower a team to act. Kemmis et al. (2014) encompass my researcher-practitioner journey perfectly when they describe the power of participatory action research:

People turn to critical participatory action research to reshape their lives and work—to change the arrangements they find themselves in, and to take an active and thoughtful approach to changing themselves, their practices and the conditions under which they practice. They do so with the aim of making their own individual and collective practices more rational and reasonable, more productive and sustainable, and more just and inclusive. (p. 18)

In this process, I took an active role in changing myself as a leader and the conditions in which I lead. Together with my CPR group, we cultivated an environment to be inclusive of all of our students, working to ensure they have access to rigorous instruction.

As I reflect on the process of Project I<sup>4</sup>, I am amazed at the growth I have seen in myself personally and professionally as I took on the challenge of achieving a childhood dream—to obtain a doctorate. Professionally, I have seen changes in myself in two specific areas. The first area of development is time and relationships. Secondly, I have grown in my ability to conduct selective verbatim observations and have conversations with teachers about instruction in the classroom.

When I think about when I initially started the process, I needed to realize the value or importance of relationships. Through learning during the 2020-2021 school year during our doctoral classes, I realized that to have a successful CPR group willing to make changes, I had to establish relationships and trust within the group. I utilized strategies from gracious space, personal narratives, and protocols from IEL to facilitate trust and relationships among the CPR members. Aguilar (2016) describes the importance of leaders to "cultivate connections, understanding, and relationships for members of a community" (p. 34). I used these ideas as a baseline for my research for establishing relationships among the group members. My codebook referenced these working agreements (n=11) during the PAR Pre-Cycle as a space for participants to feel vulnerable to grow and learn from the process. As relationships began forming, I realized that I was moving much slower than I thought I would. I knew what I wanted to see from the PAR project, but I also knew in working with a group of co-practitioners, I needed to bring them to a level of understanding that would result in change for their practice. I have always checked off the boxes as fast as possible to get the job done. However, through the PAR process, I had to slow down, reflect, and take my time to ensure the next step was the right step for the team. In my reflective memos from Fall 2021 (n=6), I referenced how I was not moving as fast as I thought in every reflective memo. Moving slowly to go fast is more effective. In previous experiences, I was usually quick to complete a task, which did not always turn out as well as it could have. Throughout the PAR experience, I used feedback and reflection from interviews, CPR meetings, and CLEs to guide the group's learning and make the learning meaningful to the CPR members. To make changes in practice, participants and I need time to process and understand exactly what it means while reflecting on current practice to make wise and appropriate instructional changes in the classroom.

Throughout each PAR cycle, small changes helped teachers reflect and move forward in improving and having equitable academic discourse within the classroom. For example, during the PAR Cycle Two, I added coaching conversations to differentiate learning for CPR group members because each person was at a different place in their understanding and implementation of improving equitable discourse in their classroom. When I initially had coaching conversations with my CPR members, I was nervous, unsure exactly what to say, and realized I did a lot of talking during the conversation. For example, I spoke for ten minutes in one coaching conversation while the teacher only spoke for five minutes. As I reflected, I realized that I should not be doing most of the talking; if I asked better coaching questions, teachers can think about and solve their own dilemmas of practice.

During another coaching conversation round, I realized that I spoke more during the conversation with Black teachers than I did with White teachers. When I realized this, I was distraught; I questioned my coaching conversation abilities and wondered why I felt I needed to talk more with Black teachers. I even spoke to the Black teachers personally about their feelings about the coaching conversations and the amount of time I spoke during the discussion compared to when they spoke. From the second round of coaching conversations and this reflection, I knew I needed to do better.

I found that I needed to ask the right opening question based on the data from the selective verbatim walk-through so that the teachers could analyze and reflect on their practices and develop the next steps that made sense to them as classroom teachers. During the coaching conversations toward the end of PAR Cycle Two, I had conversations that are the exact opposite of how I started. I decreased my talk time during the conversation, listening more to the teacher, and asking more probing questions. As a result, the four CPR members established their next steps without me having to tell them what to do. Their confidence is not only growth for me as a principal but also for the CPR members. That growth can only occur for teachers if school leaders understand how adults learn best and how to literally bring out the best in them.

Throughout the process, ensuring relationships with the CPR group, that I moved at a pace that was effective for the CPR group, and that I have grown in my confidence to communicate with teachers through the coaching conversations has helped me in my leadership development. Each of these experiences contributes to learned practice for myself, which I will use as I continue to move forward in my leadership journey. As a leader who continues to reflect, accept, and change, I ensure that every student and staff member feels valued and heard and that I, as the adult leader, do not stand in the way of the growth of those around me.

#### Conclusion

As an instructional leader, I needed to look critically at myself to determine if I was fighting the equity fight for myself or my children, family, staff, students, and ultimately the community where I grew up in and am now a school leader. This internal reflection allowed me to take a step back and think about what I could do to improve conditions for students in the school. The initial challenge for me was getting teachers to view the importance of equitable academic discourse in their classrooms. However, as we co-created a space in which teachers

had dialogue like I wanted to see in classrooms, they willingly collaborated, learned, reflected, and changed their practices. Then, through a series of evidence-based observations with conversations, teachers enacted change based on real-time data from their classrooms. Through establishing the conditions and providing teachers with evidence through observation data, teachers acted purposefully and directed their growth, helped colleagues, and thus, felt a reinvigorated sense of teacher agency.

We developed ourselves by building on the assets of the team. Through collaboration and personal narratives, we learned to rely on our collective knowledge. We engaged in our work through storytelling, established trust, and the desire to improve conditions for students in the school. By truly understanding the problems we seek to address, we change actions that utilize our assets and overcome the challenges in our contexts. Combining the CLE axioms with improvement science principles can empower educators to be agents of change and establish agency. As change agents, we can remove barriers that prevent students from accessing rigorous and equitable school environments. We are people that desire to have relationships with each other, and through those relationships we are able to discover connections within the knowledge we already have. This project exemplifies what Bateson (1994) calls learning as homecoming-"learning to learn, knowing what you know, cognition recognized, knowledge acknowledged" (p. 206). It is through learning that we can take the unknown and turn it into something familiar, it is through learning that we establish a vision to better our school community, it is through that school community that we create a home for ourselves as leaders, the teachers, and the students and parents we serve.

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#### APPENDIX A:INSTITUTIONAL REVIEW BOARD APPROVAL LETTER



# EAST CAROLINA UNIVERSITY

#### **University & Medical Center Institutional Review Board**

rede.ecu.edu/umcirb/

#### Notification of Exempt Certification

From: Social/Behavioral IRB

To: <u>Lyndsay Britt</u>
CC: <u>Matthew Militello</u>
Date: 8/31/2021

Re: <u>UMCIRB 21-001662</u>

Promoting Academic Discourse: Implementing Common Equity-Based Protocols

I am pleased to inform you that your research submission has been certified as exempt on 8/31/2021. 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

Classroom Observation Form(0.01)
Community Learning Exchange(0.02)

Individual Interview Script(0.01)

Informed Consent to Participate in Research(0.02)

Observation Tool: Calling On(0.01)
Observation Tool: Question Form(0.02)
Observation Tool: Question Level(0.01)
Post Observation Conversation(0.01)

Promoting Academic Discourse: Implementation of Common Equity-Based

Protocols Dissertation Proposal(0.01) Recruitment Documents(0.01)

The I4 Comprehensive Assessment of Leadership for Learning (CALL)

Survey(0.01)

Description

Data Collection Sheet
Interview/Focus Group
Scripts/Questions
Interview/Focus Group
Scripts/Questions
Consent Forms
Data Collection Sheet
Data Collection Sheet
Data Collection Sheet
Data Collection Sheet

Study Protocol or Grant Application

Recruitment Documents/Scripts

Surveys and Questionnaires

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.

# APPENDIX B: CITI TRAINING CERTIFICATE



#### APPENDIX C: DISTRICT PERMISSION



# HERTFORD COUNTY PUBLIC SCHOOLS

HCPS, serving as a cornerstone of our community, will prepare graduates who are ready to meet the global challenges of education, career, and life.

701 North Martin Street • P.O. Box 158 • Winton, North Carolina 27986 • Phone (252) 358-1761 • FAX (252) 358-4745

June 7, 2021

To Whom It May Concern:

Hertford County Public Schools recognizes the benefits of participating in relevant, well-designed research studies proposed by qualified individuals. Approval for conducting such studies is based primarily on the extent to which substantial benefits can be shown for Hertford County Public Schools and its mission of educating students. The purpose of this letter is to notify you of the approval to use conduct your dissertation study titled, "Implement equity based protocols and strategies that foster academic discourse in the Early College" with participants in our schools. We also give permission to utilize the following spaces at Hertford County Public Schools to collect data and conduct interviews for his dissertation project: Network Improvement Communities, Community Learning Exchanges, and site and classroom visits.

The project meets all of our school/district guidelines, procedures, and safeguards for conducting research on our campus. Moreover, there is ample space for Lyndsay Britt to conduct her study and her project will not interfere with any functions of your role of the school. Finally, the following conditions must be met, as agreed upon by the researchers and teachers:

- Participant data only includes information captured from the state data collection strategies.
- Participation is voluntary.
- Participants can choose to leave the study without penalty at any time.
- Any issues with participation in the study are reported to the school administration in a timely manner.
- An executive summary of your findings is shared with the school administration once the study is complete.

In addition to these conditions, the study must follow all of the East Carolina University IRB guidelines.

We are excited to support this important work.

Respectfully,

William T. Wright, Jr., Ed.D.

Superintendent, Hertford County Public Schools

www.hertford.k12.nc.us Equal Opportunity Employer

#### APPENDIX D: CONSENT FORM: CPR GROUP ADULTS



# **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: Promoting Academic Discourse: The Implementation of Equity-Based Protocols

Principal Investigator: Lynds ay Britt

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

Address: 900 Camlin Street, Ahoskie, NC 27910

Telephone #: 252-332-9046

Study Coordinator: Dr. Matthew Militello

Telephone #:252-328-6131

Participant Full Name:		Date of
Birth:		
	Please PRINT clearly	

Researchers at East Carolina University (ECU) 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 research.

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

The purpose of this participatory action research (PAR) is to examine the extent to which the use of common equity-based protocols used in the classroom promotes academic discourse within an Early College setting. You are being invited to take part in this research because of the role you have within the school setting and would make a great volunteer. The decision to take part in this research is yours to make. By doing this research, we hope to learn together as a team of co-practitioners how common protocols are used across content areas with a focus on equity and academic discourse in the classroom.

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

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

There are no known reasons for why you should not participate in the 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 Hertford County Early College High School (HCECHS), Ahoskie, North Carolina. You will need to come *to the high school, multi-purpose room, approximately fifteen times* during the study. The total amount of time you will be asked to volunteer for this study is <u>fifteen</u> hours over the next fourteen months.

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

You will be asked to do the following: you may be asked to participate in an interview, classroom observations, and attend community learning exchanges during the study. The interviews, observations, and community learning exchanges may be recorded in addition to handwritten notes by the research team members. All of the interview questions will focus on your experience with using common protocols that are equity based focused on academic discourse in the classroom at HCECHS.

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

We don't know of any risks (the chance of harm) associated with this research. Any risks that may occur with this research are no more than what you would experience in everyday life. We don't 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?

We will not be able to pay you for the time you volunteer while being in this study.

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

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

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

Only the lead researcher will know that you are part of this research and unique identifiers will be used so that names are not associated with the research participant and data.

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

he information in the study will be kept confidential to the full extent allowed by law. Confidentiality will be maintained through 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. 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 252-332-9046 (days, between 8:00 am and 4:00 pm or email brittl19@students.ecu.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.

## 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.

Participant's Name (PRINT)	Signature	Date
Person Obtaining Informed Conservations or ally reviewed the contents of the conservations answered all of the person's questions	nsent document with the pers	•
Person Obtaining Consent (PRINT)	Signature	

#### APPENDIX E: CONSENT FORM: CLE GROUP ADULTS



# **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: Promoting Academic Discourse: The Implementation of Equity-Based Protocols

Principal Investigator: Lynds ay Britt

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

Address: 900 Camlin Street, Ahoskie, NC 27910

Telephone #: 252-332-9046

Study Coordinator: Dr. Matthew Militello

Telephone #:252-328-6131

Participant Full Name:		Date of
Birth:		
	Please PRINT clearly	

Researchers at East Carolina University (ECU) 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 research.

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

The purpose of this participatory action research (PAR) is to examine the extent to which the use of common equity-based protocols used in the classroom promotes academic discourse within an Early College setting. You are being invited to take part in this research because of the role you have within the school setting and would make a great volunteer. The decision to take part in this research is yours to make. By doing this research, we hope to learn together how common protocols are used across content areas with a focus on equity and academic discourse in the classroom.

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

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

There are no known reasons for why you should not participate in the 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 Hertford County Early College High School (HCECHS), Ahoskie, North Carolina. You will need to come *to the high school, multi-purpose room, approximately three times* during the study. The total amount of time you will be asked to volunteer for this study is <u>five hours</u> over the next fourteen months.

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

You will be asked to do the following: you may be asked to participate in an interview, classroom observations, and attend community learning exchanges during the study. The interviews, observations, and community learning exchanges may be recorded in addition to handwritten notes by the research team members. All of the interview questions will focus on your experience with using common protocols that are equity based focused on academic discourse in the classroom at HCECHS.

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

We do not know of any risks (the chance of harm) associated with this research. Any risks that may occur with this research are no more than what you would experience in everyday life. We do not know if you will benefit from taking part in this study. There may not be any professional or 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?

We will not be able to pay you for the time you volunteer while being in this study.

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

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

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

Only the lead researcher will know that you are part of this research and unique identifiers will be used so that names are not associated with the research participant and data.

# 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 through 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. 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 252-332-9046 (days, between 8:00 am and 4:00 pm or email brittl19@students.ecu.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.

## 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.

Participant's Name (PRINT)	Signature	Date
Person Obtaining Informed Consent orally reviewed the contents of the contanswered all of the person's questions a	sent document with the pers	*
Person Obtaining Consent (PRINT)	Signature	Date
Lyndsay Britt	Signature	 Date

# APPENDIX F: DATA COLLECTION INSTRUMENT:

# **CLASSROOM OBSERVATION FORM**

# **Classroom Observation Form**

Utilize the chart to take selective verbatim notes. It is important to note the time of all notes. After the observation, analyze the selective verbatim notes and create initial codes.

Time	Selective Verbatim	Code

# APPENDIX G: DATA COLLECTION INSTRUMENT: QUESTION FORM PROTOCOL

# **Question Form Protocol**

The tool is designed to collect basic information for the teacher to record <u>question forms</u>. Use selective verbatim by selecting and recording teacher questions. If the teacher addresses a question to a specific student, name the student and recognize if the student name is first or last and if there is think(wait) time or not. Record time if possible.

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

TIME	Teacher Questions	Question Form
IIIVIE	reacher Questions	Question rotti

Question Form Abbreviation	Question form explanation
Y/N ?	Yes/no questions
QW or	Question word (question starts with question word)
NQW	No question word (question does not start with question word)
FIB?	Fill in the blank question.
SNA	Student name after question
SNB	Student name before question
TT	Adequate Think Time for type of question
NIT	No think time used
Other	Anything else you observe about question form

# APPENDIX H: DATA COLLECTION INSTRUMENT:

# **QUESTION LEVEL PROTOCOL**

# **Observation Tool Question Level**

The tool is designed to collect basic information for the teacher to see what types (levels) of questioning the teacher is using. First, use selective verbatim by selecting and recording teacher questions and student responses (use T; or S: to indicate which). If possible, name the student to whom the teacher addresses the question. Second, analyze the evidence using names from the next page.

**Date** 

**Observer** 

Duratio	Duration of Observation to		
TIME	Teacher Questions and Student Responses (Use T: or S: to indicate speaker)	Level or Type of question	

# **Naming Questioning**

Teacher

Use these names and abbreviations to analyze the selective verbatim evidence for teacher questions and student responses.

Name Level or Type of Question. Use one type of question naming practice for your use with a teacher. You should choose based on the kind of language you use in your school or district or a type you want to introduce and use regularly.

Bloom Revised	<b>Five Practices Questions</b>	Lyman Think Trix
Remember/Recall	Assessing	Recall
Understand		Cause/Effect
Apply		Similarity/Difference
Analyze	Advancing	Idea to Example
Evaluate		Example to Idea
Create		Evaluation

If you are developing skills in the question form, you can combine the equity tools of Question Form and Calling On with Questioning Level – access and rigor are in the same observation. Note: WK (Who knows) is an addition from fall Project I4

Abbreviation	Full name	Explanation or Definition	
Question Form			
? word	Uses question	Uses question words to cue students that a question is	
	word	coming.	
Y/N ?	Yes/No	The question typically does not start with a question word.	
	Question		
WK	Who	A question that usually does not elicit student	
	knows?	responses/often used in conjunction with hand raising.	
FIB?	Fill in the	Typically, the teacher starts to make a statement, but about	
	blank	half way through the statement then shifts to fill in the blank	
		form of question.	
		Supports for Students	
TT/NTT	Think	Think time of 3-8 seconds depending on question level is	
	time/No think	typically useful. Takes time for teachers to get students to	
	time	depend on TT. NTT=no think time before calling on or	
		eliciting response	
TPS	Think-Pair-	Scaffolding for students to rehearse responses; requires	
	Share	every student response. However, cannot be "sloppy". T.	
		needs to insist on TPS protocol	

As you do these processes, you may add other abbreviations and names.

# APPENDIX I: DATA COLLECTION INSTRUMENT: CALLING-ON PROTOCOL

# **Observation Tool Calling-On Tool 1**

# 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

R*	Raised hand
CC**	Cold Call
CCD	Cold Call for Discipline
B-A	Blurt out-Accepts
B-I	Blurt out-Ignores
C&R	Call and Response: Teacher asks for group response or indicates students should "popcom"
ES	Uses equity strategy (equity stick or card to call on student)
TR*	Teacher repeats student response to class verbatim
TRV	Teacher revoices student response
TPS	Think and Pair and then Share
Other	Any other strategy you note

R	Raised hand
CC	Cold Call
CCD	Cold Call for Discipline
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TR	Teacher repeats student response to class verbatim
TRV	Teacher revoices student response
TPS	Think and Pair and then Share
Other	Any other strategy you note

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

Student Name OR number	Raised hand CO: R	Cold Call CO: CC	Cold Call Discipline CO:CCD	Calling out CO: C&R CO: B- A CO: B- I	Equitable method CO: ES	Simple Repetition TR	Teacher Revoicing TRV	Other
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								

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

## APPENDIX J: DATA COLLECTION INSTRUMENT: INTERVIEW PROTOCOL

# Promoting Academic Discourse through Implementation of Common Equity-Based Protocols

## **Individual Interview Protocol**

## Introduction

Thank you for taking time from your busy schedules to meet with me today. I appreciate your willingness to participate in this interview and will limit the time to one hour.

My name is Lyndsay Britt and my study is participatory action research (PAR) study. I, with a team of co-practitioner researchers (CPR), will examine the extent to which the use of common equity-based protocols used in the classroom promotes academic discourse within an Early College setting. I hope that this study will show the importance of common instructional practices across all content areas. This study will be used to inform decisions for the entire school.

#### Disclosures:

- Your participation in the study is <u>voluntary</u>. It is your decision whether or not to participate and you may elect to stop participating in the interview at any time.
- The interview will be <u>digitally recorded</u> in order to capture a comprehensive record of our conversation. All information collected will be kept <u>confidential</u>. Any information collected during the session that may identify any participant will only be disclosed with your prior permission. A coding system will be used in the management and analysis of the interview data with no names or school identifiers associated with any of the recorded discussion.
- The interview will be conducted using a semi-structured and informal format. Several
  questions will be asked about both the individual knowledge and skills gained and the
  organization practices used.
- The interview will last approximately one hour.

		•		
Interview Questions				
TURN RECORDER ON A	ND STATE	THE FOLLOWING:		
"This is Lyndsay Britt, inte	rvie wing		on	_for the common
equity-based protocols pro				
First Round:				

- 1. Can you name 2 or 3 practices that are equitable practices in the classroom?
- 2. What is your current understanding of equitable access?
- 3. How does feedback provided from observations affect your practice?
- 4. How do you plan for equitable access to discourse in your classroom?
- 5. How are all students getting access to rigor in your classroom?

#### Second Round:

- 1. Can you name 2 or 3 practices that are equitable practices in the classroom?
- 2. What is your understanding now of equitable access?
- 3. Based on feedback provided, how did it affect your practice?
- 4. How do you plan for equitable access to discourse in your classroom?
- 5. How are all students getting access to rigor in your classroom?

# APPENDIX K: DATA COLLECTION INSTRUMENT: CONVERSATION PROTOCOL

# **Protocol**

# **Post-Observation Conversations**

After a researcher conducts classroom observation, the researcher facilitates a 15-minute post-observation conversation with the teacher. The researcher takes notes on the observation and then codes the post-observation notes using a set of pre-established codes and open coding.

Date of Post-Observation Conversation:					
Teacher Iden	ntification Code:				
Brief Descrip	otion of Lesson Focus				
TIME	Notes of Conversation	Coding			

#### FOR DATA ANALYSIS

Researcher uses four categories with 23 possible codes for evidence from post-observation conversation. The codes and categories have been validated by calibration by other researchers (Saldaña, 2016; Policy Studies Associates 2020).

# Opening and Coaching Stance

- 1. Greeting
- 2. Quick turnaround on analyzing evidence
- 3. Transparency of conversation
- 4. Collaborative approach
- 5. Direct informational approach

# Processes and Strategies in Conversation

- 6. Follow-up questions: paraphrasing teacher responses
- 7. Question form: open-ended and clarifying questions
- 8. Ratio of talk time (observer: teacher)
- 9. Redirect to focus on teaching and learning
- 10. Responding to ideas from teacher
- 11. Positive feedback on key parts of the lesson
- 12. Acknowledging tensions of roles; emphasizes support and development role
- 13. Teacher knowledge: checks teacher knowledge about instructional practices
- 14. Observer summary: frequently summarizes conversation

#### Focus on Evidence

- 15. Opening question: related to equity data
- 16. Focus on evidence throughout, particularly equity data
- 17. Teacher has data in advance of conversation
- 18. Use of tool and factual evidence
- 19. Next steps teacher-driven & related to evidence and equity focus

# Body Language, Tone and Setting

- 20. Sitting side by side
- 21. Nonverbals: looking at teacher, nodding, sub-vocal responses (hmm)
- 22. Asset-based
- 23. Supportive

## APPENDIX L: DATA COLLECTION INSTRUMENT:

## COMMUNITY LEARNING EXCHANGE PROTOCOL

# **Protocol for Community Learning Exchange (CLE) Artifacts**

Each semester for the duration of the participatory action research study, the researcher will host a Community Learning Exchange on a topic related to the research questions in the participatory action research (PAR) project. At the CLE, the researcher will collect and analyze artifacts that respond to the specific questions listed below. The researcher will collect qualitative data based on the activities in which the participants engage at the CLE. The data will be in the form of posters and notes that participants write and drawings that participants make in response to prompts related to the research questions.

Participants will include the Co-Practitioner Researchers who sign consent forms and other members of the school or district community. All information will be collected, analyzed, and reported in aggregate form without attributing responses to any individual. All responses will be anonymous and no names will be attached to individual written or visual responses.

Date of CLE: Fall 2021/Spring 2022/Fall 2022

Number of Participants: 10

Purpose of CLE: The purpose of the Community Learning Exchange is to provide insight as to how teachers demonstrate an understanding of equitable access in the classroom and how they use classroom practices to promote access in their classroom.

# Questions for Data Collection:

- 1. What is equitable access?
- 2. What strategies do you use that promote equitable access in the classroom?
- 3. How do you work with others to help understand student access in the classroom?
- 4. How do you plan instruction so that equitable practices are used?
- 5. How does feedback play a role in your instruction?
- 6. What type of feedback is most effective in making changes in the classroom?

# APPENDIX M: SAMPLE AGENDA

Hertford County Early College High School CPR-NIC Meeting Date: November 16, 2021 Time: 1:45 PM - 2:45 PM Freeman 113

#### Purpose/Context:

Desired Outcome(s): By the end of this meeting, participants will have ...

1. Shared good news and purpose

- 2. Discussed Personal Narrative
- 3. Read and Discuss Academic Discourse Text

#### Norms:

- Be respectful of each other (no cellphones, paying attention, etc.)
  Start and End on Time
  Have an agenda

- Open minded Honesty/What happens in the room, stays in the room

What	How	Time	Notes/ Minutes	
Welcome/Purpose	Explain the purpose of the meeting and revisit norms	5		
Dynamic Mindfulness	Participate in Dynamic Mindfulness	2		
Personal Narrative	Think of a time when you were treated equally as someone else that did a disservice to you.	10		
Debrief CLE	Click here to view debrief protocol.	40		
Reflections	CPR members will write a written reflection.	5		
Next Meeting Date	January 11, 2021			
Dismissal				