

ABSTRACT

Krystal Lane Cox, LISTEN, REFLECT, ACT: A PARTICIPATORY ACTION RESEARCH STUDY TO SUPPORT FIRST-GENERATION EARLY COLLEGE STUDENTS USING STORYTELLING (Under the direction of Dr. Matthew Militello). Department of Educational Leadership, May 2023.

First-generation early college high school students have many needs when they walk into a classroom; therefore, determining how to help them achieve academic success is critical. This participatory action research study examined how teachers learned to listen, reflect, and act on students' stories to form relationships with students, which permitted teachers to become warm demanders. I analyzed data collected from community learning exchanges, interviews, reflective memos, meeting notes, and storytelling protocols over 18 months. I used an iterative coding and analysis process to determine trends and confirm conclusions. I verified the three findings through triangulation of the data and member checks. First, teachers needed to empower students to share their personal stories to support teachers in formulating relationships with their students. Teachers utilized protocols to help students reveal their stories. Next, teachers needed to engage students' stories by reflecting upon what they learned and determining the place and space where the information should impact learning. Finally, teachers needed to enhance student experiences by utilizing the information learned about the students from their stories to act and provide culturally responsive experiences for students. The study highlighted how cultivating student-teacher relationships was not a skill every teacher knew how to create professionally. As a result, implications for practice, policy, and research support why teachers need professional learning to cultivate these skills, policies to allow the protected time to build relationships, and research to further this work for teachers and students.

LISTEN, REFLECT, ACT: A PARTICIPATORY ACTION RESEARCH STUDY TO
SUPPORT FIRST-GENERATION EARLY COLLEGE STUDENTS USING STORYTELLING

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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May 2023

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DEDICATION

I dedicate my dissertation to an extraordinary group of people who have been with me since the beginning of this process.

To my parents, Willis and Angela. Thank you for instilling a love of learning in me. Thank you for supporting my dreams and letting me know that anything is possible with the help of God. Without your prayers, love, and support, I would not have made it.

To my husband, James. Thank you for allowing me to be selfish while completing this process. Thank you for giving me pep talks when I wanted to quit. Thank you for always having my back 100%. Thank you for your love, understanding, and support.

To my sister, Ashley. Thank you for your words of encouragement along the way. Thank you for allowing me to step away from my “big sister” duties to complete a lifelong dream.

To my sister circle, Marquitta, Aiyanna, Cynthia, and Kellie, you have all talked me off the ledge a million times. You were encouragers and reminded me of my purpose. Thank you!

To the EC Divas, Jennifer and Lyndsay. We started in Project i4 as strangers. Look at us now – Doctors of Education. I know I could not have made it without you pushing me, keeping me on track, and motivating me to be the best version of myself. Thank you!

To Johanna and Hugh, I don’t know what I would have done without the two of you making me laugh or checking on me throughout the process. You rock!

To my brother from another mother, Leon, we started this journey together and finished it together. I could never have made it without having you as my motivator and sounding board.

Last, I want to dedicate this to all the students and staff I have worked with over the years. You were all a part of my evolution to becoming an equity warrior. I hope you know I enjoyed fighting for you!

ACKNOWLEDGEMENTS

I thank my committee members who selected and supported me throughout this process.

To Matt and Lynda, the masterminds. Thank you for utilizing your desire to want to see educators grow and writing a grant that answered a long-awaited prayer for me. Not only did I get to receive most of my education for free, but I was able to focus on equity, which has always been a driver for my passion as an educator. Now I can articulate my passion and advocate for students easily because of the intentional exposure to literature I received throughout this process. Thank you!

To Jim Argent, I would like to thank you for being a great coach during Project i4 and seeing the potential I had to be in the EdD program.

To Chris Thomas, the coach of all coaches. I thank you. I didn't know how this relationship was going to go. I was super nervous. I know I have made a lifelong friend and ally in pursuing equity. Thank you for your insight, your ability to ease my anxiety with positive affirmations, and for letting me see your humanity. I could not have done this without you. You are a superstar! You are a game-changer!

Lastly, I want to acknowledge my co-practitioner research team and the ECU instructor team who helped me get here. You are too many to name, but you are etched in my heart forever.

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CHAPTER 1: NAMING AND FRAMING THE PROBLEM OF PRACTICE

“Hammond says, “All instruction is culturally responsive. To whose culture is it responding?” (Geller, 2021)

How does a teacher plan a culturally responsive lesson without hearing from their students? It’s impossible! Creating authentic and culturally responsive lessons cannot be done without listening, reflecting, and acting on the stories shared by students. According to Hammond (2014), culturally responsive teaching is:

An educator’s ability to recognize students’ cultural displays of learning and meaning making and respond positively and constructively with teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new concepts and content in order to promote effective information processing. All the while, the educator understands the importance of being in a relationship and having a social-emotional connection to the student in order to create a safe space for learning (p. 15).

While the definition does not explicitly discuss student voice, it is central to every aspect.

Teachers cannot make meaning or build relationships without truly listening and empowering student voices. A teacher cannot respond to their students’ cultures without allowing them the ability to share their own stories. Educators must understand what student voice is and how to create conditions for students’ stories to infiltrate schools and classrooms. I challenged the status quo and researched the changes teachers needed to make to utilize storytelling to academically support first-generation early college high school students.

Activating student voices and asking the students about their experiences must be a part of any instructional program. Educators must listen to their students’ stories to utilize appropriate culturally responsive teaching practices. The overarching research question of this study was: How do educators prepare first-generation early college high school students for academic

success? Culturally responsive teaching needs to be a part of the equation to success for first-generation early college high school students to find success. Teachers cannot change their pedagogical practices without authentic relationships with students. Teachers will not have the information to select the appropriate culturally responsive teaching practices without allowing storytelling from their students.

In the next section, I explain the focus of practice (FoP). Then, I discuss the rationale for utilizing participatory action research (PAR), the analysis of the assets and challenges related to the FoP, the significance of the project to practice, policy, and research, and the connection the PAR has to equity.

Focus of Practice

The focus of practice (FoP) for this research project was to prepare first-generation early college high school students for academic success. These students must feel like their voices matter. Sleeter (2012) says the following must be present for us to combat marginalizing our students.

1. Evidence-based research that documents connections between culturally responsive pedagogy and student outcomes
2. Educating parents, teachers, and education leaders about what culturally responsive pedagogy means and looks like in the classroom
3. Reframing public debate about teaching, especially teaching in diverse and historically underserved communities (pp. 578–579)

The focus of the research hinged upon these ideas. Idea number two surfaced as most important as I sought to ensure the teachers at Academy of Applied Technology (AAT) understood culturally responsive pedagogy and how to formulate relationships with their first-generation

early college high school students. While building relationships is an essential teaching principle, how to build relationships is not explicitly taught in teacher preparation programs. Therefore, ensuring teachers understood what culturally responsive pedagogy entailed and strategies to create the appropriate classroom environment was vital to the research process.

Rationale

By listening to the voices of first-generation early college students, I hoped to discover the culturally responsive practices needed to support students and to change teachers' pedagogical practices. Therefore, I anticipated leading teachers to listen to student stories and incorporate strategies that inspire relationships that would lead to academic success for students. Once listening to the students takes place, teachers would determine how to utilize the information gained from the students by reflecting on what they learned. Last, teachers would utilize the information to enhance the learning environment. The research that supported the rationale for this study was: first-generation college students in an early college high school, culturally responsive teaching, and professional learning for teachers.

The research study occurred in a North Carolina Cooperative Innovative High School (CIHS). The creation of these schools began in the United States in 2002 and in North Carolina in 2004. CIHSs serve one of three types of students:

1. Students at risk of dropping out of school before attaining a high school diploma,
2. Students with parents who did not continue education beyond high school, or
3. Students who would benefit from accelerated academic instruction. (NC Department of Public Instruction, 2017)

These small schools allow students to earn their high school diploma and up to two years of college credit within five years. CIHSs include various school structures, including Early College

High Schools, Middle Colleges, STEM-themed high schools, and Career Academies (NC Department of Public Instruction, 2017).

At the start of this research, North Carolina had 125 CIHSs. While the number of early colleges continued to grow in North Carolina, this was not true across the country. There were around 300 early college high schools in 28 states in the United States, with Texas and North Carolina leading the way. While these 20-year-old schools have found success, there is still much to learn compared to the history of public education that has served whites for over 385 years and students of color for 160 years (Siddiqi & Mikolowsky, 2019; Quillen, 2016).

I worked in the same school district I graduated from almost 20 years ago. As a student, my experiences supported this study and the need to help the students I served daily. As a first-generation college student and a student of color, I rarely felt like my teachers created authentic connections with me because they did not know who I was as a person. Rarely did they ask me who I was, what my family structure looked like, or even what I aspired to be later in life. As an educator, I had a chance to change this experience for my students. As the principal of an early college, I hoped to create personalized experiences and positive outcomes for my students. From listening to the voices of our students, we ascertained our strengths and weaknesses as instructional leaders to determine how we needed to create instructional practices to support our students' growth and development.

Lastly, the research study created opportunities for equity. Equity was an important aspect of what we did as a school and the rationale for this research. Eighty-four percent of AAT's first-generation college students were minorities, with 44% of students being African American and 40% being Hispanic. Meanwhile, minority students remain underrepresented in many of our collegiate institutions and later are in the minority in leadership positions in multiple

industries (Chen, 2005). Ultimately, the opportunities we provided for our students to find academic success were critical because they would impact their futures as college students, employees, and citizens. Therefore, this research was necessary. In the next section, I discuss the micro, meso, and macro assets and challenges surrounding the FoP.

Analysis of Assets and Challenges

I analyzed the FoP through the micro, meso, and macro assets and challenges. The micro-level focused on the assets and challenges at the school level. The meso level focused on the assets and challenges that impacted AAT through the lens of the school district and the community of Wilson County. Finally, the macro-level focused on the assets and challenges from a state and national perspective. This analysis included policies, mandates, and funding provided by the government. I met with teachers and counselors at AAT to uncover these assets and challenges on varying levels (see Figure 1). The fishbone diagram summarizes the key points highlighted during these discussions. The goal statement was that the teachers at AAT would listen to the voices of its students to prepare them for academic success.

Micro Assets and Challenges

We identified assets that have been in place since the school's inception. We believed these assets supported the growth of our first-generation college students. For example, teachers did not teach a course section with over 20 students. Small class sizes allowed teachers and students to create relationships with one another and for students to get to know their peers more intimately. Students were looped and had the same teachers for at least two classes while at the school. Each year a new cohort of students was selected and started as ninth graders.

We allowed students to explore multiple career options by providing relevant real-world experiences. Starting in the 9th grade, students took necessary classes and participated in

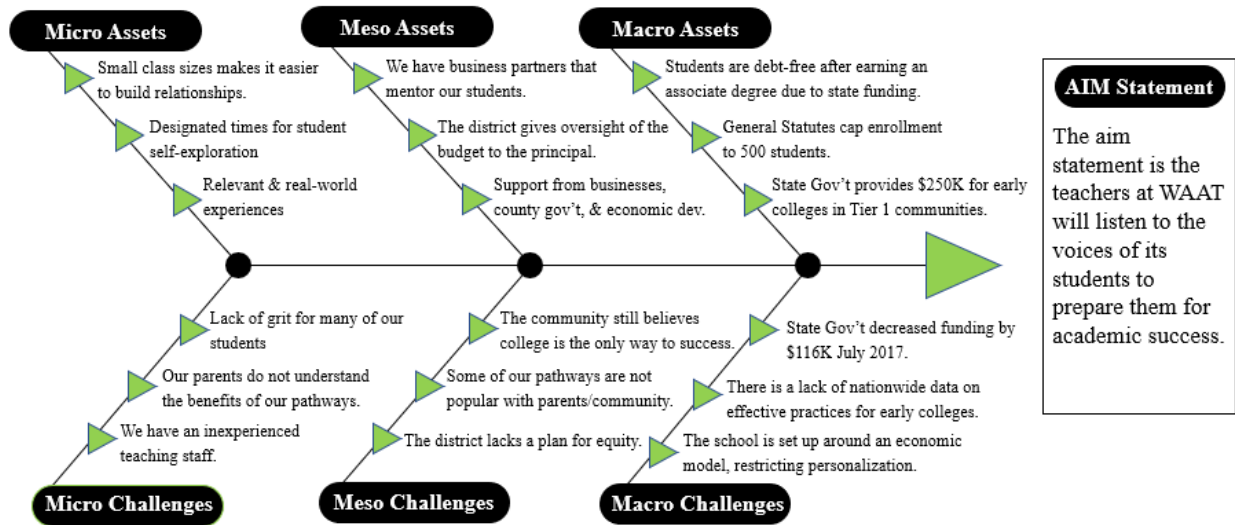


Figure 1. Fishbone diagram: Analysis of assets and challenges of the FoP.

activities to help them learn about various career opportunities in their community. We gave assessments to help students understand their personalities, strengths, and interests. We allowed students to visit college campuses and local businesses to expose them to options after high school. They participated in project-based learning assignments that allowed them to not only learn the required standards but creatively gain public speaking experience, a deeper understanding of content, and an opportunity to create a product.

We were fortunate to provide first-generation college students the opportunity to take community college classes while they are in high school. We partnered with Wilson Community College. Because AAT was an early college high school, the state of North Carolina paid for the students' college tuition. This partnership allowed our students to leave high school with up to 64 college credits debt-free.

We cannot ignore the challenges present at the school level. The youthfulness of the school staff created some barriers. First, we had an inexperienced teaching staff who had not had many years to learn some of the nuances of teaching. Second, long-range planning skills were absent for students. Third, we needed to continue to work on strategies to support students when facing challenging content. Lastly, many families did not understand the benefits of our pathways and placed value on jobs that make a large salary or provided a specific workplace environment. As a result, many of our first-generation college students selected pathways of genuine interest to them, only to be disappointed and pressured to select a seemingly safer pathway to success by their families.

Another challenge was the lack of understanding college instructors had for adolescent learners. Most instructors were unaccustomed to teaching students under the age of 18. These students lacked the traditional collegiate setting independence, which can make dynamics more

challenging. Due to the lack of development, students struggled while not knowing how to advocate for themselves. Instructors did not understand that scaffolding was not watering down instruction or expectations but providing student support. Unfortunately, the students sometimes suffered because of instructors' unwillingness to make pedagogical changes.

Meso Assets and Challenges

The district and community provided assets that encouraged the growth of our first-generation college students. The support we received from our businesses and county government allowed us to provide vital hands-on opportunities for students. Twelve companies allowed our students the opportunity to participate in job shadowing, internships, and mentoring, as well as providing funding and equipment for real-world experiences. The companies provided site visits for teachers to learn how to advise students and utilized real-world examples in their classrooms. In addition, our county government and economic development provided funding sources and a catalog of industry leaders for networking. These significant assets supported students who often did not have exposure to Science, Technology, Engineering, and Math (STEM) careers and aided in the academic growth of our students.

Going to a four-year college is not the only way to find success. Still, many of our families and community members believed the only way students could find success was to graduate from AAT and enroll in a four-year college or university. Community leaders and parents often ignored the voices of our students and overlooked that there were multiple ways to succeed. Students could leave an early college high school program and enter the workforce utilizing their two-year degrees. They could also enter the military already having the technical skills to qualify for high-paying jobs. Finally, they could continue their schooling and complete a four-year bachelor's degree. Our students' families lacked experience with going to college but

had experience leaving high school and entering the workforce. While we had researched and developed pathways ensuring high-demand jobs in the workforce, many families often perceived that going to college to earn a four-year degree was the surest way to reach future success. Until we could educate our parents and community to listen to the voices of our students and provide stories of first-generation early college students who traveled different roads to success, this would continue to be a challenge.

Macro Assets and Challenges

The State of North Carolina funds the tuition for courses taken by early college high school students. These funds are one of our greatest assets: a free associate degree from the community college for students. The state provides an allotment to select schools with a Cooperative Innovative High School status. The funds pay for college textbooks, supplies, teacher and staff positions, and field trip costs. Without this funding, we could not provide the support needed for these students. Early colleges receive calendar waivers, allowing them to start and stop their school year in line with their institution of a higher education partner. Last, the state created specific parameters to support low annual daily membership. Early colleges cannot enroll over 100 students for each class. This caps school enrollment at 500 students. This requirement ensures that early colleges remain small schools. Early college students have five years to complete their high school graduation requirements and a two-year degree. As a result, teachers and school leaders can provide more academic support and form deeper relationships with students.

Unfortunately, the state government reduced funding for early colleges in 2017. The economic status of each county determines the amount of funding each school district receives. AAT is in a tier-one community, meaning we are in a geographic region with a high poverty rate.

Even though we have more significant economic needs, our yearly funding dropped from \$326,000 to \$250,000. The loss of funding significantly impacted our school. We lost the ability to hire critical positions and created challenges in providing similar opportunities for our first-generation college students as their peers with degree-holding parents.

Finding research and data to support the growth of our school was challenging. More nationwide data would help state and national officials understand why early college high schools are critical for first-generation college students. De-funding, closing, or limiting how many early colleges started in a school district hurts the growth potential of our state's students.

Context and Significance

Next, I discuss the context in which the study takes place. Then, I explain how the early college high school plays a role in the research and serves as a vital element of the backdrop of this study. I also explain the significance of this study for AAT and other early colleges with a similar student population. Last, I will discuss the practice, policy, and research for this study.

Context for Study

The setting for this research was at AAT, an early college high school in North Carolina. The rural community has roughly 80,000 residents. The school is in the eastern portion of the county that experiences high poverty rates. A priority in the selection process is for first-generation college students. A first-generation college student is one whose parents have not earned a baccalaureate degree (NASPA, 2017). AAT demographics include 69% of enrollment identified as first-generation college students.

Additionally, 84% of first-generation college students are students of color. The school opened in 2016, and since its inception, there has only been one principal, but the teaching staff has seen turnover each year, especially in the Math department. Students at the school attend for

a maximum of five years to earn both a high school diploma and a two-year degree. AAT partners with Wilson Community College as its institution of higher education.

An interesting element about the school was its STEM focus. The school was co-created by Wilson County Schools, Wilson Community College, Wilson Economic Development, and several local industry leaders to solve a systemic community problem. Local industries struggled to find qualified employees for STEM careers. The creation of AAT fostered a grow-your-own solution for business leaders. The school partnered with different companies to provide mentoring, funding, tours, and hands-on experience to introduce our students to careers in STEM that they may not have imagined possible. The school created six pathway options for students to get their two-year degree from Wilson Community College based on community feedback. They include:

- Associate in Science
- Associate in Applied Science in Applied Engineering Technology
- Associate in Applied Science in Automotive Technology
- Associate in Applied Science in Biotechnology
- Associate in Applied Science in Criminal Justice Technology
- Associate in Applied Science in Information Technology: Networking and Cybersecurity

In this context, listening to the voices of our students to help them find academic success was essential. Culturally responsive teaching allowed our first-generation college students to achieve academic success as their stories transformed the selection of instructional strategies to those that sparked their interest and were relatable. In addition, this research allowed teachers to get a deeper understanding of our students to ensure they were making instruction relevant.

Significance

The study was significant to my context because it shined a much-needed light on the needs of first-generation early college students. We recognized we never asked our first-generation college students about their life experiences or used the information to incorporate their cultures into our classrooms intentionally. This FoP was vital because we could not ensure positive experiences for our students' post-graduation without the proper support in the high school setting. Students may perform well while walking our hallways, but we wanted to support their academic growth and future by humanizing them as much as possible.

Practice, Policy, Research

The practice of listening to the voices of first-generation early college students was essential for us as educators. Therefore, educational programs and district professional development need to teach teachers how to effectively use strategies that empower students to share their personal stories. Without understanding a student's background and prior knowledge, teachers cannot effectively create authentic learning environments for students.

Local, state, and federal policies on testing need to be adjusted to allow teachers the flexibility to incorporate storytelling protocols that elicit student voice and allow teachers to gain a deeper understanding of their students' backgrounds. Currently, teachers are afraid to take risks with their instructional time because of the demand to teach the standards from bell to bell. While this work is not standards-based, not allowing teachers the time to learn about their students stunts their opportunities to provide a culturally responsive environment. There should be mandates that require districts to allow time into their daily or weekly schedule to prioritize relationship-building between teachers and students.

Furthering the research on early college high schools is essential. Because early college programs support first-generation college students in rigorous environments, continuing to understand the correlation between this small school structure and why it is a breeding ground for innovation and personalization is vital work.

Connection to Equity

The FoP relates to equity issues because there was an apparent neglect of focusing on the needs of first-generation college students in an early college high school. Our school allowed underrepresented students in college settings to jump-start their college experience by taking community college courses while in high school. The underrepresented population for our school was first-generation college students. This study focused on determining what culturally responsive practices needed to be in place to support first-generation early college high school students with rigorous curriculum and instruction. Teachers listened to their students' voices by providing activities to understand the culture each student brought with them into the classroom. The missing element of equity was hearing from the first-generation college students themselves. Without their voices, we were assuming the needs of this group of students. Two equity frameworks supported the focus of practice: the political-economic framework of Labaree (2008) and the psychological framework represented in the work of Steele (2010).

Political-Economic

First-generation college students must overcome organizational factors to achieve equitable access leading to academic and social success. These factors include building relationships and creating a seamless learning environment. Labaree (2008) strongly argued that teachers needed to develop a teaching style that allowed them to build fruitful relationships with students. He mentioned that this was challenging because "teachers are highly reluctant to

change it [teaching persona] to carry out the latest social mission that comes to them from above" (Labaree, 2008, p. 458). By not achieving buy-in from our staff, the lack of change in their teaching style could perpetuate the lack of access to the accurate knowledge needed to make the structural changes to support our first-generation college students.

As a group of educators, working to establish a plan to foster relationships with our first-generation college students was vital to finding out the needs of our students. We needed to operate as integrated components of a single entity. We needed to create a system that negates the semi-autonomous segments found in one school (Labaree, 2008). Underlying factors such as district and state mandates and leadership differences created variances between classrooms and school-to-school, hindering first-generation college students from consistently accessing what they needed throughout their high school careers. Our teachers needed to consistently provide rigorous instruction, exhibit a sound understanding of the curriculum, and connect instruction to each student's pursuit of academic success. Strategic thinking was essential to ensure these organizational factors did not interfere with our teachers' work to provide equitable opportunities.

Psychological

Steele (2010), the author of *Whistling Vivaldi*, illuminates the issues of how stereotypes affect us all. First-generation college students experience judgment for several reasons. First, they are in danger of stereotype threat, meaning that misjudgment often follows these students simply because they are minorities, and some come from low-socioeconomic backgrounds. Second, first-generation college students are underrepresented in baccalaureate college settings. Therefore, teachers could question whether these students will succeed in an early college setting.

Understanding how to help these students not focus on these threats and contingencies to eliminate academic pressure can positively affect student performance for first-generation college students. Talking to students to understand their strengths, weaknesses, fears, and aspirations can have a long-lasting effect. Steele (2010) completed several research studies that assessed eliminating the psychological pressure to help students perform to their highest potential. This research was vital to address the equity concerns for our students. We needed to find ways to eliminate stereotype threats for our students.

There were equity concerns for first-generation college students. These students were underrepresented in collegiate settings, and we were compounding the issue by not capturing their voices, stories, and experiences to help us make equitable decisions about providing instruction. To ensure we provide these students with equitable opportunities in our early college setting, we had to be willing to inspect the political-economic and psychological impacts on the mindsets of these students. Through the process, we listened to the stories of our students, built relationships, and then began to make the necessary changes to our instruction.

Participatory Action Research Design

Participatory Action Research (PAR) is a qualitative research design process that allows researchers to use qualitative data to formulate a conceptual framework. This research method gives a voice to the team of researchers who were a part of the environment being researched. Together, we worked to solve a problem in our context. For this study, we answered a question that was a problem of practice for us as educators. We recognized through the research question that we were not utilizing student voice to create authentic, culturally responsive environments. As a result, we addressed research questions that led to meaningful outcomes for teachers and students (Creswell & Creswell, 2018).

The PAR focused on designing a process to prepare first-generation early college high school students for academic success. Working with a team of educators as co-practitioner researchers (CPRs), we worked together to solve the overarching question of supporting our first-generation early college students to help them find academic success. CPRs conduct research in their context with others who have a vested interest in solving a community problem (Herr & Anderson, 2014). Our team aimed to ensure that we provided first-generation early college high school students with culturally responsive curricular experiences based on their context. We eventually realized that before we could impact the curricular experiences, relationships had to be built between the teachers and the students. The PAR followed an improvement research process that consisted of multiple methods that developed the knowledge for teachers. We transformed good ideas into practices that worked, built human capabilities necessary for this learning to spread, and directly addressed a significant challenge in every improvement effort "building for change" (Bryk et al., 2016). Another method we used was community learning exchanges (CLE) to determine the experiences of our graduates to facilitate the change needed in our school. To create effective CLEs, we must recognize that the people closest to the problem are the best people to help solve it (Guajardo et al., 2015). Magnifying the voices of our graduates who were once students through CLEs, would ultimately lead us to solve the problem of helping our students reach success through building relationships. CLEs focus on five axioms, which are:

- a. Learning and leadership are dynamic social processes,
- b. Conversations are critical and central pedagogies,
- c. The people closest to the issues are best situated to discover answers to local questions and problems,

- d. Crossing boundaries enriches how we develop and learn, and
- e. Hope and change are built on the assets and dreams of locals and their communities.

(Guajardo et al., 2015).

These axioms were at the center of our research. The CPRs understood that to inspire change, we must learn together. We must listen to our students because these are the lives we are impacting.

We also understood that the teachers on the CPR team brought a great deal of knowledge, practice, and experience to the conversations because they worked with the students daily.

Purpose Statement, Research Questions, and Theory of Action

The purpose of the PAR study was to determine the best ways to support first-generation early college students to find academic success. Four teachers, who taught STEM courses, volunteered to make up my CPR team. We engaged in two iterative action learning cycles to explore the stories of our students and help us connect learning for them. From this, we hoped to create culturally responsive experiences infused with the knowledge gained from listening to our students' stories. The overarching research question is: *How do we prepare first-generation early college high school students for academic success?* The research sub-questions included:

1. How do teachers deepen their understanding of the experiences, interests, and knowledge of first-generation early college high school students?
2. How do teachers create student-centered and culturally responsive learning environments for first-generation early college high school students?
3. To what extent do teachers modify their practices to support first-generation early college high school students academically?
4. To what extent does my leadership evolve as I lead a co-practitioner research team to change outcomes for first-generation early college high school students?

These questions guided the PAR, focused on culturally responsive practices (CRP). They informed the theory of action: If teachers can listen to the knowledge and experiences of their students, they can embed culturally responsive strategies into their pedagogical practices to help students find academic success. The study results informed our staff to ensure we were providing the student-directed learning environment that is a part of our school's mission. Ultimately, our students would feel their cultures and backgrounds matter. As a result, they could formulate relationships with staff members, who would then use the information to take culturally responsive actions that support our students' academic success. In turn, students could achieve academic success because they see themselves as heard, seen, and valued members of the learning environment.

Project Activities

Along with a team of CPRs, I engaged in and completed two action research cycles. We begin with Cycle One. As the lead researcher, I formulated the CPR team through purposeful sampling during this cycle. After this, the team conducted one CLE consisting of graduates of the high school, who were all 18 years old or older. Most of these graduates were first-generation college students. Each CPR team member participated in an interview to share their perceptions of culturally responsive teaching. Finally, the team began researching the meaning of culturally responsive teaching by utilizing the work of Hammond. Professional learning occurred during the CPR meetings each month.

PAR Cycle Two focused on utilizing protocols to learn more about student stories. I completed observations to see if teachers created equitable learning environments through questioning. After the observations, I followed up with each teacher to have coaching conversations about what I had noticed and for the teachers to determine one goal they would

like to work towards for improvement based on the observation data. A second CLE and interviews were conducted to assess the growth of the participants and gain insight from other AAT staff members about their impressions on the implementation of cultural responsiveness in our school.

Summary

Using the CPR team, CLEs, and improvement sciences, we addressed the FoP. By listening to the voices of those closest to the situation, we determined that helping teachers learn how to create supportive relationships with the students was essential to creating a culturally responsive environment and could ultimately help our students achieve academic success. For these students to succeed, we understood that teachers must be willing to adjust their pedagogical practices based on the stories of their students, which required them to reflect and then engage with students, exhibiting active change. The PAR allowed a talented group of educators to serve as the CPR team to participate in this discovery process.

The final dissertation will include six chapters. The five remaining chapters will discuss the following topics. Chapter 2 provides a review of the research literature that surrounds the FoP. Chapter 3 outlines the methodology and examines how I conducted the research, the research setting, the study participants, and who helped complete the research as a part of the CPR. Chapter 4 establishes the context for the FoP and an overview of Cycle One. Chapter 5 discusses PAR Cycle Two and my findings. Finally, Chapter 6 reveals the study's implications and reflects on how I grew as a leader and researcher throughout this process. I also provide a conclusion for the research based on the 18-month study.

CHAPTER 2: LITERATURE REVIEW

While students should be at the center of their educational experience, they generally have little to say about how it is delivered or what they really need (Benner et al., 2019). In this review of the literature, I discuss the importance of what first-generation college students need to thrive in a collegiate environment. I define barriers and assets for these students. Understanding the early college high school model is important to the research we conducted. Therefore, explaining the nuances of this small school model and how it supports first-generation college students is essential. Culturally responsive teaching is a term used often in education, so defining and highlighting what is needed in a culturally responsive environment is included. Finally, I address professional learning for teachers and how the act of listening to students' voices cannot be achieved without teachers having the place and space to learn more about this practice. Understanding ways to build the capacity of teachers is critical to the work of cultural responsiveness. Figure 2 graphically represents the three sections of this chapter. Each section of the graphic is highlighted in yellow to signal the focus for each section.

First-Generation College Students in Early College High Schools

Early college high schools were created to support underrepresented students in collegiate settings. They were created to give students the foundation and skills necessary to find success and ultimately graduate from a four-year college or university. When looking closer at the underrepresented population of students served in early colleges, many schools ensure that one group, first-generation college students, is selected among the accepted students each school year (Edmunds, Arshavsky, et al., 2017a). In this section, first-generation college students will be defined, along with explaining their barriers, needs, and assets. It will highlight how

What are the barriers, needs, and assets of first-generation college students? What are early college high schools and how does the model support first-generation college students?
What is needed to create a culturally responsive environment?
How do we build capacity for teachers to be culturally responsive?

Note. The first section of the literature review addresses first-generation college students and their connection to early college high schools.

Figure 2. Literature review overview (first section).

early college high schools support first-generation college students by understanding these attributes.

First-Generation College Students

The literature was examined to understand the barriers, needs, and assets of first-generation college students. A first-generation college student is generally described as a student whose parents or guardians have either no college experience or some college but have not completed a four-year degree (Ishitani, 2006; NASPA, 2017; Padgett et al., 2012; Pascarella et al., 2004; Whitehead & Wright, 2017). This section will outline several barriers, needs, and a number of assets first-generation college students bring with them to the collegiate setting.

Barriers for First-Generation College Students

First-generation college students can come to the table with some crippling barriers that can stunt their academic growth if not addressed through interventions to help them navigate the collegiate experience. First-generation college students are often defined as traditionally at-risk students (Whitehead & Wright, 2017). They can be considered at risk due to attributes such as low socioeconomic status, race, gender, and language barriers, among others (Pascarella et al., 2004; Whitehead & Wright, 2017). These factors can limit their access to the necessary resources and experiences to find success in a collegiate setting. First-generation college students often come to college underprepared. One in three first-generation college students come to college not having determined a major. They typically earn fewer credits each year due to part-time enrollment, late starts, breaks in attendance, or leaving without completing the degree (Chen, 2005). Areas of understanding these students often lack, yet are considered crucial for college readiness, are academic preparation, academic behaviors and attitude, and understanding college processes (Edmunds, Unllu, et al., 2017b). Other at-risk factors that cause barriers to post-

secondary completion are lower grades, the need for more remedial assistance, and being more likely to withdraw or repeat college courses. Unfortunately, these at-risk and underrepresented students have barriers that can cause them to graduate at lower rates than their peers whose parents graduated college (Chen, 2005).

Psychologically, first-generation college students can suffer from imposter phenomenon or syndrome (Whitehead & Wright, 2017). Imposter Syndrome is a condition where sufferers feel they are in the wrong place; it manifests in fear of exposure whereby someone might realize that they shouldn't be there and ask them to leave (Clance & Imes, 1978). Students who suffer from this may feel like their presence on a college campus is not their rightful place. They may feel like they are going through the motions of a college student, but they do not really belong because of their background or needs. They may not feel worthy and struggle to identify with non-first-generation college students (Whitehead & Wright, 2017). These students lacked opportunities prior to college to understand the college-going culture, unlike their continuing-generation peers (Engle et al., 2006). Therefore, the mental image of them being on a college campus can create fear and stress as they have not been exposed to representations of what their life could be as a college student or the possibilities of graduation (Chapman, 2017).

First-generation college students are often not prepared academically for the rigor of college. While they make up a third of the students enrolled, only 27% earn their degree in four years (Whitley et al., 2018). Much of this can be attributed to the lack of pre-collegiate curriculum experiences in high school. Many students struggle with reading and writing, although they may have had high grade point averages at their high schools. Students often lack the ability to synthesize their ideas when they write. This may occur because they had underprepared teachers or a lack of resources in their schools (Wahleithner, 2020). Many of

these students attend schools that do not have a college-going culture or expectations. All these barriers create disadvantages for first-generation college students when they are not addressed.

Needs of First-Generation College Students

The needs of first-generation college students are clear and explain why only 26% of them complete their bachelor's degree within eight years in comparison to the 68% of non-first-generation college students who complete their degrees in the same amount of time (Chen, 2005). As indicated by this completion gap, first-generation college students have additional needs that must be addressed in order for them to find success. Two main requirements for first-generation college students to find success are needing more advising and mentoring time and needing opportunities to participate in curricular and co-curricular activities. Coincidentally, even if these supports are available, they still have a need to defend their college identity.

First, they need more advising or mentoring time at school (Demetriou et al., 2017; Whitehead & Wright, 2017). They typically do not have the external support of non-first-generation college students. They need more support to obtain their goals from someone who has already achieved a career goal or someone who can help them make appropriate academic choices, like a faculty mentor. This time will allow them to build a relationship with someone who has the needed knowledge and can model goal achievement and collegiate behaviors. It is someone who can ask questions on how to navigate the college-going experience (Demetriou et al., 2017).

First-generation students need activities related to extracurricular and cocurricular experiences to find success. Their participation on campus can serve as a motivator, provide a sense of community, and be a way for them to build their knowledge. Some of these activities include participating in research, community service, student organizations, studying abroad,

engaging in coursework, and obtaining a job related to their studies (Demetriou et al., 2017). These on-campus activities can help them to feel a part of their environment, helping to minimize struggles with barriers like imposter syndrome and offering them knowledge they would not be able to acquire outside of their college community.

To this end, first-generation college students still have a need to defend their identity as a college student to family and friends. They feel alone in their pursuit. So, they seek external affirmation from their friends, instructors, and college-going peers. They need these affirmations because they are singularly selecting a goal of completing college as a necessary step to accomplishing a larger pursuit (Whitehead & Wright, 2017). They are enduring an experience those closest to them cannot understand, so receiving affirmation and assurances that they are making the right decisions is critical to closing the completion gap for these students.

Assets of First-Generation College Students

While much of the literature focuses on the barriers and needs, it is important to look at the assets that first-generation college students are bringing with them to the collegiate setting. A recent study by Hands (2020) shines a light on how first-generation college students have conquered the transition to online learning during the COVID-19 pandemic, illuminating some strengths of first-generation college students that have been not frequently identified in prior studies. Three assets exhibited by first-generation college students is their ability to create authentic relationships, their self-awareness and thoughtfulness, and their desire to learn and then support their own community. These assets can be used to help bolster first-generation college students and overcome the barriers they may bring with them to college.

First-generation college students thrive with the support of college instructors, librarians, advisors, and other trusted staff members if they have the opportunity to build authentic

relationships with them. They are good at taking the initiative to cultivate these networks, and these relationships can serve as a much-needed catalyst to help them overcome negative barriers that easily confront them (Hands, 2020).

First-generation college students are self-aware and thoughtful when they reflect on their life experiences, personal strengths, and weaknesses. While they might not always know what they do not know, they easily do comparison and contrasts against the experiences of their peers. The ability to do this allows them to identify what they need help with to be successful (Hands, 2020).

Lastly, they love civic engagement. They like to serve and have community networks. This allows them to form peer support groups (Hands, 2020). While that study's circumstances may have been different, these are assets first-generation college students have that need to be exploited to help them thrive in a collegiate setting. After understanding the barriers, needs, and assets of first-generation college students, it is clear that a deeper dive into these topics is important research, especially from the perspective of an early college high school student.

First-generation college students bring a unique voice to the early college setting. After understanding their barriers, needs, and assets, it is important that teachers in early colleges understand how to empower these students to share their backgrounds and their perspectives in order to be successful academically in their classrooms. Therefore, when thinking about the first-generation college students we serve, we must understand the barriers that exist for them, their personal needs as a sub-group, and the outlook on them entering careers for the pathways we promote at our school. The research does not make these connections to the early college high school setting frequently, but it can be inferred that there are significant needs and barriers for students taking community college classes as ninth graders. Understanding these needs, barriers,

and strengths can help us define the steps necessary to them being successful as they pursue degrees in a variety of pathways.

One of the main attributes of early college high schools is to help first-generation college students overcome their barriers and needs and allow their assets to help them find success in post-secondary settings. The next section explains the history and purpose of early college high schools and, ultimately, how these are good environments to support these students.

Early College High Schools

There are multiple barriers and needs for first-generation college students that are not always met in a traditional high school setting. Thus, the emergence of early college high schools, also referred to as early colleges, in 2002 was the beginning of a type of school that would address the needs and barriers of underrepresented groups of students in colleges (Edmunds et al., 2012). Early colleges are small schools of choice that allow students to earn their high school diploma and up to two years of college credit that is either transferrable or allows the students to earn a two-year degree (Edmunds, Unllu, et al., 2017b). These schools initially started with the support of the Bill and Melinda Gates Foundation, and the national initiative is now supported by Jobs for the Future (Edmunds, 2012). While states have the autonomy to add specifications to their definition of an early college, on a national level, they are designed with these characteristics in mind:

- Early college schools are committed to serving students underrepresented in higher education.
- Early college schools are created and sustained by a local education agency, a higher education institution, and the community, all of whom are jointly accountable for student success.

- Early college schools and their higher education partners and community jointly develop an integrated academic program so all students earn 1 to 2 years of transferable college credit leading to college completion.
- Early college schools engage all students in a comprehensive support system that develops academic and social skills as well as the behaviors and conditions necessary for college completion.
- Early college schools and their higher education and community partners work with intermediaries to create conditions and advocate for supportive policies that advance the early college movement (Jobs for the Future, 2008).

It is important to review the history and purpose of early colleges to understand how it prepares students for college and career success.

Early college high schools were created to bridge the gap between secondary and post-secondary experiences (Duncheon & DeMatthews, 2018). The concept of an early college focuses on three main issues for underrepresented students in collegiate settings: academic preparedness, achievement, and transition to college (Brewer et al., 2007) and were created to increase the number of students that graduate from high school and who were prepared for a postsecondary education. Students who attend these schools are normally those who are underrepresented, in the middle academically or are less likely to attend college. Early colleges are mostly located on college campuses, and students study to earn a high school diploma and an associate degree or two years of college transferrable credit in four to five years. These dual credit courses give them credit for both their high school and college transcripts (Quillen, 2016). The schools are uniquely designed to be small in order to best address the needs and barriers of

their students (Edmunds et al., 2012). These are schools of choice that students have to oftentimes apply and be selected to attend (Duncheon & Muñoz, 2019).

Researchers determined that students can find success in college settings if they have been prepared academically, understand appropriate academic behaviors, and understand the college-going process (Edmunds, Unlu, et al., 2017b). To build readiness strategies for students, early college high schools develop opportunities for students to gain these skills. For example, they must provide rigorous courses for students, provide dual enrollment or advanced placement courses, provide support to teach students strategies like study skills and provide logistical preparation for students to help first-generation college students with the enrollment process (Edmunds, Arshavsky, et al., 2017a). Rigorous academics and clear career pathways are addressed in early college models (Brewer et al., 2007). More than one-third of students are unqualified or marginally prepared for college (Perkins, 2004), nor are they prepared with the necessary skills for the world of work (Edmunds et al., 2012) when they graduate from high school. Teachers hold a large part in the success of early college students because their knowledge impacts the preparation of these students in college-level courses. Teachers rely on their personal and professional experiences on how to provide the appropriate experiences and rigor for students. Thus, their development is tantamount to their willingness to explore and try new teaching practices (Duncheon & Muñoz, 2019). Meanwhile, the principal must prioritize instructional rigor, targeted interventions, embedded supports, and student enrichment for the school and students as a whole to find success (Duncheon & DeMatthews, 2018).

Organizations like the former North Carolina New Schools Project and, more recently, RTI International have outlined characteristics that these schools should possess in order to

support students with achieving successful outcomes. RTI International outlines five areas of focus for an effective early college high school. They are:

- A Next Generation Early College demonstrates a commitment to creating an environment that supports the social and emotional learning of all students through a personalized approach.
- A Next Generation Early College demonstrates teaching for learning through innovative instructional practice that builds student self-efficacy through active collaboration.
- A Next Generation Early College leverages the connections among school, home, the community, and workplace to expand authentic learning opportunities and partnerships.
- A Next Generation Early College ensures that students are prepared for post-secondary education and careers in a rapidly changing global economy.
- A Next Generation Early College embodies a growth mindset for professionals that pushes boundaries through shared responsibility, reflective practice, and inquiry. (RTI International, 2019).

If a school is functioning under the “Prepared” or “Model” ratings, students should be finding college and career success when graduating from an early college high school program (RTI International, 2019).

First-generation college students have a set of needs and barriers that must be addressed for these students to find success. They need mentoring and curricular opportunities to gain the knowledge that their continuing-generation college peers have been raised with. To this end, institutions like early colleges provide a small environment with personalization for these

students to thrive. These schools allow students the ability to gain the knowledge necessary to be successful in a college or career setting after graduation. If we are going to provide a personalized plan for first-generation college students to thrive in early colleges, we must first provide the time for their voices to be heard. Teachers must be willing to create opportunities for students to share their stories in the classroom. In the upcoming section, a dissection of culturally responsive teaching research will show how this instructional methodology can support the needs of first-generation college students.

Culturally Responsive Teaching that Provides Student Voice

After gaining an understanding of the main character in the study, first-generation college students, and how early college high schools support their academic growth, understanding and acknowledging how culturally responsive teaching helps these students is necessary. Culturally responsive teaching is “using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them” (Gay, 2010, p. 31). It allows students to learn through their own cultural filters (Gay, 2013). Culturally responsive teaching highlights the student differences as valuable to the educational environment and the development of its students (Gay, 2013). For culturally responsive pedagogy to be successful, Ladson-Billings identifies three criteria:

1. Students must experience academic success.
2. Students must develop and maintain cultural competence.
3. Students must develop a critical consciousness through which they challenge the status quo of the current social order (Ladson-Billings, 1995).

With this being said, in order for teachers to have cultural knowledge about their students, they must provide a time for students to share their prior experiences and frames of reference, among

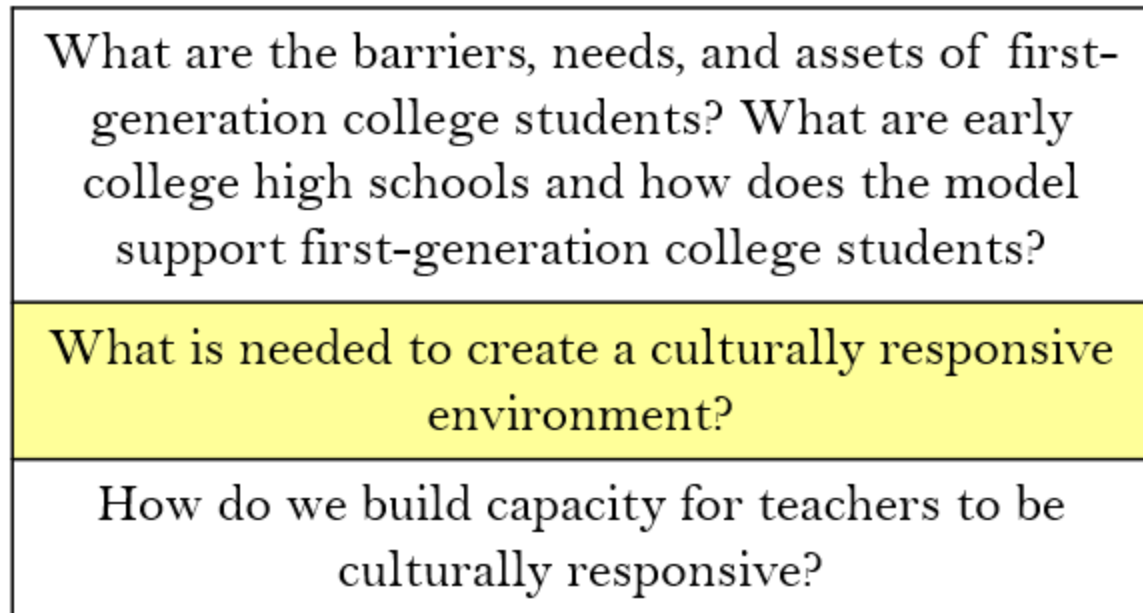
other stories that can add color and insight to the culturally responsive planning process for teachers. The highlighted portion on Figure 3 shows the focus for this section.

Academic excellence is critical and achieved by defining the culture of the students. For example, allowing students to use their native language creates comfort for students. Students can gain academic skills in various ways, but all students need literacy, numeracy, technological, social, and political skills to be productive citizens. Students must also gain a sociopolitical consciousness that allows them to identify inequalities (Ladson-Billings, 1995).

Teachers can provide culturally responsive teaching by combining an understanding of three key elements. This section will discuss how first-generation college students can be successful in culturally responsive classrooms where teachers understand how critical it is for teachers to build a relationship to understand their students' identities. Next, understanding how the teacher's personal beliefs, attitudes, and behaviors create their disposition and impact the support given to first-generation college students. Lastly, we seek to understand the elements of culturally responsive teaching and how to create independent learners.

Understanding Student Identities

Understanding the way first-generation college students identify themselves is important. Students from nondominant communities, like first-generation early college students, can lack success in schools (Milner, 2010). To help mitigate this issue, understanding the impact of culturally responsive pedagogy, along with a student's community, is important for student success. Teachers should understand that the behavior a student exhibits in a classroom can be impacted by the student's community. For teachers to incorporate their students' community into their classrooms, Garland and Bryan (2017) suggest the following: community messages



Note. The second section of the literature review addresses what is needed to create a culturally responsive environment for students.

Figure 3. Literature review overview (second section).

regarding academic achievement, community-school tutoring programs, and community and place-based learning. Thus, they must understand that each student brings value and knowledge into the classroom from his or her life experiences. While these students may seem marginalized and plagued with deficiencies, with a closer and culturally responsive look, these students are creative, resourceful, and accomplished (Gay, 2013). Understanding how the brain processes information is the beginning of understanding a student's identity.

Understanding a student's identity requires a teacher to understand a student's brain and how his or her culture impacts how he thinks. Culture "is the way every brain makes sense of the world" (Hammond, 2014). A student's brain encodes learning opportunities and guides student behaviors by requiring the mind to rely on life experiences, hence creating the student's identity. Because of cultural experiences, students may react certain ways to educational environments. For example, if a student comes from a collectivism culture, he or she may perform and learn better working in a team dynamic (Hammond, 2014).

Culturally responsive teachers want to understand how the brain works to enhance the learning experiences for their students. Understanding the background and experiences of students helps them to utilize their schema to process information. Culturally responsive teachers are the bridge to understanding for students. They utilize strategies and skills to help students build their intellectual capacity. For example, teachers utilizing culturally responsive teaching use methods like oral traditions to help students connect to new content. Teachers learn how the brain inputs, processes, and retrieves information from long-term and short-term memory. Understanding this process helps teachers create routines for students to learn and retain information for later use (Hammond, 2014).

When making meaning of the world, the brain uses surface, shallow, and deep culture. Surface culture is derived from elements of a person's everyday life, like food, music, and holidays. Shallow culture has a strong emotional charge because it relates to how a student is raised. This culture describes a student's value system. These are the rules and social norms taught by their parents, grandparents, and communities. Deep culture guides the brain during culturally responsive teaching. Deep culture helps the student's brain decode information based on its worldviews. These views can create an intense emotional charge but can be influenced and changed through life experiences. When students lack life experience and exposure, it can impact a student's schema (Hammond, 2014).

Teacher disposition is important for the growth of students from diverse backgrounds, such as first-generation college students. The next section will review research about how their disposition impacts the academic growth of their students.

Understanding Teacher Disposition

For a teacher to be culturally responsive, he or she must get rid of any misconceptions about the students they serve (Gay, 2010). Teachers need to check their microaggressions or implicit biases toward their students (Hammond, 2014). A culturally responsive teacher must conduct a self-reflection to identify his or her cultural diversity and specific ethnic groups. These teachers must be willing to consider and then make changes to their own behaviors and beliefs (Gay, 2013). Eliminating the idea that students are only doing the best they can because of their poor life circumstances must be removed when teaching minority or marginalized students. For example, believing these students come from dysfunctional homes or are trying to avoid "acting white" are not assumptions teachers should have when working with these students (Gay, 2013).

Teachers must take a deep look into their thoughts about these students to ensure that they do not interfere with the education of their first-generation college students.

Incorporating Student Voice into Culturally Responsive Teaching

Being a culturally responsive teacher requires one to create an environment of independent learners. Independent learners experience productive struggle, which leads to their cognitive growth. Teachers should utilize culturally responsive strategies to inspire learning and should listen to their students in order to determine how to best support students academically. A teacher cannot truly facilitate learning to create independent students without knowing what students need to get them there. Hammond contrasts the differences between dependent versus independent learners. A dependent learner:

- Is dependent on the teacher to carry most of the cognitive load of a task always,
- Is unsure of how to tackle a new task,
- Cannot complete a task without scaffolds,
- Will sit passively and wait if stuck until the teacher intervenes, and
- Doesn't retain information well or "doesn't get it" (Hammond, 2014, p. 14).

While an independent learner:

- Relies on the teacher to carry some of the cognitive load temporarily,
- Utilizes strategies and processes for tackling a new task,
- Regularly attempts new tasks without scaffolds,
- Has cognitive strategies for getting unstuck, and
- Has learned how to retrieve information from long-term memory (Hammond, 2014, p. 14).

Hammond argues that culturally responsive teaching is the most powerful tool to stimulate academic growth for students and increase the intellectual capacity for culturally diverse learners (2014). Cook-Sather (2006) confirms that student voice provides perspective, presence, and an active role in classrooms for students, which further shows how independent learners cannot be fully cultivated without consideration of the legitimate voice of students.

Thinking about the facilitation of the curriculum is critical to the success of first-generation college students. How a teacher delivers the curriculum must be sensitive and provide a diversified experience for students of different races and cultures (Irizarry, 2007). They must focus on the positives these students bring to the instructional situation and build upon that to help students reach mastery. To make instruction more relevant for students, teachers must combine the curriculum, teaching strategies, and a student's culture (Gay, 2013). Teachers should be searching for and finding answers to why these achievement gaps for students persist beyond the issues they may or may not be able to control (Gay, 2013). The teacher must be willing to truly assess the needs of his or her students and why the difficulties exist for them individually (Gay, 2013). Teachers should get outside of their comfort zones to identify and utilize resources such as multicultural, young adult, and popular culture literature in their classrooms to connect to the cultural backgrounds and communities of their students (Garland & Bryan, 2017).

A culturally responsive classroom must utilize the voices of its students to share what they need, want, and have experienced in life that shapes the way they learn. Dewey (1938) explained how students cannot learn without the use of prior experience. In order for teachers to connect to this for students, they must have mechanisms or strategies that allow students to share their prior experiences to enhance the learning environment. Students must be provided with the

opportunity to give input into their educational experience. This includes allowing them to share input on instructional topics, the ways they learn, and their prior experiences. Benner suggests strategies to incorporate and implement student voice into a school's environment. These include surveys, allowing students to participate in discussions with governing bodies, and democratic classroom practices. In any case, students' opinions and experiences mattered, shaping the experience they created for themselves in the learning environment (Benner et al., 2019).

Culturally responsive teaching is critical to the growth and development of first-generation college students. It requires teachers to understand the way the brain works and how culture plays a part in the way students process information. Teachers must understand the way a student identifies himself and that a student's community can help shape their identity. Teachers must also understand their personal thoughts about working with first-generation college students. They must ensure that any negative perceptions about these students do not infiltrate the experiences they provide their students in a negative way. Last, teachers must understand what it means to be a culturally responsive teacher and what strategies support the growth of independent learners. Teachers must value a student's experiences and be willing to use culturally responsive strategies to help increase the intellectual capacity of their students. Students are keen to identifying authentic experiences and interactions. Students can perceive when teachers' and school leaders' commitments are genuine to the process of student participation (Rudduck & Fielding, 2006). They understand when teachers really want to listen to them. To this end, teachers must understand the impact listening to students' voices and stories can have on their classroom environments.

There are different ways to create a culturally responsive environment. One way is through listening. Active listening allows students to provide feedback to adults. Allowing

students to provide feedback increases engagement and creates ownership in their learning. Another practice is to organize student-led conferences where students get to guide the discussion and are given the responsibility to execute decisions for themselves (Holquist, 2019).

Inspecting how student voice allows teachers to create a culturally responsive environment is important. Teachers cannot inspire independent learners without taking the time to listen to the needs of their students. For teachers to use culturally responsive teaching, they must receive professional development and participate in professional learning communities. The next section will outline the importance of this for first-generation college students and the teachers that serve them. There is a gap in the literature that connects the act of storytelling to identifying the appropriate culturally responsive practices for students. I believe this study helps to examine how that process supports culturally responsive teaching.

Professional Learning for Teachers

Professional learning for teachers is important to ensure that students receive the instruction they need to find academic success. Listening and learning from student voices forced a change from the ways in which teachers engaged with students and how they observed their own practices (Bahou, 2011). To ensure teachers know how to incorporate storytelling and student voice strategies into their classrooms, school leaders must ensure that there is a place and space for teachers to be professionally developed. It is also important to know how to facilitate a team of educators who are working together to solve a problem of practice. Understanding Communities of Practice, Professional Learning Communities and Network Improvement Communities is vital to build the capacity for teachers or our research team. Each system shares similarities in its purposes, collaborative environments, and its focus of the transfer of knowledge. Figure 4 shows the focus for this section.

What are the barriers, needs, and assets of first-generation college students? What are early college high schools and how does the model support first-generation college students?
What is needed to create a culturally responsive environment?
How do we build capacity for teachers to be culturally responsive?

Note. The third section of the literature review addresses how to build capacity for teachers.

Figure 4. Literature review overview (third section).

Communities of Practice

Communities of Practice (CoP) increase knowledge sharing between teachers (Wenger, 1998). Common practices can be shared because of the relationships and routine cycle of information sharing. In this section, I will discuss how leadership matters in relation to the success of communities of practice and how trust is important for teachers to comfortably and openly share their practices.

First, the leadership of the CoP is important to the success of the information sharing that can take place. In a 2009 study conducted by Zboralski, 222 CoP members from different communities were assigned to one of 57 leaders. The study determined that there are four necessary components to create and facilitate an effective CoP. They are trust, cohesion, communication climate, and interaction frequency (Zboralski, 2009). While all of these components were necessary, the role of the leader as facilitator served as the greatest factor for information sharing to take place. It was determined that the community leader was the vital part of the success or failure of the CoP. The leader must possess the ability to motivate people to participate, they must be supportive, and they must be intrinsically motivated to see the community work together. As the facilitator, they must spark cohesion and trust for participants (Zboralski, 2009).

As the lead researcher and leader of the CPR team, it was going to be important for me to lead using the attributes described in the study. The team will need to feel motivated to share and find solutions to help our first-generation early college students. If they are motivated, they will be open to meeting frequently to help solve the problem of practice.

Trust is another factor that must be a part of an effective CoP. Teachers must feel comfortable to share their thoughts and the strategies they use in their classrooms. Group cohesion is an important factor for CoP from a socio-emotional perspective. If the teachers don't trust the process, leader, and each other, there will be no sense of community (Nistor et al., 2014).

Leadership and trust will be important components of this study. The CPR team will need to trust the leadership as well as each other. There will be instances when they will need to share best practices, instructional strategies, and what is working for the first-generation college students in their classrooms. As the leader, I will need to motivate them to share but also create a trusting environment (Bryk & Schneider, 2003). Creating relational trust among the members of the team can lead us to success.

Professional Learning Communities

We learned in the prior section that first-generation college students can benefit from culturally responsive teaching. While teachers learn a lot in pre-service programs, it cannot be assumed that they have been trained to support the cultural needs of their students. Training teachers how to identify when their students need help are professional conversations school leaders need to have with their instructional staff. This is where Professional Learning Communities (PLCs) come into play. In this section, I will explain what PLCs are, how they create a culture of collaboration among teachers, and how it promotes focusing on results.

Professional Learning Communities (PLCs) help teachers focus on student learning. The focus moves from teaching to learning. Staff must all be committed to finding what helps each student learn (DuFour, 2004). Dufour crafted three questions that teachers must find the answers to as it relates to their students, including:

- What do we want each student to learn?
- How will we know when each student has learned it?
- How will we respond when a student experiences difficulty in learning? (DuFour, 2004, p. 8)

Understanding how to respond when a student is not learning, the third point from DuFour, is where the value comes for students. During the PLC discussion, teachers are trying to find ways to quickly address the needs of students who need additional support. Teachers find methods to intervene to help students during learning rather than at the end of learning through remediation. Planned time to help students, where the students are required to participate, will allow the teacher to address the needs of students who are not showing mastery (DuFour, 2004).

When thinking about the challenges first-generation college students can bring to a classroom, students will benefit from having a teacher who is focused on what students need to learn, how they know students are learning, and what to do if they are not learning. This practice can help diminish the achievement gap for these students because they are receiving the academic support needed for them to be successful (DuFour, 2004).

For teachers to work together, trust must be established (Prenger et al., 2017). Working together as a team is key to helping students learn. Collaboration in a Professional Learning Community (PLC) is defined as teachers analyzing student data and classroom practices to promote academic growth for all students. They ask each other meaningful questions to challenge each other's thoughts about their instructional methods. Teachers may collaborate on creating formative assessments, give the assessment to their students, and then discuss the strengths and weaknesses of the data for each team member (DuFour, 2004). To create this culture, there must be norms and procedures on how to participate in the meetings. They must

feel comfortable with the process (DuFour, 2004; Prenger et al., 2017). A useful part of the collaboration is teachers observing each other to see if the instruction provided is effective to address the outcome goals of the team. Performance tracking tools can be used to provide objective data for the team to discuss. When visiting classrooms, teachers may review who is dominating the conversations, whether each group is encouraged to participate, building on the thoughts and ideas of others. This review of conversation behaviors can help teachers assess whether their instructional methods prohibit or promote a positive learning experience for students (Eaker & Marzano, 2020). The collaboration of the teachers in the PLC is critical to the growth and development of the teacher and, ultimately, the students.

A critical topic of discussion during the Professional Learning Community (PLC) meeting is to highlight the results of the students assessed. Reflection is important (Eaker & Marzano, 2020; Prenger et al., 2017). The team can help each other formulate a plan to help students that have deficits (DuFour, 2004). Teachers must meet regularly to review the data and have a shared goal (Prenger et al., 2017). As a team, they can help each other access materials, intervention strategies, and support. While completing this process can be challenging, and teachers may not always like the data, with continued conversations, student success rates can improve when a clear plan is in place on how to help students learn (DuFour, 2004). PLCs allow teachers to use the collective expertise and knowledge of the team to review the data to determine which standards and skills matter for students to learn, to examine the student performance, and create an intervention plan that is tailored to the needs of each learner (Eaker & Marzano, 2020).

Network Improvement Communities

Professional learning can take place in Network Improvement Communities (NICs). The authors of *Learning to Improve: How America's Schools Can Get Better at Getting Better* thoroughly describe NICs and how they support teacher growth in a school setting. First, one must understand the difference between the three learning levels. Then, one must understand how a NIC is defined. Lastly, one must understand how the reviewing of the data helps teachers learn from one another (Bryk et al., 2016).

There are three levels of learning, Levels A, B, and C. Level-A learning is on an individual level. This is where a teacher may reflect independently to see if there is growth in a particular area. Level-B learning is where teachers may form a small group within their school environment to reflect and learn together. This may be a school-mandated group, like Professional Learning Communities, or a grade-level or content-specific team. The greatest level of learning is Level-C learning. This is where teachers learn with teachers outside of their school community. It requires learning from different contexts. This level of learning must be organized and deliberate to be effective. The value of Level-C learning is the increased capacity of the learning for the group because there are multiple people from multiple contexts learning together (Bryk et al., 2016).

The group formation in Level-C learning is called a Network Improvement Community (NIC). A NIC creates a social learning environment. NICs are structured, providing norms and responsibilities for the participants while the community focuses on a problem. Everyone on the team should believe that the problem is worth solving. From the problem, an aim statement is created that the team will actively work on solving. The team will research different methods and use those methods to try to find a solution to the problem. Finally, the team will implement the

solution in each of their individual contexts to see if the joint problem is solved (Bryk et al., 2016).

The Network Improvement Community (NIC) allows teachers to learn from the cooperative look at the data collected to solve the problem. This accelerates the process because there are multiple teachers from multiple contexts reviewing the same data and allows the team to compare outcomes to determine the best solution for continuous improvement. The Level-C learning done by the network hub enhances all the learning on the other two levels. From learning in this environment, participants can take back the knowledge gained to their individual classrooms and schools (Bryk et al., 2016).

Network Improvement Communities (NICs) provide a way for educators to learn using the expertise of multiple teachers from multiple environments outside of their own. Once there is an understanding of the NIC working together to solve a group-oriented problem and aim statement, the true value comes when teachers can discuss and analyze the data created from solving an issue from different contexts. This method provides multiple perspectives to compare and ultimately leads the team to select the best option for improvement.

For teachers to learn how to support first-generation college students in an early college environment, having structures in place for teachers to work collaboratively will be important. Communities of Practice, Professional Learning Communities, and Network Improvement Communities all share the same themes. Teachers must be able to work collaboratively by trusting each other and the processes facilitated by the school leadership. They must be passionate about solving a problem and aspiring to help student's success. Through their participation in any of these methods, culturally responsive teaching can be learned.

I wanted to understand how researchers talked about professional learning as I thought about facilitating learning for the CPRs working with me on this study. Through my exploration of this literature, I noticed that much of the information is centered around teachers using student data to make changes in instruction. While this is important, shifting how teachers incorporate student voice into their classrooms is also crucial, as Safir and Dugan (2021) point out.

Conclusion

Chapter 2 covered the meaning of first-generation college students. I discussed their strengths and barriers and how educational staff can support them in the early college high school. Next, I discussed what culturally responsive teaching is and how teachers must understand the identities of the students they teach, what dispositions teachers bring to the classroom before even knowing their students, and how to be a culturally responsive teacher. To create a culturally responsive environment, student voices must be present to create authentic experiences for students. Lastly, I discussed that an environment of professional learning has to be created. Whether it is through Communities of Practice, Professional Learning Communities, or Network Improvement Communities, teachers must be willing to work collaboratively, share best practices, and be led by someone who motivates them to gain knowledge to help students. This research process will require me to work collaboratively with a team and supports how school leaders should implement opportunities for professional learning around topics like student voice in meaningful ways. In the next chapter, I will discuss the methodology for this study.

CHAPTER 3: RESEARCH DESIGN

In the participatory action research (PAR) study, I collaborated with a team of teachers to design a process that would put us on the road to preparing our first-generation early college high school students for academic success. The team wanted to ensure that we provided first-generation early college high school students culturally responsive experiences based on their context. To capture this context, we determined that teachers would have to listen to the voices and stories of their students to allow them to make their lessons culturally responsive. Therefore, this PAR design used the following Theory of Action (ToA): If teachers can listen to the knowledge and experiences of their students, then teachers can embed culturally responsive strategies into their pedagogical practices to help students find academic success.

Academy of Applied Technology (AAT) is an early college high school in a rural county in eastern North Carolina. This small school has 200 students with 12 teachers, a principal, a counselor, a college liaison, and two classified staff members. AAT is an early college high school that prioritizes selecting first-generation college students. The school system created AAT to impact a community's need to help students gain the necessary skills during their high school years to prepare them for the workforce, baccalaureate degrees, or military positions in Science, Technology, Engineering, and Math (STEM) pathways. In addition, the community wanted to build a "create your own" scenario where students would receive degrees that would enable them to work locally in our community.

The Focus of Practice (FoP) was designed to help teachers prepare first-generation early college high school students for academic success. After reading about the setting, it is essential to understand the focus of the study. Early colleges or cooperative innovative high schools (CIHS) often select first-generation college students because the purpose is to allow students to

earn college credit who would otherwise not have easy access to the opportunity. “CIHS [early colleges] recognize that students from populations traditionally underrepresented in higher education are often students who would benefit from accelerated academic instruction, especially in an innovative school with a strong culture of personalized student supports” (NC Department of Public Instruction, 2017). Therefore, hearing from these students is essential. Teachers should not make assumptions about what these students understand, what they need, or who they are as people. Sometimes these students struggle to connect to the academic curriculum, and their lived experiences are not celebrated or utilized to help them make relevant connections. Listening to their voices, stories, and context will allow teachers to make lessons culturally responsive.

In this chapter, I discuss the qualitative research process designed to answer the research questions. The overarching question we are working to address is: How do we prepare first-generation early college high school students for academic success? I also share information about the participants, data collection, and the analysis process for the study. Lastly, I review the limitations along with the confidentiality and ethical consideration for this study.

Qualitative Research Process

The research conducted utilized a qualitative research process. Qualitative research puts theory into practice by combining action and reflection (Reason & Bradbury, 2001). This research process uses open-ended questions to create data. The approach allows researchers to explore a social or human problem by listening to the meaning of individuals through their own words. It pursues practical solutions for those closest to the issue (Creswell & Creswell, 2018; Reason & Bradbury, 2001). While going through the process, participants build their capacity by looking for a sustainable solution (Blair & Minkler, 2009). The research determined the needs of first-generation early college high school students who needed academic support. As a team, we

gained a deeper understanding of our students and discovered how to help them in our classrooms by listening to their voices and life experiences (James et al., 2008). Through analyzing the answers to the open-ended questions and culturally responsive activities, we evaluated themes, interpretations, and explanations to the research questions to find solutions for how to embed and connect this information to the instructional opportunities provided for students to find academic success in our school.

While there are multiple types of qualitative research, participatory action research (PAR) served as the best methodology. The following section explains in more detail why participatory action research was the best fit due to its collaborative nature and the focus on a problem of practice that would impact our school. I also explain the purpose of participatory activist research and how this informed this study. Next, I discuss the improvement science used to guide us through the study. Lastly, I end this section by giving a brief overview of the role of praxis, the research questions, the action research cycles, and the context for the study.

Participatory Action Research

To work towards a solution to the research questions, as the lead researcher, I believed that participatory action research would lend the best results to our students. I wanted the team to focus on a realistic problem we needed to solve as a school while ensuring we had the opportunity to collaborate with them and key stakeholders. I wanted us to complete action research...research done by or with insiders to an organization or community (Herr & Anderson, 2014). In this study, the participants were teachers who were closest to the first-generation early college high school students that needed support. The teachers utilized the stories of the students they taught to support the pedagogy in their classrooms. This methodology allowed for a focus on a problem of practice, social action, and humanization of those closest to the issue. Utilizing

this research methodology allowed the teachers on the co-practitioner research (CPR) team to grow and increase their application of culturally responsive strategies in their classrooms. Through reflection, the teachers could see how the use of student stories impacted their ability to be culturally responsive and provide equitable experiences.

This study utilized the expertise of teachers at AAT to address a problem of practice utilizing PAR. The problem was determining how to take a deeper dive into the context of our students' lives to determine the appropriate practices to implement culturally responsive teaching and learning in our classrooms. In turn, this helped our first-generation early college students find academic success.

PAR was a suitable methodology for this study because the design fosters social interaction. It allows researchers to identify generative themes illuminated as necessary by those in the community where the research occurs. This study utilized the expertise of teachers at Academy of Applied Technology to address a problem of practice, which allowed for methodologies like Community Learning Exchanges (CLE) to let the research team hear directly from our graduates and current teachers (Herr & Anderson, 2014). CLEs work well with this research process because it is designed to be a dynamic social process while utilizing the people closest to the issue to find solutions to local concerns (Guajardo et al., 2015).

Freire's (1970) problem-posing action research model was at the heart of this study because it allowed researchers to glean from those closest to the issue through empowerment and humanization. The research was conducted with a co-practitioner research (CPR) team. The team consisted of several teachers chosen because of their closeness to the problem, ability to provide consistent feedback, examine the evidence, and help collect and analyze data. The CPR team sought to humanize those closest to the problem by listening to their experiences (Freire, 1970).

The PAR study used two cycles of inquiry to solve this problem of practice. Reflection was at the heart of the practice and was systematic (Herr & Anderson, 2014). The reflections completed during each stage helped the CPR team arrive at findings and recommendations for the Focus of Practice and research questions by the end of the study. The reflections were done using reflective memos that I wrote throughout the research process. The reflective memos charted our activities of praxis. The reflective memos also charted the progress I was making as a leader. Our activity of theory and practice was reflection and action modeled. The CPR team completed reflections on their learning throughout the process. These reflections served as valuable notes of our progress toward our research question and, most importantly, the transformation in practice the CPR team and I made by the end of the process. I understood the power of reflection in that if I wanted to be an equitable leader, I had the responsibility for the coordination of praxis for the CPR team. Not allowing praxis would have “oppressed” and “invalidated” their own reflection and action (Freire, 1970, p. 126).

We, the CPR team, were considered organizational insiders. While some may find this a conflict of interest in research, the use of evidence was at the forefront to support any claims (Herr & Anderson, 2014). PAR ultimately allowed the humanization process to occur because the CPR team acted as "restorers of the humanity" (Freire, 1970, p. 44). By listening to our first-generation early college high school students' voices, we empowered them with the support they needed to find academic success. Next, I explain why participatory activist research undergirds this research on first-generation early college students because of its focus on equity (Herr & Anderson, 2014; Hunter et al., 2013).

Activist PAR

Incorporating participatory activist research into the PAR methodology kept the research focused on addressing the inequities that have persisted for first-generation early college high school students. To support academic success, individuals on the CPR were activists willing to design culturally responsive strategies. This activist approach incorporated individuals who were a part of the study community to negate or transform the problem (Hale, 2017). This study relied on individuals willing to listen to the experiences and stories of their students to create culturally responsive environments, which in turn negated the problem and led to academic success. To this end, participatory activist research supported our PAR because of its similarities to rely on those closest to the problem to help find a solution that inspired social change for those involved in the study—a main tenet of CLEs (Guajardo et al., 2015). One might think that this research should not be activist. Sadly, the current system of a school, institutions of education, and the practices of dissertation studies does not support these “activist” ideals. I believe this research is reclaiming the way schools should provide a quality education for first-generation college students.

Improvement Science

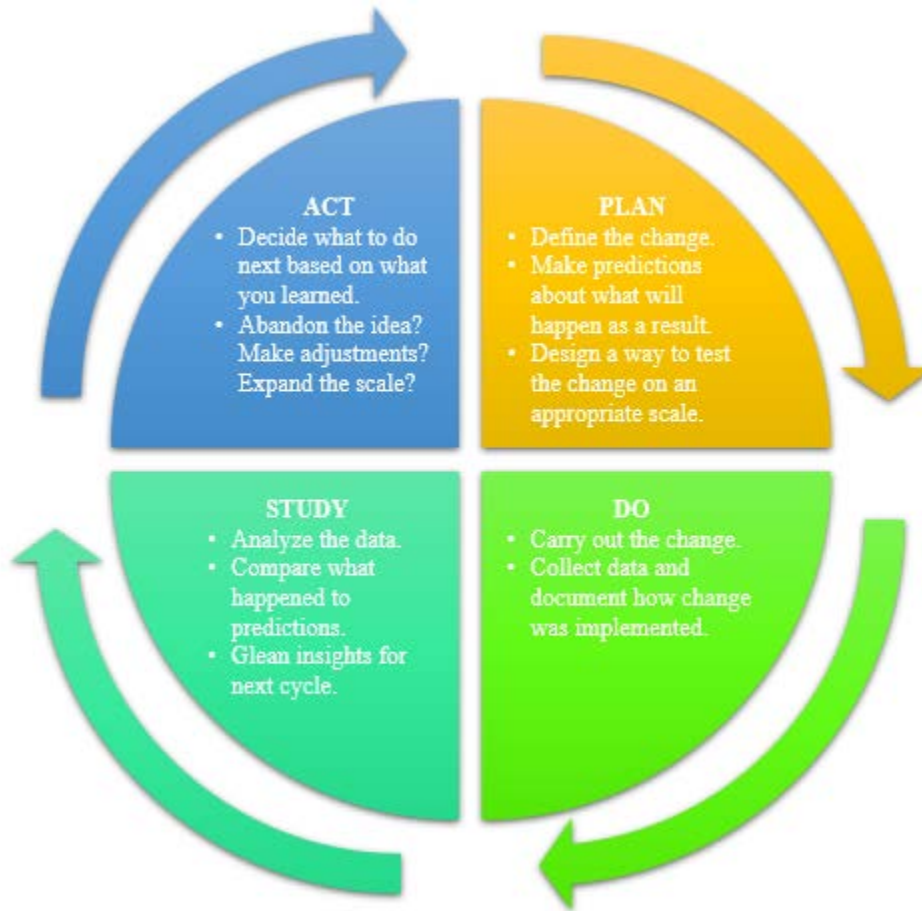
Improvement science requires educators to change their practices through cycles of inquiry (Bryk et al., 2016). The Plan-Do-Study-Act (PDSA) method guided our Co-Practitioner Research team through the cycles of inquiry during the Participatory Action Research. PDSA was selected because it is an improvement science methodology that requires educators to look at data to make decisions. First, the process allowed researchers to make predictions. Then, the researchers created a plan to implement an intervention. After implementation, the researchers compare the predictions to what actually happened to uncover any potential gaps in their

understanding. Lastly, the CPR team revised the plan based on these discoveries. We then reenter the cycle and continue rotation through the cycles several times until we reached the best possible solution. In the case of this study, we used this process for both PAR Cycle One and PAR Cycle Two. Figure 5 contains a visual representation of the PDSA Cycle. Each cycle builds on the others to help solve a problem. This supported our research because it required us to use data points from multiple perspectives and try multiple potential plans before settling on a final conclusion and course of action (Bryk et al., 2016). PDSA was the best method for us to use because of its flexibility and ease of repeating the cycle with each research question as our depth of knowledge increased or we discovered an initial plan did not work. This also allowed for the utilization of different protocols, like a community learning exchange, to gather the voices of those closest to the issue. The following section explains the use of community learning exchanges to collect data.

Community Learning Exchange

I used Community Learning Exchanges (CLEs) to collect data on how we could impact first-generation early college students by listening to their experiences and incorporating them into our lessons. CLEs are a social process to help create meaning-making through conversation, exploration, hope, and change. This methodology allowed us to hear from those who have lived through the experiences and allow them to offer potential solutions for the Focus of Practice (Guajardo et al., 2015). The information the participants in the CLEs offered guided the participatory action research and provided the co-practitioner research team with data to support the findings for the research questions. Community Learning Exchanges (CLEs) provide five axioms that guide this process. They are:

- Learning and leadership are a dynamic social processes.



Note. (Bryk et al., 2016).

Figure 5. The Plan-Do-Study-Act Cycle.

- Conversations are critical and central pedagogical process.
- The people closest to the issues are best situated to discover answers to local concerns.
- Crossing boundaries enriches the development and educational process.
- Hope and change are built on assets and dreams of locals and their communities.

(Guajardo et al., 2015)

While all five axioms inform this study, axiom three, which focuses on utilizing the people closest to the issues, will be the guiding axiom. The CLE process allowed the CPR team to inquire and utilize the expertise of our graduates and teachers to determine how to best support the first-generation college students at AAT. Both groups provided insight from their vantage points, which supported why they are best situated to discover the answers to the local concerns of our school (Guajardo et al., 2015).

Role of Praxis

Praxis is the act of reflecting and then putting the reflection into action (Freire, 1970). Praxis played an essential role throughout the research process. During this PAR, participants reflected on their experiences at various points during the PAR cycles. They had the opportunity to share their expertise, as those closest to the issue, to help guide the CPRs to the solutions for the FoP and research questions. The research questions allowed the CPRs to deepen their understanding of the first-generation early college students they served and reflect upon the design and changes they needed to make to ensure their students received a student-centered and culturally responsive learning environment. We facilitated the reflections through the reflective memos written throughout the research process. While the research did help answer the research question and sub-questions, on a larger scale, the research, action, and reflection allowed us to improve our educational practice and my leadership as an instructional leader and principal.

Research Questions

The overarching question is: *How do we prepare first-generation early college high school students for academic success?* The PAR activities allowed the CPRs to answer the research questions (see Table 1). In addition, data collection took place during each PAR activity.

Research Sub-Questions

The study had four sub-research questions. They are:

1. How do teachers deepen their understanding of the experiences, interests, and knowledge of first-generation early college high school students?
2. How do teachers create student-centered and culturally responsive learning environments for first-generation early college high school students?
3. To what extent do teachers modify their practices to support first-generation early college high school students academically?
4. To what extent does my leadership evolve as I lead a co-practitioner research team to change outcomes for first-generation early college high school students?

Action Research Cycles

The action research cycles took place in two parts. Cycle One gave me, as the lead researcher, the opportunity to establish the CPR team and conduct one CLE. The CPR team reviewed the data from the CLE. Then, PAR Cycle Two included a second CLE and teachers implementing culturally responsive strategies to promote student voice and student-centered classrooms. We utilized the Plan-Do-Study-Act to reflect on our data and design and implement the next steps. We completed the PDSA cycle multiple times to drill down to a usable plan to answer the research question and sub-questions. We also reviewed the culturally responsive

Table 1

Participatory Action Research Cycles Overview

Research Cycle	Time Period	Actions
PAR Cycle One	August-December 2021	CLE with Alumni CPR Team Selected CPR Learning Activities Interviews Reflective Memos Monthly Team Meetings
PAR Cycle Two	January-April 2022	Monthly Team Meetings Observations Effective Conversations CLE with Teachers Interviews

teaching practices of the teachers in the CPR meetings to determine how we were appropriately supporting our students' needs.

Context

The PAR study took place in Wilson, North Carolina. Wilson is a rural county with a population of approximately 80,000 people. Wilson is a Tier One community, a designation by the state of North Carolina that classifies the economic status of its counties. Tier One communities are one of ten counties with the highest poverty rate in the state. Racially, 55% of its residents identify themselves as white. Forty percent of the residents identify as Black. The remaining citizens are a mix of Hispanic, Asian, Pacific Islander, or identify as biracial. Wilson has consistently had one of the highest unemployment rates in the state. At the time of the study, it was at 7%. In addition, only 19% of its residents graduated with a four-year degree from 2015-2019 (U. S. Department of Commerce, 2019). These statistics support a focus on helping our first-generation early college students. When evaluating the number of college graduates and the percentage of unemployed citizens, finding a way to support students is paramount in the Wilson Community.

The town's largest industry is manufacturing. As a result, STEM careers are frequently available in this region, but the qualified applicant pool is small. Therefore, with the support of the Wilson County Commissioners, Wilson Economic Development, and Wilson Community College, this school was created to try to address the school-to-work pipeline issues by providing students with an education that will set them up for success. After having one cohort graduate, the co-practitioner research team believed it was time to assess whether we were accomplishing the vision and mission for the school and community.

Academy of Applied Technology (AAT) is one of two early colleges in Wilson County Schools. The district has approximately 10,300 students in twenty-six schools. In 2016, the district was a low-performing district, ranking 90th out of 116 school districts in North Carolina. However, the district rallied around its students and had the highest growth of any district in the state for two consecutive years, moving to 51st. After the academic growth, the area of weakness was the graduation rate. The district has struggled for the past five years with achieving a graduation rate of over 80%, which is low compared to neighboring and comparative districts. Figure 6 is a map of the state for geographic reference.

The mission of AAT is to promote a student-directed learning environment, provide authentic industry experiences, and strive to foster stakeholder relationships within our community. The school opened in 2016 with leadership focusing on recruiting first-generation college students who needed support with their college and career goals. The school is in a rural part of the county. It serves 202 students, with 69% of its enrollment identified as first-generation college students. Additionally, 84% of first-generation college students are students of color. Over time, the school became known for its use of project-based learning, creating opportunities for authentic learning and, ultimately, helping its graduates move from high school into college or profitable careers.

Serving these students are 12 teachers. Over half of the teachers are considered beginning teachers. While they come to classrooms with little classroom experience, their eagerness to help their students succeed is always present. The teaching staff was comprised of four Black teachers, seven White teachers, and one Asian teacher. The male-to-female teacher ratio was 1:3.



Note. (GIS Geography, 2022).

Figure 6. Geographical map of North Carolina.

Participants, Data Collection, and Analysis

In this section, I discuss the participants and the sampling method used to select the participants. I then describe the data collection method and the different sources of data collected throughout the study. Lastly, I share how I analyzed the data through coding and themes.

Participants

I completed this research study with a cooperative group of inquiry-minded practitioners. We investigated how listening to the stories of first-generation early college students could help provide the knowledge needed to make equity-driven pedagogical changes that could create a culturally responsive classroom environment. The CPR team was the central group of participants for this study.

Participants needed to exhibit certain attitudes and attributes to be asked to participate in this study. They needed to believe in student-centered classrooms, culturally responsive teaching, relationship building with students, and early adoption of teaching practices. They all volunteered to participate and wanted to see positive changes for our students and school. The CPR team members completed a consent form once they decided to participate. They were also all aware that they could opt out of participation at any time (see Appendix B).

Sampling

Purposeful sampling was used to select the members of the CPR team. Teachers were the unit of analysis for the research. The primary focus was to collect data from those a part of the CPR team. Purposeful sampling requires researchers to select information-rich cases and provide insight to help answer the problem of practice. This method allowed the team to increase their credibility with a small sample that focused on an in-depth analysis (Patton, 1990). All members

of the CPR team were knowledgeable of our school, have relationships with students, and wanted to be early adopters of culturally responsive practices.

Co-Practitioner Research Group

I was the lead researcher in this study, working with four AAT teachers as a CPR team. The participants were from the math and science departments at the school. These staff members were vital researchers providing expertise and had the desire to help our first-generation early college students find academic success. They were co-researchers and co-facilitators alongside me to help answer the overarching question. It was unplanned, but all of the CPR team members were Black. Three of the four teachers were classified as beginning teachers with less than four years of teaching experience. Each teacher shared their interest in bringing their experience and insight to the problem-solving table. They all had a desire to learn more about being a culturally responsive teacher. Table 2 gives some basic demographic information about each member of the CPR team.

Other Participants

As a part of the PAR process, the CPR team co-facilitated two Community Learning Exchanges (CLE). The first CLE allowed graduates of AAT who were over 18 years old to reflect on if and how we gave them the opportunity to tell their stories while they were students in an early college setting. The second CLE was with teachers who work at AAT. They shared what they believed culturally responsive teaching means in our school and what it could look like in the future.

Data Collection

Qualitative research requires researchers to collect multiple data sources. The data, usually in the form of text and images, is open-ended. Qualitative research allows participants

Table 2

Participant Demographics

CPR Team Member	Race	Gender	Years of Teaching Experience	Subject Area
Mason Thompson	Black	Male	2	Math
Julie Howard	Black	Female	2	Math
Tiffany Wilson	Black	Female	5	Math
Ashley Smith	Black	Female	4	Math

not to be constrained to answering in a dichotomous way. It also provides opportunities for the creation of multiple data sources (Creswell & Creswell, 2018). This study collected data from multiple sources, including CLE artifacts, CPR meeting artifacts, interviews, classroom observations, post-observation conversations, reflective memos, and member checks.

CLE Artifacts

The CPR team used Community Learning Exchanges (CLEs) to collect data and artifacts from critical stakeholders such as graduates and teachers (see Appendix C). As a CPR team, we learned from the participants' experiences, stories, and thoughts shared during each CLE. Our job was to listen to those closest to the situation to glean from their perspectives. The CLEs focused on the axioms and gathered stories from the participants through questions designed to create engaging dialogue about our FoP. The responses collected during the social activities during the CLE guided our understanding and served as data (Guajardo et al., 2015). For example, during the CLE with the graduates, we collected a list of times when they believed their voices were heard by their former teachers. Another example would be drawings completed by groups of the teaching staff depicting what they believe cultural responsiveness looks like at AAT. These artifacts were able to be coded to further the research process.

CPR Meeting Artifacts

The PAR activities included meetings with the CPRs. The team met monthly. Each meeting had an agenda, and we took notes to capture any discussions, decisions, and plans for the team. We used these notes and the agendas from these meetings as artifacts. In addition, I captured each team member's thoughts at the end of each cycle by writing a reflective memo. These artifacts were a source for member checks. All artifacts were then coded and analyzed (Creswell & Creswell, 2018).

Interviews

The PAR activities included interviews to take a deeper dive into the understanding of the CPR team at the beginning and the end of the study. The interviews served as a pre- and post-assessment. For consistency, I used a pre-determined list of interview questions and a recorded interview protocol (see Appendix D). The questions were open-ended questions to evoke explanations and to gain insight into the development of each CPR team member before and after the study (Creswell & Creswell, 2018). I also conducted interviews with five AAT graduates. The interviews allowed a more in-depth understanding of when they believe their stories were heard when they were students at the school. They were asked what relationships they cultivated with staff members. Each graduate was asked interview questions from a pre-determined list. I recorded and transcribed the interviews and took notes while each participant shared their responses. I collected consent forms from all participants.

Classroom Observations

The PAR activities included classroom observations. I used the Question Form Observation Tool. This tool helps one observe how and what questions teachers ask their students during instruction. It identifies who they are asking the questions of and if they are providing sufficient wait time for students to think of their response before having to answer the question. The use of the tool creates valuable evidence data during the observation (see Appendix E). The observer denotes if the teacher is using the appropriate question form, which can be connected to levels of rigor. After the observation, which is objective, the teacher is asked to assess the findings to determine some actionable steps to remedy any deficiencies they notice. This tool assisted the CPR team in determining if they were using culturally responsive teaching strategies and if their students' voices were being heard equally during discourse of academic

topics. I completed the observations of the CPR team members with this form, reviewed the data collected, then had post-observation conversations, which I discuss further in the next paragraph.

Post-Observation Conversations

After each classroom observation, I conducted a post-observation conversation with each teacher observed. During this conversation, I followed a strategic process called the Effective Conversation Guide (see Appendix F) to empower the teachers and lead them to self-discovery based on the facts captured during the classroom observation. Teachers came to these meetings having had time to review the data with no judgments from the observer. Based on the post-observation conversation, the teacher would leave the meeting with action items to positively impact their classroom's equity and cultural responsiveness (Tredway et al., 2020). Notes were taken during these conversations and used as data for coding.

Reflective Memos

Throughout the PAR process, I captured my growth process as a leader using reflective memos. I shared my thoughts as I progressed through each cycle. These thoughts helped me develop the codes and themes utilized in the analysis (Creswell & Creswell, 2018).

Table 3 shows how the CPRs used the data collected to triangulate the findings and how each data source addressed the research questions. The triangulation sources ensured we were comparing the perspectives of multiple participants before making a claim. The table also shows the data sources that the activities created for us to analyze. Lastly, it shows what the CPR team used to provide member checks and triangulation for our outcomes.

The data collected from multiple sources supported the early findings of our research. Protocols were in place to ensure we captured the essence of each source in a uniform method. In

Table 3

Research Questions, Data Sources, and Triangulation

Research Sub-Questions	Data Source (Metrics)	Triangulation
How do teachers deepen their understanding of the experiences, interests, and knowledge of first-generation early college high school students?	CLE Artifacts CPR Meeting Artifacts Interviews Classroom Observations	Reflective Memos Member Checks
How do teachers create student-centered and culturally responsive learning environments for first-generation early college high school students?	CLE Artifacts CPR Meeting Artifacts Interviews Classroom Observations	Reflective Memos Member Checks
To what extent do teachers modify their practices to support first-generation early college high school students academically?	CPR Meeting Artifacts Classroom Observations Effective Conversations	Reflective Memos Member Checks
To what extent does my leadership evolve as I lead a co-practitioner research team to change outcomes for first-generation early college high school students?	Reflective Memos	Member Checks

addition, these selected sources ensured we gained multiple perspectives to guarantee our research's validity. The following section will discuss the data analysis process that was followed during the research.

Data Analysis

The process I used for data analysis started with specific data and ended with larger generalizations. I collected data from various data sources throughout the research process. While collecting the data, I constantly utilized codes to create categories and determine data patterns. The patterns emerged from similarities, differences, sequences, indications, or examples. From these patterns and reviewing of the codes, emergent themes led to more prominent themes and concepts. By the end of the data analysis process, I had assertions and claims based on the data collection and analysis. Lastly, I triangulated the data through member checks and reflective memos to ensure the validity of my themes (Saldaña, 2016).

The data analysis process was one with continual revisions as I continued to glean more from the additional research conducted and the using the Plan-Do-Study-Act method. These codes were stored in a codebook shown in Appendix G. The formation of the codes that lead to categories, and then themes will be described in subsequent chapters. It is important to understand that I completed over six revisions of my codebook to ensure it was accurate. I did this through inductive and deductive coding methods. The codes were derived from the artifacts collected, like the interview transcriptions, CLE activity artifacts, classroom observation walkthrough forms, and reflective memos. Ultimately, a thorough inspection of the codes led to answers to my research questions. Figure 7 depicts the coding process I utilized.

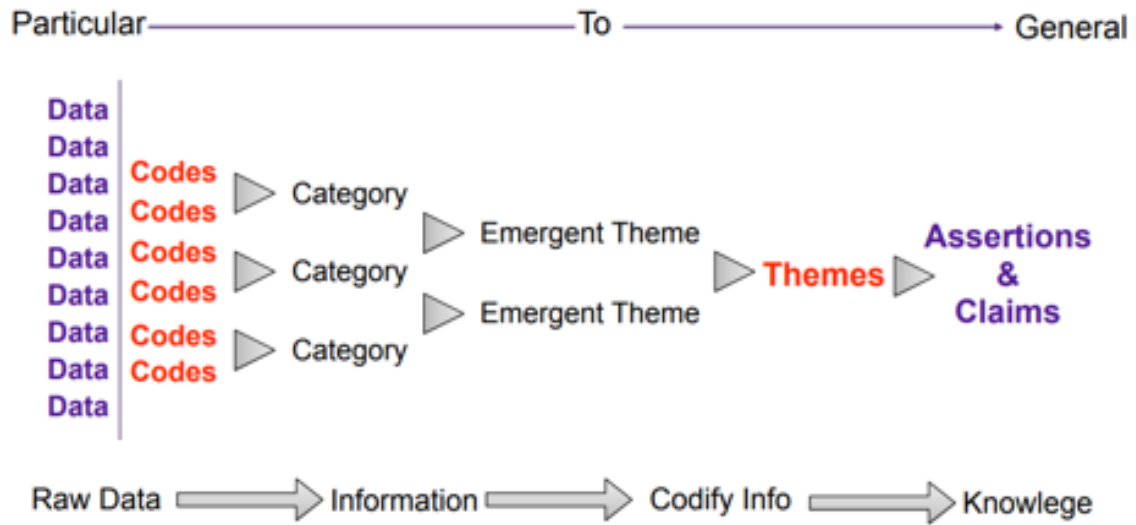


Figure 7. Saldaña's (2016) data analysis coding process.

Study Considerations: Limitations, Validity, and Confidentiality and Ethics

As with any research study, there will be limitations inherent in the design. These limitations are discussed in detail in a following section. Maintaining the validity of this PAR research was crucial, and examining the roles of the researcher and participants was important to safeguard the research process. As the lead researcher, I needed to pay close attention to the positionality of everyone who participated in the study because of our closeness to the study environment. I guaranteed there were no issues by using triangulation throughout the study, allowing time for member checks through reflection, and ensuring internal validity. Last, I ensured that confidentiality was a priority throughout the study.

Study Limitations

The empirical results reported herein should be considered in light of three limitations: time constraints, cultural bias, and lack of research. The study took place over 18 months. At the start of the study, the requirement for students to return to the building after being out for a school year due to COVID-19 had just occurred. COVID-19 lessened my time in classrooms completing observations due to contact tracing. This impacted the number of codes that could come from this study activity. There were a few CPR team meetings where participants were absent due to being quarantined. If we could have had an additional cycle, more reflections from the CPR team could have been coded as it relates to the question form observation tool. I would have been able to provide more coaching conversations about how equitable strategies were being used in classrooms.

The entire CPR team was black. This was not by design, but the team of teachers that volunteered to participate in the process all had this in common. While no two people's experiences are identical, the team had similar experiences with injustices from educational

environments that did not understand our culture or needs. Our passion for fixing how we were wronged as students was imperative, but a person from a different racial perspective could have added value to our conversations.

There is a lack of research that gives specific strategies about how teachers can build relationships with students. Research shares how important it is for teachers to allow students to tell their stories. Still, it oftentimes does not list specific protocols to support how teachers need to execute these conversations with students, especially when thinking about how teachers can conduct these activities during instructional time. This study hopes to address that gap in the research.

Validity

The trustworthiness of our research is essential (Lincoln & Guba, 1985). I was the researcher, data collector, and data analyst for this qualitative study. To ensure there was accuracy in the findings and that these findings were free of bias, I utilized member checks to ensure the trustworthiness of my research. Throughout Cycles One and Two, I conducted member checks to determine the accuracy of the themes I surmised from the data collected and analyzed. In addition, I utilized the expertise of my CPR team to triangulate the data to ensure they were accurate and corresponded with the cultural description and the theory for the study (Creswell & Creswell, 2018).

As the lead researcher, I restricted my claims and generalizations to environments like the setting of the study (Creswell & Creswell, 2018). The setting for the study was an early college high school that provided multiple STEM pathways for students to earn an associate degree from our local community college alongside their high school diploma. The study will hopefully help other early colleges with a similar mission and makeup who prioritize the admission of first-

generation college students. While the students, teachers, and pathways may differ, the focus on listening to the voices of these marginalized students to create a student-centered and culturally responsive environment is necessary for school districts across the United States.

Confidentiality and Ethical Considerations

The participants in this study were educators committed to creating an educational environment where first-generation college students could thrive in our STEM early college program. Therefore, I met with each staff member individually to see if they would like to help with the study as a co-practitioner. They understood that their participation was voluntary. The consent form was approved by East Carolina University's Institutional Review Board (see Appendix A). If the staff member agreed, they had to sign a consent form to affirm their participation.

Academy of Applied Technology is a relatively new school that opened five years ago. As a new principal of a new school and as the lead researcher, I wanted to conduct a study to assess the program we had created and determine if we were providing equitable opportunities to our students. I wanted to complete the research with a group of staff members willing to take a deeper look to see if we were providing our first-generation college students with what they need to be successful in our early college high school. I had the CPR team help me plan and facilitate the CLEs and analyze the artifacts created from these events. They also helped throughout each cycle of the study. Together we reflected on the themes to make claims.

I was the supervisor of the individuals that I worked with to complete this study. Because of my role, it was vital that I took special precautions to ensure that all participants were willing to help. I fully understood and acknowledged the power of my position as the principal and did not want to put any undue pressure on participants. Therefore, participants who volunteered for

this process signed a consent form that attested that I did not coerce them to participate through my role as their supervisor and evaluator. The consent form also let them know that if they wanted to discontinue their consent and end their role on the CPR team, they could do so without any repercussions.

I received approval from my direct supervisor and the school district to conduct my research (see Appendix H). In January 2021, I completed Institutional Review Board Collaborative Institutional Training Initiative Training (see Appendix I). The training ensured that I understood my ethical requirements while researching with humans. I understood that the study could be stopped at any time, for any reason, even with these safeguards in place to protect everyone involved.

I wanted to have open and honest conversations with the individuals who agreed to participate in this study. The answers they shared could have provided sensitive information, yet their honesty was paramount to the validity of the study. Every participant was protected by the use of pseudonyms. Documentation safety was a priority. Therefore, I kept all data in a password-protected digital folder or a locked filing cabinet.

Conclusion

Chapter 3 explained the research design for this study. It provided an overview of how our CPR team planned to prepare first-generation early college high school students for academic success. The study had two PAR cycles that included CLEs to help us gather data from multiple perspectives. The chapter also reviewed the data collected and how we conducted the analysis and coding process for the research. Lastly, the chapter ended by sharing how I ensured that everyone involved was honored through confidentiality and volunteered to participate in the

study because they believed in the problem of practice. In Chapter 4, I share details about the participatory action research Cycle One and its context.

CHAPTER 4: PAR CYCLE ONE

The participatory action research (PAR) was focused on how to support first-generation college students to find success in an early college high school. In this chapter, I share the context of the study and the processes I used during the PAR Cycle One, including the analysis of qualitative evidence to derive codes and develop emergent categories. Then, I discuss the emergent categories from the analysis of multiple activities during Cycle One. Lastly, I review my process as the leader of the PAR research and my evolution in becoming a leader of equity.

PAR Context

The context of the study took place at Academy of Applied Technology (AAT). This small school provides multiple opportunities for its students. The school caters to first-generation college students. The teaching staff, while youthful, is passionate about learning how to be equity warriors and providing culturally responsive opportunities for their students. The proceeding sections provides insight into the school community and the people that educate its students.

Context: Place

Academy of Applied Technology (AAT) is an early college high school with a STEM (Science, Technology, Engineering, and Math) focus. Students earn a high school diploma and an associate degree from a community college in five years of study. The school prioritizes the selection of first-generation college students, and 69% of the students meet this description. AAT is located on the campus of a comprehensive high school, but by the Fall of 2023, the school will relocate to the campus of Wilson Community College, where the students take their associate degree level courses. The school is designed to support the economic stability

of the community and build a pathway for Wilson County's young people to achieve academic success.

The school has 202 students, twelve teachers, one counselor, a college liaison, two support staff members, and one administrator, who is the lead research practitioner of this study. The staff has cultivated a family-oriented environment in which students are well-behaved, have good attendance, and are generally well-supported by their parents. While the school is small and non-traditional in some of its approaches, the staff values giving students as many opportunities to grow and learn academically and social-emotionally. A cornerstone practice of the school is providing students learning opportunities through project-based learning. Using this instructional method, students focus on answering an inquiry-based driving question, investigating to find a solution to a real-world problem, and developing exhibitions. The project ends in a presentation in front of experts on the topic. Methods like this support our students to grow and learn as prospective college students, adult workers, and community citizens.

The community created this school to address many of the economic issues that plague our county. The school's conception was a partnership between the Wilson County Schools, Wilson Community College, Wilson Economic Development Council, and local industry to address the county's high unemployment rate and the need for qualified applicants for hundreds of open positions. Wilson County has one of the highest unemployment rates in the state, yet hundreds of jobs are available. These positions are filled by people outside of the community commuting into Wilson each day or are left vacant. Employers report that they struggle to find local citizens with the necessary skills. To this end, AAT was created to provide industry-selected pathways that could lead directly to employment after completing a two-year community college degree. The pathways include Associate in Science, Associate in Applied

Science in Applied Engineering Technology, Associate in Applied Science in Criminal Justice Technology, Associate in Applied Science in Information Technology, and Associate in General Education – Nursing.

The PAR focused on how to help first-generation college students find success in an early college setting. Understanding the place is important for teachers because strategies can support the way these students may learn. Also, understanding the environment and the community provided insight on the importance of the school and the opportunities necessary to prepare students for success in STEM courses, as well as life after high school.

Context: People

The co-practitioner research (CPR) team was comprised of STEM teachers who wanted to learn more about culturally responsive teaching. While they have all heard about culturally responsive teaching and know that it is important, they were unclear on how to implement the strategies to impact change for students. Therefore, they knew their participation could help them help their students. Secondly, all share a desire to be strong teachers; some knew early on they wanted to be teachers and others decided later in life, but all value their roles as teachers and value professional learning that will support them to serve students. In Table 4, I provide basic information about each member of the CPR team: name, role, race, gender, and years of experience in education. Next, I will describe and provide a brief biography for each participant.

Ashley is one of two science teachers at the school. She has been a teacher for three and a half years. She taught a semester in another school district before coming to AAT. Ashley is a member of the school's leadership team and advises the Science Club. She became a teacher because while tutoring Advancement Via Individual Determination (AVID) students while she was in high school, she fell in love with helping students learn. This experience inspired her

Table 4

Participant Descriptions

CPR Team Member	Race	Gender	Years of Teaching Experience	Position
Mason Thompson	Black	Male	2	Teacher
Julie Howard	Black	Female	2	Teacher
Tiffany Wilson	Black	Female	5	Teacher
Ashley Smith	Black	Female	4	Teacher
Krystal Cox	Black	Female	15	Principal

to become a teacher. Ashley was fortunate to have a teacher who helped her cultivate her voice. This teacher recognized the sensitive side of her and encouraged her to not let her sensitivity stunt her growth. For her, Ms. Joyner inspired her to speak up for herself as a student and not worry about other's opinions when she utilized her voice. Ashley shared:

She [Ms. Joyner] said you have to grow thick skin and speak up for yourself because no one is going to speak up for you if you don't. You can't be scared of what people might say if you speak up for yourself.

She wants to become a culturally responsive teacher to learn her students better and to be more well-rounded in her approach.

Mason teaches math and Freshmen Seminar. He advises our Student Council. Mason transitioned from a neighboring school district after one year of teaching. Mason became a teacher after initially going to school to become an engineer. The school he received a full scholarship at did not have an engineering program, so after debating between music or mathematics, he chose mathematics. Leading up to graduation, he went to a career fair and was pitched the idea of using his degree to teach math, so he took a chance and started his teaching career.

Two people that helped cultivate his voice and love of math are Mr. and Mrs. Carbonaro. Not only did they teach him math but served as a mother and father-figure while he was in school. He did not grow up with his father in the home and his mom was busy trying to provide for his family, so they stepped in to help him become the person he is as an educator. “[They] gave me the opportunity to love math and what it can do for me.” He was interested in becoming a culturally responsive teacher, but he did not know how to go about it. He has heard about it but was not sure what it included yet believes it will help him learn more about his students and push

him outside of his comfort zone. He can be closed off and not open to starting new relationships with people unless they spark it with him first. He believes this process will offer him strategies to build relationships and open up more to his students.

Tiffany has been teaching for nine years but has been at AAT for three years teaching Math. When she was a child, her mom taught her the difference between a job and a career. While she knew she wanted a career, she was unsure of what to pursue. She did not feel like she was good at anything, but she knew she was smart. So, when in college she decided that teaching could be a career, she was good at math, therefore this would be a good fit for her. Dr. Bosé was one of her math teachers in college and he valued her work as a student, which meant a lot to her. He paid attention to her work and used it as examples for other students. She had to work hard, and he appreciated her for her effort. Tiffany shared:

That was the first time that anybody ever looked at my work as my work. In Math, geometry, writing proofs, I had to teach myself pretty much. He would look at mine and say ‘oh that’s good, I want to keep these. Can I use these for other classes?’ So, it wasn’t just me turning in an assignment, but he actually paid attention to my assignments to know that it was uniquely me.

She was intrigued to do the work as a member of the CPR team because she knew a little about being a culturally responsive teacher, although it seems to be a topic of discussion for many in education. She believed that her participation would allow her to learn about the instructional practices and how to support her students socially and emotionally through culturally responsive teaching.

Julie has been a teacher for two years and this was her first year at AAT. She wanted to be a teacher since she was in middle school. She knew that she was good at math. So, her

becoming a math teacher made the most sense. For her, the teacher that made her voice and identity feel important was her English teacher, Ms. Brown. She saw that she was quiet but encouraged her to express herself and communicate. Julie shared, “She [Ms. Brown] was like we are going to get you talking. I appreciate her for doing that.” She pushed her to use her voice and it helped her once she moved on to college. She wanted to learn more about being culturally responsive because she loved building relationships with her students. She wanted to find a way to help her students to connect what they were interested in to Math. She recognized that she had students who did not like Math, so she believed this help her bridge the gap for them.

I am the lead researcher and principal of the school. This was my fifteenth year as an educator. I spent five years teaching 8th grade English students before becoming an assistant principal at a high school. After two years as an assistant principal, I was asked to create AAT, the setting for this research. I wanted to become a teacher as a child yet as I grew older was strongly encouraged not to go into this career pathway. After receiving an unexpected call about a scholarship from my high school counselor, I knew that I was meant to be an educator. Conducting this research was important to me because I wanted to give my students every chance to excel academically. I believed the best way to do that was to develop my teachers on how to be culturally responsive teachers and equity warriors.

The one thing the entire team has in common is their interest to impact change for students in a positive way. Everyone on the team had a vested interest in learning more about being a culturally responsive teacher. They all knew what it felt like to have an educator invest in them. The team understands that completing these strategies to fidelity can have a positive impact on how our students are performing in their STEM courses.

The next section will provide an account of the activities that I completed during Cycle One and what was done prior to the implementation of the culturally responsive teaching strategies. These activities created the opportunities for the artifacts that were used to determine the emergent categories. Some of these artifacts include journey lines, interviews, chalk talks, memos, mandalas, and emulation poems. After this, I will explain the codes and the codebook created from the data from the artifacts.

Cycle One Process

Multiple activities took place during Cycle One. After formulating the team, ensuring that the team had a common definition of what culturally responsive teaching meant was crucial to the success of our learning process. It was also important to give the team first-hand experiences with activities that would give their students the opportunities to share their voices. I will explain the activities for each month of the Cycle One and how they supported the learning for the team and the research.

Activities

To complete PAR Cycle One we performed a series of activities. During this cycle we completed a community learning exchange (CLE), interviews with the CPR team members, CPR team meetings, and wrote reflective memos. These activities helped us gain a series of data that was analyzed to create initial codes.

Cycle One took place during the fall semester of 2021, an outline of activities is presented in Table 5. I began Cycle One with the selection of the CPR team. I sought volunteers who wanted to enhance their teaching abilities by learning about culturally responsive teaching practices. After previewing the work we would complete as a team, participants completed a

Table 5

Participatory Action Research Cycle One

Time Period	Actions
October 2021	Established CPR Team Facilitated CPR Learning Activities Facilitated Team Meeting #1 Conducted CPR Team Member Interviews Wrote Reflective Memos
November 2021	Conducted CLE with Alumni Facilitated CPR Learning Activities Facilitated Team Meeting #2 Wrote Reflective Memos
December 2021	Facilitated CPR Learning Activities Facilitated Team Meeting #3 Wrote Reflective Memos

consent form to confirm their participation. Three of the participants make up the math department at AAT, and the other teacher is one of two science teachers at the school.

PAR Cycle One included three CPR meetings, interviews, and one CLE. Over an eight-week period, I began the groundwork that would support PAR Cycle Two. The first three CPR meetings established a baseline of understanding for all participants about what culturally responsive teaching looks like, based on the work of Hammond (2015). After I completed the interviews, it was evident that the participants could provide, at best, surface level examples of culturally responsive teaching. In addition, many of their examples of equity were shallow. In the first meeting, participants were told they could complete the culturally responsive strategies with their students during Cycle Two. During this first meeting, participants contributed to a chalk talk describing the assets of our school. Next, they created a journey line describing individuals that valued their voices as students from kindergarten through college. Each participant was asked to share the experience with one person they wrote about on their journey lines. Lastly, we briefly went over a preview of the work we would do during each cycle.

During the second CPR meeting in the Cycle One, we focused on chapter one of *Culturally Responsive Teaching and the Brain* (Hammond, 2015). This chapter gave us a common definition of culturally responsive teaching that anchored our work:

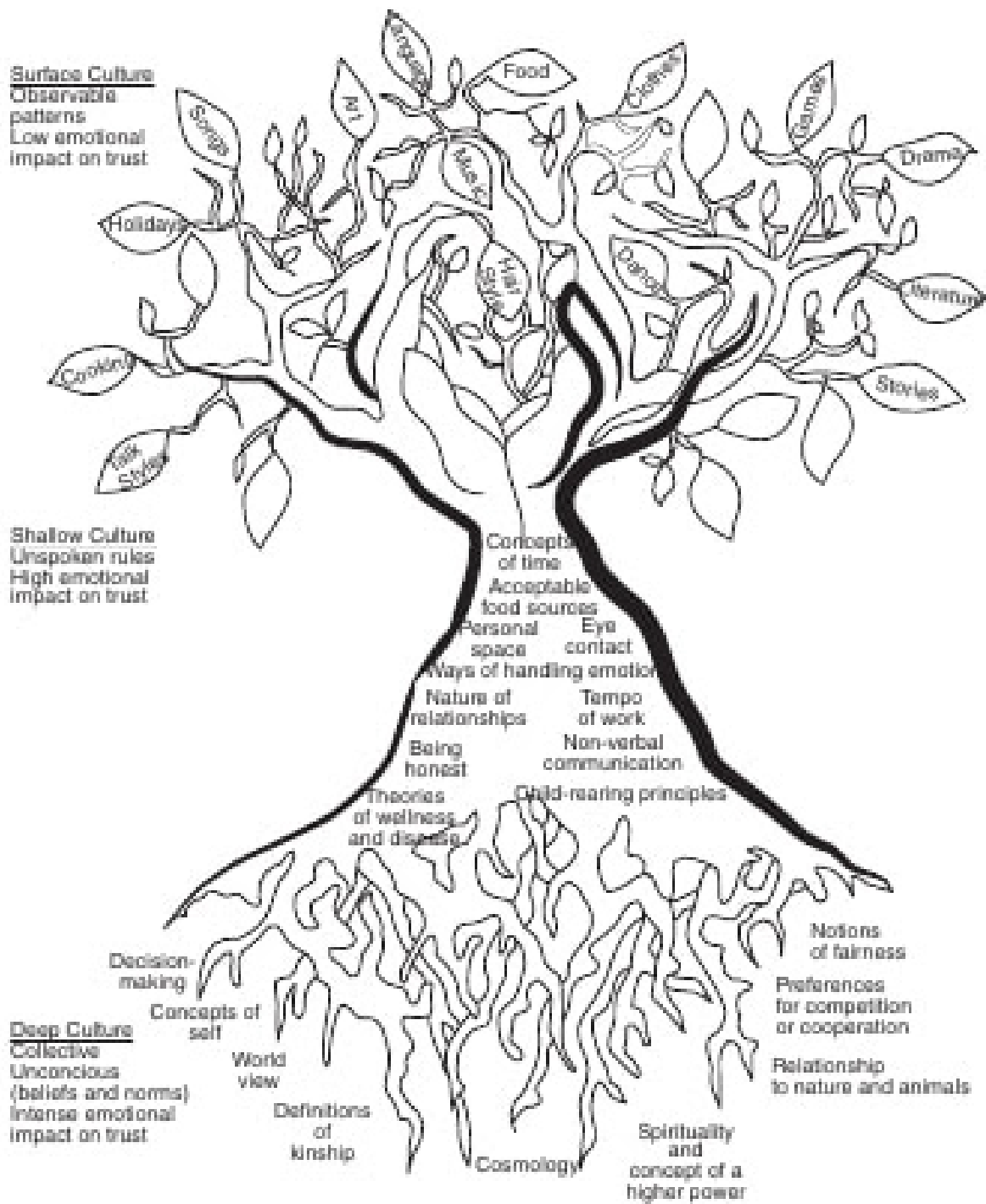
An educator's ability to recognize students' cultural displays of learning and meaning making and respond positively and constructively with teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new concepts and content in order to promote effective information processing. All the while, the educator understands the importance of being in a relationship and having a social-emotional connection to the student in order to create a safe space for learning. (p. 15)

I had the team discuss the key words in the definition to ensure we had the same understanding of the work we would do during the next cycle. Participants created emulation poems that shared information about where each person was from. The poems offered insight that I would not have otherwise known about each of them. To end the meeting each teacher created a personal goal that they would like to reach by the end of the research on culturally responsive teaching.

The third CPR meeting allowed us to look at the different levels of culture from chapter two of Hammond's work. We focused on figure 8, The Culture Tree, from chapter two of *Culturally Responsive Teaching and the Brain* to guide our discussion. The culturally responsive strategy the participant experienced was creating a mandala. This allowed everyone to get a deeper understanding of what makes up the different levels of culture for each person. We finished with a closing circle that required foreshadowing of how implementing these strategies during the next semester would go for each person.

The CLE was conducted with former students who had graduated from AAT over the past two years. There were ten graduates that participated. The purpose of having them as the participants of the CLE was to get an understanding from them on when they felt their voices were heard or valued throughout their high school experience. The graduates shared key staff members at the school that they believed were influential to their growth and helped them feel like their voices mattered by completing a journey line.

Then they participated in a World Café. During each rotation, participants wrote down their responses to the following questions:



Note. (Hammond, 2014).

Figure 8. Culture tree.

1. When were you provided an opportunity to be heard, to lead, or impact change at AAT?
2. Now that you have graduated from AAT, what do you perceive as the assets of your experience?
3. Now that you have graduated from AAT, what were some of the challenges of your experience?

Their responses provided insight and deepened the understanding of the CPR team about the experiences, interests, and knowledge of first-generation early college high school students at AAT as it related to how we have provided opportunities for student voice.

Lastly, I completed reflective memos to capture my thought process as I began Cycle Two. I spent a lot of time reflecting on the creation of the team and the initial team meetings. Next, I explain the coding completed from the artifacts gathered from these meetings.

Coding

I analyzed several forms of data that were collected from interviews, CPR meetings, and a CLE. The artifacts included the Cycle One meeting notes, interview question responses, participant journey lines, and World Café responses. Either a notetaker or I took notes at each meeting. I transcribed the interview or CLE responses that were recorded.

Next, I coded each artifact. I started first with the interviews. The purpose of the interviews was to gauge the knowledge of each participant prior to beginning our research on culturally responsive teaching. Each team member was asked the same questions.

1. What do you look for to determine whether instruction is equitable?
2. What would you look for to determine whether instruction is culturally responsive?
3. What would you look for to determine whether a teacher knows her or his students?

4. Why is that important in terms of culturally responsive teaching?
5. How might students be participating if instruction allows for student voice?

After coding the first two interviews, I began to see commonalities or similar codes. I continued to review the remaining transcriptions by using the codes identified. As I continued this process, I made modifications whenever necessary that lead to emergent categories.

After completing the process for the interviews, I followed the same procedure for the artifacts created from the CLE, CPR meetings, and reflective memos. After coding all of the documents, I tallied the codes discovered in each document. I totaled the codes based on ones found in the same type of documents. After conducting a second round of coding, I was able to start making sense of the codes and emerging categories surfaced.

I used open coding based on Saldaña (2016). I started with codes, then I begin to see the connections to literature that related to cultural responsiveness. Figure 9 is an excerpt from my codebook. When reviewing the data and codes, I began to see patterns that lead to categories. I captured the codes, which CPR member made the statement, what activity the code came from, and later assigned categories. I continued to adjust my codebook as categories emerged. In the next section, I discuss emerging categories and provide sections of the codebook created from the artifacts collected during Cycle One.

Emergent Categories

The focus of the PAR is determining how we prepare first-generation early college high school students for academic success. To prepare these students, a deeper look at the practices that would allow for student voice to be at the forefront became necessary to allow teachers to utilize student stories in their instructional pedagogy. As we began to explore during Cycle One, a focus on culturally responsive teaching practices became prevalent during the CPR meetings,

Category	Quotes	Codes
Listening & Learning from Student Stories	high school being the first time they did anything hands on.	negative experiences
Listening & Learning from Student Stories	she discussed that she started dislike math in 8th grade	negative experiences
Listening & Learning from Student Stories	surprised at number of students that didn't have anyone for their HS years.	negative experiences
Listening & Learning from Student Stories	since they started at WAAT, they haven't felt like they mattered to anyone.	negative experiences
Listening & Learning from Student Stories	neither of us had anyone make us feel valued during K-12 experience.	negative experiences
Listening & Learning from Student Stories	students started to struggle with math from kindergarten to 5th grade.	negative experiences
Listening & Learning from Student Stories	thought middle school is where the students would have started to struggle	negative experiences
Listening & Learning from Student Stories	I had students talking about how they were almost in foster care	negative experiences
Listening & Learning from Student Stories	students telling me about their parents walking out on them,	negative experiences
Listening & Learning from Student Stories	near-death situations	negative experiences
Listening & Learning from Student Stories	they did not want to be here (on earth) any more at one point in their life.	negative experiences
Listening & Learning from Student Stories	their parents did not have much education.	negative experiences
Listening & Learning from Student Stories	I would still cry	negative experiences
Listening & Learning from Student Stories	I am a person that does not talk about emotions or how I feel each morning	negative experiences
Listening & Learning from Student Stories	I did not talk too much to anyone since all of my friends graduated early	negative experiences
Listening & Learning from Student Stories	English was my worst subject.	negative experiences
Listening & Learning from Student Stories	Mr. Brown never called his stepdad "stepdad" until he passed away.	negative experiences
Listening & Learning from Student Stories	struggled to make relationships with men	negative experiences
Listening & Learning from Student Stories	Mrs. Williams shared that she didn't have a strong relationship with	negative experiences
Listening & Learning from Student Stories	was a selective mute in elementary school	negative experiences
Listening & Learning from Student Stories	because she didn't speak a lot, she was put into certain classes	negative experiences

Figure 9. Excerpt of codebook.

interviews, and the community learning exchange. The initial examination of the data allowed three emergent categories to surface. These categories are extracurricular activities, interactions, and concern.

Extracurricular Activities

The evidence collected during the community learning exchange (CLE) focused on what graduates felt regarding the opportunities they received while they were students at the school. AAT graduates identified opportunities when they felt they were heard, had the opportunity to lead, or make an impact on the school. The opportunities were clearly divided by extracurricular opportunities versus instructional opportunities. The opportunities identified as stemming from extracurricular opportunities were overwhelmingly more frequently mentioned than those that happened in the classroom. The CLE allowed the graduates the opportunity to brainstorm and discuss what opportunities they had that provided them with the chance to be heard, lead, or make an impact on the school.

Collectively, they came up with a list of ten activities they believed gave them these opportunities. The interesting discovery was that most of their responses were activities that happened outside of the instructional time. When dividing the list, eight activities were considered extracurricular activities, while two of them took place during the instructional time. After discovering this, the categories became instructional activities and extracurricular activities. Some of the codes derived from the graduate responses were Bullying Awareness Assembly, Clubs, Newspaper Articles, and Middle School Talks. The only two codes for instructional activities were project-based learning and the use of different teaching styles to connect with students.

The data provided from the CLE with the graduates raised some questions for the CPR team. Why are there not more opportunities during the instructional time where students believe they can be heard, lead, or impact change at our school? As we continue to explore culturally responsive teaching, exploring this question more could lead to some discoveries about our instructional practices as a school and what our students are craving in the classroom environment.

Interactions

After the first CPR meeting, I interviewed all members of the CPR team to get a sense of their understanding of what it means to be a culturally responsive teacher. The interview revealed that we had some work to do as a team to make sure everyone understood what being a culturally responsive teacher actually meant. After going through two rounds of coding, several codes emerged. The most prevalent one was actions. When having to define what culturally responsiveness meant, the teachers gave a variety of actions they believed they utilized in their classrooms with their students. While many of them were not on the deepest levels of being culturally responsive, actions between the teachers and students were taking place.

When looking at the responses from each participant, it became evident that the actions of the CPR team was mostly at the surface culture. For example, Ashley shared:

So, if they share something like, I went to Forever 21. I would say, ‘Oh, I also like to shop at Forever 21 as well.’ I think my latest thing with building a relationship with this group has been me starting to watch anime.

There were several more codes and examples where teachers were having positive interactions with students to get to know them better, so they can incorporate their interests into their lessons.

The intent was that after completing the research process I would interview the teachers a second time. Through our work together, they will be able to get a deeper understanding of what it means to be a culturally responsive teacher and what ways will best support our first-generation college students. At that point, hopefully their examples, responses, and interactions will be ones that confidently speaks to what our students need based on their personal knowledge of the students they teach.

Concern

During the CPR meetings, the team was able to experience culturally responsive activities that they will be able to recreate with their students during Cycle Two. One activity they completed was a journey line. The concept of the journey line allows participants to reflect upon several years and answer a central question. For the CPR group, they had to answer the question: Who were the teachers and/or family/community members that made you feel valued and that your voice and identity were important? Each person had think-time to complete their journey line. Then I asked each participant to share why they selected at least one person on their journey line.

Each participant chose a former teacher they had during their high school or college years. All the relationships they mentioned with their former teachers indicated that those teachers showed personal concern and care for them. The teachers were concerned about them on a deeper level than just teaching the content or the standards for the course. Caring became the category after reviewing several codes that exemplified the relationships between them and their teachers. Tiffany shared how her professor knew how her work was “uniquely her.” Mason shared how his teachers were like father and mother-figures, standing in the place of his parents who were not always available. For another example, Julie was moved by the concern of her

teacher and her motivation to help her overcome her shyness. Her teacher's mission was to help her to learn how to advocate for herself. She shared:

She knew I was quiet. She was like we are going to get you talking. I appreciate her for doing that, because after I left there, I was a little quiet in college but at least I could talk more and communicate with the students and staff there.

Based on the initial CPR meetings, the CLE, and the pre-research interviews these categories have emerged. The CLE revealed that we do have some opportunities for students to feel like their stories are being heard during the extracurricular activities we provide. The pre-research interviews uncovered that the staff lacked an understanding of what culturally responsive teaching looked like in the classroom but are actively having some positive interactions with our students. During the CPR meetings, they all shared stories of educators from their past that were concerned and provided culturally responsive environments for them. The next section will review my reflections of Cycle One and my planning for PAR Cycle Two.

Reflection and Planning

My growth as an equity warrior and leader in my school was important and the reason why I was passionate about the changes that can take place through our work as a CPR team. My reflection on my leadership throughout the process offered me an opportunity to see the progress and growth for me and for the team. I discovered that being a researcher and a practitioner has its own challenges. Lastly, I will share my plans for PAR Cycle Two.

Reflection on Leadership

I think the first thing that was telling for me was when I conducted the interviews. My questions assessed what they knew already about being culturally responsive. None of the teachers really knew much or could articulate their opinions on what they thought it was outside

of it is something that should be done or focused on. This helped me get a starting point for the foundational knowledge I needed to scaffold or help build for my staff. Without them understanding what culturally responsive teaching is and why it is important, teaching them instructional strategies would not mean much. I noticed they were open to sharing and learning, which aided me throughout the process. This built my capacity because I was having the same experience that I was encouraging my teachers to have with their students. I was able to learn about their backgrounds and listened to their voices to make decisions about how I needed to move us forward through inquiry.

The first leadership change I noticed was the personal risk of who I worked with on the CPR team. After really thinking about the needs in my school, I decided to choose the Math and Science Departments to solicit participants. These staff members had not had the opportunity to lead in the building. While I was nervous, I thought taking this risk and selecting a different group of people to work with was smart, leading to the empowerment of more teachers in my building and to help them grow as educational leaders in their classrooms. My plan was to have them later share their experiences with the entire staff and lead opportunities for the staff to learn how to infuse the strategies they learned and used in their classrooms. Through distributing leadership through different teachers showed that I valued everyone on my staff. The choice to include these teachers could pay off greatly in our school community.

When I asked the team to reflect throughout the process, I could not take it personally. I had to stay focused on what was best for the students, while being willing to listen to their voices. If they did not like a strategy or did not understand my approach, I needed to work hard to facilitate open dialogue and to make them feel comfortable during the research process. I did think a strength of mine was that I always encouraged my staff to reflect and gave them time to

see how new strategies could work in their classrooms. I had always tried to facilitate opportunities for them to see how they could use something new that they learned. I believed marking the team members' growth as teachers would be important and show them that I valued them as a part of the school community.

I think two of my professional and personal strengths or skills was my willingness to learn and my competitive spirit. I wanted to grow as a leader. By studying and seeing how culturally responsive teaching could positively impact my school, I would develop the skills to be able to teach my staff. The reason I selected this topic was because I saw the void in my school. The other skill of competition drove me to want to teach the teachers these new strategies, so they could be leaders in our school and in their classrooms when it comes to being culturally responsive. I wanted them to win because I knew it would help our students win. I also knew that it would enrich the classrooms that historically struggled and exhibited the racial divide in our school. I believed me being the holder of all the knowledge would not be impactful. So, I wanted to provide the teachers an opportunity to participate on the CPR team to grow. Thankfully, they were up for the challenge and gladly volunteered to participate.

Lastly, providing professional development for teachers was something I enjoyed doing. Like with students, I enjoy seeing the light bulb of understanding turn on for them. I believed being organized in my thinking as they shared throughout this process would allow me to tap into their strengths and eagerness to learn. I would set up the agendas and process in a way that was replicable. This would allow them to lead with success because they would have a blueprint through the modeling that took place in each of our meetings.

Researcher vs. Practitioner

Working in education often requires a leader to be solution driven. Being a new researcher was challenging because as I began to dig into the data, I was already grasping at potential solutions. As I completed my first round of coding, I instantly began to connect it to research and began moving to themes. What I discovered was this was wrong in order to be an efficient researcher. I had to take a second look at my codes and categories. What I found was I needed to be more literal and inspect what was on the surface even closer before jumping to solution-based assumptions. By taking this second look, I completely changed my codebook to make sure everything was based on the words and thoughts from the CPR meetings, pre-research interview, and CLE data. As I continued to move forward, I would have to bring myself back to the idea of not jumping to conclusions. I had to allow the data to lead me down the appropriate path when it was time.

Planning for PAR Cycle Two

I needed to help the teachers on the CPR team connect the stories from their past with the opportunities they provide for their students. Through hearing their stories, they had experiences where educators listened to them and valued their stories to impact positive changes in their lives. The plan was to have teachers begin to implement culturally responsive activities with their students so they can hear their students' stories. Then, I would give them time reflect on these stories, so they could determine how they could use the information they learned to cultivate relationships and trust with their students. Then they could create culturally responsive lessons for their students that fosters voice and choice opportunities during their instruction. These opportunities helped the CPR team see that providing these culturally responsive openings would allow them to be leaders of equity in their classrooms.

Conclusion

Understanding the PAR context gives insight as to why this research is necessary in this environment. Dissecting Cycle One helped expose what we did as a CPR team. Coding the artifacts from these activities helped me discover the emerging categories. Finally, the reflection and planning for PAR Cycle One provided an opportunity for me to analyze the growth during Cycle One. It also increased my understanding of my team and how their stories and culturally responsive teaching knowledge should influence the work we needed to complete in PAR Cycle Two.

CHAPTER 5: FINDINGS

In this participatory action research project, I served as both the school's principal and the lead researcher. These positions created an opportunity for me to actualize the role of practitioner-researcher. This role also provided the space and opportunity to better understand how to help first-generation early college high school students find academic success. The work we completed was eye-opening and revealed that teacher-student relationships were at the heart of the solution to supporting these students to find success. We also knew that listening to our students' stories, reflecting on what we learned, and acting by using the information we learned was going to support our first-generation early college students.

In this chapter, I review the cumulative data collection process with specific detail on PAR Cycle Two. I describe the activities I facilitated and the data analysis for this cycle. I provide a comprehensive chart and analysis that exhibits the data collected throughout both Cycles One and Two and a description of the coding and analysis process. Through this 18-month study, three findings emerged. As I close this section, I share these findings and explain how the activities and codes gathered supported my claims.

PAR Cycle Two Process

In this section, I outline the activities I facilitated during PAR Cycle Two. I completed these activities with a co-practitioner researcher (CPR) team ($n=4$) of science, technology, engineering, and math (STEM) educators. The other participants were graduates ($n=13$) and staff members ($n=6$) of the school. We completed CPR team meetings, observations, post-observation conversations, a community learning exchange and interviews. I discuss how I analyzed the data from the activities conducted during this process. Ultimately, from these activities from PAR Cycle One and Two, I determined the three findings for the research study.

PAR Activities

PAR Cycle Two took place from January to May 2022, the second semester of the school year. Since we focused on learning different strategies during PAR Cycle One, teachers began utilizing the practiced protocols to build relationships with new students. During this cycle, we completed CPR meetings, another CLE, interviews, and classroom observations. Table 6 displays the activities conducted during Cycle Two and the timeline of events. I explain each activity in detail.

CPR Team Meetings

The team met four times over the course of the spring semester. We did not meet in March because we missed a week for our spring break and did not have a May meeting because we concluded the semester with the collaborative learning exchange. I wanted to ensure that the tone of the meeting was inclusive and that all participants felt safe. I enjoyed hearing the stories of the staff members as we practiced the different strategies they would try with their students throughout the semester. An agenda was set before each meeting to ensure we maximized our time together (see Appendix J). At each meeting, we had certain rituals we performed. These included reading the school's vision statement, reviewing the meeting outcomes and the essential question, and completing an opening circle activity.

Meeting #1. Our first meeting was on January 28, 2022. The opening circle for the meeting had the teachers continue to think about the person they identified as being the most influential for them in their journey line they created during Cycle One. They had to read the following quote by Timothy Hilton, "Building relationships with students is by far the most important thing a teacher can do. Without a solid foundation and relationships built on trust and respect, no quality learning will happen" (Ferlazzo, 2021), then respond by sharing how the

Table 6

Summary of Activities in PAR Cycle Two

Week	1	2	3	4	5	6	7	8	13	14	15	16	17	18	19	20
Month	January			February				April				May				
CPR Meetings (n=4)				•			•				•	•				
Observations (n=4)	•										•	•				
Post- observation conversations (n=4)												•	•			
Interviews (n=9)												•	•			
CLE #2 (n=6)														•		

teacher from their journey line created trust and respect for them. Ms. Smith shared:

I 100% agree with this quote. My relationship with Mrs. Joyner is still lasting to this day. I still talk to her and still speak to her for teaching advice. I still thank her for being hard but patient with me in high school. I tell her from time to time that it has shaped me into the person I am and has taught me how to deal with people. She was the first teacher to truly validate my feelings but also turned around and continued to push me. I would still cry, but I knew her intentions were genuine, and she wanted the best for me. By the time I was a senior, I took all her critiques and criticisms without any resentment or even getting upset about it.

Her response illustrates how the development of this trusting relationship allowed her to grow in confidence as a leader. After this discussion, we moved on to our dynamic mindfulness activity for the meeting.

The heart of our meeting was their reflections on how the journey line activities went with their students. In the last meeting of Cycle One, we determined that each of them would do a journey line with one or all their sections. Everyone thought this activity would be safe with a brand-new class. Creating trust was important, and this activity was low risk. Each teacher wrote their questions, but each of them centered around the students' past experiences with either math or science. The team members had a positive reaction to the experience. One team member shared, "I think it was good that students could listen to each other's experience in math and see how many people shared common connections." The CPR team began to get a glimpse into the stories of their students. Julie shared that she was surprised many of her students cultivated a negative relationship with math in elementary school. She was surprised by how early they began to dislike the subject she loved. Based on their responses, she determined that she wanted

to make the assignments interesting because students craved this. She wanted her classroom to be active, where students could move around. Lastly, she wanted to check in with her students to ensure they understood the lessons. She did not want them to continue to feel the stress and anxiety they had been experiencing since elementary school. To conclude the meeting, the team determined that completing the mandala would be a good activity for the next month's activity.

Meeting #2. The next meeting was on February 14, 2022. We reviewed the vision statement, agreements, and the essential question. Then I had the team discuss if they had ever experienced inequity as a student. Each person shared a personal experience. To anchor their thinking, I quoted Erika Garcia, "Equity isn't handing a kid a laptop. It's knowing the systemic conditions that led to the lack of the laptop and working to mitigate them" (Chavis, 2020, p. 1). One teacher shared that even though she made As and Bs in all her classes, she was not allowed to take honors-level courses. Another shared how she did get to take academically and intellectually gifted courses, and she had certain experiences and advantages that students in general education classes did not have. For example, she could participate in academic competitions that she enjoyed, but the other students were not even asked to be a part of them. I facilitated a presentation that helped the teachers see how culture, relationships, and equity intersect. After defining equity, I shared a video showing how students come to our classrooms with different advantages and disadvantages. Our job is to get a sense of these, so we know how to support our students with what they need. We talked about culture and how the more we know, the more we can increase rigor for students. Lastly, we discussed equity strategies teachers should use to ensure all students have access to a rigorous learning experience. We ended the meeting with each teacher determining one equity strategy they would try to use over the next month. Each of them was going to facilitate the mandala activity with their students.

Meeting #3. Before the third meeting, I met with each teacher individually to show them the tool we would use for their equity-based observations. At the third meeting on April 21, 2022, we focused on the data collected from the observation tool. I conducted the feedback conversations based on their tallying of the questions during the classroom visit. At the meeting, we did complete an opening circle, and the team had to respond to a quote by Freire. The quote reviewed his theory on banking education versus problem-posing education. From this quote, the teachers described what they felt a culturally responsive classroom should look, feel, and sound like. One teacher shared:

I believe a culturally responsive classroom should look and feel like a positive environment full of dialogue between the students and the teachers. The teacher should not be the only one teaching within the classroom. The students should have the opportunity to teach themselves, their peers, and even the teacher at times.

After dynamic mindfulness, we started our discussion about the questions asked during the observations. Overall, the teachers were disappointed in themselves. While they were aware of the strategies the rubric assessed, they did not meet their own expectations because of poor planning. To conclude the meeting, I had the teachers recall the chart from Hammond that showed the differences between dependent and independent learners. Then I asked them how we were creating independent learners at AAT. They shared:

- Project-based learning assignments
- Equity sticks
- Teaching students how to advocate for themselves
- School-wide expectations and norms so that students have similar experiences.

Then I asked them to share what we could do to increase the opportunities for students to become independent learners. They shared:

- Do better about giving students think time.
- Encouraging students to look up information on their own when encountering a word or concept they are unfamiliar with in class.
- Integrate more problem-based activities in class.

Before we concluded, I challenged each teacher to observe one teacher using the question form rubric. I let them know I would complete one more observation.

Meeting #4. In the last meeting of the year, participants responded to the quote for the opening circle by Albert Einstein, “We cannot solve our problems with the same thinking we used when we created them.” Teachers were asked to think about our work throughout the year. I wanted to know how their thinking had changed. We completed the dynamic mindfulness exercise and then reviewed the data from the observations. Teachers then determined something they each wanted to improve upon during the remaining lessons they had for the year. To conclude the meeting, the teachers completed a brainstorming session about what they wanted to share during the CLE with the staff.

Observations and Effective Conversations

In the final cycle, I introduced the question form observation tool (see Figure 10). The tool allowed the teacher to receive feedback on how they asked questions in their classroom. The tool assessed what questions teachers asked, if they started with a question word, and whether teachers called the students' names after asking the question. Think time is another equity strategy that was assessed. The observations last from 12 to 15 minutes. After the



Project 1st Observation Toolkit



Step Two: What You Need to Do in Observation of Question Form

The tool is designed to collect basic information for the teacher to record question forms. Use selective verbatim by selecting and recording teacher questions. If teacher addresses question to specific student, name the student and recognize if student name is first or last and if there is think(wait) time or not. Record time if possible. Use as many pages of the same recording as needed. Then in Step Three, you name the question form in last column by using the abbreviations.

Teacher Brown Observer Lox Date 4/20/2022
Duration of Observation 11:00 to 11:10

TIME	Teacher Questions	Question Form
11:02	This symbolizes what? Lynsey(SNB)	nQW NTT
11:02	That means this side is what? Lynsey(SNB)	nQW NTT
11:07	Which one is it going to be?	QW NTT
11:08	The opposite of the lowercase will always be — ?	FIB NTT
11:08	What kind of triangle is this?	QW NTT
11:09	what comes after sin?	QW NTT
11:10	what two do we have together?	QW NTT
11:10	what's next? Lynsey, what's next? (SNA)	QW NTT
11:10	what's next after we do that? (Reads problem?)	QW NTT s

Figure 10. Example of Completed Question Form Rubric.

observation, the teachers had to tally the results. The information that was gathered during the observation was objective and factual. No opinions were used in the completion of the rubric; the subjectivity comes from the teacher who was observed. They looked at the facts gathered before the effective conversation. During the conversation, because of the closeness of our team, we were able to have the conversations as a unit. I would ask probing questions to the group, and everyone would share their responses. At the end of the conversation, the teachers would have ideas about what they wanted to change. The conversation method was effective because, as the conversation facilitator, my opinions did not matter. I would lead the teachers to discovery by asking questions such as:

1. What did you observe about these data?
2. Based on your data, what experiences did students have during the observation?
3. As a result of this data, what do you observe as strengths of your data?
4. How would you rate the equity and access for students during the lesson? Why?
5. What is practice(s) do you want to change?
6. What do you want me to observe during my next visit?

The best part of the conversation was hearing the teachers reflect on themselves. During the first observation, one teacher rated his observation a two, and he referred to his data as “trash.” While he had a harsh reflection on himself, he understood that what he was doing was ineffective for students. He shared that he wanted to look at planning his questions in advance of his lesson to ensure he has quality questions. He also wanted to ensure he provided equity by giving students think time. In his first lesson, he did not give students any think time. By his last observation, he had improved. The observations and effective conversations served as a great data tool and helped us analyze our equitable practices.

Interviews

During Cycle Two, I conducted two types of interviews: ones with graduates ($n=5$) from AAT and ones with the members of the CPR team. After having the CLE with the graduates during PAR Cycle One, more insight was needed about how they felt their stories were heard during their time at AAT. I wanted to gain insight into how they believe we cultivated a relationship with them inside and outside the classroom. The overall tone of each conversation was positive. Graduates had great things to say about their personal experiences and how they felt part of the school community. Four out of the five graduates were first-generation college students. This was important to see if these graduates felt we provided them with the necessary opportunities. All graduates were asked semi-structured interview questions (see Appendix K).

The graduates named specific staff members that made a lasting impression on them. They shared how they went over and beyond to build relationships with them and continue to check in with them during their time at school. Some of these relationships were created through our school mentoring program, while others were created through classroom teacher or advisory roles. The graduates shared that they received tough love when necessary and felt supported when things were not going well. They shared examples of when their voices were heard. One student shared:

When I brought up the fact that we should have a Spanish club to Mrs. Parker, she became the advisor of the club and helped us start it. This was important to me because I saw the other schools had one, and we had a lot of Hispanic students, so it would be good to be around people like me. We could talk Spanish together which is something we couldn't do in our classes.

Their responses revealed that we still needed to be more intentional about how we planned activities. While graduates shared that they enjoyed building relationships with staff members during clubs and mentor meetings, we needed to increase the relationship building opportunities in the instructional environment. To have an immersive culturally responsive environment, we need to look at how and when we interacted with our students to listen to their voices.

After the research process ended, I interviewed the four teachers who were a part of the CPR team. I asked participants the same questions I asked them in October 2021, seven months earlier. I was pleased to see they could answer the questions more confidently. When asking them the questions during Cycle One, they did not know how to answer several questions. This time, everyone had responses, many of which showed their growth in understanding equity and culturally responsive teaching. The CPR team recognized that a teacher needs to know more than a student's name. Each teacher was asked semi-structured interview questions (see Appendix D) and shared insight like the statement from team member, Ms. Howard.

I have learned that culturally responsive teaching is not just about race, gender, or knowing what the interest is of our students. Culturally responsive teaching has shown me how I can get a better relationship with my students to where I can use the information, I know about them to benefit their learning in my classroom. I want to continue to create this "safe space" for my students to feel like they have a voice.

Additionally, I want to use their stories, experiences, and interests in my daily lessons to help them understand math in a better and deeper way.

The teachers showed substantial growth in deep learning and understanding from Cycle One to Cycle Two, which demonstrates the potential impact that being a culturally responsive teacher can have on the students in our school.

Community Learning Exchange

A Community Learning Exchange (CLE) is an opportunity for people to collaborate in learning about a topic of interest or achieve a common goal (Guajardo et al., 2015). The CLE in Cycle One was with former students in our school. They shared opportunities when they believed their voices were heard while they were students. For this CLE, the focus was having our staff share when they believed our students' voices were heard. In both cases, hearing from those closest to the situation brought great value to the conversation.

I started the CLE by briefly explaining the definition of a CLE and sharing the significance of the process. I emphasized that they were in the best position to offer a solution to the problem because they were closest to it. I asked them to tell me when our students have the opportunity for their voices to be heard. Teachers wrote the occurrences on sticky notes. After giving them think time, they shared why these opportunities were significant. We then divided the opportunities they listed into two categories: during the instructional time and during extracurricular time. After we sorted their responses, I asked them to predict what they believed the student responses looked like. Their responses were unlike the students (see Figure 11). The students listed more opportunities during extracurricular and school-sponsored events, while the teachers' responses were more balanced. This was the most significant contrast they discovered after viewing the charts. I shifted the conversation to have them describe the ideal picture of what student voice should or could look like at AAT. Each group decided to draw visuals (see Figure 12). After having time to work on these visuals, one representative from each group shared their interpretation of the drawing. Teacher responses summarized deeper student relationships, intentional opportunities to support students, and how it is a continuous process. To conclude the meeting, I shared a diagram with the CPR team, one I created that summarized

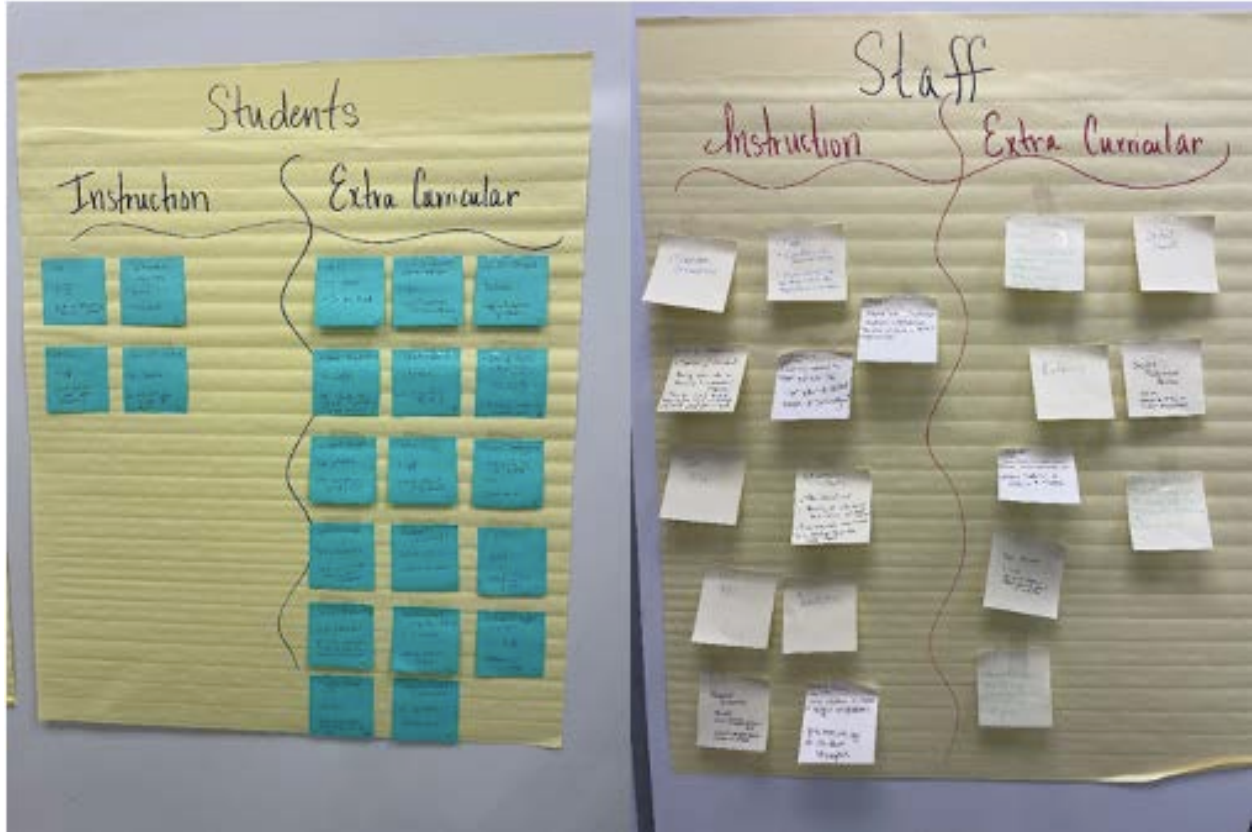


Figure 11. CLE activity: Graduate vs. teacher responses to relationship-building opportunities.

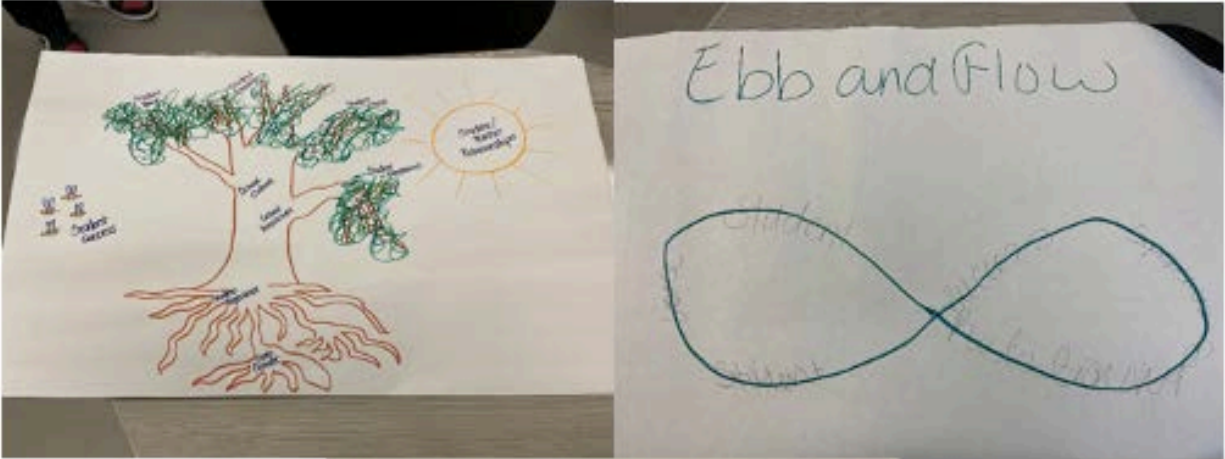


Figure 12. Teacher drawings of student voice.

what we believed were the emerging themes. The teacher participants agreed with the big ideas but did push back on the idea that all the topics are continuous and interconnected.

All these activities led to the gradual understanding and growth of the members of the CPR team. The additional CPR meetings helped us continue the research process and provide artifacts of learning. The classroom observations gave us a glimpse into the importance of academic discourse and why question form inspires this process. The CLE provided insight into the AAT staff's perception of equity and what it could look like in our school. In the following section, I discuss the findings discovered through the analysis of the data collected from the activities in PAR Cycle One and Two.

Data Analysis

The process I used for data analysis started with specific data and ended with larger generalizations. I gathered information for my investigation from a variety of sources. I frequently used codes to categorize the data and find trends while I was collecting it. The parallels, differences, sequences, and signals noticed, or examples provided, led to the patterns emerging. Emergent topics developed into bigger findings and concepts as a result of these patterns and the review of the codes. I had statements and claims based on the data gathering and analysis by the time the data analysis procedure was complete in PAR Cycle One and Two. Finally, to confirm the reliability of my themes, I triangulated the data using member checks and reflective memos (Saldaña, 2016).

In the next section, I explain the findings for the study. I identified three findings as a result of the data collected from Cycles One and Two of the PAR study. In the findings section, I talk in more detail about the categories and the codes analyzed that led to these findings.

Findings

The claims are supported through my analysis of the data that is summarized in three findings: empowering student voices, engaging student stories, and enhancing student experiences. Table 7 displays the findings and categories aggregated from the multiple activities and experiences throughout the research process. The table summarizes the data collected in PAR Cycle One and Two, while Appendix G features the codebook that includes all of the codes and categories that led to these findings, as well as the frequency of the codes collected for each finding. It was important to ensure we had clear ideas of what each finding looked like to articulate the meaning of student voice clearly. Next, I discuss each finding and category discovered through the research process.

Empowering Student Voices

Understanding the power of student voice is critical to the success of first-generation early college high school students. To hear student voices, teachers must implement clear strategies to reveal students' stories and life experiences in a safe and authentic way. Educators need to feel their own sense of agency to glean information about the identities of their students rather than being forced to follow a pedagogy of compliance (Safir & Dugan, 2021). Teachers at our school staff felt bound to a pedagogy of compliance. During our CPR meeting, a teacher shared that the expectation of teaching from bell to bell stifled her freedom to get to know her students better. By the end of this process, we recognized that protocols needed to be in place to ensure teachers understood how to elicit student stories, which would in turn help build a relationship between the teachers and the students. Next, I look at the categories for this finding. The codes that made up each category are provided in Appendix G the codebook for the study, but Table 8 shows the category and frequency for this finding.

Table 7

PAR Cycle One and Two: Findings, Categories, Definitions, and Frequency

Findings	Categories	Definition of Category	Frequency
Empowering Student Voices	Utilizing Student Voice Strategies	Teachers utilize strategies like journey lines, emulation poems, etc. to invite students to share their stories.	81
	Listening & Learning from Student Stories	Teachers actively listen and learn about the experiences, interests, and knowledge shared from student stories.	105
Engaging Student Stories	Determining the Place & Space	Teachers find the appropriate times and places, e. g. clubs, mentor meetings, lessons, to connect with students based on student stories.	49
	Performing Intentional Actions	Teachers intentionally go out of their way to build relationships and/or have follow-up conversations with students.	92
Enhancing Student Experiences	Providing a Caring, yet Demanding Environment	Teachers can set high expectations because of their caring demeanor.	65
	Using an Equity-Focused Practices	Teachers use equity strategies to ensure that all students' voices are present in the learning environment.	149

Utilizing Student Voice Strategies

As a CPR team, we discovered early in Cycle One that finding methods to help teachers help their students share their stories would be important to utilizing student voices to in turn build teacher-student relationships. The codes that I formulated were a result of the types of student voice activities and protocols that we used in our CPR meetings and in our classrooms to reveal the innermost thoughts of our teachers and students. These activities provided ways for teachers to connect to students during instructional time.

When completing the initial community learning exchange (CLE), we received insight from students who graduated from our school. During the CLE, they shared if they felt like teachers allowed their voices to be heard in our school. While we were not intentionally planning these activities so their voices could be heard, we discovered how they felt. They told us that the extra-curricular activities and mentor sessions we provided were some of the main opportunities they had to share their stories. Figure 13 are photographs taken during the CLE when students were brainstorming these opportunities. Students identified the mentor meetings with the school staff and industry professionals, performance reviews that discussed their grades, and clubs that provided topics of interest as some of the times they shared personal experiences and life stories. These ideas were coded. One key insight from conversations with the students is they did not identify many opportunities during the instructional time where they could share their backgrounds and experiences.

One strategy in which students shared their voices was an emulation poem. The activity asks the poem's author to describe the place they come from, the place they are in currently or a place they went, and lastly, where they want to go in the future. Teachers were able to use this protocol to glean background information from their students. The activity did not take up much

Table 8

PAR Cycle One and Two: Empowering Student Voices

Finding	Category	Frequency
Empowering student voices	Utilizing student voice strategies	81
	Listening and learning from student stories	105



Figure 13. Graduates participating in a World Café Activity during the CLE.

students. For example, one CPR member shared, “This [emulation poem] activity is probably the most likely to stir emotions. The emulation poem is the deepest because it is the student telling who they are and why they are who they are. It is very personal.” All the CPR members shared the same sentiment. This activity served as a positive way for students to share their stories.

During the CPR meetings, teachers identified the simplicity of learning students on a surface level, but to move into the shallow level, teachers needed something to support those conversations. The mandala activity served as a great way to increase their knowledge and hear students’ stories. The mandala activity asks participants to share four areas of personal insight: defining where they are from, sharing who they are in constant relationship with, recognizing personal networks and who they answer to in life, and acknowledging who they want to be in the future. This strategy, like the emulation poem, allowed teachers insight into the inner workings and relationships of the lives of their students. One teacher shared, “The mandala activity allows students to express themselves in a safe space and dive deep into the underlying culture of why students do the things they do.” Figure 14 shows one of the examples a CPR team member received when completing the activity with his students. This work revealed that teachers were able to get to know their students more authentically. The facilitation of this activity was completed as a bell work assignment at the start of a period. From this short experience, the teachers were able to learn some thought-provoking information about their students.

Determining ways for teachers to reveal the stories of their students was essential to cultivating relationships between teachers and students. The activities allowed teachers to create a safe experience for students to feel vulnerable enough to share their stories. The use of emulation poems and the mandala, among other protocols, helped teachers and allowed them to have the necessary skills to learn more about their students than just how they performed academically.

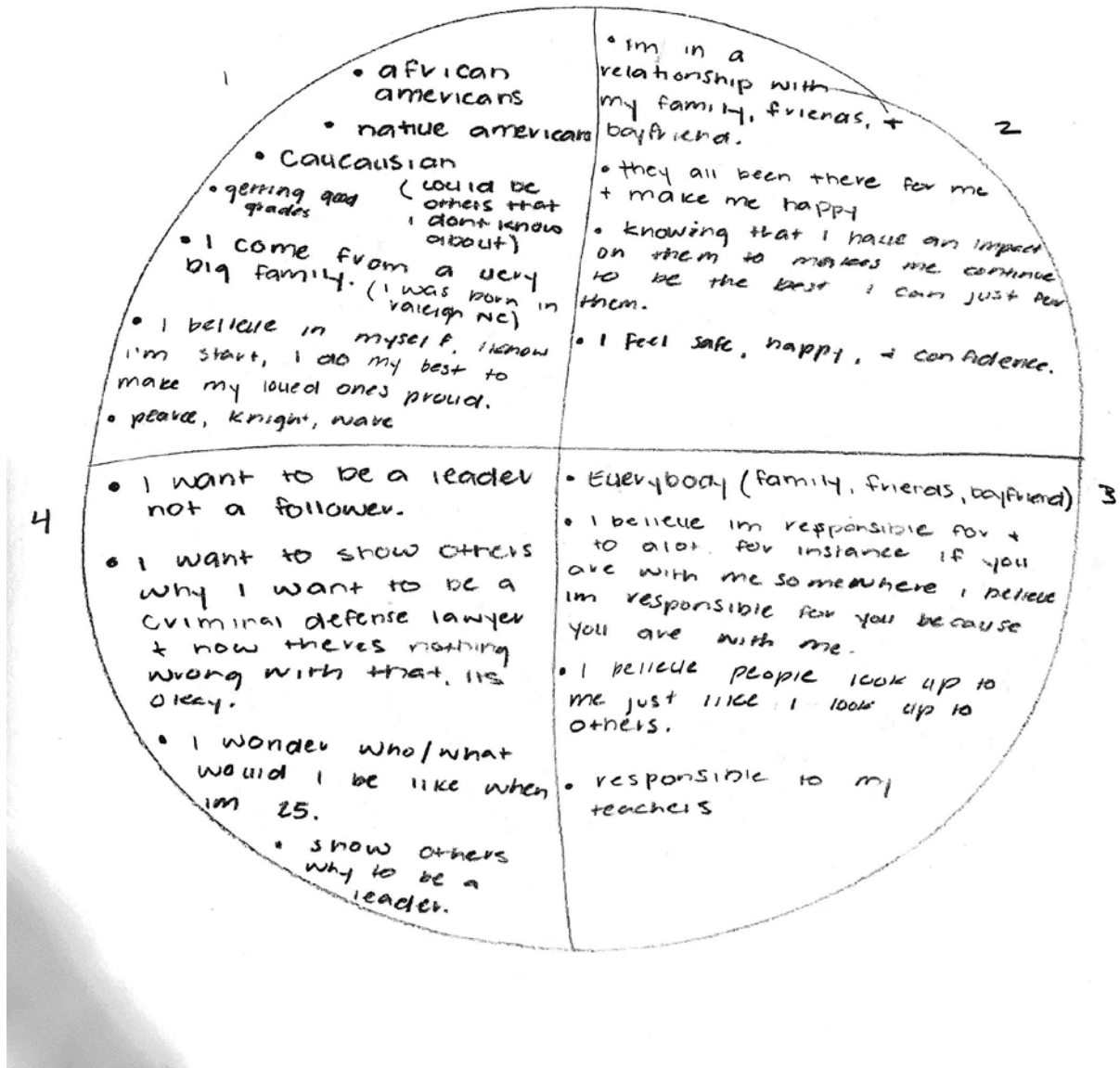


Figure 14. Example of a completed mandala.

As a team, we believed the use of the protocols were essential to the success of the relationship building. It provided teachers with a structured way to get to know their students' stories during instructional time. Progress would not have been made without their use.

Listening and Learning from Student Stories

Listening and learning from student stories surfaced as a category during the research process. It was important to have strategies for students to reveal their stories, but the CPR team recognized that it was not just about collecting the information. The power is from listening and then learning from the students' stories. The act of reflecting on what is learned is crucial to understand how to later act upon what is learned. Hammond (2014) shares how the act of listening demonstrates respect for and interest in the student's contribution. For teachers to cultivate relationships with students, they must be willing to listen to what students share and then process the information. As teachers implemented different strategies, information about the students were revealed. Teachers had to process the information they learned about their students from the journey lines, emulation poems, and mandalas. Negative and positive thoughts and experiences came up because this is how the teachers interpreted the information they learned. The reflections on the information the teachers learned revealed negative aspects of their students educational and personal lives. For example, after completing the journey line activity, teachers were shocked at the negative experiences their students had endured in their math and science classes. Some teacher reflections included:

Some of the students started to struggle with math as early as kindergarten to 5th grade.

This surprised me because I would have thought that math in middle school is where the students would have started to struggle and/or dislike math.

Another CPR team member shared:

I had students talking about how they were almost in foster care, students telling me about their parents walking out on them, near-death situations, and how they did not want to be here (on earth) anymore at one point in their life.

Teachers learned and found connections to their students past negative experiences and gained a new respect for how their students learn based on their life experiences.

Understanding that positive experiences could help their understanding of students was first revealed to the CPR team through their participation in protocols. Each of the protocols they facilitated with their students, they completed themselves first during our CPR team meeting. For example, the CPR team members all completed a journey line about teachers who allowed them to share their stories and built relationships with them. Ashley shared that she had a high school English teacher that showed how much she cared. She had a positive experience in this teachers' class. Ashley shared, "She was the first teacher to truly validate my feelings but also turned around and continued to push me. I would still cry, but I knew her intentions were genuine, and she wanted the best for me." The strategies used provided teachers with examples of positive experiences students encountered at different times in their lives. The stories allowed teachers to connect instruction to the larger sociopolitical context (Hammond, 2015). Positive experiences were revealed from the comments of our graduates. For example, one of the graduates wanted to start a Spanish club to give him and his friends a positive outlet at school where they could connect culturally. The graduate shared, "When I brought up the fact that we should have a Spanish club to Mrs. Parker, she actually became the advisor of the club and helped us start it." Members of the CPR team learned about their students having family farms, being cheerleaders in the past, and their enjoyable experiences in math and science classes.

Teachers listening and learning from their students' stories is a powerful process. Listening to and learning from students' stories is critical to support the learning process for first-generation early college high school students. Relationships between teachers and students are made easier once the teacher can learn more about their students. Next, I discuss a second finding, engaging student stories.

Engaging Student Stories

Engaging student stories allows teachers to utilize the information they learn from completing the activities to strengthen their relationships with students. Teachers need to acknowledge the personhood of students to build intentional and authentic rapport (Hammond, 2015). Relationships cannot be cultivated without action or the use of information, which has a trickle-down effect on how and what students learn instructionally. The analysis of the data revealed two categories that support this finding. Table 9 displays the finding, categories, and their frequencies captured throughout the research process. The categories are determining the place and space and performing intentional actions.

Determining the Place and Space

Determining the place and space for teachers and students to connect is not always the easiest to identify but necessary for the growth of first-generation early college high school students. When analyzing the codes, the CPR team and graduates identified the opportunities they had to build and deepen their relationships. The data gathered through graduate interviews and a community learning exchange revealed the codes. Figure 15 shows responses from both CLE activities in which each participant could share how students' stories and voices were heard. The graduates and teachers identified the classroom and during extra-curricular activities

Table 9

PAR Cycle One and Two: Engaging Student Stories

Finding	Category	Frequency
Engaging student stories	Determining the place and space	49
	Performing intentional actions	92

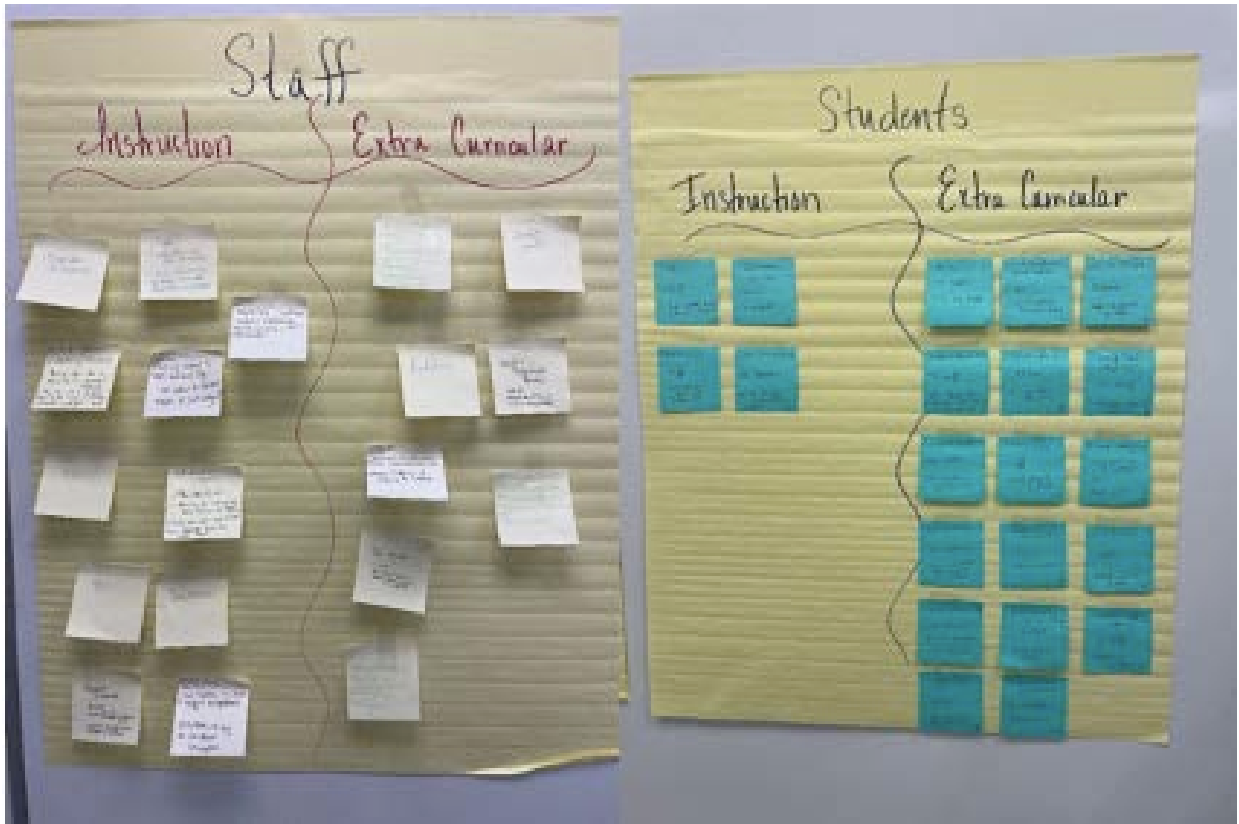


Figure 15. CLE activity: Discrepancy in responses to relationship-building activities.

as the place and space relationships were formulated. When contrasting the information shared between the graduates and the teachers, teachers believed that they were providing opportunities to share their stories during the instructional time, while the graduates did not identify these opportunities. The graduates shared opportunities where their voices were heard as primarily outside of the instructional time. This revealed a dissonance between the teachers' thinking and reality and provided an opportunity for us to discuss why this discrepancy really existed.

The CPR team discussed the challenges with building relationships during instructional time in their classrooms because of state mandates as well as the requirement to teach from bell to bell by school administration. During the CLE, the teachers came up with examples, but these opportunities were not identified by the graduates. One of the times graduates identified was during performance reviews. Performance reviews were a time when teachers had one-on-one conversations about how students were performing academically. While that was the main focus, graduates felt like many of their teachers supported them in other ways during this time. It allowed them to get to know their teachers better and vice versa. For example, one graduate shared, "He [the teacher] used to do performance reviews with us. He was a guy I could always talk to. I could talk to him about anything. Stress or anything." While the strategy may not have been an obvious choice, students strengthened their relationships with their teachers, supporting their academic growth.

The extra-curricular activities we offered as a school served as a time when our graduates identified that their voices were heard. Our teaching staff identified some of these times during the second CLE. In this case, connections were made because of common interests and an atmosphere without the pressure of performance. One of the main times when extra-curricular activities took place was during club time every Friday. A graduate shared, "In this environment,

we could express our opinions.” Other times identified were mentor meetings and counselor check-ins. Again, these were times when academics, meeting standards, and a tight timeframe was not set.

Performing Intentional Actions

As we went through each cycle, we came to understand that our work needed to be intentional. We learned that listening to and learning students’ stories was not enough. Teachers must deliberately utilize the information they learn about students to engage them during classroom instruction. By helping students make connections through using the knowledge learned about students, relationships were created and strengthened.

During the first CLE, it was evident that our graduates appreciated the teachers that followed up with them on things they shared. This helped them to feel a part of the school community and that their voice was heard. During the graduate interviews, the same sentiment was validated. One graduate shared how she got off the bus one day and looked sad. One of the staff members immediately knew something was wrong with her demeanor and pulled her to the side to check up on her. The graduate reported, “She could read me. She would pull me aside, and she would have a couple of words with me.” Another graduate shared:

I had gotten into an argument with my friend. The teacher wanted to know if I was okay and how she can help me. She even followed up a few days after that to check on how my situation was going.

These types of interactions required these teachers to not only know the students academically but know the students emotionally.

Having purposeful conversations lets students know that what they say matters and that they are heard. This was shared by the CPR team members as a priority when they were students.

During their personal reflections on their student experiences, they shared how their teachers went out of their way to have purposeful conversations with them. For example, Mason shared how his teacher Mr. Carbonaro built a relationship so deep through purposeful conversations that he became a father figure in the absence of his own father. He cultivated his love of math. As a teacher, he wanted to cultivate relationships with his students through purposeful conversations. From a graduate's perspective, purposeful conversations supported Angel's success as a student at our school. Angel shared, "I failed a class during my senior year because of my attendance. She [Ms. Mitchell] called me out on it. I didn't miss classes anymore because she told me she was going to be attentive, and she really was." The staff member knew her potential and followed up on what she said. Purposeful conversations are crucial to the success of students.

Engaging student stories is essential. While having mechanisms to capture student stories and voice is a start, if there is no intentional use of the information learned to connect with students, the strategies and the process are often not successful. The intentionality of the engagement is the part that many forget; while some connections will happen organically, the deepest relationships are consistent, authentic, and thoughtful. The engagement in the stories is what builds the relationships and was clear to the CPR team as a necessary aspect of supporting first-generation early college high school students. As the CPR team reflected, they begin to make connections to when they could utilize the information and they were learning from the protocols they were facilitating with their students. Tiffany shared examples of how she had already begun to intentionally use the information she learned about two students. One student shared a story about how she was a cheerleader in middle school. Tiffany used this information to connect with the student later in the semester and encouraged her to try out for the school's team. She utilized information she learned about another student during math class. She shared:

During the mandala activity a student mentioned his family owned a farm. Not too long after I used his name in a math problem and used the scenario of a farmer needing to use the formula to solve a math problem.

This example showed that teachers were gaining an intentionality around utilizing what they learned about their students' background and experiences.

Student voices need to be used in order to enhance student experiences. The last section explains the final finding and how students have more authentic experiences because relationships are built. The use of these stories can allow teachers to become warm demanders and provide equitable opportunities to improve the learning environment.

Enhancing Student Experiences

Cultivating relationships is vital because it supports student success in the academic classroom. For students to gain trust, they must feel like their voice is heard and then see actions that correspond to what is said. Once this occurs, enhancing student experiences can happen and support academic success. When analyzing the codes, these ideas were evident and showed up in two categories: providing a caring yet demanding environment and using equity-focused strategies. Table 10 displays the finding, categories, and frequencies captured throughout the research process. In the following paragraphs, I discuss each category.

Providing a Caring, Yet Demanding Environment

When analyzing the data gathered from the different research activities, the codes made it clear that one must be caring first in order to require high expectations of their students. Table 10 shows the frequencies for the number of times participants referred to a teacher being caring or

Table 10

PAR Cycle One and Two: Enhancing Student Experiences

Finding	Category	Frequency
Enhancing student experiences	Providing a caring, yet demanding environment	65
	Using equity-focused strategies	149

requiring high expectations of them. It was clear that the students were open to accepting the challenges and expectations required once the relationship was created through the caring demeanor.

Providing a caring persona is imperative to the academic growth of first-generation early college high school students. Members of the CPR team identified with this same description as the graduates that participated in the CLE and graduate interviews. This was clear from the first CPR meeting. Figure 16 shows the CPR team completing a chalk talk about the assets of AAT. After reviewing the comments listed about the assets of our school, the team identified that we were a staff that cared about its students. It was resounding when each person described those, they had relationships with that mattered; their caring persona was important. For example, two graduates shared: “They cared about you as a person, your feelings. You know that you are human when you are here. You are not just a number or a regular student.” The quote shows how the teacher humanized the student and her feelings. She felt like she was a part of the larger community of the school with the personal relationships guiding her experience. Another student went on to say, “He created a relationship with me during my first meeting. I know this is a performance review, but he was really open. I could tell that he truly cared.” This graduate shared that the teacher cared more about him than just discussing his grades. He was a whole person that needed to be supported. These two examples showed how the caring environment and persona was important as they reflected on their time as students in our school. Our CPR team members shared stories about teachers who influenced them during their own school experience. Each person focused on how they felt cared for in a way other teachers had not displayed for them. The ability to be caring seems to be the catalyst to open students up to sharing their stories and the sharing of students to build deeper relationships with their teachers.

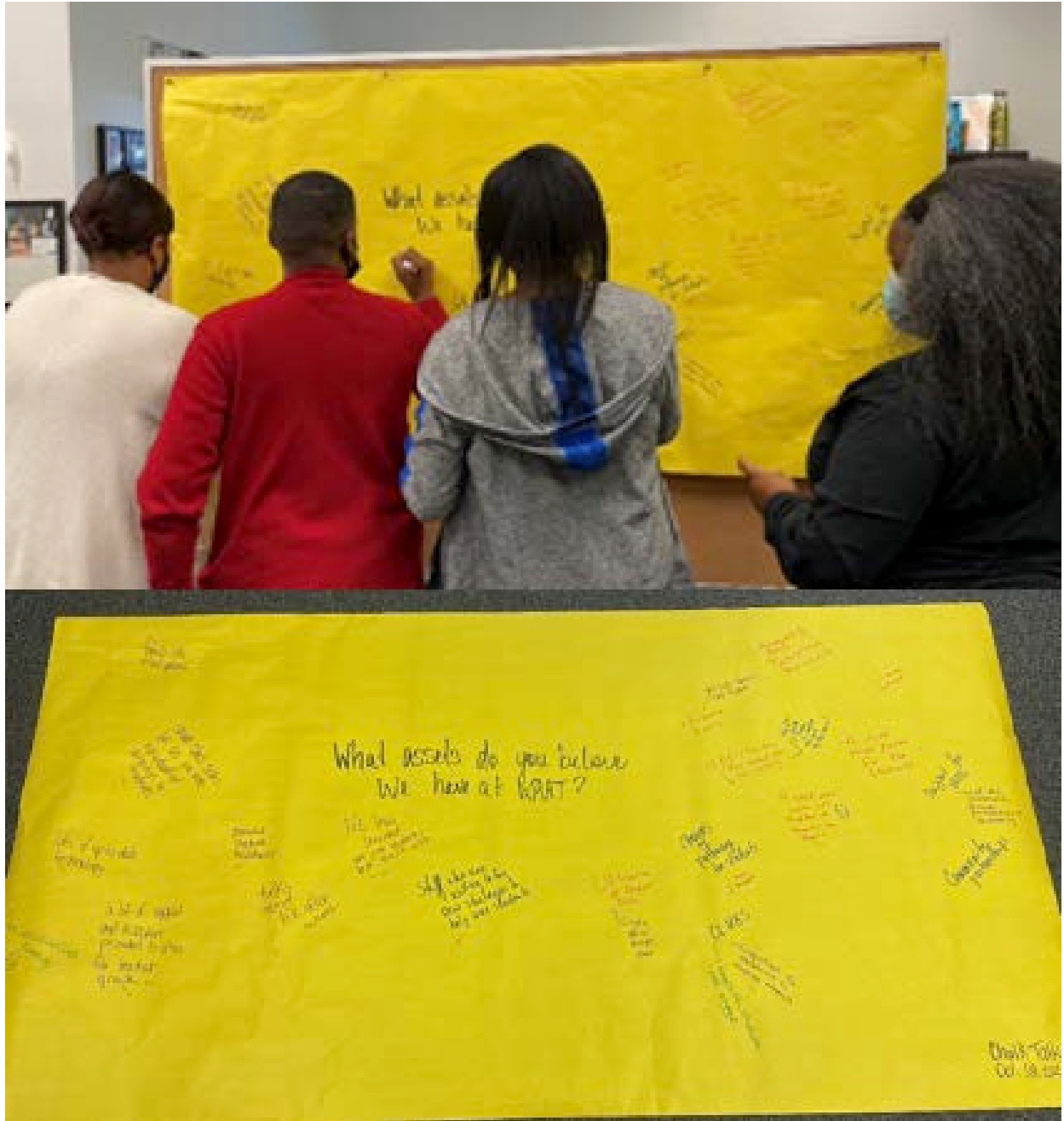


Figure 16. CPR completing Chalk Talk activity.

Once the caring relationship is established, the teacher has the power to create high expectations for the student (Delpit, 2012). The student then understands that the teacher is setting the expectations because they care about them, understand their story and background, and want to see them succeed. For example, during an earlier CPR meeting, Mrs. Smith shared, “She [Mrs. Joyner] was the first teacher to truly validate my feelings but also turned around and continued to push me. I would still cry, but I knew her intentions were genuine, and she wanted the best for me.” Meanwhile, our graduates shared similar sentiments. Brandon shared, “She always pushed us. She was there for advice and would keep us on track educationally. She helped me get into honors classes.” This is the goal, to have students willing to accept the push. This is what students in a challenging early college environment need.

Using Equity-Focused Strategies

Using equity-focused strategies allows students’ voices to be heard in the classroom during lessons academically. These strategies also allow teachers to gauge if students are learning, which is critical. Expectations cannot be set without knowing if students are learning in one’s classroom. Students need to be able to use their academic voice just like their personal voice. The way students learn is connected to their life experiences (Hammond, 2014). Therefore, allowing students to feel a part of the learning environment supports the relationship necessary for first-generation early college students to grow academically.

Creating a culturally responsive environment encompasses multiple layers but is a large part of how students can participate in the learning environment. For example, teachers could be bringing biases to the learning environment. These could stunt the growth potential of students. During the final interview with the CPR team, one team member shared, “I need to determine if there is any bias in the lesson or activities that may put a certain group of students at an

advantage or disadvantage.” This conscience decision of the CPR team member will help her ensure that students receive an equitable experience in her classroom. Another team member shared, “For each lesson, I always start with background information about the topic to ensure that everyone starts on the same level.” For this team member, she did not want to assume what prior knowledge her students were bringing to each new lesson. Other examples were the realization of how important it is to ask questions on varying levels of revised Bloom’s Taxonomy to multiple students during a lesson to make sure they are challenged and have a chance to share their understanding. Using strategies like think-pair-share came up because it would allow all students to share their answers to questions. The opportunity for academic discourse also has great value to first-generation early college high school students. The CPR team was able to gain an understanding of these principles through the question-form observations. Teachers were required to analyze their own objective data after the observation. Figure 17 shows a chart and questions teachers had to analyze before having their effective conversation with me as the principal. Teachers were able to deduce on their own that they were not asking enough questions, lessening rigor with true/false questions, or not providing students with enough think time.

The CPR team members realized that using the students’ stories within a lesson could increase the engagement and connectivity to lessons for their students. After participating in several activities, the CPR team could see the value in utilizing the information they learned about their students in their classrooms. For example, when students feel comfortable, the learning environment can become more concrete for students through the use of specific examples or background integration like this example from Ms. Smith:

I would also try to incorporate information into a daily lesson or topic. An example of this was when a student told the class that he was a sickle cell carrier, and we happened to be talking about genetics. I was able to use that information as an example of how the sickle cell trait can be passed from one generation to the next.

This example made learning about genetics more engaging for this student and potentially his classmates because it related to something he understood specifically. These types of integrations are another mechanism to help our first-generation early college high school students.

Enhancing student experiences comes down to utilizing what you have learned about students to create an equitable learning environment for all. This connects the earlier actions and the findings. This allows for a cycle to occur that progresses the relationship to get deeper with each intentional and continual interaction. Once a caring demeanor is established, teachers have the liberty to push students and require higher expectations of them (Delpit, 2012). They strengthen a student's academic voice by using equitable strategies that encourage discourse. These integrations made the classroom a more enjoyable environment.

Conclusion

After two PAR cycles, an in-depth analysis, and multiple reviews of the codes created from each activity, three findings surfaced with sufficient data to support them. For student-teacher relationships to be cultivated, teachers must empower student voices, engage student stories, and enhance student experiences. This occurs when a teacher listens to students' backgrounds and life experiences, reflects on what they heard and how they can use it to support student growth, and then implements strategies to create a more authentic learning experience in the instructional classroom. Ultimately, establishing a relationship, using the students' stories, and the follow-up inside and outside of the instructional time can lead to academic success.

Question Form Teacher Reflection

Observation #1
4/20/22
Completed By:
Kf

Teacher Name: [REDACTED]
Date: April 21, 2022

Question Form Abbreviation	Question Form Explanation	Number of Instances
Y/N?	Yes or No Questions	
QW	Question Word (Question starts with a question word.)	6
NQW	No Question Word (Question does not start with a question word.)	2
FIB?	Fill in the blank question. (Usually, the teacher starts to make a statement and seems to decide halfway through the question to change to asking and says...is what? At the end of the sentence.	1
SNA	The student's name is called after the question.	3
SNB	The student's name is called before the question.	
TT	Adequate think the time was given for the type of question (3 to 8 seconds.)	
NTT	No think time was provided.	9
Other	Anything else observed about question form	

Evidence from Observation

- The teacher asked 9 questions in 10 minutes.
- The teacher asked 6 out of 9 questions with question words.
- The teacher asked 2 out of 9 questions without question words.
- The teacher had 1 fill in the blank question.
- The teacher asked 3 out of 9 questions after saying a student's name.
- The teacher asked 0 out of 9 questions before saying a student's name.
- The teacher asked 0 out of 9 questions with think time.
- The teacher asked 9 out of 9 questions without think time.

Figure 17. Question form teacher reflection.

I initially thought my teachers would have been more aware of culturally responsive teaching (CRT) methods. Still, after completing and coding the pre-research interview, I realized their understanding was minimal. The initial process revealed that we still needed to find a way to hear our students' stories and get to know them better. We needed to continue researching how to help our first-generation early college high school students find success. To accomplish this, we knew we had to slow down to understand the importance of these elements during the second part of the research process.

I had to augment the agendas for the co-practitioner research (CPR) team meetings to ensure PAR Cycle Two could be advantageous for the team and our students. After Cycle One, the teachers wanted to start using the protocols they experienced in our meetings with their students. The team members had the autonomy to select the strategies they deemed appropriate for their classrooms. As a practitioner-researcher, I wanted to ensure they knew we were working together in this learning process to determine the best ways to support our first-generation early college high school students.

In a quest to find a way to help our students who are underrepresented in college settings find early success, we came to a group of findings that can support the growth of our teachers and students. The findings, when processed together, create a framework that can guide the thinking of those who want to help first-generation early college students. In the final chapter I re-examine the findings through the lens of the literature. I also provide the implications for research, practice, and policy. Most importantly, I investigate a potential framework for educators who want to support first-generation early college students.

CHAPTER 6: DISCUSSION AND IMPLICATIONS

“Storytelling offers the opportunity to talk with your audience, not at them.”

– Laura Holloway

All students need their stories to be heard. Current school structures do not support this, nor do teacher preparation programs train teachers on how to facilitate this process. As a result, we need to make it a priority to train teachers on the value of listening to our students’ stories to promote building relationships with their students. Therefore, making sure teachers know how to allow storytelling in their classrooms, as well as the ability to intentionally use the information learned from student stories, is critical to education. Dewey’s (1938) work explained that students learn from their personal experiences, their own interests, and prior knowledge. If this is how students learn, how can one effectively teach them without considering the stories of the students or giving them a chance to reflect and share them? So, while the participatory action research (PAR) study aimed to examine how we prepared first-generation early college high school students for academic success, this work required us to find the best way to support underrepresented students in a challenging academic environment by understanding their personal life stories and experiences. The belief was that if teachers could hear and learn from the students’ stories, teachers could use this knowledge to build relationships with the students while integrating ideas from these stories into their lessons to make them more relevant to the students they teach. I hypothesized the PAR design on the following theory of action: *If teachers can listen to the knowledge and experiences of their students, then teachers can embed culturally responsive strategies into their pedagogical practices to help students find academic success.*

While the school was primed for success because of the small class sizes, support from the community, and state-level financial support, there were still challenges. As depicted in the fishbone diagram in Chapter 1, the staff indicated that many of the students came into the

school needing an understanding of how to work through academic challenges. There needed to be more understanding of the benefits of students pursuing a workforce related pathway.

Meanwhile, we wondered if we would lose funding because legislators didn't fully understand the power of the early college model. To compound these challenges, most of the students were first-generation college students, which often predicates a need for additional support for students and their parents when understanding the college-going culture. The school staff wanted to help underrepresented students in a college setting overcome the systemic obstacles that the students faced. Therefore, finding the best way to support the students was essential to the purpose of the study.

The PAR was an action research project and study that consisted of two PAR cycles over a school year. It focused on helping teachers give voice to the stories and backgrounds of the students within their classrooms. The work was done as a team of co-practitioner researchers (CPRs) that consisted of three Math teachers, one Science teacher, and me as the lead research practitioner. The two cycles allowed us the time to work together as an equity-centered network improvement community to help our teachers better support our first-generation early college high school students. In Table 11, I provide an overview of the key PAR activities intended to address how to help first-generation early college students find academic success. To achieve this goal, I facilitated two community learning exchanges to gain insight from those closest to the problem: our former students and current teachers. I had monthly CPR meetings to provide opportunities for equity-centered work and personal reflection. The use of interviews helped understand graduates' and CPR team members' perspectives on student voice, equity, and culturally responsive teaching practices. The utilization of reflective memos served as a window into the learning process and understanding of myself and the CPR team members throughout the

Table 11

Participatory Action Research Cycles

Research Cycle	Time Period	Activities
PAR Cycle One	August-December 2021	CLE with Alumni Interviews CPR Learning Activities Reflective Memos
PAR Cycle Two	January-May 2022	Monthly CPR Team Meetings Observations Effective Conversations CLE with Teachers Interviews Member Checks Reflective Memos

study. Lastly, the classroom observations and follow-up conversations began the culturally responsive practices review of our teachers to determine the use of equity of voice, think time, and question form in their classrooms.

Ultimately, we wanted our teachers to deepen their understanding of first-generation early college high school students' experiences, interests, and knowledge. We also wanted to determine how to help teachers create student-centered and culturally responsive learning environments for first-generation early college high school students. Lastly, we wanted to help teachers modify their practices to academically support first-generation early college high school students. In this chapter, I share the three findings we discovered as a result of our research, and I back them up with evidence from the extant literature. I then explain the lessons I've learned and their implications for practice, policy, and research in the future. I close with a personal leadership reflection on the research project and study.

Discussion of Findings

In connecting the findings to the literature, I analyzed sources from the original literature review and new sources. I provide data from the study about the PAR research questions. Next, I present a framework that explains how teachers can support first-generation early college high school students to find academic success through building relationships. To review, the PAR findings are: (a) empowering student voices; (b) engaging student stories; and (c) enhancing student experiences.

Empowering Student Voices

During the two cycles of inquiry, the CPR team practiced and analyzed how to empower our students' voices within our school. We determined that it was important to utilize student voice strategies to facilitate sharing stories and then take the time to listen and learn from what

students shared during these activities. It was discovered early in the process that teachers could use assistance with strategies to engage students and allow them time within the instructional period to have students share their stories. Militello and Guajardo's (2013) study supported this finding and the need for storytelling. The study revealed how storytelling is a cultural tool that supports meaning making and supports organizational learning. While the demands of standardized testing still exist, the CPR team determined that suggesting specific strategies could be advantageous for teachers trying to build relationships with their students. During our CPR meetings, the CPR team experienced each activity before they facilitated it with their students. They were able to practice the process by actually participating in the activity. This practice helped the CPR team identify when they should perform each activity. While completing the activity, we realized that teachers needed not only to listen to their students' stories, but also to learn from them to determine when to utilize the information gleaned about each student from the activities. Julie reflected on the journey line activity by sharing that she saw herself utilizing the information from her students' by making her lessons more engaging and allowing them to move around, since most students shared how boring their classes were and that they disliked Math. This experience, like several others, showed the power of the use of the protocol to foster a conversation to hear the students' stories.

The knowledge gained from these findings was supported from theoretical positions. According to Hammond (2015), "All learners have to connect new content to what they already know" (p. 49). In order for teachers to connect new content to what students already know, they must find out what students know by encouraging them to share their stories. This solidifies why the use of protocols was essential to help teachers uncover student stories. Hammond suggests that culture guides how people process information. Because of this theory, teachers must gain

an understanding of students' deep culture. Deep culture is not something teachers can gain an understanding of through reading books or student information files. Many of these gems are hidden in students' minds and need to be released (Hammond, 2015). To this end, teachers must be willing to try activities like journey lines, emulation poems, and sharing endowed objects to better understand a student's deep cultural values.

One can only begin the relationship process by listening and reflecting on what one heard from their students' personal stories. Safir and Dugan (2021) support this claim that teachers must be willing to slow down and listen to build relational trust. Teachers must be willing to listen to student narratives to humanize the process of data-gathering or utilize strategic listening. We quickly learned that it was more than just learning a student's name that would lead to a deep relationship. If teachers were ever going to get to the culturally responsive environment, described by Gay (2010) as a place that uses prior experiences and allows students to learn through their cultural filters, starting with listening and learning from their students' stories were critical to the progression of the process and relationship. Empowering student voices by providing the time to listen to their stories, backgrounds, and prior knowledge is important to creating an authentic learning environment for students.

Engaging Student Stories

Teachers need to understand that the culturally responsive process continues after listening and learning something about their students. Teachers must be willing to act and utilize what they learn about their students. Teachers must identify the place and space where they can use the information they learn about their students. By the end of the research process, CPR team members were responding differently and actively making plans for how they would utilize what they learned about their students' experiences in their lessons. For example, Tiffany shared that

she planned to use some of the knowledge learned in regular conversation in her classroom with the students from time-to-time to make sure they know that she was listening to them. Therefore, the instructional classroom is definitely at the forefront as a time to build connections because instructional time is the greatest amount of time students spend with teachers. On the other hand, teachers need to take advantage of the other opportunities to connect with students. Some avenues surfaced through the conversations with our graduates, including clubs, mentor meetings, and advisory meetings. These are opportunities for teachers to connect students' stories to their learning. The other important factor was that teachers take intentional actions. We learned that it was all about the initial use of information and then the follow-up. Trust between the teacher and student grows here. When students see that teachers have intentional follow-up conversations with them, trust begins to formulate. Teachers utilizing information about family structure, successes and failures, and goals are a few examples that could show a student there is genuine interest.

These claims are further supported by Khalifa (2013), who focuses on the importance of humanizing students and preventing the shaming, teasing, or suppression of student identities. This means that teachers need to find ways to thank students for their display of cultural practices by showing their support and intention through authentic interactions. "Culturally responsive teaching is about being in relationship with students and the content in a different way" (Hammond, 2015). Finding the place and space to engage with student stories is critical, because at that time a teacher has not only listened to a student shared their story but has found the appropriate time to utilize the information to support the student.

Enhancing Student Experiences

Teachers need to provide a caring yet demanding environment for students. The prerequisite themes are necessary to get to a place where the teacher can push the student to more rigor. First, teachers must show the students that they care about them through the cultivation of relationships. Gay (2010) posits that encouraging relationships demonstrated as caring is critical to culturally responsive teaching (CRT). Hammond (2015) also supports the idea of caring relationships when she shares that they are the foundation of all social, political, and cognitive endeavors. While these students may seem marginalized and plagued with deficiencies, with a closer and culturally responsive look, teachers should be able to identify these students are creative, resourceful, and accomplished (Gay, 2013). Understanding these qualities allows the teacher to understand what pedagogical strategies they can use to push students to higher expectations.

To this end, teachers can utilize equity-focused strategies to increase the rigor in their classrooms because of their relationships with their students and the understanding of their stories. Freire (1970) supports the idea of creating a more rigorous and equitable environment through a problem-posing environment. The antithesis is the banking concept of education, where the teacher oppresses their students by believing they are filling their empty brains with all the information they need to know on a topic. Instead, this research supports the problem-posing method that encourages teachers to pose problems relating to the world their students are a part of to increase the challenge. This method requires teachers not to believe their students are empty vessels or docile listeners but are critical co-investigators in dialogue with the teacher (Freire, 1970).

Last, education is about the experiences students encounter daily. Gay (2013) supports this idea by sharing that students need the ability to learn through their own cultural filter. Teachers are in the driver's seat of ensuring that students receive a robust education. So, ensuring that students have the opportunity to have their education connected to their experiences can make a difference for first-generation early college students. Teachers must understand that to provide an equitable environment, they cannot have a one-size-fits-all approach. For a teacher to provide hands-on and relevant experiences for students, one must understand the journey the student took before arriving in the classroom. In order for teachers to ensure they are providing students with an equitable education, they must know the experiences, backgrounds, and prior knowledge of their students (Dewey, 1938). For example, one teacher reflected after completing the mandala protocol:

I had students talking about how they were almost in foster care, students telling me about their parents walking out on them, near-death situations, and how they did not want to be here [on earth] anymore at one point in their life.

Through this experience, the CPR member received insight into some of the most critical moments in her students' lives. Those experiences affect how they learn. Therefore, for teachers to enhance student experiences, one must have personal knowledge of their students, and intentionally use that information to impact student learning.

To prepare first-generation early college high school students for academic success teachers need to empower student voices, engage student stories, and enhance student experiences. At the center of these strategies is the teacher-student relationship. We knew that relationships had an impact on students because we received several interview responses like the one shared from Brandon, "Mrs. Cox knew us and I knew that Mrs. Cox cared about us because

whenever she saw us not doing right, she would talk to us and tell us to get it together. She wanted us to be successful.” This was evidence that when students do not have relationships with or trust their teachers, there can be serious consequences (Hammond, 2015). Who would check on Brandon if he did not have a relationship with Mrs. Cox? While there is a great deal of research that examines why teacher-student relationships are important, there is a lack of literature that explains how to build relationships during the instructional time through the use of protocols, which this research addresses. We recognized that building relationships is not something that can be left to chance. Helping teachers identify methods like journey lines, mandalas, and other strategies must be intentionally taught to support the needs of first-generation early college students. The next section will re-examine the research questions and their answers.

Research Questions Re-examined

As a CPR team, we set out to answer three sub-questions that would guide us to the understanding of the overall research question. The sub-questions were:

1. How do teachers deepen their understanding of the experiences, interests, and knowledge of first-generation early college high school students?
2. How do teachers create student-centered and culturally responsive learning environments for first-generation early college high school students?
3. To what extent do teachers modify their practices to support first-generation early college high school students academically?

I share the answers to each question based on the data analysis of the codes collected during the research process.

By the end of this research process, we determined how teachers can deepen their understanding of the experiences, interests, and knowledge of first-generation early college high school students. Teachers need to use strategies or protocols that allows students the opportunity to share their stories. During this process, we discovered that teachers did not have a plan for how to build relationships. They would try to have conversations with students, but there was no real plan for how to build relationships with students in their classrooms. We also noted that the first CLE revealed that our graduates frequently did not see their time in the classroom as the opportunity to build relationships with the staff. Therefore, the use of protocols provided a structured way for teachers to learn more about their students. During the research process the teachers had the opportunity to learn how to facilitate several strategies which included journey lines, mandalas, and emulation poems. After they participated and used the process themselves, they opted to use the strategies in their classrooms. The information they were able to learn about their students helped them to see what was under the surface. For example, Ashley was impressed with the experience and information she learned about her students after facilitating the mandala protocol. She shared in a CPR meeting that the activity provided her with insight as to how students act and feel about themselves, and how their circle of friends truly impacted who her students were and their personal identities. Like Ashley, the CPR team was excited about how the students opened up and wanted to share their stories. So, it was clear that if given the opportunity to share their life experiences, most students were willing to do so.

Additionally, we discovered a way for teachers to create student-centered and culturally responsive learning environments for first-generation early college high school students. We initially had to all adopt the understanding of what culturally responsive meant. We used the definition by Hammond to ground our work.

Culturally responsive teaching is an educator's ability to recognize students' cultural displays of learning and meaning making and respond positively and constructively with teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new concepts and content in order to promote effective information processing. All the while, the educator understands the importance of being in a relationship and having a social-emotional connection to the student in order to create a safe space for learning (Hammond, 2015, p. 15).

One of the first steps to creating a student-centered and culturally responsive learning environment for students is finding a way to cultivate a relationship with students. Students need to understand that their teachers care about them and to know that teachers want them to learn and be successful. The best way to implement this culture in a classroom is to have mechanisms to first listen to the students' stories. The action will allow teachers to learn what students need, what their prior knowledge is, and what experiences have occurred in their lives. Next the teacher has to be willing to utilize what is learned in their classrooms to ensure that students feel at the center of the learning environment. It is not just about letting students have an academic voice. They need to see and hear where the teacher is strategically planning to make the classroom more inclusive by utilizing what they learn about their students. In turn, this allows the teacher to become a warm demander, setting rigorous expectations for their students. They also can then utilize equity-focused strategies to allow all students to participate in the learning process. Because the teacher has built a relationship with the student, the student will be more likely to take academic risks. The ability to create this environment requires planning and intentionality but is possible to achieve. For example, once the CPR began to reflect on what they were learning, they begin to think about how they could use what they learned from their

students. Mason shared that he wanted to do a better job of gauging students' prior knowledge by sharing, "I could do a better job of guiding students by utilizing some of the background knowledge they've learned in previous math classrooms." Epiphanies like this and many others surfaced for the CPR team as they learned more about how to provide a responsive environment for their students.

By the end of the research process, teachers began to modify their practices to support first-generation early college high school students academically. We learned from classroom observations that students needed to be part of the learning process. Teachers using questioning methods, think time, and calling-on strategies help to increase the rigor and equitable learning opportunities for students. Question form required teachers to look at the types of questions they were asking and if they started with question works. In order to support students with academic discourse, teachers learned that providing think time before asking students to respond allowed them to have more confidence. To capture these questions, we used a form that objectively had the observer to write the information on the form. What helped the teachers want to modify their practices was tallying the results and then participating in an effective feedback conversation. The use of this tool was the first step to helping teachers recognize they needed to be strategic with the questions they asked their students.

Based on our collective work, I developed a framework for change that blends our learning with the research. The following section will explain the framework. Teachers understanding how to build relationships with students is a critical change that needs to happen to support first-generation early college high school students. To support the process, teachers need to listen, reflect, and act to also utilize what is learned about students' stories to further build relationships. This framework provides a model for this process.

Framework for Change

As a result of this PAR study, I developed a framework for supporting first-generation early college students to find academic success. After many iterations, it became clear that relationships must be at the forefront of the work teachers do daily to impact the academic success of first-generation early college students. While some may struggle with this because building relationships is not mandated by state standards, relationships were clearly the driving force in the conversations we had with our graduates and our teaching staff.

The framework grew out of the numerous conversations with our CPR team. We learned that relationships are not built from a single experience. We also gleaned that students learned better when they can connect themselves to the learning standards. Last, we discovered that students needed to feel safe and cared for in the learning environment to take risks, which points back to the relationships being a necessary factor in our students' academic growth. From these revelations, the framework shown in Figure 18 emerged.

The first aspect of this framework is a catalyst for change. The catalyst sparks the need for culturally responsive experiences to occur or be examined. In the case of this study, the initiation of the changes was determined by me as the school's leader. There was also student perception data that supported we needed to foster relationships with all of our students. Delpit (2012) supports that teacher-student relationships are essential and allows teachers to become warm demanders, which is needed in a rigorous early college environment. Therefore, the ability for teachers to show they cared and empathized with students helped them to cultivate relationships that allowed them to push students beyond their own boundaries.

The next aspect of the framework to understand is the cycle that shows the movement between each of the findings. The process is not linear and requires teachers to perform the three

actions listed along the circle: listen, reflect, act. Listening supports the first finding, empowering student voices. At this stage the teacher is using protocols to support students with sharing their personal stories. The sharing of the information about their experiences, backgrounds, learning styles, etc. is critical to the ability of a teacher selecting the appropriate culturally responsive strategies. Next, teachers must reflect, which supports the second finding: engage student stories. At this stage teachers are trying to determine the place and space for when they will use what they have learned from the students' stories. This aspect is critical. The planning process shows students the intentionality of having them share their stories. Last, enhancing student experiences is where the teachers act on what they learned from the students sharing their stories. Multiple outcomes occur when students can see themselves in a classroom. Students are able to connect to their teachers and lessons because they have a more enriching classroom experience. Our graduates shared that when their teachers referenced their backgrounds and desires, they believed that their teachers cared about them. This idea supports the work of Geneva Gay (2010), when she explained how caring is one of the pillars of culturally responsive teaching for ethnically diverse students. These strategies or findings combined allows teachers to cultivate relationships with their students, meanwhile, the stories shared gives teachers the ability to truly be culturally responsive because they can respond to the cultures of the students that they are facilitating learning for (Tredway et al., 2021). In essence, teachers also change their pedagogical practices because they can identify the changes needed to support student learning and academic success.

During the pre-research interviews and the first few CPR team meetings, it was clear that the team did not know how to cultivate relationships with students other than surface level interactions. Ashley shared that she had a practice of asking the students to share good things at

Teacher-Student Relationship Cycle

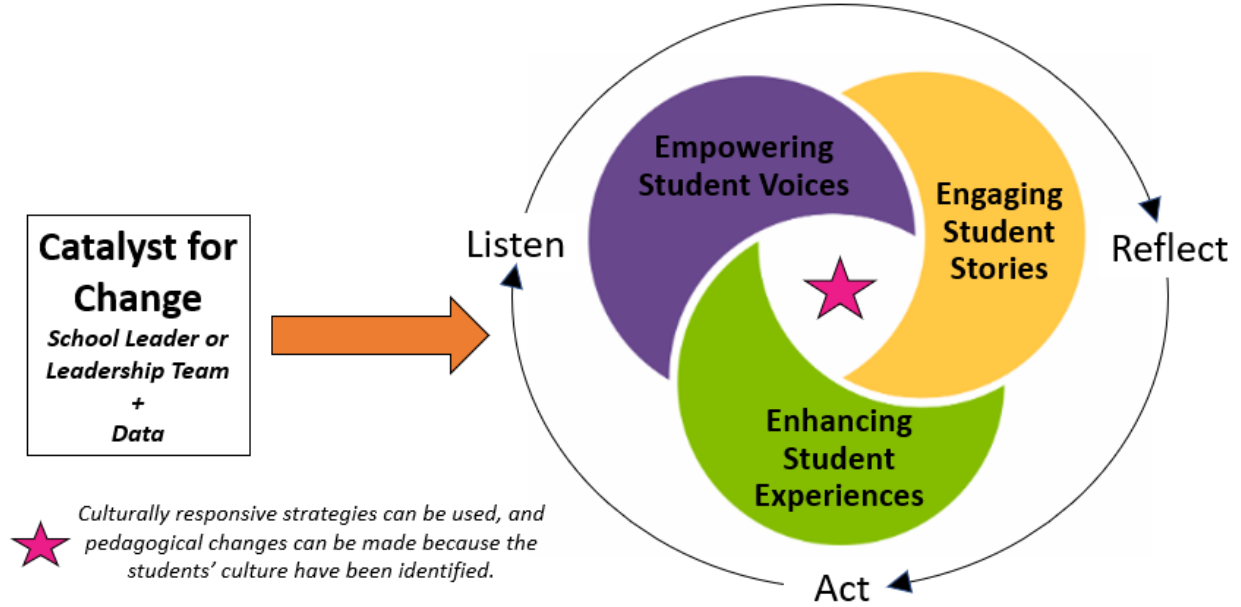


Figure 18. Cultivating a teacher-student relationship.

the beginning of her class period. Through these interactions she learned about students' favorite television shows or what they liked to do over the weekend. This was exhibited in this interview response:

I do Good Things every day. So, I start my day off by asking who has a good thing, something good that has happened in the last 24 hours. So, we can just share something. So, if they share something like, I went to Forever 21. I would say, oh, I like to shop at Forever 21 as well. Just so I can build that rapport. My latest thing with building a relationship with this group has been me starting to watch anime. Which I have never done in my life. And I just started. Some of the students who would not look at me the first day of school are now stopping by my room and having full blown conversations with me.

These were positive interactions and useful for Ashley but, when looking at the levels of culture, still only surface level. We knew to impact the way students learned we need to receive information on multiple levels. Therefore, providing experiences to support this work was necessary.

It also came out in conversations that they did not know how to balance these interactions with the demands of teaching bell-to-bell and ensuring that students have standards-based instruction. So, having specific strategies or protocols that they could utilize was imperative to facilitate the storytelling experience. Figure 19 is an example of the journey line template I provided for teachers as the first protocol we experienced. After teachers completed the journey line, they thought it would be a great way to learn about their students past experiences in the particular content area they were teaching.

S&T Journey Line

Name:

Date: 1/5/22

Directions: Throughout your education describe how you feel or felt about S&T (Science & Technology). On this paper, you will write down different experiences/teachers (good or bad) that influenced your thoughts and feelings in Science & Technology.

• I use to take apart the light switch and screw them back together bc my dad did and I thought it was fun.
 • Took a trip to IMAR with family friends to see Star Wars. then went to the childrens Museum
 • Computer teacher: Mrs. Liles I didn't really like her. She just made us do hard projects on the old Powerpoint.
 • 5th Grade - Mrs Groh Science Teacher: Kinda hands on
 > Dissected chicken
 • Girl Scouts - Technology Camp: played w robots & legos

• My dad let me get a marble racing track that I built myself & it was fun
 • Yearbook/Journalism: good opportunity to learn more about things I didn't do in middle school & lots of the Yearbook: kinda fun, didn't do much
 • Mrs Boykin: 6 & 8th grade Art
 • Advanced Art: A lot of hands on activities & won 1st place in an art competition
 • Mr. Johnson: 6th grade CTE Typing, his class was fun Hands on games & stuff

• Design Club: working w/ diff technology to create cups, shirts, keychains, etc.
 • Makerspace: built catapults & learned about them
 • Recently I got a roller coaster set & built it. It took about 4 hrs (w/ trial & error in the 1st hour)
 • Biology III - Every other day we had lab & worked w/ diff liquids & materials/tools
 • Mrs Carlos: Science & a lot of hands on activities
 • Mrs. Evans: Freshman ^{Semina} ~~Senior~~ Introduced to different STEM
 • Mrs. Temple: AML - one of the 1st actual hands on experiences w/ real life tools & examples
 • Mr Skinner: engaged & allow me to learn about different STEM jobs

K-5

6-8

9-12

Figure 19. Example of a completed journey line.

We also realized that reflection had to be a part of the process. For example, during the journey line activity, Mason stated the following about one of his students:

I want to know about Becky's math journey because in her journey line she discussed that she started to dislike math in 8th grade, but she had a really helpful teacher. I think I would like to see what concepts she knows and help her build upon that knowledge.

Based on this information, the next step in the process for Mason was to have a follow-up conversation with Becky to see what did work for her to support her moving forward in his class. If he stopped at just learning the information, he would not know how to best assist her.

Reflection is a critical component to the relationship building process. It is not just enough to get the information from the students, but really thinking about what the students need based on the information they shared.

When teachers learn critical information about their students, it is important for them to plan and then use the information to support the academic growth of their students. This can include using a different teaching strategy, providing knowledge to create connections for students, understanding a student's personality, etc. As we moved through the research process, the teachers begin to think more about how they would use the information they were learning about their students from the different needs. After completing the journey line activity, teachers reflected on how they wanted to use the information learned. One CPR member, Julie, shared how she wanted to have check-ins with her students to make sure they were feeling okay in her math class after finding out that so many of her students had a negative opinion about taking math. Because of completing this activity, she now had the opportunity to support her students differently.

Through these experiences we were led to the idea that teachers needed to understand the

cycle of listen, reflect, act. It is important for them to provide the opportunities for students to share their stories. Then they must reflect on the information they learn from the students' stories and make plans to use the information. Last, the teacher has to act on what they have planned. This process allows for students to receive a more authentic and connected experience.

While in the research process, the initial thought was that teachers would need to go through a step-by-step process to cultivate the teacher and student relationship. Initially, this may be the case, but when taking a deeper reflection, it was important to note that the approach is multifaceted. In addition, it was important to note that movement through the framework is only dictated by the deepness and nature of the relationship between the teacher and the student.

The findings from the study showed the importance for teachers to listen to student stories, reflect upon what they learned and how it can inform their teaching, then act or utilize the information in the school environment. This process is the only way to ensure the intentionality and purpose of building relationships with students. Based on reflections from the CPR team, finding ways to communicate and get to know the students was crucial. Utilizing equitable strategies like journey lines allows an organized and safe way for students to share their stories. Using the information learned from the strategy, the teacher needs to process what they learned to determine the right place and space to act out what they learned. Then the teacher must utilize the information they learned about the student in the best way, whether through a conversation in passing, a one-on-one mentor session, or incorporating a prior experience into a lesson. At this point, the teachers move into the most challenging part of the process and become warm demanders to increase their academic expectations for students.

Students sense that their teachers care because they have reoccurring conversations

and see that the teachers are following up with them. Teachers must focus on incorporating equitable strategies to ensure that everyone's voice is heard within the classroom. At this point, a teacher may need to complete additional strategies and conversations to continue to learn more about the student or continue to utilize the information they have already gathered to support the academic growth of the students. In any case, the relationship serves as the foundation for growth of the first-generation early college high school student.

Implications

There were multiple implications for the PAR study related to practice, policy, and research. I have recommendations for improving current educational practices, informing state and national educational policies, and future research to expand on the findings of this study.

Practice

The PAR study identified the importance of utilizing community learning exchanges and equitable protocols to gain knowledge of students' stories, backgrounds, and experiences. The research confirms that teachers need instruction on how to build relationships with their students in professional ways in their classrooms. The activities utilized during this study created safe environments for students to share their prior knowledge and life experience on multiple topics. For example, the first activity we utilized was a journey line. Our teachers used it with their students to learn about their students' previous experiences in math and science. The information students provided gave them insight into the hopes and fears students had for the lessons they were about to teach. The activity served as a non-threatening way for students to share their thoughts about the course they were about to take. This simple conversation provided the teachers with information they could continue to use throughout the semester. I believe that professional learning on these types of strategies should be included in the onboarding and

continuing education process to ensure teachers understand the importance of building relationships with students. This professional learning should also include strategies to support the relationship building process and further how to utilize the data gained to create personalized experiences. I believe until we do this, teachers will not fully grasp the understanding of how to differentiate instruction because they are leaving out the key element in this process, the use of student stories.

From my experience as a teacher and educational leader and as a result of the findings, next I present a specific set of recommendations for practice to achieve the goals of promoting student voice and relationship building. Student voice is a buzz word in our schools, but we really need to ensure teachers understand thoroughly what this means. In the case of this study, student voice means hearing the life experiences, prior knowledge, and backgrounds of students through their own authentic voice. Then, translating the information learned into more opportunities for discourse because there is a connection between the students' stories and how and what they learn. To this end, an additional layer of professional development to inform teacher practices in understanding what student voice means and how to create trust to inspire sharing is necessary. Teachers must understand that it is not the act of just listening, but there must be a utilization of those stories to allow student agency and effect the educational experience of the students. Listening is not enough as there must be action. Teachers must intentionally plan when they will use the information they learn during classroom instruction, mentor meetings, clubs, or informal conversations with students. The act of using the information is what helps students see that teachers care and in turn allow them to cultivate a relationship. Training on how to do this is necessary to ensure teachers know how to provide students with the opportunity to share their voice, and then how to best apply the information

learned. While they do not have to use the exact same strategies we used in this study, examples like journey lines, emulation poems, and mandala were useful to provide the experiences for students.

Policy

Public education has been in a state of reform for years, and I believe culturally responsive teaching and relationship building need to be added to the list of changes in classrooms for first-generation college students. The act of building relationships with students should be a part of the teacher education programs for universities. It should also be a part of the onboarding process for school districts. But to take this a step further, a part of the instructional day for schools should be set aside to provide an opportunity for teachers to get to know the inner workings of their students. Because of the increased pressure to have students perform well on standardized tests, teachers are afraid to detour from teaching the standards. Unfortunately, because students learn best when a relationship is cultivated with them, schools must have the time and ability to prioritize these actions without feeling fearful of hurting students academically.

State policies need to be reformed to place less emphasis on testing and getting through materials, so teachers feel like they can invest the time to build relationships with students. School should be required to dedicate a certain amount of non-instructional time to learning about its students, meeting with the students' families, providing time for mentoring, and learning about students' career aspirations. Reformatting or creating advisory periods would support the ability to get to know students. If teachers know that this time is guarded to increase the academic and social success of their students, I believe they would be willing to invest the time. The use of protocols should also be included with this policy to ensure that teachers know

how to have students share their stories during the instructional time. The objective is to not waste instructional time, but to enhance it with the ability to use students' personal experiences to enrich the classroom environment and learning opportunities.

School leaders and teachers could also be taught how to use strategies like community learning exchanges to get an understanding about the lives and backgrounds of families and community members. This will allow insight from those closest to the problem. A requirement of facilitating these types of events at least twice a year should be a priority for schools to gain insight into communities where teachers sometimes do not live.

Research

Additional research is needed around first-generation high school students. Most sources discuss factors that support first-generation college students already enrolled in higher education. My belief is that research studies need to be done to inspect the experience students receive leading up to the college going process. High schools can have a drastic impact on whether a student even makes it to a college campus. Therefore, understanding the strategies needed to help students get to the college application process when they may not have the necessary supports at home is critical.

More research could be done on early college high schools. While there are multiple pieces that describe the importance of a small school and personalized environment, taking a deeper dive into why these schools are successful would be significant research. While North Carolina is a leader in early college high schools, the data that supports the use of specific strategies to create a personalized and authentic experience is minimal. This research could further explain why early colleges are a breeding ground for the strategies used in this study. It could also explain why students in these schools that come from marginalized environments find

success in extremely rigorous environments. For example, it is a norm for students to receive one-on-one mentoring, the ability to share what they would like to aspire to in their future, and seminar time to bridge the knowledge gap around the college-going culture. Having specific data around the nuances not oftentimes seen in traditional comprehensive high schools could show the merit in this alternative educational experience.

There remain additional areas that the next researchers could explore. One question is how teacher education programs could be more explicit with teaching their education students how to build relationships with students. It would also be worth examining how students would respond to when their teachers actively use what they learn about them in their classrooms. It could be interesting to compare student responses from teachers who use culturally responsive strategies versus a teacher who does not. Last, it would be valuable to learn how student experiences may be enhanced in schools or districts that require time within the school day that allows teachers time to build relationships with their students.

The purpose of this study was not to look specifically at the experiences of Black educators conducting CRT activities in rural spaces, but it was present in the backdrop of our study. The CPR team were all from rural spaces, had lived in the south their entire lives, but were not all clear on what it meant to be culturally responsive. We had all experienced injustices as a student with few culturally responsive opportunities ourselves. We had all been in schools where we didn't always receive the same opportunities as our White counterparts. While it was unspoken, there was a certain responsibility for our team to provide a guide for ways teachers of any race could connect better with their students. We all understood that these connections would lead to trust, and trust to relationships, and relationships to academic success. So,

additional research of educators who work in this space and have lived certain injustices in first-person could lend itself to educational growth in the field.

Limitations

Academy of Applied Technology was a new school that opened five years prior to the start of the study. I wanted to carry out a study to evaluate the school we had developed, and I found this especially important as the main researcher and the founding principal of the school. In order to determine whether we were giving our first-generation college students what they needed to succeed in our early college high school, I wanted to finish the research with a group of staff members who were willing to look more closely at our school's practices. The CPR team assisted me in planning and leading the CLEs as well as in analyzing the materials produced by these events. They supported the study at every stage. We discussed the codes, categories, and themes in order to formulate claims.

I was the supervisor of the individuals that I worked with to complete this study. Because of my position, I felt it was essential that I took extra care to make sure that everyone was willing to assist. I was completely aware of the influence I wielded as the principal and did not want to pressure the participants. Therefore, participants who volunteered for this process received a consent form to sign that attested that I did not coerce them to participate because I was their supervisor and evaluator. The consent form also let them know if they wanted to discontinue their consent and end their role on the CPR team, there would be no repercussions.

Leadership Development

As a part of this research process, I wanted to answer a question around the evolution of my leadership development: To what extent does my leadership evolve as I lead a co-practitioner research team to change outcomes for first-generation early college high school students? At the

end of the process, I knew I had grown as a leader, but more importantly as a scholarly practitioner. The process was challenging, because as a principal, I have always felt that a big part of my job was to help solve the problems of my school by any means necessary, frequently wearing that burden independently. Alternately, this process required me to work with a team and utilize the data that surfaced from each activity to help us answer important research questions that would impact our students. As I reflected on my learning, I thought about the tangible knowledge I had gained from doing research on a topic near to my heart—equity. I also thought about how the trust amongst my team grew because of our work together. I also learned that my staff needed support with cultivating relationships with their students, and I did not realize the support I would need to provide to support them with their personal growth. Lastly, while I knew the Plan-Do-Study-Act (PDSA) process would help us through the research procedures, I had to learn how to connect our work to equity in a way that would help our school and teachers' future transformations.

My Personal Knowledge Grew

For years I had prided myself as someone who was equity-minded and wanted to ensure that all students had a fair opportunity to an equitable education. But I noticed over time, as I progressed in my career, that having the appropriate language and sources to back up what I knew was right would be necessary to change the thoughts and perceptions of those around me who did not believe in this type of change. Through my participation in this EdD program, I gained that language and the sources to support what I have known to be true from my own personal experiences as a first-generation Black student trying to navigate the educational system. This program exposed me to valuable literature that I will continue to use as I work with educators. Books like *Pedagogy of the Oppressed* by Freire, *How to be an Antiracist* by Kendi,

Experience and Education by Dewey, and *Culturally Responsive Teaching and the Brain* by Hammond have provided me with the ammunition and research-based proof that equity work is important work. I can use these sources to support those who want to change with meaningful strategies. I now have sources that no matter where an educator is in their journey, I can support them. I honestly feel more powerful. While I know I still have a way to go to fully educate myself, the enlightenment and confirmation I received through this process will be with me throughout my educational career. When people around me try to ignore this work, I believe that I can stand tall as an equity warrior and point them to sources that will inspire them to think differently about themselves and how they educate children.

Relational Trust is Necessary

Before beginning this research and study, I knew that trust was essential for the work we would do together. Honestly, I had assumed that, as a team, we already had a trusting relationship based on our previous work together. What I discovered is that like with many of our students, the relationship and trust we had was only surface level. Not until we began utilizing culturally responsive strategies to get to know each other better did the collegial trust transition to relational trust. The work we were doing was deep. It required a certain vulnerability for the teachers participating on the team. They had to share more than just their thoughts on education, but how their personal experiences interacted with how they taught students on a daily basis. Through this discovery, I saw up close and personal how important earning relational trust with teachers is when forwarding the equity work in a school.

This process was about the betterment of our teachers and our school as a collective. Bryk and Schneider (2003) stated, “When school professionals trust one another and sense support...they feel safe to experiment with new practices” (p. 43). I needed to let them know that

this was a safe space and that we were all in this learning experience together. So, I needed them to know and feel that I respected their opinions as educators and valued the risks they were going to take instructionally to support our students. To help us build these relationships and build trust, I strategically selected quotes and activities for us to get to know each other better during Cycle One. We completed activities like journey lines, emulation poems, and mandalas to help us share varying levels of our personal story. They needed to complete these activities to help them drill down to their innermost thoughts. This process increased our trust.

While we had a surface level trust, I quickly learned that in order to dissect why teachers made certain decisions to build or not build relationships with students, I had to make them feel comfortable and provide an environment that lacked judgement for them to share these thoughts. We transitioned from collegial trust to relational trust. I also saw that they were eager to take risks if I was going to support them as the school leader and if these risks would support the growth of our students. The trust that grew over the course of the process paid off and we all grew in the process. Moving forward in my educational journey, I will never take for granted the necessity to create relational trust among a team.

Levels of Culture Matter

I have always thought of myself as a culturally responsive leader who understood my students and staff. This work has really helped me understand culture in a new way and pushed me to think about how I understand our students' backgrounds. For me, building relationships has always come naturally. I always try to hear the heart of students to understand how to help them and how their culture shaped their perceptions on life. What I realized in this work is that this does not come naturally to every teacher, thus having a methodology to help educators

understand their students' cultures is important. It made me assess how I pushed educators to think about culture.

I learned that culture is dynamic and multifaceted. Culture is more than just knowing a student's favorite color. I needed to help my staff understand this to have a deeper impact on our students and to help them find success. When I reflected on the responses they shared at the start of the study about their understanding of equity and being culturally responsive in relation to where they ended, I was thoroughly impressed. In an early reflective memo, I stated:

The initial conversations about student voice and being culturally responsive in their classrooms are not revealing an understanding or need to support students in that way.

There was also dissonance between their experiences and the experiences we wanted to authentically cultivate for our students that currently walked our halls and sit in their classrooms.

The growth of my staff meant growth for my students, and in turn was growth for me as a leader. I needed to learn how to facilitate this learning experience for my teachers. I knew if our teachers could get a deeper understanding of culture and why the levels mattered and impacted how students learn, it would help transform our school.

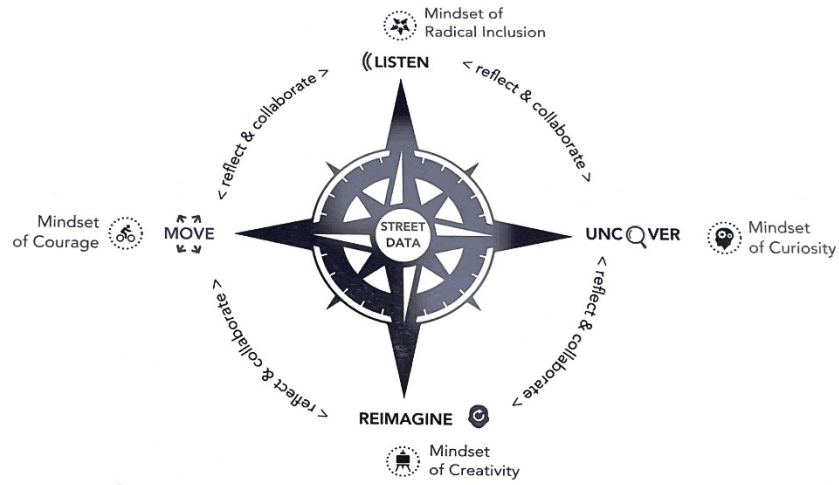
When initially introducing the concept to the staff, they latched on, and many of them realized that the relationships and knowledge they had of their students were at the surface level. We begin to do a deep dive into the work of Hammond to understand the levels of culture. No judgement was passed, and it helped us all understand that we had work to do as a school in order to more authentically meet the needs of our students. By the end of this process, the terms from the levels of culture, surface, shallow, and deep, were a part of my everyday language (Hammond, 2015). It also showed up in the growth of the responses of each CPR team member

in the interview and CLE at the end of the process. To this end, I was able to grow as a change agent for culture and stop making assumptions that educators knew how to build meaningful relationships with students.

Equity Transformation Takes Time

In a reflective memo, I shared, “As a leader, I really had to trust the process. I remember at the beginning of this process Chris [my dissertation coach] telling me that the data would guide the route we needed to take. I honestly didn’t believe him.” I did not want to trust the process, I wanted to just solve a problem, but I let go and truly worked with the team to determine how to help our first-generation early college high school students. Initially, we used the Plan Do Study Act (PDSA) process to guide our work, but I learned as a leader that I needed to help us understand, as a team, that the process would take time. So, in addition to PDSA, the Equity Transformation Cycle by Safir and Dugan supported our thought processes and agendas. On September 17, 2021, I wrote “I believe I am going to purchase “Street Data” for my CPR team. I believe this book can provide foundational skills to support the transformation of our thinking.” Early in the process, I recognized we had to slow down to really understand the root causes that were specific to our school and creating this gap. To do this, the Equity Transformation Cycle served as a guide for our thinking (see Figure 20). The framework requires reflection and collaboration throughout the entire cycle. The four main checkpoints are to listen with the mindset of radical inclusion, uncover with the mindset of curiosity, reimagine with the mindset of creativity, and move with the mindset of courage (Safir & Dugan, 2021). These four checkpoints served as the backdrop to the work we completed during the school year. These four checkpoints help guide me as a leader to ensure we were keeping our equity-lens at the forefront,

FIGURE 4.1 Equity Transformation Cycle



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Note. (Safir & Dugan, 2021).

Figure 20. Equity Transformation Cycle.

helped us stay organized in our work, and ultimately help guide me as I created the agendas and opportunities of reflection and collaboration throughout this process.

The growth I experienced as a leader was critical to my continued career as a scholarly practitioner. I learned strategies and concepts that I will be able to replicate as I continue to strengthen and change the landscape of education. I understand that creating relational trust amongst a team of researchers is critical to the success of the study. The focus on equity and making culturally responsive moves is crucial and must be at the forefront when building connections with our students. Lastly, finding an improvement cycle that can structure the work I am trying to accomplish, like the Equity Transformation Cycle, can make all the difference with the quality of the change I can achieve with a team.

The growth I made as a leader will impact the work I do far into the future. I now have the necessary tools from the literature review and literature researched throughout the process to articulate why it is important that we listen to our students' stories. Also, going through the research process itself taught me a deeper way to analyze data. This process required several reviews of the data collected to glean the deepest understanding possible. It was a challenge to let the data guide me at first, but the more I reviewed the codes, my vision was cleared, and I was able to decipher the categories and themes.

The reflection process served as a mirror of my growth. Throughout the experience, we had to complete reflective memos of our learning and growth. As I went back to review what I read at the beginning when the team was formulating to some of the later submissions, I am compelled to continue to do this work after this process has formally ended. This quote captures the essence of my leadership growth:

Now, I am inspired to inspire others. I am inspired to change the educational experience in a big way for not only first-generation college students, or students who are black and brown, but any human-being who is not being given the full opportunity to reach their highest potential. I know that I have a big job to do, but I am willing to take it on because I am not alone. I have classmates, soon to be doctoral graduates, instructors, and coaches who are fighting with me.

Conducting this research has changed me. I have my what, how, and why equity, cultural responsiveness, student voice, and relationships are so crucial in the educational sector. I will continue to fight to ensure all students have enriching educations.

Conclusion

I started this process wanting to have a positive impact on the students in my building. I love these kids like they are my own. And at one point, I was them. I was a Black first-generation college student. I wanted to see them succeed in every way. So, the passion I had from the start of this study was there, but I gained so much more throughout the process. I also had a personal connection to the work, because like my students, I was never truly asked about my personal story and how that impacted how I learned. Through this work, I not only learned how to help first-generation early college high school students find academic success through cultivating relationships, but I learned how to articulate many of the equity and culturally responsive concerns I had as an educator for years. Not only did I learn how to fight for the rights of my students, but I brought others along with me.

As a team, we quickly saw that the discoveries we would make would not only help our students but would impact the students of anyone who read this work. We were searching for ideas to help our first-generation early college students find academic success. We learned that

we needed to empower them to tell their stories. We also needed to engage in the student stories by finding the appropriate times to utilize the information and follow up to deepen our understanding and trust between the teachers and the students. Finally, we learned that we had to enhance student experiences by showing a caring demeanor that can lead to pushing students to their highest potential, while increasing the rigor in our classrooms through the equity in voice and academic discourse.

I now have the opportunity to coach teachers and administrators. Now I have an even broader audience to share why this work is so important. I also have strategies that I can suggest to spark positive change in every school faculty member I get to work with. I get to challenge those who need more exposure to why equity must be the cornerstone of our classrooms. I get to be an equity warrior every day, spreading ways for us not to oppress or forget about the voices of our students, but to inspire their voices and stories to flourish so culturally responsive teaching can begin.

The overarching research question was how teachers prepare first-generation early college high school students for academic success. I believe we determined that teachers could do this by cultivating relationships with these students by allowing them to share their stories. As a leader this allowed me to grow and earn a deeper understanding of how relationships impact students, but the use of their stories is the mechanism to building meaningful relationships. The findings revealed that teachers need to empower student voices, engage student stories, and enhance student experiences by listening, reflecting, and acting on what they learn about students. This work must be done. Storytelling for students can make all the difference and create relationships that provide authentic opportunities for students to find success. Therefore,

creating a space where we as educators can listen to the stories of our students ensures that their voices are amplified as we listen, reflect, and act to make learning better for all students.

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APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

Notification of Exempt Certification

From: Social/Behavioral IRB
To: Krystal Cox
CC: Matthew Militello
Date: 9/20/2021
Re: UMCIRB 21-001651
The Forgotten Voices

I am pleased to inform you that your research submission has been certified as exempt on 9/17/2021. This study is eligible for Exempt Certification under category # 1 & 2a.

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession. This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

Document	Description
CALL Survey(0.01)	Surveys and Questionnaires
CLE(0.01)	Interview/Focus Group Scripts/Questions
Consent Form- Other Participants(0.01)	Consent Forms
Consent Form- Teachers(0.01)	Consent Forms
Interview Protocol(0.01)	Interview/Focus Group Scripts/Questions
Observation Protocol(0.01)	Additional Items
Post-Observation Protocol(0.01)	Additional Items
Recruitment Script(0.01)	Recruitment Documents/Scripts
The Forgotten Voices(0.01)	Study Protocol or Grant Application

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.

RB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418
IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418

APPENDIX B: ADULT CONSENT FORM



ADULT CONSENT FORM

Informed Consent to Participate in Research

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

Title of Research Study: Listen, Reflect, Act: A Participatory Action Research Study to Support First-Generation Early College Students Using Storytelling

Principal Investigator: Krystal Lane Cox

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

Address: 6106 Old Stantonsburg Road, Stantonsburg, NC 27883

Telephone #: 252-289-0931

Study Coordinator: Dr. Matthew Militello

Telephone #: 252-328-6131

Researchers at East Carolina University (ECU) 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 research is to inform early college high school teachers about how to prepare first-generation early college high school students for academic success. You are being invited to take part in this research because you are a key stakeholder at Academy of Applied Technology Early College High School. I believe you will provide valuable insight for the research project. The decision to take part in this research is yours to make. By doing this research, we hope to learn how to listen to the experiences of our students to embed them in the lessons taught in our school to be equity warriors and culturally responsive to the needs of our students.

If you volunteer to take part in this research, you will be one of about 44 alumni and other Academy of Applied Technology teachers to participate in two group meetings. In addition, I intend to invite six Academy of Applied Technology teachers to participate as part of the collaborative team that will meet more frequently. The total number of participants will be 50.

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

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

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

You can choose not to participate.

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

The research will be conducted at Academy of Applied Technology Early College High School. You will attend one or two community exchange meetings with approximately 50 people. Each meeting will last approximately one hour.

What will I be asked to do?

If you agree to participate, you will be asked to do the following:

- Attend monthly meetings to discuss data and develop pedagogical and equity strategies
- Utilize pedagogical strategies to support student academic success
- Classroom Observations and Post-Observation Conversations (May be recorded)
- Interviews (Will be recorded)
- Attend Community Learning Exchanges (Will be recorded)
- Complete the CALL Survey. Please note that the survey results will be anonymous.

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 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?

No, we will not be able to pay you for the time. You will be a voluntary, non-paid participant.

Will it cost me to take part in this research?

No, it will not cost you anything to participate in this research.

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

Confidentiality will be maintained throughout the entire research process. Consent forms, any data collected from observations, interviews, and data analysis documents will be kept secure, in a locked, private office at 6106 Old Stantonsburg Road, Stantonsburg, NC 27883. Electronic files will be kept secure in a password protected Pirate Drive. No reference will be made in the oral or written reports that could link you to the study. The information collected will be kept three years after the research is complete. After which, all data will be destroyed.

What if I decide I do not 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 252-265-4038, Monday through Friday from 8:00 a.m. to 4:00 p.m.

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
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Person Obtaining Informed Consent: I have conducted the initial informed consent process. I have orally reviewed the contents of the consent document with the person who has signed above and answered all the person's questions about the research.

Person Obtaining Consent (PRINT)	Signature	Date
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APPENDIX C: PROTOCOL FOR COMMUNITY LEARNING EXCHANGE

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: October 29, 2021

Number of Participants: 15

Purpose of CLE: To hear from our former students (graduates 18 years old or older) about how we listened and incorporated their voices while they were students at our early college.

Questions for Data Collection:

1. How did we give you chances to tell your story?
2. Do you remember your teachers incorporating topics of interests or experiences you had in their lessons?
3. What did we do well as a school to prepare you for academic success?
4. What could we have done better as a school to prepare you for academic success?

APPENDIX D: INDIVIDUAL INTERVIEW PROTOCOL TEACHER

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 Krystal Cox, and I am completing a participatory action research study to determine how using the voices and stories of first-generation early college high school students should impact how we create culturally responsive classroom environments. The interview will aid my research by allowing me to hear the perspective of teachers and their understanding of creating a culturally responsive classroom.

Disclosures:

- Your participation in the study is voluntary. 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 digitally recorded in order to capture a comprehensive record of our conversation. All information collected will be kept confidential. 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 60 minutes.

Interview Questions

TURN RECORDER ON AND STATE THE FOLLOWING:

“This is Krystal Cox, interviewing (*Interviewee Name*) on (*Date*) for the study, “Listen, Reflect, Act: A Participatory Process to Support First-Generation Early College Students Using Storytelling.”

Do you agree to participate in this interview?

Question #1 – How long have you been a teacher?

Question #2 – What subject do you teach?

Question #3 – What do you know about culturally responsive teaching?

Question #4 – How do you build relationships with your students?

Question #5 – Can you share an example of how you have incorporated something you learned about a student into a lesson?

Question #6 – What do you know about the term first-generation college students?

Question #7 – How do you support first-generation college students in your classroom?

APPENDIX E: OBSERVATION TOOLKIT



Project I⁴ Observation Toolkit



Tools for Questioning in the Classroom 2.A

Overview: Question FORM

Questioning techniques in the classroom are powerful, yet often overlooked. How, when, and why teachers ask questions is an important technique that needs to be planned and practiced. Research indicates that educators have not been provided the knowledge nor skills to be effective “questioners.”

*The purpose of this tool is to help an observer of the classroom to collect evidence about the question form. **Question form** is how the teacher shapes and models effective questioning. The purpose of this tool is to assist you in collecting evidence on the forms of questions teachers are asking. Other tools can help observers and teachers examine question levels, especially those kinds of questions that push mathematical thinking.*

This document includes four steps.

THE FOCUS OF THE FALL 2019 SEMESTER IS STEP TWO, collecting evidence in classrooms.

- **Step One:** This is a refresher for the basics of **question form** that teachers use in classrooms.
- **Step Two:** Observe classrooms and collect evidence. Practice, practice, practice! The template provides a tool for the observer to record the question forms used in the classroom. Use your **selective verbatim** notes to center your observation of the **forms of questions** you hear in the classroom.
- **Step Three:** Use (or add to or modify) the codes provided to name the **forms of questions** from the observation. This will provide you with the evidence necessary for a meaningful, data-driven, conversation with the teacher.
- **Step Four:** Conversation with the teacher using the evidence collected. We provide a guide for the observer to have conversations with the teacher. While we will spend more time on this next semester, teachers will want “feedback” from your observations and we would like you to move from the traditions of “feedback” to evidence-based conversations.

Step One: What You Need to Know about Form of Questions

How is the teacher forming the question for most effective student access and thinking? The form of the question – including use of question words as well as calling on students equitably -- is critical for student access. Most critical perhaps is getting used to **think (wait) time** and building that into the question form. It takes time in a classroom for the teacher and students to get accustomed to the wait time and then using that time to think before speaking or responding. Secondly, when the teacher calls on a student, effective practice usually means that the teacher states question first and then calls on a student after think time. To be most effective, the teacher and students need to accustom themselves to a different kind of pacing and responding. Below are two resources: ATTRIBUTES OF EFFECTIVE QUESTION (p. 3 below) with form highlighted and QUESTION TREE (p. 4 below) for ensuring most questions start with a question word.

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. Usually teacher starts to make a statement and seems to decide halfway through the question to change to asking and says.... Is what? at end of sentence
SNA	Student name after question
SNB	Student name before question
TT	Adequate Think Time for type of question
NTT	No think time used
Other	Anything else you observe about question form

ATTRIBUTES OF EFFECTIVE QUESTIONING

FREQUENCY

- Effective teachers ask many questions
- Student involvement increases student achievement
- Student attention is focused by frequent questions
- Repetition and rehearsal increases student learning

FORM

- Effective teachers plan questions so that they ask one question at a time. They do not ask multiple questions at one time that confuse students
- Use question form with question words
- Declarative teacher statements carefully chosen with a question that follows can be effective if used with think time

EQUITABLE DISTRIBUTION

- Questions patterns should call on ALL students equitably
- Lowered student achievement is the result of calling on students who volunteer and accepting call ours
- Direct questions to student by name
- Expectations are communicated

PROMPTING

- Teacher redirection can include moving from higher level question to probing with lower level questions to offer cues to student thinking
- Ask student to redirect question to another student, wait for response and then check for understanding with first student
- Paraphrasing can support student understanding the questions and permits think time
- Teacher communicates expectation and ensures success by prompting same student

WAIT TIME/THINK TIME

- Should be 3-8 seconds, depending on level of question
- Improves equitable distribution and responses from culturally/racially diverse students
- Students give longer and deeper responses
- Used in conjunction with Think-Pair-Share, gives student rehearsal time
- Voluntary participation increases; fewer students fail to respond

USEFUL TEACHER QUESTION “TREE”

WHAT IS?	WHERE IS? WHEN IS?	WHO IS?	WHICH IS?	WHY IS?	HOW IS?
WHAT DID?	WHERE DID? WHEN DID?	WHO DID?	WHICH DID?	WHY DID?	HOW DID?
WHAT CAN?	WHERE CAN? WHEN CAN?	WHO CAN?	WHICH CAN?	WHY CAN?	HOW CAN?

WHAT WOULD?	WHERE WOULD? WHEN WOULD?	WHO WOULD?	WHICH WOULD?	WHY WOULD?	HOW WOULD?
WHAT WILL?	WHERE WILL? WHEN WOULD?	WHO WILL?	WHICH WILL	WHY WILL?	HOW WILL?
WHAT MIGHT?	WHERE MIGHT? WHEN MIGHT?	WHO MIGHT?	WHICH MIGHT?	WHY MIGHT?	HOW MIGHT?

Adapted from Patricia E. Blosser *Handbook of Effective Questioning Techniques*

Finally, you can review the Zwiers (2007) article on the website. In this research Zwiers names specific kinds of Questioning Forms from classroom observations.

Zwiers, J. (2007), Teacher practices and perspectives for developing academic language. *International Journal of Applied Linguistics*, 17 (1), 93-116.

Step Two: What You Need to Do in Observation of Question Form

The tool is designed to collect basic information for the teacher to record question forms. Use **selective verbatim by selecting and recording teacher questions. If teacher addresses question to specific student, name the student and recognize if student name is first or last and if there is think(wait) time or not. Record time if possible. Use as many pages of the same recording as needed.** Then in Step Three, you name the question form in last column by using the abbreviations.

Teacher _____	Observer _____	Date _____

Duration of Observation _____ to _____		

TIME	Teacher Questions	Question Form

Step Three: What You Need to Tabulate and Analyze

In the third column of the question form evidence, use these abbreviations in column one below to name the question form. You may have more than one code for a single question as there are many parts to the question form.

Then tabulate number of instances of each question form below.

Question Form Abbreviation	Question form explanation	Number of instances
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. Usually teacher starts to make a statement and seems to decide halfway through the question to change to asking and says.... Is what? at end of sentence	
SNA	Student name after question	
SNB	Student name before question	
TT	Adequate Think Time for type of question	
NTT	No think time used	
Other	Anything else you observe about question form	

What are statements of factual evidence from the observation?

Use the evidence categories from the data collection and used marks to record to make 5-6 factual statements about the data.

Examples of Evidence

- The teacher asked ___ questions in ___ minutes.
- The teacher used no think time/wait time in any question
- The teacher used think time of ___ seconds.
- In ___ questions in which the teacher called on students, the teacher used the student name at start of question ___ times and used the student name at end of questions ___ times.

Step 4: Having a Conversation with the Teacher

In this section, although you will have ideas about what to do, **engage the teacher in problem solving**. Keep in mind: “Telling people what we think of their performance doesn’t help them thrive and excel and telling people how we think they should improve actually hinders learning” (Buckingham & Goodall, 2019, p. 2).

1. **Introduction:** *I was in your class for ___ minutes while the lesson was focused on _____. As you know, I was particularly concentrating on the ways you called on students and perhaps used opportunities to have student-to-student dialogue*

2. **These are the data from that observation: (present factual analysis to teacher).**

3. **Let’s talk about what you are observing about these data?** *Continue to ask probing questions but engage the teacher in making a decision about what specific action to take and how s/he will know there is improvement.*

4. **As a result of this data, what areas of strength do you observe? What is a practice that you want to change?**

5. **What do you want me to observe and when**

APPENDIX F: EFFECTIVE CONVERSATIONS PROTOCOL

GUIDE
EFFECTIVE CONVERSATIONS



Project I⁴

**East Carolina University
and the Institute for Educational Leadership**

**Lynda Tredway
Matt Militello
Ken Simon
Larry Hodgkins
Jim Argent
Carrie Morris**

October 2020

"We come to praise; we come to learn; we come to have conversations about practice"
Frank Lyman

The guide is a work in progress and based on research and tools from:

- [Glickman](#), C. (2003). *Leadership for learning*. Alexandria VA: ASCD
- [Bloom](#), G.S., Castagna, C. L. , Molr, E., & Warren, B. (2005) *Blended coaching: Skills and strategies to support principals*. Thousand Oaks, CA.: Corwin Press.
- Saphier, J. (1993). *How to make supervision and evaluation really work*. Research for Better Teaching

Special thanks to Jim Warnock of Research for Better Teaching for input. Note on pronouns: We have not fully converted to pronoun use for persons who identify they and their as pronouns of choice.

NOTE: See hyperlinks in the text for deeper explanations.

OVERVIEW

A conversation (formal or informal) that follows an observation (also formal or informal) has several components: preparation for observation, using an observation with tool that collects objective and usable evidence, data analysis and preparation for post-observation conversation, the conversation, and then follow-up observations/conversations.

Think about the parts of the conversation as we think about parts of a lesson and “task analyze” the approach. Obviously, the conversation following an observation is premised on **establishing trust between the teacher and the observer**. Trust is enhanced by the observer’s ability to have a substantive reflective conversation about practice and provide useful **data and coaching questions** that support the teacher’s reflection.

The conversation following a relatively short observation (10-20 minutes) may be different than the actual formal post-conference for evaluation purposes. Because the formal process of evaluation in a state or district process requires written evaluation using a prescribed format, that conversation may require a different process than a conversation following an informal observation. However, an administrator can use the informal observations to build a set of evidence that can serve both the teacher and the administrator for the formal evaluation process.

Through observations and conversations that occur throughout a school year, sustaining trust in the total process can deepen through frequent observations and conversations about practice. A key guideline: There should be a **quick turnaround** on the evidence, the analysis, and the conversation. Follow-up conversations should be held as close as possible to the date of the observation. That means that the observer needs to analyze the evidence from the conversation, send the analysis to the teacher, and schedule a conversation of approximately 15 minutes within 2-3 days.

There is no one right way to have a conversation. However, the formats we introduce are useful for **most** conversations. Some conversations require **coaching moves**, as the teacher may have not made changes in practice after several attempts to observe and provide feedback. Or, in some cases, a teacher has done something that is egregious which requires administrator intervention. As one administrator said: *Every principal has to analyze the staff and decide how you can have a coach role and when you have to be clear about your administrator-evaluator role and have someone else on staff take on the coaching role.*

The suggestions offer guidance, but not “rules”. Every teacher is different, and knowing how each teacher learns/thinks is vital to setting up the trusting relationship necessary for any conversation.

GENERAL PREPARATION FOR CONVERSATION AFTER OBSERVATION

The primary objective of the conversation is to **support the teacher to (1) analyze the data from the observation; (2) make decisions about what s/he proposes to change; and (3) make a clear plan to improve instructional practice.** We, as administrators and coaches, have been schooled to give “feedback”, and teachers often say they want feedback. However, Project I⁴ posits that what teachers want is more consistent and deeper attention to their teaching so that the conversation uses the evidence from the observation to provide a “tailor-made” observation and conversation process (Paryani, 2019).

Thus, the administrator’s objective is not to give feedback about what the administrator thinks should change. In having the conversation, the principal should be **transparent about how the analysis of the evidence and the conversation are different.** The main objective is to support the teacher to talk about his/her practice so that s/he can make decisions about what to change. Typically, with veteran teachers, the observer can proceed with a **collaborative coaching stance** and engage in cognitive coaching, supporting the veteran to draw on his/her knowledge and skill base to make decisions. For novice teachers that may be different; they are new to instructional practices. Thus, supporting their analyses and decisions about changing practice(s) is often necessary as they do not yet have a repertoire of knowledge and skills to fully make decisions. That may require what [Glickman](#) calls a **direct informational coaching stance.** In any case, the observer needs to make decisions about the coaching stance before entering the conversation.

If the observation and conversation are used for the formal observation required for the evaluation process, there is considerable value in a substantive pre-observation or planning conference. A fruitful planning conference supports the teacher to have a more thoughtful, well-planned lesson and a more productive post observation conversation.

The following are steps **after the observation:**

STEP ONE: Analyze the data/evidence and use it to guide the conversation; depending on the situation, **give data to teacher ahead of the conversation.**

STEP TWO: Decide on an **approach/coaching stance** and a location for post-observation conversation

STEP THREE: Prepare an **opening question** that relates to the evidence

STEP FOUR: Ask **coaching questions** (acknowledging, paraphrasing, clarifying, shifting, restating); summarize throughout the conversation as you move through the evidence and conversation

STEP FIVE: Summarize next steps that teacher has chosen and set date for another observation

Step One: ANALYZE THE DATA/EVIDENCE from observation

Any analysis is premised on an observer collecting observable, **objective**, non-judgmental data to analyze in preparation for the conversation. Analyzing the data helps the observer decide on an objective/purpose for the conversation. Even if the district evaluation tool does not require evidence, effective administrators should use evidence-based observation tools (and not checklists or other judgmental tools).

To prepare for the conversation with the teacher, the administrator can make choices about analyzing the data: send teacher the data before the conversation, analyze for the first time when you meet together, or share what you, as observer, have analyzed. There is no one right way to present the data, but this question is critical: What factual evidence does the observation yield?. The important part is that you **use objective data** and **share that data/evidence with the teacher**. The data should not include any notes to yourself or questions that may indicate pre-judgment.

Step Two: Think about the **APPROACH** (also termed a **coaching stance**) for the conversation based on [Glickman](#). The approach informs the kinds of questions you ask and how you ensure that the teacher makes decisions about what to do. Two of the four approaches apply to most teachers.

- **Direct-informational:** Teacher who needs more information in order to make decisions about an improvement choice. In other words, the knowledge base of the teacher may not include what s/he needs to know to make improvement. Typically, a novice teacher or a veteran who does not know current thinking can benefit from coaching. If the conversation requires that you provide specific instructional direction, ask permission to be instructional -- *Is it all right if I provide instructional options?*
- **Collaborative:** Teacher who is knowledgeable about practice and for whom the evidence is supportive. The conversation is **two-way with an emphasis on teacher talk**. The **ratio** of teacher talk: observer talk is important. The responsibility of the observer (now coach) is to ask the kinds of coaching questions that elicit teacher talk and teacher decisions. The collaborative approach includes attention to **non-verbal behaviors** like nodding, smiling, and looking at the teacher.

Think about the range of coaching stances from [instructional to facilitative coaching](#), remembering that **transfer to teacher practice is the objective**. As you discuss what might be helpful and the teacher decides next steps, keep a list as you talk and summarize the materials you can provide to the teacher.

Secondly, think about **where and how this post-observation conversation occurs**. If this is in your office, do not sit behind your desk; move to a table a **sit side by side or face to face**. Perhaps meet the teacher in a classroom or a conference room in the school (neutral space). In any case, set the tone as supportive, collegial, and welcoming. You want a **nonthreatening, safe, and positive** environment that continues to nurture relational trust between you and the teacher.

**Step Three: □□□□ PREPARE AN OPENING QUESTION FOR CONVERSATION:
BEYOND ASKING “HOW DO YOU THINK THE LESSON WENT?”**

Preparing a **thoughtful opening question** for the conversations can alleviate the tension that an administrator sometimes feels at the beginning of the post-observation conversation. The question depends on the type of post-conference approach that you use: (1) direct-control (2) directive-informational (3) collaborative or (4) nondirective (Glickman, 2002). Most conversations fall in category 2 or 3 of Glickman and correspond to the [instructional to facilitative range of coaching](#) in the *Blended Coaching* (Bloom et al., 2005).

Depending upon the type of approach you use (See [Glickman chart](#)), start with a **warm greeting, introduction to the process, and a focus on the use of evidence to guide the conversations**:

“Welcome. Thanks We had decided before the observation that I would look at _____ (or use _____ tool to observe your class). What I would like to do is look at the data together and see what we observe.”

Reiterate the importance of the use of the tool to gather factual information.

Note: Feel free to say (especially in early conversations while you are getting used to the format) the following: *This is a new process for me and I will want your response to the process when we finish. We want to use the evidence to guide our conversation, and I want to listen better to your ideas.*

Step Four: Ask **follow-up coaching questions** during conversation. As much as possible, do not put your 2 cents worth in the conversation (aka feedback); rely on coaching through paraphrasing moves/questions.

In this section, you are listening with great care, summarizing as you go. **Focus on assets** the teacher can bring to addressing any changes. As you move through the conversation, **redirect** as necessary to ensure that (a) the **focus is on the evidence to guide discussion**, (b) the **teacher is then making decisions** about what to do next, and (c) insert any instructional ideas only as a part of talking about the evidence. In this kind of conversation, do not switch into “feedback” or telling mode (which is only necessary for direct control approach): **See coaching questions below in [Coaching for Equity: Paraphrasing](#)**

Step Five: Summarize and Debrief (optional)

Summarize

End the conversation with a decision about what is next in terms of teacher practice and a possible follow-up observation. Often, the observer can use the summarizing and organizing function to summarize what has been said (see [Coaching for Equity: Paraphrasing](#)). If the conversation is a part of a formal evaluation process, the administrator must translate the objective observation and conversation to the district or state forms.

Discretion is advised at this step of the process as the collaborative process in which you have engaged has the potential to drift toward hierarchical (because of bureaucratic requirements or because you may revert to feedback and telling). Depending on the teacher need and assessment of Glickman types, you may have to engage in a direct-control conversation with a teacher who needs improvement.

Use summarizing statements/questions:

- Let's review the key points of the discussion.
- What next steps are you taking? OR The steps I heard you talk about are _____
- What evidence will you look at to ascertain if those next steps are working? OR The evidence I need to collect next time I come is _____
- How does this connect to student learning/equity? I heard you say ___ and that clearly connects to student learning/equity in these ways: _____

DEBRIEF

Debriefing may or may not feel like the right thing to do. As an administrator, you are model reflection. Thus, depending on the situation, ask for feedback on the structure, tone, and usefulness of conference, using the + and Δ (delta=change) format or use a written feedback form for the teacher to reflect on and complete if s/he wishes. However, in some cases, debriefing would not be an appropriate choice.

CONSIDERATIONS and FINAL "TIPS"

While we might have mentioned these previously, we are reiterating.

- **Set the tone:** Of course, you want the conversation to go as well as possible, so make the teacher feel comfortable. Many administrators recommend having the conference in the teacher's room, or, if it is your office, then probably the administrator sits by the teacher or sits around a table with the teacher. Unless it is a direct control conversation (Glickman) in which you have to set a distinct hierarchical tone with teacher, do not sit behind your desk. Assume best intentions and assume that if the teacher knew to do anything else, s/he would do it. Refrain from making judgments; instead seek reasons behind problems or stated explanations. Probe, but do not prejudge. Use coaching questions. Indeed, if you are practicing having a different type of conversation for the first time, then be transparent and share that with the teacher.

For example, I am practicing having a different kind of conversation with you about the observation, one that relies on the evidence I collected and analyzed and one in which you decide what your next steps are. I have ideas, of course, but what I am most interested in is your decisions about what you want to do next as a result of analyzing the evidence from the

observation. As always, I only observed a slice of your teaching practice, so, if there are particular classroom circumstances with students or lesson, please tell me as we proceed.

- **General rule of thumb: Teacher should do most of the talking.** Acknowledge ideas, even if you do not totally agree. Typically, do not start conversations with WHY questions. Think time or silence is OK as it allows time for collecting thoughts and thinking about what happened. Use paraphrasing to encourage teacher talk. Use an opening question based on evidence.
- **Language.** In general, avoid “you” statements. Convert to “we” or “I” statements. Use open-ended questions that produce explanations and ideas, not short answers. See advice on question stems that can help to clarify, paraphrase or probe.
- **Body Language:** The process should be viewed in general as a **conversation between professionals**. Be aware of the ways you position yourself as the administrator. Again, for the “hard” conversations, you have to think carefully about what you want to communicate and that may require a different stance, format (directive-control) or positioning (behind your desk).
- **Procedural Advance Organizer (AO):** Explain the **purpose and the parts of the post conference and ask for concurrence**. You want to be open, but purposeful. Think carefully about the objective of the conversation. You are creating a mini-lesson plan for conducting the conference. Be open, as you are in a classroom, to the student input and changing direction, but don’t just drift from one question to another, getting surface responses. *Note: This seems like a lot of planning at first, but as you gain experience, the planning lessens and parts of this become more automatic.*
- Use **teaching and learning language** – naming practices specifically as much as possible. That helps the teacher build structures and you develop a common language for teaching and learning in your school.
- **Acknowledge tensions:** This means that you, as the observer (administrator) recognize that teaching is a complex task and each teacher is thinking of many things at once: management, lesson outcomes, time, next question, lesson flow and pacing.
- **Remember to put equity at the forefront of the conversation and push the teacher to think about equitable access and even if the observation was not specifically about this.** How does the evidence demonstrate equitable or inequitable practice? How can you direct every part of the conversation toward equity?

Enhancing Student Experiences	Using equity-focused practices	student backgrounds	2
Enhancing Student Experiences	Using equity-focused practices	student backgrounds	2
Enhancing Student Experiences	Using equity-focused practices	think time	2
Enhancing Student Experiences	Using equity-focused practices	think time	2
Enhancing Student Experiences	Using equity-focused practices	think time	2
Enhancing Student Experiences	Using equity-focused practices	think time	2
Enhancing Student Experiences	Using equity-focused practices	think time	2
Enhancing Student Experiences	Using equity-focused practices	think time	2
Enhancing Student Experiences	Using equity-focused practices	think time	2
Enhancing Student Experiences	Using equity-focused practices	think time	2
Enhancing Student Experiences	Using equity-focused practices	think time	2

APPENDIX H: RESEARCH SITE PERMISSION



Dr. Lane B. Mills, Superintendent
117 NE Tarboro Street • PO Box 2048 • Wilson, NC 27894
252.399.7711 • FAX 252.399.2776 • lane.mills@wilsonschoolsnc.net

June 30, 2021

Dear Krystal Cox:

Wilson County Schools recognizes the benefits of participating in relevant, well-designed research studies proposed by qualified individuals. I believe in approving research studies that will provide substantial benefits for Wilson County Schools and supports its mission of educating students. The purpose of this letter is to notify you of the approval to conduct your dissertation research with participants in our school district. I believe your research that will focus on how to prepare first-generation early college high school students for academic success will be a benefit to you as a leader and our school district. I give you permission to utilize Wilson Academy of Applied Technology to collect data and conduct interviews for your dissertation project. I support you completing teacher professional learning, Community Learning Exchanges, monthly meetings, and classroom visits.

The project meets all our school/district guidelines, procedures, and safeguards for conducting research on our campus. Moreover, there is ample space for you to conduct the study. This project will not interfere with any functions of Wilson Academy of Applied Technology. Finally, you must follow the list of guidelines during your research:

- 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.
- Participants must report any issues with participation in the study to district administration in a timely manner.
- Participants should share an executive summary of his or her findings with the district 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.

Sincerely,

Dr. Lane B. Mills

Lane B. Mills, Ph.D.
Superintendent

APPENDIX I: CITI COMPLETION CERTIFICATE



Completion Date 03-Jan-2021
Expiration Date 03-Jan-2024
Record ID 40170637

This is to certify that:

Krystal Cox

Has completed the following CITI Program course:

Not valid for renewal of certification through CME.

Human Research
(Curriculum Group)

Group 2.Social / Behavioral Research Investigators and Key Personnel
(Course Learner Group)

2 - Refresher Course
(Stage)

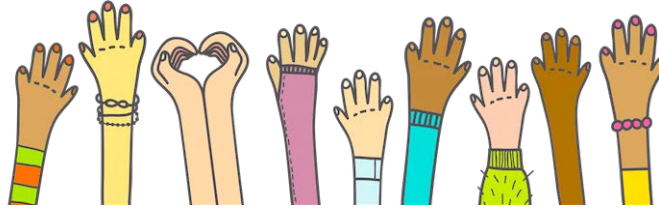
Under requirements set by:

East Carolina University

CITI
Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w21759e43-9f64-4bb4-972b-c4945e22162a-40170637

APPENDIX J: CPR TEAM MEETING AGENDA



Co-Practitioner Research Team Meeting #1

Academy of Applied Technology
October 18, 2021 – 8:00 a.m. – 9:00 a.m.

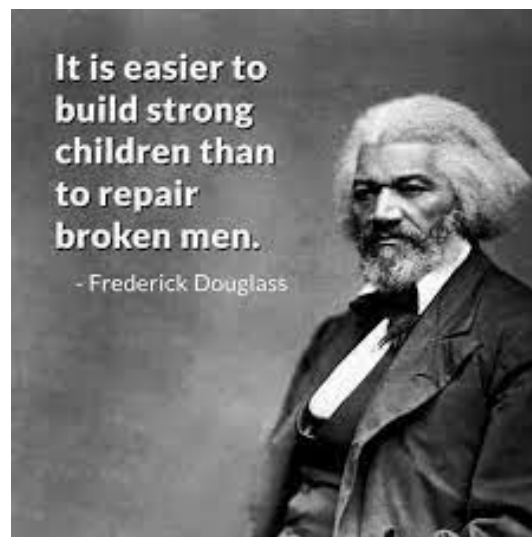
Meeting Facilitator: Krystal Cox
Notetaker: Ashley Smith
Timekeeper: Mason Thompson

***Vision Statement:** We at AAT believe by bridging the gap between industry and education, we will create the next generation of workforce-ready citizens and innovative thinkers.*

Agreements:

- *Start on time so that we can end on time.*
- *We will maintain a positive tone during the meeting.*
- *We will stay fully engaged throughout the meeting.*
- *We will contribute equally to the workload during the meeting.*
- *We will listen respectfully and consider matters from another's perspective.*

***Essential Question:** To what extent do teachers design lessons to promote student-centered and culturally responsive learning environments?*



Meeting Agenda

TIME	ACTIVITY	NOTES
15 min	<p>Opening Circle – Chalk Talk</p> <p>What assets do you believe we have at AAT?</p>	
5 min	<p>Dynamic Mindfulness – “Every Breath Counts” by Matthew Sockolov (Page 18)</p>	
15 min	<p>Personal Narrative – Journey Line</p> <p>Who were the teachers and/or family/community members that made you feel valued and that your voice and identity were important?</p>	
15 min	<p>The Focus. The Process. The Journey.</p>	
10 min	<p>Closing Circle – Think about the quote from Frederick Douglas. What desires and future goals do you have for yourself and your students by the end of this process as it relates to culturally responsive teaching?</p>	

APPENDIX K: INDIVIDUAL INTERVIEW PROTOCOL GRADUATES

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 Krystal Cox, and I am completing a participatory action research study to determine how using the voices and stories of first-generation early college high school students should impact how we create culturally responsive classroom environments. The interview will aid my research by allowing me to hear the perspective of teachers and their understanding of creating a culturally responsive classroom.

Disclosures:

- Your participation in the study is voluntary. 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 digitally recorded in order to capture a comprehensive record of our conversation. All information collected will be kept confidential. 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 60 minutes.

Interview Questions

TURN RECORDER ON AND STATE THE FOLLOWING:

“This is Krystal Cox, interviewing (*Interviewee Name*) on (*Date*) for the study, “A Participatory Process to Support First-Generation Early College Students using Culturally Responsive Teaching.”

Do you agree to participate in this interview?

1. Tell me about a person you had a deep relationship with while you were a student at AAT. What did the person do or say to create this relationship with you? Give me specific examples.
2. Tell me about a time when you felt like your voice was heard while you were a student at AAT. What was the situation, class, or activity? Who was leading the activity? What made you feel comfortable to share your voice?
3. How did you know that teachers or staff members at AAT cared about you? Give me specific examples?

4. Was there ever a time when a teacher used something they knew personally about you in a lesson or a conversation with you? What was it that they knew? How did they use it? How did it make you feel?

5. What were the times/activities while you were at AAT when you were able to build relationships with teachers or staff members?

APPENDIX L: RECRUITMENT SCRIPT

Greetings,

My name is Krystal Cox, and I am the principal at Academy of Applied Technology and a doctoral student at East Carolina University. I am creating a research study to prepare first-generation early college high school students for academic success. For the study, I hope to collaborate with a team of faculty and former students. The team will research how to provide first-generation early college high school students with culturally responsive curricular experiences based on their context. To capture this context, teachers will have to listen to the voices and stories of their students to make lessons culturally relevant.

Since this is an action research project, I am seeking colleagues and former students who are willing to volunteer to serve on my research team. This research project will span the 2021-22 school year and conclude in the spring of 2023. For teachers, this research will involve our school, but the work is separate from your contracted duties. You will be asked to attend approximately one meeting a month and will participate in a survey concerning distributed leadership. The study will not be part of any professional evaluation and you will not be compensated for your work. You have the right to withdraw from the study at any time and with no penalty. For former students, this research will involve your participation in one to two community learning exchange meetings. You will not be compensated for this work and you have the right to withdraw from participation at any time.

If you are interested in participating in working with me on the study, please let me know. I will host a meeting to review consent forms and provide more details. If you have any questions, please feel free to contact me at krystal.cox@wilsonschoolsnc.net or at 252-265-4038.

Sincerely,

Krystal Lane Cox

