

Fall 2022

Investigating Lack of Black Students Enrolled in Advanced High School Classes: Choices and Vision

Diane Marie Vrobel

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Investigating Lack of Black Students Enrolled in Advanced High School Classes: Choices and Vision

by

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Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctor of Education in

Curriculum and Instruction

College of Education

University of South Carolina

2022

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Dedication

This dissertation is dedicated to my hard-working parents, Patricia, and Jerome Perchinske. I appreciate your sacrifices you made to help me become the educated woman that I am. I also am grateful for your respect and admiration while accomplishing this dissertation as a working, mother of three children. Additionally, I dedicate this dissertation to my husband, Michael. Your love carried me through dark places while researching and writing. Lastly, I dedicate this dissertation to my three children, Benjamin, Natalie, and Tim. Thank you for allowing me to write this dissertation and know that I am sending you thoughts of love.

Acknowledgements

I would like to express my greatest appreciation to my committee chairperson, Dr. Silvernail, for your intervention, guidance, and honest feedback throughout the dissertation writing process. This dissertation would not have been as rewarding without your help. I also want to acknowledge members of my committee, Dr. D'Amico, Dr. Carson, and Dr. Lilly for your expertise, time, and encouragement.

I appreciate the nonstop support from friends and family. Thank you to my parents, extended family, and Rhonda for patiently listening to my complex explanations about my dissertation. I especially want to thank Rhonda and Michael for reading this dissertation from start to end. Finally, friends and family, I am grateful for your kind thoughts and loving actions that fueled me to finish this program.

Abstract

This action research study utilized a phenomenological qualitative design to examine reasons that eligible Black students use to not register with advance classes. This project investigated how a community of inquiry with adult participants identified and mitigated or removed barriers in a secondary education setting. This eleven-week study during the spring semester incorporated change theory while employing a community of inquiry. Qualitative data from student participants obtained from audio recordings of focus group interviews was transcribed and then shared with the community of inquiry. Adult participants then analyzed student participant data to pinpoint reasons students chose not to register. Next, the community of inquiry proposed school changes with registration to reduce or mitigate barriers. Proposals were revised iteratively based on student participant feedback. Community of inquiry meetings were audio recorded and transcribed to investigate how the group addressed school reform. Findings revealed that student participants used many reasons for not registering which included fear of academic rigor to uneasiness being with White students. The community of inquiry devised proposals which included previewing a syllabus with an AP teacher, to partnering with a student of color that has completed an advanced class. The community of inquiry experienced school reform with deep learning due to insider knowledge with student participants. The productive group also experienced favorable outcomes because of administrative support. These findings informed an implementation plan, strategies for sharing results with colleagues and thoughts about future research plans.

Table of Contents

Dedication	iii
Acknowledgements	iv
Abstract	v
List of Tables	ix
List of Abbreviations	x
Chapter 1: Introduction	1
1.1 Statement of Problem	2
1.2 Background Literature	3
1.3 Theoretical Framework	8
1.4 Purpose of Study	12
1.5 Positionality	13
1.6 Research Design	14
1.7 Significance of Dissertation	20
1.8 Limitations	21
1.9 Organization of Dissertation	22
1.10 Definition of Terms	24
Chapter 2: Review of the Literature	25

2.1 Theoretical Framework	27
2.2 Summary	38
Chapter 3: Methodology	39
3.1 Qualitative Study and Rationale.....	41
3.2 Setting and Participants	42
3.3 Data Collection.....	45
3.4 Data Analysis	50
3.5 Ethical Considerations.....	52
3.6 Summary	54
Chapter 4: Findings.....	55
4.1 Qualitative Study Results	56
4.2 Discussion	69
4.3 Research Question 1: Eligible Black Student Barriers.....	70
4.4 Research Question 2: Reduction or Mitigation of Barriers by the Community of Inquiry	72
4.5 Summary	77
Chapter 5: Implications.....	80
5.1 Data Implications	82
5.2 Research Question 1: Eligible Black Student Barriers.....	83
5.3 Research Question 2: Reduction or Mitigation of Barriers by the Community of Inquiry	85

5.4 Implications for Future School Reform	90
5.5 Reflections on Methodology	98
5.6 Recommendations for Future Research	104
5.7 Conclusion.....	106
References.....	109
Appendix A: Parent and Student Consent Form.....	119
Appendix B: Community of Inquiry Consent Form	121
Appendix C: Student Survey	123
Appendix D: Focus Group Interview Protocol	127
Appendix E: Community of Inquiry Exit Ticket	128
Appendix F: Proposals for Eligible Black Student Barriers	129
Appendix G: Focus Group Interview Protocol of Proposed Changes	130
Appendix H: Revised Proposals for Eligible Black Student Barriers.....	131
Appendix I: Student Survey for Final Proposals	132
Appendix J: Final Proposals for Eligible Black Student Barriers.....	134

List of Tables

Table 3.1: <i>Data Collection for Research Questions</i>	50
Table 4.1: <i>Timeline for Type of Data Collection with Participants</i>	57
Table 4.2: <i>Student Survey Codes Used for Analysis</i>	58
Table 4.3: <i>Focus Group Interview Codes Used for Analysis</i>	60
Table 4.4: <i>Community of Inquiry Meeting Codes Used for Analysis</i>	61
Table 4.5: <i>Community of Inquiry Meeting Details</i>	62
Table 4.6: <i>Frequency of Codes for Community of Inquiry Meetings Data</i>	65
Table 4.7: <i>Eligible Black Student Barriers Identified by the Community of Inquiry</i>	71
Table 4.8: <i>Proposed Reduction or Mitigation to Eligible Black Student Barriers by the Community of Inquiry</i>	73
Table 4.9: <i>Exit Ticket Responses by the Community of Inquiry</i>	76

List of Abbreviations

AP.....Advanced Placement

CP..... College Preparatory

CCP..... College Credit Plus

Chapter 1

Introduction

As a White female working in a male dominated field in science, my job forced me to face social justice issues with science. Since the profession is male dominated, I worked in spaces where I had to appear more masculine in my dress and emotions to be accepted by my male coworkers. As a result, I minimized my femininity to appear more competent. However, I grew increasingly dissatisfied with male expectations of females in the workplace. Working as an analytical chemist felt restrictive, as I could not share my perspective as a woman without being shut down. I eventually left the position because of the discrimination and decided to become a full-time mother to raise my family.

When I grew tired of being a full-time mother, I returned to school to obtain my teaching license. I thought I could avoid previous challenges I faced as an analytical chemist. I accepted a position at a private urban high school. The new position surprised me since faculty demographics were like my previous workplace. It made me nervous and afraid I would face similar problems and be discriminated against for being female. The science teachers and advanced students I interacted with were predominantly White and male. This experience drove me to seek change and empathize with nonwhite groups. According to the 2021 school database for Northeast High School (pseudonym) where I currently teach, 32 % of students identify as nonwhite (school database). Of those

nonwhite students, on average, 21.8 % identify as Black or African American, 2.6 % as Asian or Pacific Islander, 4 % as two or more races and 3.6 % as Hispanic (school database). I began to question why very few Black students enrolled in advanced chemistry courses. Accordingly, the lower-level science courses swelled with more Black students. I chose to seek equal access to honors and AP courses for Black students because of the difference in course demographics of advanced classes and the actual demographics of my school.

1.1 Statement of Problem

The differences between advanced track and grade-level courses are striking. Advanced courses depend on the students enrolling in those early upper-level math courses in their high school careers, while grade-level science courses do not have the same math restrictions. Fewer Black students are enrolled in upper-level math courses and as a result are restricted from enrolling in advanced science courses. Currently, the number of nonwhite attending Northeast High School (NHS) is 32% with 21.8% identifying as Black (school database). However, less than 3% of students in honors and AP chemistry are Black. In physical science, which is on-grade level, 27% are Black students since they are not enrolled in the upper-level math courses that lead to advanced track science courses.

I tried my own informal recruitment of Black students into upper-level science courses. I observed Black students who enroll in physical science, enjoyed it and were successful. Then, I encouraged them to consider taking honors chemistry. Other physical science teachers have also invited flourishing Black students to enroll in honors chemistry. Unfortunately, the number of students making the jump to advanced courses

has been small. Even fewer Black students have registered for AP chemistry. Thus, my problem of practice is that Black students are underrepresented in advanced science classes.

1.2 Background Literature

In the 2020 Condition of Education report by the National Center for Education Statistics (NCES), in 2017, 15% of public school students were Black, 27% were Hispanic, 5% were Asian and 47% were White (Hussar et al., 2020). When examining adjusted cohort graduation rates (ACGR), 79% of Black students graduated as opposed to 81% Hispanic, 89% White and 92% Asian. Black students have lower graduation rates than other races. Estimating the expected graduation demographics when examining demographics of total enrollment, there should be 14% Black, 26% Hispanic, 5% Asian and 50% White. Regrettably 4% of the estimated Black U.S. public school graduates passed their AP exams by obtaining a 3 or higher on an AP exam (Naff et al., 2021). Whereas Whites and Asians passed their AP exams aligning with their share of estimated graduation rate. Therefore, Black students are underrepresented and not performing as well as other races with AP exams.

Theokas and Saaris (2013) found that the national participation rate of students enrolled in AP coursework is about 12%. Asian students participate at twice the national average while Black students join only at half the national average. The authors estimate that if Black students were served as equally as other groups, there would be an additional 79,000 students taking AP courses. As a result, Black students have not experienced positive outcomes with advanced coursework in high school.

There has been a *shortage of theoretically grounded investigations, the underapplication of causal methods, and the dearth of inquiry into specific schools* which clouds the dynamics between Black students and the AP exam (Kolluri, 2018, p. 704). I argue that educators need to examine how Black students are evaluated for enrollment in advanced classes. Black students possibly do not see the advantages in enrolling in more challenging high school courses. Teachers and administrators are potentially not identifying Black students for advanced classes. Together, these factors mean Black students are not choosing or given the opportunity to complete advanced classes.

Between 2009 and 2015, the percentage of Black 12th graders who enrolled in a science course increased 53% (NAEP - 2015 Science Assessment, 2015). However, the science achievement gap between Whites and Blacks has not changed between those years. With the U.S. Census Bureau predicting 57% of the population will be people of color by 2060, educators will be serving a larger percentage of students of color in the general population (Banks, 2016, p. 151). If the student population is becoming predominantly nonwhite, there should be an increase of Black and other nonwhite students in advanced classes at NHS.

Black college graduates make on average \$21,600 more yearly than Black high school graduates (*Indicator 30: Earnings and Employment*, 2016). By not attending postsecondary schooling, Black Americans lose significant financial gains in annual earnings. Additionally, 3% of Black college graduates are unemployed as compared to 8.5% of Black high school graduates (Beyer, 2020). Therefore, Black Americans are two and a half times more likely to be out of work by not attending college. Additionally, Black Americans are missing out on the benefits that come with additional education:

reduction in smoking (14% less), increase in exercise (22% more) and greater civic involvement (23% more) (Ma et al., 2019).

Black students are choosing not to enroll in advanced classes. For that reason, it is crucial to improve the process of identifying and encouraging Black students to take advanced classes. Advanced classes include college level curriculum that allow high school students to experience academic rigor at that level with support. The fewer Black high school students that enroll in advanced classes, the less likely they will be successful completing college coursework during their postsecondary career. Thus, if fewer Black high school students attend college, this limits their lifetime earning power, employment, and quality of life. To increase the number of Black students attending college, teachers and administrators need to identify obstacles that exist in the enrollment of Black students in advanced classes and develop programs that encourage Black students to enroll in these courses.

I implemented phenomenology in this study to obtain knowledge about the reasons Black students are not choosing advanced classes. Phenomenology is used to interpret the experience of individuals so that researchers can understand the phenomenon they are interested in (Merriam & Tisdell, 2016). The word, *phenomenon* derives its meaning from the Greek words *phainein* which translates to the phrase *bring to light* (Williams, 2021). Therefore, researchers desire to capture and *bring to light* in-depth descriptions of the lived experiences of the subjects with the phenomenon (Groenewald, 2004). Likewise, to maintain immersion in the lived experiences of the subjects, prejudices or bias by the researchers must be bracketed or set aside (Merriam & Tisdell, 2016). Phenomenological researchers also *value the first-person perspective* from

participants which is based on individual experiences (Williams, 2021, p. 374) . Thus, I assumed that not all Black students had the same experience with advanced classes and asked for their individual viewpoints. Additionally, researchers utilize phenomenology as *conceptual analysis [which] can provide directions and tools for the empirical scientists* (Zahavi, 2010, p. 14). Therefore, I used phenomenology to access the lived experiences of Black students at NHS and as a tool to solve the problem of few Black students registering for advanced classes.

The origin of phenomenology began with Husserl, a German philosopher who created a new philosophical interpretation of human experiences with the aftermath of World War I (Groenewald, 2004). Husserl viewed each individual's experience as *essence* and that the external world must be reduced in order to view the person's experience with the phenomenon (Bello, 2010). Phenomenology as a research science was not established until after 1970 with research psychologists (Groenewald, 2004). Heidegger, a student of Husserl, established the concept of *Dasein* which is the reflection of *being in the world* and encountering others (Horrigan-Kelly et al., 2016). This concept led Smith (1996) to introduce interpretative phenomenological analysis which is an examination of participants' experiences with the researcher taking an active role in the interpretation of those experiences. In this research project, I took an active role along with my colleagues to interpret the lived experiences of Black students at NHS.

I tailored the use of phenomenology to the needs of this research project. Williams (2021) recommended that *each new branch of science has the right to reenvision the method* of phenomenology according to their needs (p. 382). Accordingly, education has *variations in how a phenomenological study is conducted* (Merriam &

Tisdell, 2016, p. 28). I was able to apply phenomenology in ways that suited this research project. For example, Nicholls (2019) stressed the importance of researcher reflexivity and recommended to be present during interviews of participants within a phenomenological study. I used mindfulness, as Nicholls (2019) suggested to achieve bracketing and observe the Black students' experience fully.

An example of an interpretive phenomenological study was by Dare et al. (2018) who conducted research with middle school teachers to assist in understanding cross-discipline content within STEM. The researchers interviewed nine teachers from different districts during implementation of the STEM program. Dare et al. conducted semi-structured interviews of the teachers after conducting implementation of the STEM program with the middle school students. Then, Dare et al. transcribed, coded, and checked with teacher participants to constant-compare for themes. The researchers determined that teacher awareness was tied to success with implementation. Accordingly, effective teacher participants made explicit and meaningful connections between disciplines. Therefore, Dare et al., by using interpretive phenomenology in their research, obtained an insider's view of the problem with integration of STEM in middle school science. I used interpretative phenomenological data to obtain an insider's view of the problem by with eligible Black students that chose not to enroll in advanced classes.

By interviewing eligible Black students, I was able to obtain an insider's view and context about their lived experience with enrollment of advanced classes. I bracketed my bias or prejudice so that I could immerse myself in their experience and obtain insider's knowledge about the problem. I used a research journal and was mindful while viewing student data by bracketing myself in this phenomenological study. This helped me to

acquire reasons based on student knowledge for why eligible Black students chose not to register for advanced classes.

Likewise, I shared this information with other educators to help determine barriers to enrollment. Educators in this study were also viewed with qualitative phenomenology. Lived experiences of educators with advanced classes was viewed by myself to understand how they perceived the barriers that eligible Black students encountered.

The conceptual framework of incorporating a phenomenological study for gathering data from the study's participants aided me with obtaining firsthand accounts for the lack of qualified Black students in advanced classes. In this background literature, the review includes a discussion of the study's conceptual framework, historical interpretations on the topics, related research, and application for school change to register more Black students for advanced coursework. The next section explores the theoretical frameworks of this study: change theory and utilization with a community of inquiry. Together, these theoretical frameworks assisted me with examining the barriers to eligible Black students and determining how to remove or reduce them.

1.3 Theoretical Framework

A theoretical framework can be viewed as interlocking frames in which *all aspects of the study are affected* (Merriam & Tisdell, 2016, p. 86). The framework assisted me in choosing specific concepts, models, and theories to create specific research questions, data analysis, and interpretation. I chose to embed the problem statement within the theoretical framework. Then I fixed the purpose of the study inside the overall structure. As an investigator, I employed known work (with citations) about this topic along with unknown information to give purpose to the study. Therefore, the theories that

illuminated my problem statement and purpose of study were change theory and community of inquiry.

Fullan (2000) perceived educational change as a three-step story building process: the inside narrative is written first; then the inside-outside plotline is constructed; and lastly the outside-inside account is formed. Fullan (2007) suggested change theory for educational reform requires motivational focus, results-oriented group effectiveness, contextual learning and changing, and persistence with multi-level reflective action. He also proposed that school reform be surveyed from the perspective of students, teachers, and guidance counselors. For instance, using Fullan's inside narrative, my school reform included eligible Black students, teachers of AP courses, and guidance counselors recommending students for those courses. Information obtained from those members assisted me with locating obstructions or barriers to enrollment of Black students in AP courses.

After the school determined effective solutions to remove impediments with registration of Black students in AP classes, parents and the community were notified. I considered this Fullan's (2000) inside-outside narrative. In the inside-outside narrative, the school communicated in detail to parents and the community about the changes in AP course registration for Black students. Fullan's proposes an outside-inside story with school reform. Therefore, I recommended in the future that the school utilize an external accountability or audit system. An outside organization would help the effectiveness of Black student success in registrations of AP or honors classes. Hence, in this study, I utilized the inside-outside narratives to ensure the school integrated productive

resolutions to reduce or mitigate barriers for registration of Black students with advanced classes.

When reducing or mitigating those barriers, Hanson (2001) suggested that smart organizations examine individual participants' knowledge in order to improve the functioning of the whole group. Theokas and Saaris (2013) also proposed that with increasing enrollment in AP courses, institutions must examine enrollment patterns, student/teacher knowledge about AP courses, and teacher expectations of students. I designed this research project to incorporate both ideas.

Additionally, Hanson (2001) recommended scrutinizing proposed solutions for more than one cycle to allow for long-term change. Multicycle analysis of school reform allows the institution to scrutinize interventions for mitigating barriers and make necessary adjustments to improve school change (Hanson, 2001). After identifying barriers and setting up supports for this research project, my colleagues and I examined the reduction, or mitigation of barriers for eligible Black students during multiple cycles to create more productive change.

The second part of my theoretical framework used in this research was community of inquiry. Seixas (1993) described how *the more teachers are integrated into the scholarly community, the better the chances that they will understand the nature of ...investigation, interpretation, and debate* within their content area (p. 321). The educators in this study included those who teach honors and AP courses. I also incorporated other educators in this project, such as guidance staff since they register Black students for coursework.

Since Pardales and Girad (2006) viewed a community of inquiry as a group that uses scientific principles to probe problems and uncover reliable sources of knowledge, the community of inquiry in this research project relied on a methodical examination of the school problem. The community of inquiry examined Black student responses, appraised current school-wide decision making for advanced class registration and proposed reduction or mitigation of barriers for enrollment. Campbell et al. (2004) spoke about the importance of a critical community of stakeholders who offer lively discussions for research studies within the community. The authors suggested that a productive community of inquiry debates sources to an institutional problem, based on evidence, and develops group solutions to the problem. In this study, I gave the community of inquiry collective decision making to allow for positively changing the Black student barriers of enrollment with advanced classes.

While using a community of inquiry, this research project incorporated change theory by identifying eligible Black students' reasons for not enrolling in AP and advanced classes with student interview data. Fullan (2000) recommended obtaining knowledge from stakeholders in order to understand the context of the problem while investigating school change. Student interview data from Black students provided background to the problem and assisted the community of inquiry with identifying causes to the problem (Campbell et al., 2004). After the community of inquiry determined solutions to remove or mitigate barriers to enrollment for Black students in advanced classes, participating Black students gave feedback on the solutions. Data obtained from the student participants refined decision making with the community of inquiry. Correspondingly, the students gave their perceptions of the final proposed school change.

Once the resolutions were made by the community of inquiry, all building personnel learned about the school change to increase group understanding (Fullan, 2007).

Fullan (2000) recommended that the parents and the larger community be informed about the changes with registration of advanced classes to continue the insider-outsider story. Thus, the school informed all parents and guardians about protocol changes for registration with advanced classes. Ultimately, a third-party chosen by the school will inspect the school change, which Fullan regards as the outsider-insider story (Fullan, 2007). In the future, this third-party review, will assure parents and the community alike that the school removed enrollment obstacles for Black students in advanced classes.

1.4 Purpose of Study

In this qualitative phenomenological study, I examined the reasons that eligible Black sophomore and junior students at my high school chose for not enrolling in honors and AP courses. I wanted to understand the obstacles they face when deciding whether to enroll in honors and AP courses. After conducting focus group interviews with the participating students, a community of inquiry of adult participants investigated enrollment barriers in the school and determined ways to remove or mitigate them. Reduction of enrollment obstacles for eligible Black students were crafted by the community of inquiry based on additional focus group interviews from eligible Black students.

Specific research questions include the following:

1. What reasons prevent eligible Black sophomore and junior students from deciding to enroll in advanced classes?

2. How can barriers to enrollment in advanced classes be removed or mitigated for eligible Black students?

This study intended to examine how Black students decide whether to enroll with honors and AP classes. The community of inquiry and I reviewed the reasons why Black students chose not to register for advanced classes. Then the community of inquiry used the Black student narratives to uncover problems with enrollment and determine how to mitigate obstacles. Next, the eligible Black students scrutinized the proposals for mitigation or removal of barriers and gave the community of inquiry feedback. Then, the community of inquiry refined their ideas based on the Black students' feedback. Therefore, I want to present educators a research project with insight into the mindset of eligible Black students and how to locally change enrollment with honors and AP coursework for those students.

1.5 Positionality

In this action research project, I conducted a study *known as participatory or collaborative research* and used *insider/outsider team research* (Herr & Anderson, 2015, p. 39). I interviewed eligible Black students for this research project. My position towards them was as an outsider since I am neither a student nor Black. Likewise, I collaborated with fellow educators in a community of inquiry at this school and they were also considered outsiders since they are not Black. Also, as a teacher at NHS teaching for more than ten years, I intimately know the culture of the school. This made me an insider to this research setting. By the same token, I regarded members of the community of inquiry as insiders since they are educators at this location.

As Herr and Anderson (2015) stated, as an outsider studying insiders, I desired to *engage more closely with the study's participants* (p. 52). Since I am a White, upper middle-class female, I am an outsider and lack the life experiences that my Black students encounter. However, I desired to understand the problems that Black students face when deciding to enroll in advanced coursework. By interviewing eligible Black students, I obtained an insider's viewpoint to the school problem.

Additionally, I possessed an insider's position as a teacher of advanced science classes. In the community of inquiry, I worked alongside other insiders that teach or register students for advanced coursework. The community of inquiry desired to mitigate barriers with enrollment of honors and AP courses for eligible Black students. The members of the community of inquiry and I intimately knew the demands of advanced courses experienced by both students and parents. Therefore, I and the group could have been biased towards positive results for this action research project. Together with the community of inquiry, I wanted to *study the outcomes of a program and fold the action research immediately back into the program* (Herr & Anderson, 2015, p. 42). Thus, it was important for both the group and me to remain objective. The community of inquiry and I worked to be impartial while analyzing data from this research project and not to interpret results subjectively. Accordingly, the community of inquiry proposals needed to be objective to remove or mitigate those obstacles to Black student enrollment in advanced classes.

1.6 Research Design

Herr and Anderson (2015) stated that *action research produces knowledge grounded in local realities that is also useful to local participants* (p. 121). This study

strove to produce understanding and solutions for increasing eligible Black student enrollment in advanced classes at my institution. The project employed a phenomenological qualitative study that examined *the experience a person has [which] includes the way in which the experience is interpreted* (Merriam & Tisdell, 2016, p. 9). In this phenomenological study, I identified eligible Black sophomore, and junior students based on either AP Potential or Iowa Assessment scores. Likewise, I interviewed these student participants to reveal lived experiences in the process of not enrolling in advanced classes. As Horrigan-Kelley et al. (2016) mentioned, *reflexivity therefore plays a central role in the researcher's attempts to keep a check on their preconceptions* (p. 4). I kept a research journal to continually monitor bias toward interpretations from participant interview/survey data (Efron & Ravid, 2020). In addition, I bracketed or temporarily set aside my prior beliefs when *intuiting the elements or structure of the phenomenon* of Black student lived experiences with advanced classes (Merriam & Tisdell, 2016, p. 26). With the community of inquiry at my school, the group analyzed student participants' responses for reasons not choosing honors and AP classes. I selected Black sophomore and junior students for this research project because they have the most options to register for honors and AP coursework. When identifying junior students, I used AP Potential as an instrument to evaluate PSAT/NMSQT scores and extrapolate student success with obtaining a 3 or higher on an AP exam (Wyatt et al., 2020). While AP Potential does not guarantee a favorable outcome for students, it allowed selection of potential Black student candidates for AP classes (Theokas & Saaris, 2013).

Since the PSAT/NMSQT is designed for junior students, I used it only as a point of reference for college readiness with sophomore students (Wyatt et al., 2011). Ultimately, I utilized scores from the Iowa Assessments (a state mandated test for chartered nonpublic high schools) to identify sophomore Black students for honors and AP classes (*Alternative Assessment Instruments for Determining Diploma Eligibility of Students Attending a Chartered Nonpublic School*, 2020; *Interpreting National Performance Using the Iowa Assessments*, 2019). I chose Black students that had a composite score of 25 or higher since their performance is considered accelerated or advanced for high school coursework (*Alternative Assessment Instruments for Determining Diploma Eligibility of Students Attending a Chartered Nonpublic School*, 2020). The combined use of AP Potential and Iowa Assessment scores presented a wider range of student participation for this project. Since this is a phenomenological research project, I included six students in this study (Creswell & Creswell, 2017). Additionally, I incorporated an approximately equal number of students from both grade levels along with an equal emphasis on both genders. As for students who do not identify as Black and do not have the required critical reading and math scores, I did not include them in this research project.

Once participants were identified, I employed a phenomenological qualitative study to look at the *affective, emotional and often intense human experiences* that Black students perceive with AP and advanced classes (Merriam & Tisdell, 2016, p. 28). Qualitative instruments used in this study included focus group interviews and surveys to access the lived experiences of the participants (Efron & Ravid, 2020). I asked participants for information about their understanding of reasons for not choosing

advanced coursework. Accordingly, I gave students an opportunity to expound on ideas for the topic. After the student data was gathered, my colleagues and I analyzed for codes.

I invited my colleagues, who were administrators, honors, and AP teachers, to participate as a community of inquiry and examine motives eligible Black students use to not register for advanced classes. I needed educators' expertise to assist with understanding the problem in this study. Likewise, administrators were requested to join the community of inquiry since they are the gatekeepers for registration decisions. The group met after school for approximately thirty minutes with a total of five meetings with proceedings audio recorded by me.

I shared data from participants' focus group interview transcripts and surveys with the community of inquiry. During the after-school meetings, we discussed the current system of identification and registration of students for advanced classes. Then the group suggested changes with procedures for enrollment of eligible Black students.

I then interviewed student participants again to acquire feedback on the committee's decisions since *critical research is generally to do research **with** people, not **on** people* (Merriam & Tisdell, 2016, p. 64). While using student participant focus group transcripts, the community of inquiry refined their proposed solutions for reducing or removing barriers to enrollment. Afterwards, I administered a survey with student participants to gauge their approval of the proposals from the community of inquiry. Subsequently, the committee made additional improvement to the proposed changes based on student feedback. Next, the community of inquiry refined proposals for school change with registration for advanced classes and student participants were surveyed

again to determine acceptance of those finalized changes. Lastly, a complete school-wide roll out of the new process for identification, registration, and support for eligible Black students in honors and AP courses was made for the subsequent school year.

Data Collection and Analysis

In this research study, I utilized Fullan's (2000) recommendations for school change to assist with determining the causes eligible Black students use for not registering with advanced classes. A Google survey was administered to student participants to obtain their initial perceptions of advanced classes and opinions about the registration process of those classes. I then used student survey data to craft a focus group interview protocol with the student participants and acquire more in-depth insight to their lived experiences with honors and AP classes. This phenomenological qualitative data gave me a view into their lived experiences with AP and advanced coursework. I audio recorded and transcribed this focus group data for analysis by the community of inquiry and myself.

The Google surveys consisted of gender and grade level identification along with open-ended responses about perceptions and exposure to honors and AP courses (Efron & Ravid, 2020). I used the data from these surveys to generate focus group interview questions. The data obtained from the focus group interviews assisted me with answering the first research question which asks for reasons why eligible Black students choose not to enroll in advanced classes. The community of inquiry reviewed this data by using content analysis and coding to reveal themes or reasons Black students chose not to register for advanced classes (Merriam & Tisdell, 2016).

Next up was the community of inquiry which consisted of AP and honors teachers, administrators, a mentorship staff member, and me. This community determined barriers that eligible Black students faced with advanced classes by examining the codes or reasons from the data. I captured the meetings of the community of inquiry with audio recordings that were later transcribed to investigate the school problem and find potential solutions. I analyzed the audio transcriptions of the meetings by using coding to identify emerging categories (Efron & Ravid, 2020). This coding analysis helped me to answer the second research question of how to remove or reduce barriers to enrollment with eligible Black students.

After the community of inquiry devised a plan to reduce or remove barriers, the student participants were interviewed again using focus group interviews to obtain their impressions of the school change plan. This aided in supplying a fuller answer to the first research question. Student participants expanded on their reasons for not choosing advanced coursework after viewing the proposed changes. Next, based on data from the second focus group interview, the community of inquiry refined their mitigation or removal of barriers to enrollment for eligible Black students. Once again, emerging categories after coding the data from the meeting transcripts supplied answers to the second research question of how the barriers with enrollment of eligible Black students with advanced classes could be reduced or removed. The community of inquiry continued to refine the process of mitigation or removal of obstacles towards eligible Black students enrolling in advanced classes with each cycle of feedback from the participants.

Lastly, I administered a survey employing Google forms with gender and grade-level identification along with open-ended questions to the student participants. This measured their perceptions and captured comments about the latest changes around reduction or removal of obstacles to registration for eligible Black students. After analyzing the second participant survey, the community of inquiry finalized school changes to mitigate or remove barriers of enrollment for eligible Black students with advanced classes. Then the student participants were surveyed a third time to confirm the finalized changes with registration of honors and AP classes. Once the school changes were confirmed by student participants, implementation was rolled out to teachers, parents, and the community.

In qualitative research, it is important to demonstrate how the interpretation of the data is believable and relates to the original source (Herr & Anderson, 2015). To ensure trustworthiness, I conducted member-checking with student participant interviews and meeting proceedings. Since peer review allows for fact checking and reliability, I recruited multiple colleagues to review my data and give constructive feedback (Efron & Ravid, 2020). Likewise, I incorporated democratic validity with the community of inquiry to allow for *collaboration with all parties who have a stake in the problem under investigation* (Efron & Ravid, 2020, p. 69).

1.7 Significance of Dissertation

Although there is research on Black students' access to AP coursework (Finn et al., 2020; Naff et al., 2021; Ndura et al., 2003; Theokas & Saaris, 2013), there is less research on how to reduce local barriers to enrollment with Black students in advanced classes using a community of inquiry. Thus, this action research project focused on

internal methods for identification, support, and implementation of enrollment policies for advanced classes for Black students at my school. By examining reasons behind lack of identification, hesitancy, and concerns with success of Black students in advanced classes, I developed an understanding of the findings from this research study and asked staff and administrators to immediately reform enrollment practices at my school.

Additionally, the discoveries about motivation or uncertainty of Black students with advanced classes may be of interest to advanced classes teachers and guidance counselors at other schools. It can aid in understanding their students' perspectives and allow for discussions to assist students in making registration decisions that are beneficial to them. By the same token, institutional processes determined from this study may give teachers and guidance counselors a pathway to identifying, encouraging, and supporting Black students for honors and AP courses.

The proposed actions developed from this study should increase understanding of the dynamics between Black students, guidance counselors, teachers, and advanced classes. Therefore, the knowledge from this action research project will benefit both students and staff and create a positive educational environment for all. While the outcomes may not be generalizable, similar high school settings may find the outcomes helpful in examining their own practices related to Black student enrollment in advanced level classes.

1.8 Limitations

Results of this research project may be limited due to the small sample size of six student participants. Not all Black students have the same experience and this study incorporated phenomenological data from three female 11th and three male 10th graders.

Additionally, my school experienced restrictions due to COVID-19 so both students and staff were under stress which could have altered the results of this study. Therefore, these findings may be different in a more traditional setting. It would be persuasive to conduct interviews after the pandemic with an additional group of eligible Black students to see if my results differed.

In this research setting, the female student participants had different reasons than the male student participants for not registering with advanced classes. Accordingly, the student responses were specific to their lived experiences. A wider range of eligible Black students would have supplied additional reasons those students use for not enrolling. Correspondingly, another limitation I found was the participation of teachers, counselors, and administrators with the community of inquiry. At each meeting, I did not have every member present and the lack of responses from the absent participants may have negatively impacted this project. Despite these limitations, most student participants responded well with focus group interviews and student surveys. Likewise, the community of inquiry experienced lively and vibrant participation. The limitations of this study are discussed more in depth in Chapter 5.

1.9 Organization of Dissertation

This qualitative action research project is divided into five chapters. The problem of practice, theoretical framework, research questions, positionality, overall research design, significance, and limitations are listed in Chapter 1. The literature review and synthesis of recent research on educational change theory with community of inquiry and how it can reform enrollment of Black students are found in Chapter 2. A deeper discussion of the tools, data collection, and analysis methods are recorded in Chapter 3.

Findings and analysis of the results from this study are documented in Chapter 4. In closing, a summary of the study, conclusions determined from the findings, and recommendations for further research are chronicled in Chapter 5.

1.10 Definition of Terms

Advanced Coursework: AP, college accredited and honors level courses that are weighted and offer college-level experience (*College Prep and Early College Programs for High School Students*, n.d.).

Change Theory: An education reform strategy that utilizes knowledge from stakeholders about an educational system and applies that knowledge with explicit actions to achieve change for that system (Fullan, 2007).

Community of Inquiry : A scholarly group of professionals that investigate, interpret and debate contextualized issues or problems to determine best practices or generate mechanisms that cut across gaps in knowledge (Seixas, 1993).

Coronavirus Disease (COVID-19): An infectious disease caused by the SARS-CoV-2 virus (*World Health Organization: Coronavirus (COVID_19)*, 2021).

Eligible Participants: Junior and sophomore level students that are identified with AP Potential as possibly obtaining a 3 or higher on an AP exam or a student that has a composite score of 25 or higher on the Iowa Assessments (*Interpreting National Performance Using the Iowa Assessments*, 2019; Wyatt et al., 2020).

Phenomenology: Detailed analysis of a lived experience of an individual with bracketing by the researcher to allow unobstructed view of the phenomenon (Schmicking, 2010).

Chapter 2

Review of the Literature

I chose to identify the reasons eligible Black students choose not to register for advanced coursework in this action research project. By using a community of inquiry, a group investigation with fellow educators, we determined the barriers to enrollment of qualified Black sophomore and junior students in advanced classes. To create a study for these goals I reviewed relevant literature on change theory and communities of inquiry.

In this chapter, I discuss the literature on the reasons that Black students have used to not enroll in advanced classes. Then I examine the history of change theory within secondary education. I also discuss how communities of inquiry have been used and how they were able to problem solve successfully or be unsuccessful. Additionally, I include the theoretical framework that shaped my problem of practice along with how the community of inquiry investigated the obstacles that eligible Black students face in enrollment with advanced classes. Lastly, this chapter contains the possible proposals for how a community of inquiry could reduce the barriers that eligible Black students encounter when considering advanced classes.

Previous research forms the foundation of a literature review (Machi & McEvoy, 2016). In this literature review, I lay out a frame of reference and the recent knowledge about reasons Black students have used to not enroll with advanced classes. I also examine how change theory and communities of inquiry and their potential effect on

increasing enrollment with underrepresented students by examining the results from multiple studies (Machi & McEvoy, 2016). For this action research project, the literature review is important because it supplies information with successful strategies that worked in earlier studies and includes the reasons for their success. Even though some of these studies were produced in environments at the elementary, middle school, or higher education levels, they were relevant for the recurrent concepts found in this action research project.

To create this literature review, I utilized Education Source (EBSCOhost) to acquire peer-reviewed education-related academic journal articles about change theory and communities of inquiry in secondary education. I obtained primary sources on theoretical frameworks for this action research project by using the Business Source Complete search engine. In addition, I incorporated library textbooks to supply information about the objectives of literature reviews for this action research study.

The two research questions I had for this project were:

1. What reasons prevent eligible Black sophomore and junior students from deciding to enroll in advanced classes?
2. How can barriers to enrollment in advanced classes be removed or mitigated for eligible Black students?

Currently, student demographics for U.S. high schools are: 47% White, 27 % Hispanic, 17 % Black and 5 % Asian (*Racial/Ethnic Enrollment in Public Schools*, 2018). At NHS presently 21.8% students are Black (school database). However, Black students represented in advanced classes at NHS are the following: 1% in AP English, 3% in AP and honors science classes, and 11% in AP, college credit, and honors math. Therefore,

Black students' demographics with advanced classes do not correspond with their population statistics. This problem connects with the first research question for this study. Black students are choosing not to enroll in advanced classes, and I would like to uncover the reasons behind this lack.

In Ohio, 48 of 100 Black students are enrolled in an AP course (*Advanced Coursework in Your State*, 2020). Less than half of the average of Black students are choosing advanced classes. This translates to lower college completion for Black students since students enrolled in advanced classes during high school have greater success with college completion (*The Advanced Placement Program Benefits Mainly Well-Prepared Students Who Pass AP Exams*, 2010). Jackson (2010) found this effect is amplified and determined that Black students have lower post-secondary completion when students do not participate in advanced coursework during high school. Accordingly, Black high school graduates earn \$21,600 less a year as compared with Black college graduates (*Earnings and Employment*, 2019). Black students are losing lifetime median earnings when not participating in high school advanced coursework (Tamborini et al., 2015).

2.1 Theoretical Framework

In Chapter 1, I proposed that this project would incorporate reasons that Black students have chosen not to enroll in advanced classes and two main theories: change theory and communities of inquiry. Together, these ideas shaped the theoretical framework of this study due to their effectiveness in identifying and removing or reducing barriers with the enrollment of eligible Black students with advanced classes. I explore each of these theories thoroughly in subsequent subsections.

Black Student Reasons

Black students are not choosing advanced classes at NHS. Previous research by Ford et al. (2008) suggests that culturally and linguistically diverse students such as Black students are not accepted by White teachers or students. As a result, Black students do not feel comfortable enrolling in advanced classes. Additionally, Black students are not valued for their giftedness since it differs from the dominant culture. Ford et al. recommends that educators reduce barriers to advanced classes by confronting deficit thinking and raising expectations with Black students. In this research project, my fellow educators and I wanted to examine the barriers that eligible Black students faced with advanced classes and reduce or mitigate those barriers.

In an urban setting, Ford and Moore (2013) examined achievement gaps of Black males in advanced classes. Black male students not supervised at home because of working parents, were more likely to fall behind in coursework. Likewise, Black males raised in poverty were more likely to watch excessive TV, read less and experience summer academic losses because of the lack of family resources. As a result, Black male students sustained lower academic performance compared to their White counterparts. With this study, my colleagues and I desired to understand why eligible Black students in an urban setting were less likely to choose advanced classes.

Lastly, research by Cook and Ludwig (1997) investigated if peer pressure from other Black students while *acting White* prevented eligible Black students from becoming high achievers in high school. The authors contended that peer influences did not account for the achievement gap between White and Black student performance in school. Instead, Cook and Ludwig suggest that resource poor schools, lack of support and

sufficient motivation prevent Black students from achieving as well as their White peers. In this research project, my coworkers and I wanted to know what reasons hindered eligible Black students from achieving high academic performance and enrolling in advanced classes.

Change theory

In my problem of practice, Black students are not represented in the current demographics with advanced classes. This demonstrates a need for educational reform, and change theory assisted me with systematically changing institutional procedures (Hanson, 2001). Fullan's (2007) interpretation of change theory relied on stakeholders to employ inner knowledge and workings of an educational system in order to create actionable strategies based on research and facilitate change within the educational organization. Conversely, Strang and Meyer (1993) viewed change theory through the lens of diffusion where institutional change is communicated to personnel through certain channels over time. Alternatively, Hall and Hord (2020) considered change theory as a multi-cycled process with institutional members uncovering how the institution operates. Using this knowledge, I wanted my organization's members to devise methods for change and see improvement.

The origins of change theory or education reform began in 1983. The publication of *A Nation at Risk* (1983) caused educators to examine the state of U.S. public education. Next, in 2002, George W. Bush signed into legislation the No Child Left Behind Act (No Child Left Behind Act (NCLB) of 2001, 2002) which created another series of educational reforms. These large-scale educational improvements generated standards-based, district wide initiatives that fell flat (Fullan, 2007). As a result,

educators devised change theory to produce actionable, research-based methods to remedy failed education improvements (Hanson, 2001).

Fullan and Miles (1992) stated the importance of a school generating its own knowledge and creating an outline of how to proceed with the school change. Fullan (2000) envisioned internal educational groups utilizing change theory by building their own model of reform and taking ownership of it. Hanson (2001) pointed out that when an educational organization acquires knowledge about a problem (both with internal and external members), it is poised for educational change. However, Hargreaves (2004) cautioned that school change is not all positive and can create negative emotions like anxiety or anger with stakeholders if they are not consulted in the process of education reform. I chose to avoid this by having stakeholders participate in the reform process.

Goodson (2001) affirmed that productive school reform strikes a balance between mission of the institution and educator ownership with the reform. Likewise, Fullan (1995) mentioned the need for educators to be part of the learning organization and become *experts in the change process* (p. 234). Fullan (1995) viewed educators as well-informed change agents who can initiate change, collaborate with co-workers, and control conflict within the change. In this research project, I viewed colleagues as change agents and provided them an opportunity to collaborate while minimizing conflict within the group.

To be a change agent and facilitate reform with an institution, it is important to capture the inside story of that organization. Fullan (2000) recommended that educators obtain information about how the organization functions which is considered the inside story. After obtaining the inside story, educators then would develop reculturing and

restructuring to create change within that organization. In this process, Fullan mentioned the need for schools to seek outside assistance from the community, technology, or the larger teaching profession for help with the reform. He cautioned that this external help is not easy to uncover or use since supports are not in place for this type of collaboration. Lastly, Fullan spoke briefly on the need for external accountability with a school to maintain standards and attention to performance. To answer the first research question, I obtained the inside story from eligible Black students, teachers, and guidance counselors (Levine et al., 2013).

Alternatively, experts and resources outside an institution can be utilized with school reform. Hansen (2001) discussed the significance of external knowledge when searching for answers to school problems. He recommended that schools survey school reform at other institutions, observe experiences from outside initiatives, employ new technology and seek scholarly reform knowledge. To answer the second research question, this study examined the expertise of community of inquiry members at other schools that reduced or removed barriers with enrollment issues. Additionally, I utilized experts within the community of inquiry that specialize in advance class registration with Black students. Therefore, in this action research project, I embraced recent research methods to solve the problem of practice.

Fullan (2007) identified how school change improved outcomes through assumptions and linkages. Fullan asserted that most educational initiatives lack thought about context and conditions under which those initiatives will be placed. Instead, he cautioned that there is no quick solution, and that real change demands a *deeply applied phenomenon in the minds of people* (2007, p. 38). Fullan claimed this new knowledge

needed to be impactful and freely distributed amongst active participants in this educational reform. To answer the first research question in this study, as Fullan suggested, I gathered in-depth data from Black students' environment. For the second research question, I included information on reducing impediments to enrollment of eligible Black students in advanced classes. Together, with the new knowledge generated by this study, the teachers, guidance counselors and administrators can reflect on it and adapt it for their different positions.

In this study I used a community of inquiry as a vehicle for school change with registration of eligible Black students in advanced classes. I sought administrative support for this community of inquiry so that members could freely partake of the process with school change. The members included stakeholders such as teachers of advanced classes and administrators. While maintaining student anonymity, I shared within the community of inquiry personal experiences of Black students' knowledge of honors and AP courses. Likewise, I established a community of inquiry that included critical discussions and best practices for achieving those goals and based on group expertise with literature resources. Lastly, the group reached consensus in iterative cycles with the eligible Black students for registration in advanced classes. Accordant with action research, the school change strategies used in this study were modified and adjusted to meet the needs of the stakeholders at this institution.

Communities of Inquiry

To answer the second research question about the obstacles to eligible Black students enrolling in advanced classes, I employed a community of inquiry to find solutions to this problem of practice. The community of inquiry removed or mitigated

barriers to enrollment with Black students. The framework of a community of inquiry originated with Dewey (1933) who proposed that education is experienced both socially and individually. Together, public discourse and private reflection are found at the center of a community of inquiry (Coghlan & Brydon-Miller, 2021). In a community of inquiry, the process of critical thinking and problem-solving is based on the scientific method. Kuhn (1970) proposed that science is not as objective as originally thought. Rather, science is governed by human-created models that have inherent biases.

Seixas (1993) refined Kuhn's idea of subjective scientists with a proposed community of inquiry and compared it to Bruner's (1988) community of learners. Seixas examined the process of historians sharing their body of knowledge with history teachers and how both groups could expand their instructional practice as a community. He saw overlap with both groups participating in similar tasks. An example of this was Seixas noticing that teachers review student essays the same way history scholars review manuscripts and books. Together, each group had a similar task of conducting scholarly work. In this research project, the community of inquiry conducted scholarly work by reviewing student participant data and proposing solutions to the removal or mitigation of barriers with advanced classes.

Alternatively, a community of inquiry can be an effective professional development method for change. Butler and Schnellert (2012) explored the development of nascent professional development models with teachers using inquiry to create change in practice (Ball, 2009; Campbell et al., 2004; Cole & Knowles, 2000; Loughran, 2002). Butler and Schnellert (2012) found a common framework in this type of teachers' professional development. Butler and Schnellert defined it as containing the following:

determining a problem in practice, being action-focused, reflective, and using iterative cycles to problem solve. The authors did comment that the depth of inquiry with the different teacher groups was uneven. Butler and Schnellert struggled to identify conducive environments for genuine inquiry. However, the researchers could pinpoint the inquiry-based teacher learning model as having a socio-constructivist framework and including self-regulated scholarship. I regarded this research project as a professional development method for educators at this site to determine iteratively best practices and enhance academic access for eligible Black students with advanced classes.

Galosy and Gillespie (2013) documented an example of a community of inquiry in action. The authors employed a community of inquiry for secondary STEM teachers early in their professional careers. Galosy and Gillespie (2013) incorporated a community of inquiry that used an online platform to analyze student data collaboratively. The online collaboration helped the group inform their teaching practices. Galosy and Gillespie found that many of the teaching fellows had fewer opportunities for local communities of inquiry. However, Galosy and Gillespie ascertained that after experiencing an online community of inquiry, those teachers desired to create a community of inquiry at their school. The authors did not elaborate on how those teachers could construct local communities of inquiry which are necessary for improved teaching practices. Notwithstanding, the researchers remarked that the quality of STEM teachers and retention of those professionals increased with the establishment of a community of inquiry at each school. Therefore, this study incorporated a local community of inquiry to engage educators and administrators, facilitate collaboration and increase the excellence of teachers at this site.

In another study that examined the workings of a community of inquiry, Butler et al. (2015) probed systems-level change. The authors examined the improvement of adolescent literacy while using a community of inquiry with subject-area classes at the district level. Butler et al. inquired into teachers' engagement with the literacy initiative and how it was related to their self-efficacy and involvement with the change. As stated in their previous study, the researchers emphasized the importance of pinpointing goals, planning, and deciding on practices to achieve them and monitoring the effectiveness of those goals through data. Butler et al. contended that this process would happen iteratively until the goals were met. Not all communities were as effective as Butler et al. desired. Some groups lacked administrative support or dedicated time to meet as a community of inquiry. Butler et al. struggled to explain how the less successful groups conducted authentic inquiry. Despite this, my research project included a community of inquiry with administrative support that met several times to review data iteratively until the group achieved its goal: acceptance of final proposed changes in registration of advanced classes with eligible Black students.

In a third example of a community of inquiry, Drew et al. (2016) investigated a curriculum reform study combining university educational researchers with local K-12 teachers. The researchers conducted Critical Collaborative Professional Enquiry (CCPE) for the duration of a year. Teacher and administrator participants collaborated with university researchers to craft curriculum reform that targeted improvement in student outcomes. Drew et al. expressed the benefits of year-long collaboration: a deeper understanding of the curriculum, a new way of thinking and innovation made by teacher and administrator participants. By the same token, most of the teachers and

administrators perceived themselves as change agents for the initiative and desired collaboration to increase their knowledge or improve their practice in implementing the curriculum. Drew et al. did not investigate a community of inquiry without university researchers as a comparison. Educators like myself would benefit from the comparison to see the different levels of collaboration and knowledge construction in a community of inquiry without university researchers present. Conversely, with this research project, I desired a community of inquiry to be a place of deep learning, critical thinking, and transformation of barriers that eligible Black students face with advanced classes.

Lastly, in another example of how a community of inquiry functions, DeLuca et al. (2017) completed a mixed methods study of Canadian elementary school teachers conducting Collaborative Inquiry (CI) into shared problems of practice. This investigation surveyed groups quantitatively to examine the systemic processes that occur within CI. Likewise, DeLuca et al. qualitatively investigated how teachers experienced enhanced learning or improved practices with their shared problem of practice while participating in CI. Teachers shared with the researchers that *evidence collected from observations of students* and having *release time* to attend meetings were the most important factors for successful CI (DeLuca et al., 2017, p. 72). Alternatively, teachers expressed that CI was time consuming and another task needed to be completed on top of other work. DeLuca et al. indicated that teachers' resistance to the new professional development model of CI may have caused them to feel frustrated or overwhelmed. Additionally, the authors did not indicate what timeframe these CI groups were meeting and what types of shared problems of practice the teachers were investigating. However, DeLuca et al. recommended that CI as a worthwhile form of systematic teacher

professional development and learning for shared problems of practice. They also advocated for CI to expand teacher knowledge about a problem and give educators a positive environment for risk taking and innovation. Therefore, in this research study, the community of inquiry gathered student evidence and deepened member knowledge about the shared problem of practice. This community of inquiry developed a cycle of identifying goals for reducing or eliminating obstacles to enrollment with eligible Black students in honors and AP classes. Then, the community of inquiry planned for and implemented practices to achieve those goals with evaluations to determine favorable outcomes for these goals. Resources were drawn from expertise of group members and recent literature to inform the community of inquiry with best practices. The cycle of inquiry was iterative for this community of inquiry until proposals for the change were met with confirmation by the student participants.

Change theory has been viewed as an effective means for organizing and developing school change. For this process to be constructive, the organization gathers knowledge about the institution and obtains the inside story about the problem. This would include eligible Black students, teachers, administrators, and guidance counselors. The knowledge gained from these groups helped to answer the first research question about reasons why eligible Black students chose not to enroll in advanced coursework. Additionally, I acquired outside knowledge through the form of research that included other institutions that have had success with reduction or removal of barriers to eligible Black students enrolling in advanced classes. This outside knowledge assisted the community of inquiry with answering the second question of how to mitigate or eliminate obstacles for eligible Black students. To create linkages within the institution, I shared

knowledge about this problem so that stakeholders like Black students, teachers, administrators, and guidance counselors could adapt this knowledge to their purpose.

2.2 Summary

In this literature review, I provided an overview of the notable literature published on reasons Black students are choosing to not enroll in advanced classes, initiatives using change theory for school reform, and how the use of a community of inquiry removes or reduces barriers to enrollment of eligible Black students in honors and AP classes. The next few chapters discuss methods of employing Black student reasons, change theory, community of inquiry, and phenomenology. Data collection and analysis of the data is included, followed by interpretation of the results from this study concerning eligible Black students enrolling in advanced classes, along with recommendations for further analysis towards the end of this dissertation.

Chapter 3

Methodology

This study took place at NHS, a private, parochial school governed by the Holy Cross Brothers in 1953. Originally, working class families educated their sons at NHS to lead towards college or trade schools after graduation. The school remained single sex until the 1970s, when enrollment declined. The school shifted focus to college preparatory in the late 1990s and became a Blue-Ribbon School of Excellence by the U.S. Department of Education. Many students who became National Merit Scholar Finalists attended the school because of its academic reputation. The student body became increasingly suburban with the neighborhood surrounding the school supplying fewer lower-middle class students. NHS continues to garner much financial support from alumni and has led to a resurgence in building, including a gymnasium, fitness center, chapel, collaborative workspace, and fine arts center for students.

NHS offers competitive merit-based scholarships for needy students and accepts state vouchers from financially needy students. It enrolls students in college preparatory classes, including sixteen college credit courses along with 11 AP courses. About 25% of students register for AP courses and 98% of the student body attends college after graduation with a small minority signing up for military service.

The school database in 2021 showed that NHS only has three Black students taking AP courses out of 300 AP students. School demographics consist of 21.8% of students identifying as Black, 62 more African American students should be taking AP courses. For college credit plus (CCP) courses, the number of Black students is higher with 25 of 303 students enrolled. However, there are 40 fewer Black students than expected from college credit courses based on their demographics. Lastly, 32 Black students of 351 total students registered for honors classes. I predicted, based on school diversity, that 44 more Black students should be taking honors classes. NHS is not maximizing college preparatory coursework for Black students. This demonstrates the problem of practice that underlined this study: Black students choose not to enroll in advanced coursework, so they are not represented demographically in those classes.

This inequality I have seen daily at NHS has made me want change. I encouraged successful Black students to consider enrolling in advanced classes like honors chemistry. I convinced a few students, but not all. The lack of diversity in advanced classes compelled me to find another solution. I hoped to discover a more effective means of attracting Black students to advanced classes by attending graduate school. Using knowledge gained from graduate classes, I wanted to create a method for change using insider research.

Herr and Anderson (2015) defined action research as having a practitioner researcher investigating the outcomes of a program. The authors stated that these types of explorations incorporate qualitative methods with data collection. In this type of investigation, I considered it an advantage to be part of the program and fold the action research back into the initiative as professional development for others within the

organization. I used these findings from this research project to apply immediately to the problem of practice.

To make change easier, Efron and Ravid (2020) argued that effective school transformation require those involved to have a role in developing solutions to problems within the organization. This includes students, teachers, parents, and administrators. Together, these individuals collaborate to bring about change. I aspired for this study to uncover why eligible Black students are not enrolling in honors and AP coursework at this school. Seeking answers to the following questions guided this study:

Research Questions

1. What reasons prevent eligible Black sophomore and junior students from deciding to enroll in advanced classes?
2. How can barriers to enrollment in advanced classes be removed or mitigated for eligible Black students?

3.1 Qualitative Study and Rationale

In this qualitative action research project, I investigated the root causes of the lack of Black student enrollment in advanced high school classes. As Merriam and Tisdell (2016) asserted, qualitative research depends on the types of knowledge gathered by the researcher. I interpreted the phenomenon in my problem of practice. I employed a qualitative study to construct meaning and understanding of this problem in my practice. This two-pronged phenomenological study included eligible Black sophomores and juniors that chose not to enroll in advanced coursework.

In the first part of the project, I identified eligible Black junior students at NHS. Richardson et al. (2016) recommended using critical reading and math scores from the

Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMST) to predict AP coursework success. This study examined in detail the eligible students' perceptions of advanced classes, why they chose not to enroll in them, and their understanding of the benefits of advanced classes.

Using their responses, the second part of the project employed a community of practice to investigate ways to eliminate or lessen the barriers to Black sophomore and junior students enrolling in advanced classes. This group included administrators, teachers of advanced classes, along with the researcher, and staff to explore methods to encourage and support Black students with advanced classes.

3.2 Setting and Participants

This study took place for 11 weeks during the spring semester at NHS. In the 2021-22 school year, a total of 809 students were enrolled at this school. With help from administrators, I identified seven sophomore and junior Black students who were eligible but did not enroll in advanced classes. Parents and guardians of participating students received a letter outlining the study (see Appendix A). The letter detailed the conditions of the study and the role that the students played in this investigation. Student participants represented the underserved population of NHS and embodied students who chose not to enroll in advanced classes. I encouraged students to participate in this study to learn about the benefits of advanced coursework. Essentially, the students and their parents/guardians freely decided to participate in this action research project.

This study had a total of six student participants that returned their consent letters and consisted of three female 11th graders and three male 10th graders that all identified as Black and were considered eligible for advanced coursework. One eligible Black

student declined due to a parental objection with the accepted race label used in this study. I included one female participant enrolled in a single AP course since she had not taken additional honors or AP classes. I also incorporated another female participant enrolled in a single honors class with no AP courses. Likewise, I added a male participant taking an honors class but no AP courses because he was not enrolled in multiple advanced courses.

The other educator participants in this study consisted of an associate principal of student services, an associate principal of academics, a mentorship staff member, and four teachers of advanced classes including myself. All members identified as female, and six out of seven members identified as White. One member identified as Black. This study utilized a community of inquiry to investigate the barriers and their removal or mitigation for eligible Black students in advanced classes. I obtained permission from educator participants of the community of inquiry to be part of this study (see Appendix B). I urged both teachers and administrators to join this community of inquiry to uncover barriers to enrollment of eligible Black students with advanced classes and devise methods to reduce or remove those obstacles. Consequently, educators freely joined this community of inquiry.

After obtaining permission, I administered a Google survey (see Appendix C) to the student participants to obtain their perceptions of honors and AP classes and barriers to registration. I wrote notes in my researcher's journal to provide bracketing for this phenomenological study and additional data for this project. Together with the community of inquiry, we analyzed this student survey data. I then constructed a focus group interview protocol for administering semi-structured interview questions to the

student participants (see Appendix D). I audio-recorded and transcribed the student participant interviews before sharing them with the community of inquiry to locate obstacles that eligible Black students experience when registering with advanced classes.

The community of inquiry met bi-weekly for 11 weeks to establish group norms, share data from the student participant surveys and interviews and identify problems with the lack of enrollment of eligible Black students in advanced classes. The community of inquiry coded the data and looked for reasons eligible Black students used to not register for advanced classes. I made audio recordings of each meeting using a portable recorder with a microphone to capture the discussions and comments during the meeting. I then transcribed the audio files using Descript, an online software that converts audio to text (*Descript: All-in-One Audio/Video Editing, as Easy as a Doc.*, 2021). Additionally, I collected artifacts of all meeting documents (see Appendixes F, H, and J).

Correspondingly, I administered a Google form (see Appendix E) to educator members to capture thoughts, opinions, and suggestions after each meeting. I also kept a journal to write down observations and reflections from each community of inquiry meeting.

The community of inquiry used member knowledge of the institution along with student participant survey and interview data to determine the barriers to eligible Black students enrolling in advanced classes. The meetings took place after the school day and the community of inquiry determined the process to reduce or remove obstacles for enrollment of eligible Black students in advanced classes. The community of inquiry shared resources from members and best practices. The community of inquiry developed a goal of reducing or mitigating barriers for qualified Black students (see Appendix F). Next, I gave the student participants semi-structured interview questions (see Appendix

G) for their perceptions of the proposed changes with reduction or mitigation of obstacles with advanced classes.

I then shared the data from the second focus group interview with the community of inquiry. I made sure to capture any thoughts using a research journal to be mindful and bracket while viewing the data from the focus group interviews. The community of inquiry then used the feedback from the student participants to refine the decisions made about changes to registration of eligible Black students with advanced classes.

Next, I surveyed the student participants again about the revised changes to registration with advanced classes (see Appendix H). Once again, I bracketed any thoughts while reviewing this data. Then, I shared this data with the community of inquiry to make additional revisions based on student feedback. Lastly, improvements were made to the final changes with registering eligible Black students with advanced classes (see Appendix J). Subsequently, I surveyed the student participants to obtain concluding comments about the final changes with registration of advanced classes with eligible Black students. After administrators confirmed the final changes for registration of eligible Black students, the school shared information with all the teachers, staff, students, parents, and guardians.

3.3 Data Collection

I used Google forms to create a student survey to acquire initial student participant data. This data assisted me with generating questions for the focus group interviews to obtain reasons why eligible Black students chose not to register for advanced classes. The first survey probed deeply into their explanations for not registering with advanced classes. A total of 11 questions were administered to the

student participants. I included demographic questions about gender, grade level, and educational goals to assist with examining factors for not registering with advanced classes. Two open-ended questions asked the students about their familiarity with honors and advanced coursework to search for reasons why they chose not to register. For example, I asked students how familiar they were with AP courses.

This assisted the community of inquiry with understanding the depth of student knowledge about AP classes. Another open-ended question probed into their decision-making process with registration. I also questioned student participants about their reasons for not registering for honors or AP courses. This student participant data allowed the community of inquiry to comprehend their rationale for not registering for these courses.

I additionally held a focus group interview with the student participants containing six questions that examined their perceptions or opinions about proposed changes based on data from the first survey. One question asked about their personal knowledge of honors and AP classes. Another question asked the student participants about their individual feelings about registering for advanced classes. Two questions asked the student participants about their in-school and outside school reasons for not choosing advanced classes. A further question asked the student participants if the school was meeting their current educational goals. Lastly, one open-ended question inquired about additional thoughts or experiences that the student participants felt comfortable sharing about advanced classes. This data provided detailed descriptions of student participant experiences with advanced courses to allow the community of inquiry to identify barriers and propose reducing or removing those obstacles.

Data collected from the focus group interviews and community of inquiry group was obtained using a Zoom H1n audio recorder and memory card. I uploaded the audio from the memory card to the Descript website (*Descript: All-in-One Audio/Video Editing, as Easy as a Doc.*, 2021) to facilitate audio to text transcription. As a facilitator, I transferred the transcripts to a Word document (*Microsoft Word for Mac*, 2022) which was shared with the community of inquiry for coding and analysis. Correspondingly, I kept a research journal using the digital diary service, Day One (*Your Journal for Life: Day One*, 2022) to record my perceptions and opinions of the meetings with the community of inquiry. Member exit surveys from the community of inquiry meetings were coded and analyzed for themes by me to assist with the process of school change.

Google Student Survey and Focus Group Interviews

A Google student survey was administered to the student participants (see Appendix C). I gave it to the six selected student participants after obtaining guardian/parental permission for this study. I solicited student participant comments with open-ended questions about why students chose not to enroll in advanced class instruction.

I chose to obtain phenomenological qualitative data from the student survey and immerse myself in the lived experience of eligible Black students (Groenewald, 2004). This lived experience from the Black students assisted me with developing a focus group interview protocol (see Appendix D) to allow for ample accounts of student participant experiences with the obstacles they face when deciding to enroll in advanced classes. Additionally, I wrote down reflections in my electronic journal to bracket my personal perceptions while immersing myself in the student participant focus group data (Nicholls,

2019). The community of inquiry also immersed themselves in the student participant focus group data and then used these comments and student participant data to code and look for themes that are possible obstacles for eligible Black students face when deciding to register with advanced classes. All student participant data was stored in a password protected site online to ensure confidentiality and security (Merriam & Tisdell, 2016).

Observations of Community of Inquiry

The community of inquiry held bi-weekly meetings after school for 11 weeks. Each meeting lasted approximately forty-five minutes. As a facilitator, I encouraged participation, monitored group progress and ensured compromise within the group (Cane, 2003). Members suggested new ideas for change with registration for eligible Black students. I audio recorded each meeting with an H1n recorder, and transcribed the audio files using Descript (*Descript: All-in-One Audio/Video Editing, as Easy as a Doc.*, 2021). I also removed any identifiers and stored the data from each observation in a secure data site to maintain privacy.

The community of inquiry utilized the group's *shared knowledge, communication of ideas and critical dialog* to draft a proposal (see Appendix F) for change of registration of eligible Black students with advanced classes (Darling, 2001, p. 19). I administered focus group interviews with student participants (see Appendix G) about the draft proposal to reveal their opinions, perceptions, and likelihood of registration with advanced classes. I then shared this second focus group interview data with the community of inquiry to improve the proposal.

Lastly, the community of inquiry refined the changes to registration of eligible Black students (see Appendix H). I then administered a second student participant survey

(see Appendix I) to view their responses about the proposed revised changes to registration of advanced classes. Student participant comments were shared with the community of inquiry to make final improvements to the school change with registration of advanced classes (see Appendix J). After the community of inquiry made final improvements to the proposed final changes, I gave the student participants a third survey (see Appendix I) to improve the proposed changes. Then, the community of inquiry made additional changes before administrators approved proposals with registration of advanced classes for eligible Black students. The school later shared the final proposals with the entire student body, faculty, staff, parents, and guardians.

Artifacts of Community of Inquiry

Google survey data generated from the meetings of the community of inquiry was collected (see Appendix E). I used this data to *provide insights into the phenomenon under study* (Merriam & Tisdell, 2016, p. 174). The community of inquiry identified barriers to eligible Black students with advanced classes. Additionally, the community of inquiry developed strategies for removing or mitigating barriers to enrollment in advanced classes with eligible Black students and recorded those proposals in electronic documents during the meetings. I included artifacts from the community of inquiry meetings in Appendixes F, H, and J. I coded and analyzed those artifacts for themes. To maintain privacy and confidentiality, I secured the data in a password protected site.

Research journal

I kept an electronic journal using Day One (*Your Journal for Life: Day One*, 2022) throughout the research study to record positionality, reflexivity, and reflection. My research journal was stored on a password protected, secure data site. I replaced

student participants' and community members' names with pseudonyms to protect privacy. Subsequently, after the data was collected, analyzed, and written up, I deleted pseudonym assignments to maintain the confidentiality of the student and educator participants.

Table 3.1

Data Collection for Research Questions

Research Question	Data Collected
What reasons prevent eligible Black sophomore and junior students from deciding to enroll in advanced classes?	<ul style="list-style-type: none"> • Google student survey #1 • Focus group interview #1 • Focus group interview #2 • Observations from community of inquiry • Artifacts from community of inquiry • Research journal
How can barriers to enrollment in advanced classes be removed or mitigated for eligible Black students?	<ul style="list-style-type: none"> • Focus Group Interview #2 • Google student survey #2 • Google student survey #3 • Observations from community of inquiry • Artifacts from community of inquiry • Research journal

3.4 Data Analysis

To answer the first research question about perceptions of advanced classes for Black sophomore and junior students, the community of inquiry and I analyzed the data from Google Student Survey #1 and Focus Group Interview #1. We remained reflexive and mindful while interpreting this data so that the students' reasons for choosing not to enroll in advanced classes were readily apparent (Horrigan-Kelly et al., 2016). The

community of inquiry coded student participant survey and focus group interview data to allow for emerging categories (Efron & Ravid, 2020). The group utilized open coding to *capture any data with a word or a phrase that seems to be responsive* to my research questions (Merriam & Tisdell, 2016, p. 208). Likewise, the community of inquiry arranged and ordered emerging categories to show relationships between the data themes and individual categories (Efron & Ravid, 2020, p. 179). Eventually, I developed a model or theory with the data analysis by interpreting the data's meaning (Merriam & Tisdell, 2016).

Accordingly, I used a research journal to maintain objectivity and be aware of bias when interpreting this data. As a teacher of advanced classes, I needed to ensure I was not distorting the analysis of this study to obtain a positive result, and increase the likelihood of enrollment with eligible Black students. I also wanted to *arrive at structural descriptions of an [eligible Black student] experience, the underlying and precipitating factors that account for what is being experienced* when choosing not to enroll in advanced classes (Merriam & Tisdell, 2016, p. 227). The research journal allowed me to reflect and view the experiences of eligible Black students through their lens.

To answer the second research question, the community of inquiry meetings allowed for collaborative data analysis (Herr & Anderson, 2015). The group members determined the meaning behind the data from Focus Group Interviews #1 and #2 and uncovered obstacles for eligible Black students in advanced classes. The community of inquiry decided on common themes or categories to create evidence for problem-solving within the group (Darling, 2001) and devise a change plan to eliminate or mitigate barriers that prohibit Black student enrollment in advanced classes. The group maintained

an iterative process involving student participant feedback after each draft. Both student and adult participants utilized phenomenological research through survey data or interview transcripts. This phenomenology assisted each group with understanding how the other group interpreted the shared data. I documented this process with audio transcripts and artifacts from the meeting.

Likewise, I open coded transcripts and artifacts from the community of inquiry meetings and arranged those codes into emerging categories (Efron & Ravid, 2020). I looked for patterns within the themes and arranged them in a logical order. These categories assisted me with answering the second research question to make sense of how my problem of practice could be solved (Merriam & Tisdell, 2016). I analyzed each initiative crafted by the community of inquiry with indicators for effectiveness. I examined the effectiveness of these changes with likelihood of enrollment with advanced classes for eligible Black students.

To increase the validity of this research project, I incorporated triangulation of data sources to *validate the accuracy of your [my] patterns and findings* (Efron & Ravid, 2020, p. 185). I used multiple data sources to verify interpretations of explanations for the research questions for this research project. I also employed multiple colleagues to help examine any biases with my interpretations and confirm discovery of this research project. Likewise, I included points of view from eligible Black students to reduce my bias.

3.5 Ethical Considerations

Within this action research project, the researcher has the position of an *insider in collaboration with other insiders* (Herr & Anderson, 2015, p. 45). Since I am a teacher at

this school, some of the student participants for this action research project were or currently are my classroom students. As a result, I considered my relationship of familiarity between the student participants and myself. Additionally, I am intimately involved with the culture of NHS and can be recognized by sophomore and junior students outside of my classroom.

Another position I have was as an outsider examining insiders (Herr & Anderson, 2015). I am a White, upper middle-class female, and do not have the same life experiences as the Black students in this project. I grew up in a lower middle-class, community but now live in an affluent neighborhood. Therefore, I regarded myself as an outsider trying to make sense of the barriers and challenges those Black students have when considering enrollment in advanced classes.

Alternatively, I possessed an insider position as a teacher of advanced science classes. I ultimately focused on removing or reducing enrollment barriers in honors chemistry and AP chemistry coursework for Black students. I know the demands of advanced science coursework experienced by students and parents together. This potentially caused me to have a bias toward a positive result for this action research project. Thus, I made sure to *study the outcomes of a program and fold the action research immediately back into the program* (Herr & Anderson, 2015, p. 42). I aspired to be objective when analyzing data from this project and not to interpret results as favorable for reducing or removing enrollment barriers in advanced classes with Black students.

3.6 Summary

In Chapter 3, I provided the qualitative research design and the rationale, along with a description of the participants, methodology, data collection tools, and analysis methods. In Chapter 4, the results of the study are presented. Chapter 5 presents the interpretation of those results and conclusions and discusses the significance and limitations of the study, along with consideration for extending this study with future research.

Chapter 4

Findings

The purpose of this study was to uncover the reasons for eligible Black students choosing not to register for advanced classes. Of 300 Black students at NHS currently only three are taking AP courses. Consequently, in this research project I tried to understand why Black students are not choosing to register for advanced classes. I conducted this study at a private, urban, college preparatory high school with six eligible student participants. In this study, I obtained phenomenological qualitative data from the student participants and shared it with a community of practice which consisted of seven faculty and staff members at this research site. Together with the community of inquiry, I gained an understanding of this problem of practice and determined how to reduce or remove those barriers.

This qualitative action research study is framed by change theory, which is an education reform approach that makes use of stakeholder knowledge about an educational system and exercises group knowledge with specific steps to achieve change for that system (Fullan, 2007). I obtained qualitative data from six eligible Black students using open-ended Google Forms surveys and focus group interviews. The community of inquiry accessed both the survey data and transcriptions of participant interviews to discover the obstacles that eligible Black students face with advanced classes. This community of inquiry, which consisted of one associate principal of student services, one

associate principal of academics, a mentorship staff member, and four teachers of advanced classes including me. The group determined barriers that the students faced, proposed changes to registration and refined those changes using student feedback from focus group interviews and surveys.

I coordinated this study over the course of 11 weeks during the spring semester at NHS. I also collected data from both the student participants and community of inquiry to answer the following research questions:

1. What reasons prevent eligible Black sophomore and junior students from deciding to enroll in advanced classes?
2. How can barriers to enrollment in advanced classes be removed or mitigated for eligible Black students?

In this chapter, I describe the findings from the data collected in this phenomenological study and reveal the results obtained from a community of inquiry while employing change theory. In the following sections, I present the qualitative phenomenological data from the participants which describes their lived experiences with advanced classes. Data coded and analyzed by the community of inquiry is used to identify the barriers that the participants faced. Then I discuss the data gathered from the community of inquiry meetings that demonstrate how change theory, which incorporates expertise from group members to conduct school reform, could be applied with removing or mitigating barriers to registration of advanced classes with eligible Black students.

4.1 Qualitative Study Results

In the following subsections, each set of data from surveys, focus group interviews, and meeting proceedings, were open coded and analyzed by the community

of inquiry and me for themes (Merriam & Tisdell, 2016). First, I obtained phenomenological data using an open-ended survey. Then I crafted a semi-structured focus group interview to thoroughly uncover the lived experiences of the participants with advanced classes as listed in Table 4.1. Accordingly, I captured community of inquiry data while members analyzed participant data for barriers and reduction or mitigation of those barriers.

Table 4.1

Timeline for Type of Data Collection with Participants

Date	Type of Data Collection	Participants
03/04	Google survey about advanced classes	Student participants
03/25	Focus group interviews #1	Student participants
03/31	Meeting transcripts and Google exit surveys	Community of inquiry
04/07	Meeting transcripts and Google exit surveys	Community of inquiry
04/12 and 04/27	Focus group interviews #2	Student participants
04/29	Meeting transcripts and Google exit surveys	Community of inquiry
05/02	Google survey about revised proposed changes	Student participants
05/10	Meeting transcripts and Google exit surveys	Community of inquiry
05/16	Google survey about final proposed changes	Student participants

Google Survey

I surveyed participants (see Appendix C) for their background knowledge, personal experiences, and feelings about advanced classes. The community of inquiry identified thirteen codes from six participant responses, as reasons participants used in choosing not to register for advanced classes. Participant responses of reasons for not

registering are listed in Table 4.2 and varied from social exclusion to time compromise. Some major codes identified by the community of inquiry were *rigor* or *academic challenge*, *fearful*, *benefits of classes*, and *peer exclusion*. One student participant mentioned that advanced classes *come off as intimidating*. Another student participant expressed that an advanced class causes them to be *separated from other students in your grade*. Correspondingly, a third student participant articulated that teachers or guidance counselors did not give them information about advanced classes, so this person felt the classes *weren't really explained to me*.

Table 4.2

Student Survey Codes Used for Analysis

Code	Meaning	Example
Isolation/Peer exclusion	Not with students like themselves	“Not very common for students of color”
Rigor/academic challenge	A demanding class that makes demands on students	“I wasn’t cut out for those type of classes.”
Rejection/fearful	A student is anxious about how others view them while in this class	“You’re not in them; you’re not good enough.”
Benefits of classes	Student does not see or know the reward in enrolling with this class	“They weren’t really explained to me,” and “less time to have hobbies and do extracurriculares (sic)”

Focus Group Interviews

To understand their lived experiences with AP and honors classes, I conducted focus group interviews (see Appendix D) with Black students that chose not to take advanced classes to obtain more details about their perceptions, exposure to, and feelings about advanced classes. I held the interviews with two groups: three females in 11th and three males in 10th grade. I summoned each group to a private conference room, gave the

participants semi-structured interview questions, and audio recorded their responses. I conducted two separate focus group interviews to obtain specific data. To acquire specific data about the participants perceptions, exposure to, and feelings about advanced classes, I held a focus group interview with male and female participants separately. Then to get feedback about proposed changes with registration for advanced classes, I convened a second focus group interview with each gender grouped apart.

In the first focus group interview, the community of inquiry and I found their responses surprising (see Table 4.3). The female participants gave more explicit and expressive reasons for not registering, whereas the male participants shared more matter of fact and succinct motives for not registering. For instance, one female participant mentioned that she chose not to register since *there is not anyone I can relate to in AP classes*. Likewise, another female participant said she avoided an advanced class because it would be a *super difficult class that I would struggle with*. As for the male responses, one participant said that he did not register since *I never heard of them* as a freshman. Alternatively, another male participant said he chose not to register for advanced classes because he had to *focus on school and sports at the same time*.

Table 4.3*Focus Group Interview Codes Used for Analysis*

Code	Meaning	Example
Societal bias	Individual is not valued because of racism	“Someone who isn’t worthy of being there”
Rigor/academic challenge	A demanding class that makes demands on students	“Have to jump through too many hoops”
Rejection/fearful	A student is anxious about how others view them while in this class	“You’re being lazy, not applying yourself.”
Benefits of classes	Student does not see or know the reward in enrolling with this class	“Not interested in some of the classes”
Lack of info	Student is not aware of advanced class	“Different levels of different subjects was (sic) really new to me.”

The community of inquiry coded the transcripts from the focus group interviews and added additional codes to the codebook because of the extensive responses from the participants. The participants gave the community of inquiry many answers that were new and not articulated before in the survey responses. Participants expounded on topics related to race and access to advanced coursework. As a result, the community of inquiry found these responses as a mix of previous codes along with new topics.

Community of Inquiry Meetings

To understand how school reform takes place, I captured community of inquiry meetings with audio and analyzed the data through the lens of change theory by using codes (see Table 4.4). I documented my reflections about each meeting in my field notes. I also recorded my observations, thoughts, and ideas about how the meetings progressed. In four out of the five meetings, I recorded, transcribed, and coded data to examine how a

community of inquiry identified obstacles and proposed mitigation of those barriers for registration with eligible Black students. Unfortunately, I unsuccessfully recorded the first meeting due to technical difficulties with the audio recorder.

Table 4.4

Community of Inquiry Meeting Codes Used for Analysis

Code	Meaning	Example
Organize	Assembly of information into groups or easily accessible format	“Focus on collapsing codes”
Transfer	Move objects or ideas from one location to another	“Record all the information”
Strategy	Intentional work for a desired outcome	“Figure this out together”
Questioning	Inquiring about how a phenomenon operates	“I wonder how that will play out”
Label	Using a term as a descriptor	“Isolation-slash-peer-exclusions”
Interpret	Understanding what an idea or comment means to the reader	“Sounds like a positive”

During the first meeting, the community of inquiry analyzed data from the student surveys (see Table 4.5). The group experienced the highest attendance with seven educator participants: associate principal of student services, associate principal of academics, four advance classes teachers, and a mentorship staff member. The group also struggled, at first, with productivity since members learned how to code and potentially identify barriers that student participants face with advanced classes. I provided members with highlighters, pens, and sticky notes to assist them with coding the student participant survey data. For that reason, I shared examples of how to code data. Likewise, I briefly

modeled how to identify codes using the student participant survey data. Through the meeting, the associate principal of student services revealed that an unsolicited student submitted a survey. The group decided to continue analyzing the student participant survey data anyway. Accordingly, I resolved to check with student participants to remove the spurious data.

Table 4.5

Community of Inquiry Meeting Details

Date	Attendees	Procedures/Activities
03/15	Associate principal of academics, associate principal of student services, mentorship staff member, and four teachers of advanced classes	Instructed group on how to code and group started coding student participant survey
03/31	Associate principal of academics, associate principal of student services, and four teachers of advanced classes	Collapsed codes and began coding focus group interviews
04/07	Associate principal of student services and three teachers of advanced classes	Finished coding focus group interviews, identified student participant barriers, and proposed removal or mitigation of barriers
04/29	Four teachers of advanced classes	Interpreted second focus group interview and revised both student participant barriers along with removal or mitigation of barriers
05/10	Associate principal of student services and three teachers of advanced classes	Interpreted student participant survey data and revised removal or mitigation of barriers

At the second community of inquiry meeting, the group encountered smaller attendance with one less member. Nevertheless, the productive group consolidated or

collapsed codes in a group spreadsheet. Members decided that there were too many codes to use. Before the meeting, I compiled group members codes and student participant survey examples into a shared spreadsheet. During half the meeting the group focused on reducing the number of codes to assist with identification of student participant barriers. Members decided on which codes overlapped and combined them into one group. Once the group contracted the number of codes, they concentrated on analyzing focus group interview data. I used the following codes for how the group identified barriers: transfer, strategy, questioning, label, and interpret. Additionally, one member visibly touched by the shared experiences of the student participants stated, *I can hear the voice of one of the students in the language, and so I know exactly who it is and that is like heartbreaking*. This member knew the list of student participants for this study and ascertained who the student participant was, which made it personal for this community group member. The group ran out of time, so they stopped coding the remaining interview transcripts.

After each meeting, I gave an exit ticket to the community of inquiry members to gauge the productiveness of the meeting (see Appendix E). A total of three members responded to the survey for this meeting. One member thought that *the meeting was productive* while another person believed *it started out confusing, but I felt like we made progress*. Another group member mentioned in the meeting transcripts *that* [collapsing codes] *might make it easier ...if we all had less codes to work with*. During this meeting, the group members came up against the challenge of how to reduce the number of codes for data from focus group interviews. Another member commented in their exit ticket that *consolidating the codes* felt satisfying and identified this as the group's major accomplishment for that meeting. No group members made suggestions for improving

the meeting and a group member commented that *I am happy to be part of this process*. Thus, group members discovered their purpose within the community of inquiry and found fulfillment as agents of change in this research project.

During the third meeting, the community of inquiry contended with fewer members in attendance. A total of four members with one associate principal of student services, and three advanced class teachers including myself attended. The effective group completed coding analysis of interview transcripts and documented barriers that the student participants faced with advanced classes.

Members spent much of the meeting interpreting the interview data as shown in Table 4.6. One member mentioned that since it was *the end of the day* and *there's a lot of material here*, they potentially felt overwhelmed from the data analysis. Another member noticed that a student participant *didn't have the time management skills* and *it wasn't like he felt he was underrepresented*. As a result of these insights, the community members crafted proposals (see Appendix G) by using their expertise with registration and advanced classes. Therefore, the group developed strategies as their next major component of this meeting as seen in Table 4.6. A member proposed that *AP kids, they make calendars* and when they realize they have less study time, they are *like learning how to adjust*. This group member suggested teaching time management skills to eligible Black students in advanced classes.

Table 4.6*Frequency of Codes for Community of Inquiry Meetings Data*

Meeting Dates and Frequency of Codes				
Code	3/31	4/07	4/29	5/10
Organize	36	3	10	1
Transfer	6	0	1	0
Strategy	46	74	197	268
Questioning	30	39	75	101
Label	109	19	35	30
Interpret	90	90	395	286

Once again, I supplied an exit ticket to group members and three out of the four attending members responded. One member remarked that the meeting went *very well* while another attender claimed *fine, not sure we had enough time*. The group experienced a time crunch since time allotted for this meeting was restrictive. Administration confined the meeting to after-school instead of professional learning community (PLC) time which runs for an hour and is held during the school day. As a result, I limited the after-school meeting time to approximately thirty minutes. Consequently, the group member found this limitation imposing and gave that exit ticket response. Additionally, a group member suggested that *it would just be helpful to have more time*. I decided to solve this problem by facilitating more meetings since identifying barriers and proposing solutions required more time. Alternatively, another member shared that *we started to develop potential solutions* and saw this as a major achievement for the meeting. I perceived that from the exit ticket responses group members received satisfaction from their work.

During the fourth meeting of the community of inquiry, the group encountered the same attendance as the previous meeting with four members present. Only four teachers

of advanced classes and no associate principals showed up to examine focus group student participants' responses (see Appendix G) of the proposed changes in registration of advanced classes (see Appendix F). Most of the time spent at this meeting centered around interpreting the responses of the student participants as seen in Table 4.6. Community of inquiry members read student participant responses and decided if the proposed changes were acceptable to student participants. If not, group members amended the proposed changes to align with student participant responses. One member stated that *the counselors to talk with them and educate them on the decision that they make*. Another group member made an additional proposal based on a student participant's response. The new proposal allowed prospective students to shadow during an advanced class to help with *understanding the dynamics of the classroom* and be less fearful of rigor.

Therefore, the group employed more strategies to help reduce or mitigate barriers for the student participants. For that reason, I identified strategy as the second highest code from the transcripts from this meeting. The group decided to reduce or mitigate the barrier of lack of knowledge about advanced courses by explaining course differences between AP, CP, and CCP (see Appendix H) with all students.

Furthermore, I distributed an exit ticket to the attending members. Unfortunately, only one member responded, and this person gave a favorable response with the observation that the meeting was *productive*. Likewise, this member felt the most important accomplishment of the meeting as *sifting through the interview information and editing the barrier document*. I ascertained that an additional meeting helped group

members analyze all the student participant data, refine identification of barriers, and propose removal or mitigation of those barriers.

Lastly, the community of inquiry met for a fifth meeting. Once again four members attended which included one associate principal of student services along with three teachers of advanced classes. Since no associate principals attended the previous meeting, part of the meeting involved informing the associate principal of student services of what they had missed. Accordingly, much of the conversation revolved around the process of registration for the student participants. The associate principal, based on her previous work experience, suggested to streamlining registration, and informing eligible Black students about advanced classes with a series of *videos for scheduling*. The registration goal included that *everybody has an understanding for what types* of classes are available for each grade level. This goal helped to reduce or mitigate barriers for eligible Black students that might have a lack of knowledge about advanced coursework.

The remaining part of the meeting involved the group members interpreting student participants' survey data about the final proposed changes as listed in Table 4.6. One member noticed that the student participants *were concerned about study time* with advanced classes. This group member used strategy, which is the second highest code found with the meeting transcripts, by proposing *an opportunity to have study time built in during an enrichment period*. Moreover, the group employed questioning by testing out ideas together. I determined that this was the third highest code I analyzed from the meeting transcript. By testing out ideas, group members refined proposals for reduction or mitigation of barriers for student participants.

For example, a group member posed the question, *would it be like they're students of color* in this enrichment study time? The community of inquiry members critiqued the idea by stating that this study time would not be teacher led. Additionally, the group decided it would be a *community of learners working together* on assignments during a school wide study period.

Finally, I supplied an exit ticket to the four attendees for the last meeting. Two out of four members responded to the survey. Both respondents thought the meeting went well with the comments of *it was productive* and *it went fine*. Those respondents thought that the community of inquiry was successful in proposing changes that addressed the barriers identified with student participant data. As for major accomplishments, one member observed that the group *identified barriers and refined our ideas*. This is shown in the final copy of eligible Black student barriers and proposed solutions (see Appendix J). The community of inquiry identified 9 barriers and proposed remedies or reductions to 8 of the 9 barriers. Correspondingly, another group member stated that the meeting *gave us much to consider in terms of things that we can add into our program to ensure communication about these upper-level courses*. During the meeting, the group discussed much about communication to all students and parents about registration. One group member proposed that when it comes to advanced classes, *teachers can communicate that more effectively* about the details for advanced classes with prospective students. A member also suggested that a webinar be crafted about course progression for advanced classes to share with both students and parents before registration.

In the exit survey, a group member suggested improving the meeting with information about registration for all members since this person felt *not sure everyone is*

aware of what is already done through the scheduling process. In this last meeting, the group talked about registering for CCP and how to mitigate barriers for students of color. The associate principal of student services pointed out that they already offered a parent night where they could *sit down at a computer* and explained how to fill out the online funding application. The student services department even offered a virtual parent night to assist with the application process in which *we had twice*. Therefore, there possibly is a gap in knowledge between teachers and parents with what student services offers for registration with CCP coursework.

Another group member suggested registration improvement as *to compare numbers of students of color taking CCP classes and discuss any disparities between AP and CCP*. In this research project, I only considered honors and AP courses for registration barriers with eligible Black students. It may be beneficial for educators at NHS to examine obstacles that Black students face with registration of CCP classes. If obstacles exist for Black students, reduction, or mitigation of those obstacles with CCP registration would allow access to enrollment for those students. CCP classes are paid by the state and offer college credit to those students that successfully pass the courses. These courses are a free source of college credit in high school and could potentially transfer to in-state colleges that Black students attend.

4.2 Discussion

After gathering and analyzing the data from the student participants and community of inquiry, I completed the second phase of data analysis to answer the research questions. I separated data from the student participant surveys, focus group interviews, community of inquiry transcripts, artifacts from the community of inquiry,

and exit ticket surveys by research question. In the following subsections, I provide data analysis methods for each research question.

4.3 Research Question 1: Eligible Black Student Barriers

The community of inquiry identified barriers for eligible Black students by examining student participant surveys and focus group interview data. The group determined a total of nine barriers in Table 4.7 after coding the student participant data. Due to the presence of two different student participant groups (10th grade members that identified as male and 11th grade members that identified as female) their barriers differed. The male student participants shared the challenge of enrolling in advanced classes while participating in a sport. Likewise, male student participants expressed concern about holding a job or having family responsibilities as a student of advanced classes. Additionally, male student participants revealed a lack of knowledge of advanced classes early in their high school career due to family experience.

Table 4.7*Eligible Black Student Barriers Identified by the Community of Inquiry*

Barrier	Example
Lack of time management skills	“Focus on school and sports at the same time”
Fearful of the rigor/academic challenge	“No sympathy for people who might be like failing AP classes”
Responsibilities to work outside of school/home	“I know that I have like a lot of responsibilities at home ...in addition to like my schoolwork and stuff”
A misunderstanding of what a class really is	“Don't get much detail about how the course where it changes”
Lack of family experience with advanced classes	“My cousins and people around me, how they went through school, that kind of set up a guideline for me”
Perception of Perfection	“They’re already better than me”
Lack of support/isolation from peers	“Only person of color in the room” and “you get rejected from that class”
Pathways for honors, AP, and CCP need to be explained from freshman registration	“Explaining AP classes to every freshman, even if they aren’t eligible”
AP teachers will expect new AP students to just be able to jump in	“I felt I wasn’t um, like given the proper like pre-preparation to join that class”

As for female student participants, their barriers focused on slightly different areas. They conveyed their anxiety about the rigor or academic challenge associated with advanced classes. They also disclosed their uneasiness being with White students who are more familiar with advanced coursework and give the perception of perfection. One female student participant stated that an ideal White student in advanced classes would say *I have an A, I have a 4.4 cumulative GPA*. Whereas, she remarked disparagingly, as a Black student, she would say *you only have like a 3.0*. This barrier relates to female student participant concerns with the lack of support for students of color in advanced

classes. Since advanced classes are an unfamiliar environment for many Black students, they feel isolated from peers and not given support needed to navigate new academic territories.

Both student participant groups communicated a misunderstanding of advanced classes and wanted to have more details of the coursework from teachers or counselors. More specifically, the student participants desired information about course progression from college preparatory classes to honors courses to AP at the start of their high school career. This would give them knowledge to help plan when they needed to take various courses throughout their four years. By the same token, the student participants wanted support from AP teachers as first-time students. Student participants desired full explanations of expectations or procedures in an AP course so they could be well informed as the rest of the class.

4.4 Research Question 2: Reduction or Mitigation of Barriers by the Community of Inquiry

The community of inquiry reduced or mitigated barriers by accessing knowledge and expertise of group members. The community of inquiry examined the student participants' data and interpreted their lived experiences. Next, the group members crafted proposals based on comprehension of student participant experiences and their understanding of advanced coursework along with local registration practices. Together, members were able to present 8 out of 9 solutions to reduce or mitigate student participant barriers (see Table 4.8).

Table 4.8

Proposed Reduction or Mitigation to Eligible Black Student Barriers by the Community of Inquiry

Barrier	Reduction/Mitigation
Lack of time management skills	“Teaching executive functioning skills to all students. Students in honors and AP could be grouped in Enrichment as ‘as study groups’”
Fearful of the rigor/academic challenge	“Previewing a syllabus for the AP course so students can see what is expected. Q&A with AP course instructors. Shadow an engaging class to see how the honors or AP classes function. Attend a seminar with students of color and offer their experiences with AP”
Responsibilities to work outside of school/home	“Mentoring/modeling from other students about time management.”
A misunderstanding of what a class really is	“Preview of Course Handbook during Enrichment A to review descriptions of classes that students are interested in registering for. Explaining the progression and differences between AP, CP, and CCP. Have a department flow chart that students can follow for course progression.”
Lack of family experience with advanced classes	“Family information sessions- in person and virtual. To be scheduled in late fall of student’s 9 th grade year- to introduce course progression that can lead to advanced courses” More training for faculty/staff on registration information regarding course progression”
Perception of Perfection	“Students can shadow current honors AP students for a small portion of the class to get a sense of what it is like to be a part of these types of classes”
Lack of support/isolation from peers	“During enrichment, partner with students of color that have completed honors or AP courses. Check-in with honors or AP teachers for additional support”
Pathways for honors, AP, and CCP need to be explained from freshman registration	“Have clear timelines and options for students to see visually where their subject area classes can possibly progress.”
AP Teachers will expect new AP students to just be able to jump in	No proposal submitted

For example, a group member noticed that a student participant *didn't have the time management skills*. Therefore, this member mentioned the fact that *our AP kids, they make calendars* to assist with time management. Using personal knowledge about the phenomenon, a group member crafted a reduction/mitigation proposal listed in Table 4.8 for the time management barrier: AP teachers would assist eligible Black students with use of assignment calendars to balance their coursework outside of class with other responsibilities.

Additionally, a group member realized that student participants *don't understand like the front-loading process* with advanced classes. This group member noticed that the student participants *need to know as soon as they're like freshman* for needed coursework that prepares students for advanced classes. Likewise, the member observed *they're like finding out later and then they feel it's too late* to enroll in advanced classes. So, this group member suggested reduction or mitigation with lack of family experience by holding *family information sessions- in person and virtual and to be scheduled in late fall of student's 9th grade year- to introduce course progression that can lead to advanced courses*. This proposal recommended that freshman parents/guardians be informed of the different course pathways close to the time of registration.

Each proposal from the community of inquiry was presented to student participants for comments and critiques. This allowed proposals for reduction or mitigation of barriers to be more robust. One student participant agreed with the community of inquiry's proposal for the barrier of fear of rigor or academic challenge but wanted the scheme to be more *engaging*. The initial proposal stated that students would

be *previewing a syllabus for the AP course so students can see what is expected and Q&A with AP course instructors*. This student participant thought the proposal *would need a more engaging experience* and recommended that students be given an opportunity to shadow a class to view the syllabus in action. Therefore, the community amended their proposal for the barrier of fear of rigor or academic challenge to reflect the student input: shadow an engaging class to observe function of honors or AP classes.

Another improvement with student participant feedback occurred with the barrier of *a misunderstanding of what a class really is/how the workload differs from CP to CCP to AP*. A student participant thought that the proposal of *Preview of Course Handbook during Enrichment A to review descriptions of classes that students are interested in registering for* should be changed. Their suggestion was that counselors and teachers should talk to students *more about like the specific paths you can go down with advanced courses*. Thus, the community of inquiry proposal was modified to include *explaining the progression and differences between AP, CP, and CCP and have a department flow chart that students can follow for course progression* as listed in Table 4.8.

In addition to the cycles of feedback between the community of inquiry and the student participants, the community of inquiry critiqued meetings using exit ticket surveys (except for the first meeting) to share their ideas and opinions with me about the effectiveness and suggestions to improve the meetings. All meetings were critiqued favorably except for the first three meetings (see Table 4.9). The major criticism from members was the lack of time. I perceived that during the first three meetings, members were learning how to code and identify barriers and it took time for the group to develop

those skills. Therefore, by the fourth meeting, group members felt confident and positive about the progress of the meeting.

Table 4.9

Exit Ticket Responses by the Community of Inquiry

Critiques of Meeting	Accomplishments	Further Thoughts
“Meeting was productive” and “it started out confusing, but I feel like we made progress”	“Getting common language” and “consolidating the codes”	“I’m happy to be part of this process” and “I look forward to reading the results of your interview in their entirety”
“Very well” and “Fine, not sure we had enough time though”	“Looking at more of the interviews and creating new codes, if needed” and “identifying barriers”	“I’m looking forward to seeing where the process leads” and “it would just be helpful to have more time”
“Productive”	“Sifting through the interview information and editing the barrier document”	“No”
“It was productive” and “it went fine”	“I believe we identified barriers and refined our ideas” and “it gave us much to consider in terms of things that we can add into our program to ensure communication about these upper-level courses”	“I’m not sure everyone is aware of what is already done through the scheduling process” and “It would be interesting to compare numbers of students of color taking CCP classes and discuss any disparities between AP and CCP”

Alternatively, when examining the accomplishments shared in the exit ticket, members listed coding student participant data and identifying barriers as an important accomplishment. One group member stated that *I believe we identified barriers and refined our ideas* as an accomplishment of the meeting. This response tells me that the members valued mastering these tasks. Accordingly, attendees revealed satisfaction in completing this research with comments like *I’m happy to be part of this process* and *I’m*

looking forward to reading the results of your interview. One group member wrote the dissenting comment that *it would just be helpful to have more time.* I decided to schedule more meetings as direct result of this comment. Another group member wrote the opposing view: *I'm not sure everyone is aware of what is already done through the scheduling process.* Since a member gave this response after the last meeting, I will make sure that faculty and staff are fully informed about the current and revised changes with registration.

A further suggestion listed by a group member in the exit ticket from the final meeting was the idea to *compare numbers of students of color taking CCP classes and discuss any disparities between AP and CCP.* Since this research project primarily focused on honors and AP courses with eligible Black students, the comment could be considered for a future research project.

4.5 Summary

Over the course of 11 weeks, I collected qualitative phenomenological student participant data along with community of inquiry artifacts, transcripts and exit tickets. I gathered the qualitative phenomenological student participant data to assist the community of inquiry with determining why eligible Black students choose not to register for advanced classes. The community of inquiry artifacts, transcripts and exit tickets helped me to ascertain how student participant barriers could be reduced or removed with registration of advanced classes. The phenomenological data gave educators an intimate view of the obstacles that student participants face when considering enrollment of advanced classes. The community of inquiry data informed me

of how identification of student participant barriers and proposed reduction, or mitigation of those barriers could occur in a local setting.

The phenomenological data analyzed by the community of inquiry produced a total of nine barriers that student participants were confronted by when considering registration of advanced classes. The male and female student participants presented different barriers but also shared a few obstacles with advanced classes. The males cited lack of time management skills, lack of family experience with advanced classes and responsibilities to work outside of school/home as barriers for registration with advanced classes. Whereas, the female student participants disclosed their fear of rigor or academic challenge, perception of perfection with White students, and lack of support/isolation from peers as barriers with enrollment of advanced classes. Both groups shared barriers with the following: a misunderstanding of what an advanced class entails, pathways for advanced classes, and AP teachers' perceptions of new AP students.

The community of inquiry proposed reduction or mitigation of eight total barriers that student participants faced. Feedback from student participants assisted with refinement of proposals from the community of inquiry. Student participants delivered feedback in the form of focus group interviews and surveys to enhance the proposed changes to registration of advanced classes. A student participant suggested allowing students to shadow an advanced course and the community of inquiry refined their proposal to the barrier fear of rigor or academic challenge. This refinement of the proposal gives eligible Black students familiarity and remove anxiety about the course before registering.

In addition, I analyzed data from exit tickets to determine how a community of inquiry could reduce or mitigate barriers for the student participants. Members critiqued meetings favorably except for the first three meetings since time was a concern. It took group members three meetings to be confident with coding student participant data and identifying barriers with registration of advanced classes. Once attendees became confident in their ability to code and identify barriers, they expressed satisfaction and excitement about reducing or mitigating those barriers. However, some group members communicated dissenting views about faculty and staff knowledge of current registration policies and consideration for CCP coursework as compared to AP classes.

Chapter 5 will provide a deeper understanding about the meanings obtained from the data analyzed in this chapter. Moreover, I suggest further significance with potential barriers that eligible Black may face with other coursework in high school. I also discuss the limitations in this study, as well as suggestions for future research.

Chapter 5

Implications

The purpose of this study is to uncover the reasons why eligible Black students choose not to register for advanced classes. In this qualitative phenomenological study, I performed action research with a community of inquiry to understand the barriers that six eligible Black student participants faced when registering for advanced courses at a private, urban college preparatory high school. In this chapter, I will explore how findings from Chapter 4 affect my practice. I also will describe the implementation of changes in access to advanced classes for eligible Black students. Furthermore, I will make suggestions for educators that face similar problems of practice.

With my problem of practice, I found noticeable differences between students of advanced track and grade-level courses. Advanced classes rely on students enrolling in upper-level math courses early in their high school careers while grade-level science courses do not require the same math restrictions for students. Since fewer Black students enroll in upper-level math courses, they are prevented from enrolling in advanced science courses. Presently, students of color make up 32% of the student body at NHS and 21.8% identify as Black (school database). With that said, less than 3% of students in honors chemistry and AP chemistry are Black students. Alternatively, physical science, which is grade-level, has 27% Black students who have not enrolled in upper-level math courses which lead to advanced track science courses.

I tried to recruit Black students for upper-level science courses. Whenever I noticed Black students who enjoyed and were successful in physical science, I would encourage them to consider taking honors chemistry. Other teachers of physical science also invited thriving Black students to enroll in honors chemistry. Sadly, the number of Black students enrolling in advanced classes has remained small. I have experienced even fewer Black students registering for AP chemistry. Therefore, my problem of practice is that Black students are underrepresented in advanced science classes.

To solve this problem of practice, I employed research from the literature review in Chapter 2 to conduct a qualitative phenomenological research project with eligible Black student participants. I also utilized a community of inquiry who met for 11 weeks during the spring semester. The research questions that guided this study were the following:

1. What reasons prevent eligible Black sophomore and junior students from deciding to enroll in advanced classes?
2. How can barriers to enrollment in advanced classes be removed or mitigated for eligible Black students?

To answer the first research question, I utilized focus group interviews and surveys to obtain student participant data regarding what they thought and felt about enrolling in advanced coursework. Then, to answer the second research question, I captured adult participant data from the community of inquiry to understand how school change occurs to reduce or mitigate Black student barriers with advanced classes.

Early in the research project I conducted separate focus group interviews with three 10th grade Black male student participants and three 11th grade Black female student

participants to acquire their perceptions and feelings about registering for advanced classes. The community of inquiry and I open coded and analyzed this data to identify barriers that the student participants encountered with advanced classes. After analyzing the results, the community of inquiry crafted proposals to reduce or mitigate those barriers. Iterative feedback from student participants and then the refinement of proposals by the community of inquiry proposals throughout the process produced a total of nine barriers with eight suggestions for reduction or mitigation of those barriers. The student participants generated multiple sources of qualitative data and adult participants corroborated research findings. In this chapter I provide an interpretation of the qualitative results for each of the two research questions in this study. I also discuss the implementation of the school change, the study's limitations, and implications for future research.

5.1 Data Implications

In this action research study, I examined the reasons that eligible Black students chose not to register for advanced classes and then based on the information, ways a community of inquiry proposed to reduce or mitigate barriers to advanced classes for those students. Eligible Black students gave multiple reasons for not registering for advanced classes; reasons varied from fear of academic rigor to uneasiness being with White students to a lack of understanding of how advanced classes function. Accordingly, the community of inquiry analyzed the barriers eligible Black students cited as reasons not to register and proposed reduction or removal of those obstacles. The community of inquiry proposals included a few of the following: previewing a syllabus with an AP teacher; partnering with a student of color that has completed an advanced

class; and reviewing advanced course progression with a counselor. Moreover, the community of inquiry was able to identify and suggest removal or mitigation of eight out of nine barriers for eligible Black students. Initially, the community of inquiry expressed concern with mastering the identification of those barriers. However, with additional time and practice, the community of inquiry members conveyed satisfaction and delight with crafting proposals and refining them based on student feedback. With the following subsections, I will address data implications from the data analyzed in Chapter 4 for each of the two research questions.

5.2 Research Question 1: Eligible Black Student Barriers

Conducting qualitative phenomenological research, I formed a community of inquiry to uncover reasons that eligible Black student participants chose not to register for advanced classes. As Zahavi (2010) stated, phenomenological data utilized by the community of inquiry aided in understanding the barriers that student participants faced with advanced classes. Likewise, Nicholls (2019) recommended that researchers immerse themselves in the student participant data. By reading the transcripts from student participant focus group interviews, the community of inquiry immersed themselves in student participant experiences with advanced classes. An example of this was a community of inquiry member making the comment, *I can hear the voice of one of the students in the language, and so I know exactly who it is and that is like heartbreaking.*

Consistent with previous research (Groenewald, 2004; Merriam & Tisdell, 2016; Williams, 2021; Zahavi, 2010), student participants shared their lived experiences with the community of inquiry about their perceptions and feelings about advanced classes.

Student participants revealed various reasons for not registering in advanced classes, including a lack of affiliation to knowledge about advanced classes.

A theme that student participants shared during focus group interviews was related to their lack of affiliation with advanced classes. This theme is consistent with research by Ford et al. (2008). The authors found that Black students felt not acknowledged as gifted by White teachers and students. Evidence of this could be found in a student participant comment of *have to jump through too many hoops*. Another student participant considered themselves as *someone who isn't worthy of being there*. These responses indicated that eligible Black students struggle to identify and feel comfortable with advanced coursework.

Another theme that emerged from focus group interviews was the theme of lack of knowledge about advanced classes. It is accordant with research by Cook and Ludwig (1997). The authors determined that peer pressure was not the reason for the achievement gap between Black and White students. Instead, Cook and Ludwig decided it was an absence of support, guidance, and motivation for Black students. For example, one student participant stated that *different levels of different subjects was (sic) really new to me*. This demonstrates that student participants were not as well informed with advanced classes. An alternative response about advanced classes was that *they weren't really explained to me*; again, establishing that student participants were deficient in their understanding of the purpose and organization of advanced classes.

Since the proposals from the community of inquiry were based on student feedback, as the study progressed, proposals were altered. An example of this was a student participant agreeing with the community of inquiry's proposal on the barrier of

fear of rigor or academic challenge but suggesting that the approach could be more *engaging*. The student participant recommended that the proposal include shadowing of advanced classes by prospective students. Therefore, the community of inquiry members recognized that this proposal could be altered to have students interact so to provide potential identification and knowledge for eligible Black students.

An additional proposal changed by the community of inquiry due to student feedback was the *Preview of Course Handbook during Enrichment A to review descriptions of classes that students are interested in registering for*. A student participant suggested that counselors and teachers could expand more on this by talking to students *more about like the specific paths you can go down* with advanced courses. Once again, this refinement of the original proposal would give eligible Black students more knowledge about how advanced classes are arranged in the curriculum and the purpose of taking those classes. Thus, the interplay between student participant and community of inquiry members allowed for refinement of proposals for changes in registration of advanced classes. Student participant feedback resulted in refinement of proposals by the community of inquiry. These proposals became more meaningful and customized for student participants.

5.3 Research Question 2: Reduction or Mitigation of Barriers by the Community of Inquiry

To help answer how a community of inquiry could reduce or mitigate barriers experienced by eligible Black students with registration of advanced classes, I utilized previous research (Fullan, 2007; Hall & Hord, 2020; Levine et al., 2013). Levine (2013) suggested that in school reform, it is important to view AP as only part of the whole

institutional change. Therefore, the AP classes are just one aspect of the school reform. Prerequisites and other advanced classes should be considered in the school reform. Thus, the community of inquiry examined access for eligible Black students with honors classes as well as CCP coursework. In addition, Hall and Hord (2020) recommended that school change begin with stakeholders understanding the problem. The community of inquiry learned about barriers with advanced classes by examining phenomenological student participant data. This helped the group discover a total of nine barriers based on student participants' data; the reasons varied from *lack of time management skills* to *fearful of the rigor* to *isolation from peers*. By analyzing phenomenological student participant data in this action research project, the community of inquiry determined the barriers those students faced.

Aligning with prior research on change theory (Fullan, 2007; Hall & Hord, 2020; Hanson, 2001), the community of inquiry identified the student barriers and made use of local expertise, external scholarship, and internal institutional knowledge. The community of inquiry focused on contextual learning from phenomenological student data, persistence by meeting biweekly, and motivation as a results orientated group during the course of 11 weeks (Fullan, 2007). Group members that specialized in AP or honor class content or academic counseling were able to employ their local expertise while examining student participant data while other community of inquiry members brought external scholarship to craft innovative proposals to reduce or remove barriers that student participants faced. Additionally, other members utilized inside institutional knowledge to craft proposals that reduced or mitigated barriers for student participants with advanced classes. Through the 11 weeks, the group conducted a multi-cycled

investigation with iterative interaction between student and adult participants to uncover how the institution operated and generated barriers that student participants voiced (Hall & Hord, 2020). Thus, this research project corroborates the use of change theory. This study was successful since group members employed local expertise, outside knowledge and internal competence to identify barriers that eligible Black students face with registering for advanced classes. Furthermore, the community of inquiry was effective due to multi-cycled improvement of proposals with student feedback.

Using a community of inquiry with school change, I sought to answer the second research question based on previous research (Butler et al., 2015; DeLuca et al., 2017; Drew et al., 2016; Galosy & Gillespie, 2013). To facilitate teacher professional learning and a shift in institutional practices, Butler et al. (2015) advocated using a community of inquiry to support and coordinate system-level change. This community of inquiry was an effective professional learning since members were involved in the problem of practice. Group adult participants engaged in this research project because as an administrator, teacher, or staff member, they were stakeholders in this problem of practice.

After I shared both student participant survey and focus group data for adult participants to perform qualitative analysis, many members experienced a connection with the student participants they were analyzing. One member made the comment, *I can hear the voice of one of the students in the language, and so I know exactly who it is and that is like heartbreaking*. This corroborates that phenomenological data gives educators a first-hand look at what students are experiencing. The qualitative analysis also gives educators an opportunity to relate to those students.

Initially, I noticed that community of inquiry members struggled with the labeling of codes for transcript analysis of student participants. When I examined the meeting transcripts of the community of inquiry, I coded *Label* 109 times (see Table 4.6). Additionally, during one of the first few meetings, an exit ticket response from a member shared *it started out confusing, but I feel like we made progress* (see Table 4.9). As a result, it took time for adult participants to determine descriptors that summarized the text they were analyzing.

Next, the community of inquiry spent much of their meeting time utilizing *Interpret* and *Strategy*. During meetings on 4/29 and 5/10, I coded *Interpret* 395 and 286 times and *Strategy* 197 and 268 times respectively (see Table 4.6). In addition, one of the exit ticket responses from an adult participant stated *it gave us much to consider in terms of things that we can add into our program to ensure communication about these upper-level courses*. Therefore, community of inquiry members devised strategies to eliminate or reduce barriers after interpreting the student participants responses about advanced classes. An example of a strategy related to the exit ticket response was *more training for faculty/staff on registration information regarding course progression*.

Furthermore, during community of inquiry meetings, members used *Questioning* as a technique to try out new ideas with the group. For the meeting on 5/10, I coded *Questioning* 101 times (see Table 4.6). An example of this was a group member posing the question, *would it be like they're students of color in this enrichment study time?* The group member put forward that Black students enrolled in AP and honors classes would be grouped together during school wide study time. Adult participants decided that the enrichment study time would not be teacher led. Instead, the group assessed the idea and

decided the school wide study hall would consist of a *community of learners working together* on assignments. Thus, *Questioning* was beneficial for trying out new ideas in a safe space while getting feedback from colleagues. I also found acknowledgement of this process with an exit ticket response: *I believe we identified barriers and refined our ideas*. It shows that adult participants felt confident improving their proposed solutions to barriers while using group critique.

Those proposals included a few of the following examples: *teaching executive functioning skills all students, Q&A with AP course instructors during enrichment, and partner with students of color that have completed honors or AP courses*. Galosy and Gillespie (2013) recommended using communities of inquiry as a source for learning opportunities, exploration into curriculum and leadership development. In this study, teachers of advanced classes, staff and associate principals experienced deep learning about student participant barriers and developed new methods for removing or mitigating those barriers. In deep learning about advanced classes, adult participants became aware that student participants, *they're like finding out later and then they feel it's too late*. Group members realized after analyzing student participant data that they were not aware of when prerequisites courses need to be taken for advanced classes. As a result, student participants were missing opportunities to register for advanced classes. Another revelation was an adult member noticing a student participant *didn't have the time management skills and it wasn't like he felt he was underrepresented*. This adult member discerned that the student participant struggled with managing his class workload yet did not see himself as marginalized with advanced classes. Consequently, community of inquiry members acquired nuanced knowledge about student participants and their

perceptions. This nuanced knowledge aided members with identifying barriers and drafting proposals to remove or mitigate those barriers.

Additionally, DeLuca et al. (2017) determined productive conditions for Collaborative Inquiry (CI) which included a supportive environment for members with administrative approval, trusting relationships amongst colleagues and a willingness to try new instructional approaches. This community of inquiry had administrative approval with associate principals attending. The members also experienced a safe environment to try out new ideas like *gave us much to consider in terms of things that we can add into our program to ensure communication about these upper-level courses or teachers can communicate that more effectively*. Likewise, an adult participant suggested the new idea of using *videos for scheduling*. Therefore, the community of inquiry experienced favorable conditions that provided insight into what student participants viewed as barriers while enrolling in advanced classes and then reduced or mitigated those barriers.

5.4 Implications for Future School Reform

This study examined the use of qualitative phenomenological research to determine barriers of eligible Black students with advanced classes and how a community of inquiry could be effective in reducing or mitigating those barriers while utilizing change theory. The findings of this study demonstrate that qualitative phenomenological research is a powerful tool for eliciting ideas, impressions or knowledge about school practices, curriculum, or culture from students. Rather than guess or misinterpret feelings or perceptions of a specific student population, educators need to directly solicit student responses. These student responses should be shared with a community of inquiry, who consisting of stakeholders such as administrators, teachers, and staff. Decisions made by

the community of inquiry would be informed by student responses. Thus, these decisions could reduce or remove the challenges faced by specific students. This process could be applied to problems of practice that relate to student access to classes, services, or a sense of belonging at school.

In the first focus group interview, each grade level and gender group of student participants were explicit with their reasons for not registering for advanced classes. The responses varied from not being aware of how advanced classes functioned to being isolated from peers to not seeing the value in those courses. Therefore, it is crucial that educators like me uncover reasons that underrepresented students choose to not participate in classes to adapt access to those courses to facilitate equity. Otherwise student/teacher knowledge will not be generated and enrollment patterns will not change (Theokas & Saaris, 2013).

The results of this qualitative phenomenological study demonstrate that with semi-structured focus group interviews, educators can obtain specific reasons like fear of rigor or a misunderstanding of advanced classes that deter eligible Black students from registering for them. Altogether, student participants willingly shared their motives for not enrolling in advanced classes. Corresponding to research listed in Chapter 2, this project verifies that organizations that desire knowledge about reluctant participants, can utilize this method of obtaining holistic data. Focus group interviews are an ideal pathway for institutions to elicit information about student perception, thoughts or feelings about school processes, culture, or curriculum.

Focus group interviews can provide comprehensive knowledge about school practices, policies and organizations from students, parents, and educators. Students'

willingness to communicate readily why they did not register for AP or honors classes provided me with an insider's view to the problem of practice with eligible Black students not registering for advanced classes (Dare et al., 2018). Before this research project, I did not realize that my problem of practice was multifaceted. The focus group interviews gave me awareness of the challenges that the student participants faced. I heard responses like the struggle to *focus on school and sports at the same time* which made me aware of student participants' difficulties with time management (see Table 4.7). Then I listened to a student participant talk about how they *don't get much detail about how the course where it changes* which tells me that this student was not informed of the structure or progression of advanced classes. I also learned about a student participant's perception who experienced *no sympathy for people who might be like failing AP classes*. This student participant told me why a lack of support caused them not to register for advanced classes. Thus, these differing student participant responses made me appreciate the barriers they faced. I also noticed that they had many reasons for those barriers and was grateful that the community of inquiry was sensitive to that.

As for employing a community of inquiry with change theory for school reform, this study demonstrated that both theoretical frameworks are beneficial for eliciting change. The community of inquiry consisting of faculty and staff at this research site had a vested interest in this problem of practice. Adult participants set aside time after school to attend these meetings and examine why student participants disengaged from advanced course offerings. These educators freely participated in this school reform because they desired change. Accordingly, institutions seeking reform should encourage individuals that desire change with the problem of practice to form a community of inquiry.

Likewise, because of administrative support, group norms, and iterative cycles with proposals for change, the community of inquiry obtained positive results in school reform (D. Butler et al., 2015; DeLuca et al., 2017; Drew et al., 2016). It is essential that administrators participate in or support a community of inquiry, otherwise the school change will not be approved or implemented. Because of administrative support, this community of inquiry met regularly and developed proposals later adopted by administration.

Similarly, group norms initiated at the beginning of the project allowed for respectful dialog, constructive criticism, and committee consensus. Members need to spend time during initial meetings to review protocol for analysis of phenomenological data and how to generate discussions that lead towards a group consensus. Evidence of this was an adult participant's exit ticket response which said *getting common language* and *consolidating the codes* was helpful and productive (see Table 4.9). Another exit ticket response had the comment *I'm happy to be part of this process*. Adult participants comments demonstrate the need for group norms. By laying the foundation of group norms, a community of inquiry accomplishes school change with polite discussions, effective evaluations, and forming group consensus.

Lastly, iterative cycles provided interplay between student participant responses and community of inquiry proposals. One proposal suggested *previewing a syllabus for the AP course so students can see what is expected* (see Table 4.8). While using an iterative cycle with student feedback, a student participant thought the proposal could be refined and *would need a more engaging experience*. This student participant recommended that prospective students be allowed to shadow a class and view the

syllabus in action. The community of inquiry then changed the original proposal and drafted the following: *students can shadow current honors AP students for a small portion of the class to get a sense of what it is like to be a part of these types of classes.* Student participants then approved this proposal for changes with registration. Therefore, iterative cycles are needed for school reform. Interplay between proposal recipients such as students, parents or educators and proposal generators like a community of inquiry allows for refinement of those proposals.

Regarding change theory and school reform with this research project, insider knowledge coupled with external experts and internal stakeholders produced change with the educational environment. Adult participants who possessed intimate knowledge of coursework, organizational functioning and registration procedures devised new pathways to incorporate school change. An example of this was an adult participant who noticed that a student participant *didn't have the time management skills*. As a result, this member realized that *our AP kids, they make calendars* to assist with time management. For this reason, the adult participant used her personal knowledge about the phenomenon, to craft a reduction/mitigation proposal for the time management barrier (see Table 4.8). Thus, it is crucial that community of inquiry members utilize their insider knowledge to create proposals for school change.

Correspondingly, community of inquiry members who possessed experience outside of this research site proposed alternate pathways from previous educational settings. An associate principal, who had work experience at another private school, suggested streamlining registration by creating a series of *videos for scheduling*. Her registration goal was that *everybody has an understanding for what types* of classes are

available for each grade level. This outsider knowledge led to the proposal: *Family information sessions- in person and virtual. To be scheduled in late fall of student's 9th grade year- to introduce course progression that can lead to advanced courses* (see Table 4.8). Therefore, effective communities of inquiry rely on group members that have outside organizational knowledge for crafting innovative proposals for school change.

The proposals for school change with registration were accepted by administrators. Student participants were surveyed to rank their preference for the different proposals. Each student participant chose one of five responses: *most important, very important, important, somewhat important, and least important* for each proposal. The proposal that received the most responses with *most important* was *students in honors and AP could be grouped in Enrichment as "as study groups."* The next two highest rankings were the *family info session* and *training for faculty/staff with registration* proposals (see Table 4.8). The fourth highest proposal ranked by the student participants was *partner with students of color that have completed honors or AP courses*.

To implement these proposals, I met with the associate principal after the school year to discuss strategies. The associate principal suggested that the school education management software could group Black students enrolled with AP and honors classes in the same enrichment class. This enrichment class would give those students an opportunity to work on assignments together in a supportive environment. Since the education management software was new to the school, this proposal was not implemented this school year and will be considered for the following year.

The *family info session* recommended by the community of inquiry will be implemented during the fall for freshman parents. The committee suggested a virtual and in-person session offered for interested parents. This program would be supported by the student services department with additional help from AP and honors teachers if needed.

The *training for faculty/staff for registration* proposal requires course progression from each department. Not all departments have flow charts for courses so it will be generated this school year to explain the prerequisites for each advanced class and be given to faculty and staff who conduct registration with future students. This training will be performed with faculty and staff before the next school year.

Lastly, the proposal for *partner[ing] with students of color that have completed honors or AP courses* will be conducted during the Black Student Union meetings. Black students that have completed AP and honors classes will be invited to preside on a panel for prospective Black students. The prospective Black students that desire to take advanced classes will have any opportunity to ask questions and be mentored by experienced students. This event will be held during the current school year.

The remaining proposal, *students can shadow current honors AP students for a small portion of the class to get a sense of what it is like to be a part of these types of classes*, will be offered to students before registration takes place this school year.

Students, in January and February will be offered an opportunity to shadow an AP or honors class for part of the class period to see the course in action. This experience will assist prospective Black students to develop familiarity with advanced classes.

Accordingly, the proposal, *have clear timelines and options for students to see visually where their subject area classes can possibly progress* will be available to students

before registration with advanced classes. AP and honors teachers will provide prospective students with flow charts or timelines that describe the connection between prerequisites and advanced classes.

Due to the success of this school change, I plan to share my research findings with other educators at this site to encourage the use of qualitative phenomenological research integrated with a community of inquiry while employing change theory. I would like to share my research methods with teachers, counselors, and administrators so that they can envision using it with their problems of practice.

Teachers could use focus group interviews with students and parents to uncover phenomenological data. The phenomenological data would help educators to gain intimate knowledge to employ with school reform in curriculum, classroom management, and best practices. Correspondingly, this research method would be beneficial for school counselors to determine the unmet needs of the students that they serve. Focus group interviews would deliver information about emotional support, college preparation, or family challenges. As for administrators, this qualitative phenomenological research could be utilized for reform with school policy, culture, and institutional improvement. Each segment of the school could target specific student and adult participants with focus group interviews. The phenomenological data could be analyzed by a community of inquiry consisting of stakeholders. The members could propose reduction or removal of obstacles faced by the target participants. Proposals would be evaluated by the target participants and community of inquiry members would revise proposals based on feedback. This process would happen iteratively until a consensus was built between the groups.

I desire to offer my knowledge and support to colleagues during professional learning time at this research site so that they can adapt this practice within their own content areas (Efron & Ravid, 2020). Additionally, I would like to present at a national conference so that other educators could develop this method of research as a process with school change. Sharing this knowledge will help others to accomplish school change effectively. This school change takes place when participants reveal their struggles, stakeholders devise solutions based on that knowledge and both groups interact until consensus is reached.

5.5 Reflections on Methodology

In this research project I used action research to focus on my problem of practice which was underrepresentation of eligible Black students in advanced classes (Efron & Ravid, 2020). By incorporating student and adult participants at this research site, my study incorporated lived experiences and institutional knowledge to uncover barriers and resolutions to the problem of practice (Merriam & Tisdell, 2016). To ensure trustworthiness, I incorporated multiple sources of data, researcher reflexivity, and thick descriptions of participants experiences (Efron & Ravid, 2020). Additionally, I included democratic validity with the use of a community of inquiry who proposed solutions for the problem of practice (Herr & Anderson, 2015).

My research design included a two-pronged approach deploying phenomenological qualitative research with student participants and examining how school reform could take place with a community of inquiry. First, student participants were identified using critical reading and math data. Next, I obtained phenomenological details about the participants' experiences with advanced classes. The community of

inquiry used the data to identify students' perceptions of barriers to enrollment into advanced classes.

Next, to investigate how school improvement functions with a community of inquiry, I analyze the operations of the group and inspected the success of the community of inquiry through data from each meeting's exit tickets.

The community of inquiry successfully identified barriers student participants faced but was unable to devise proposals for all barriers. Due to a lack of time, the committee did not propose a remedy for the barrier of *AP Teachers will expect new AP students to just be able to jump in*. Time was a factor since one of the exit ticket responses was *fine, not sure we had enough time though*. If the group met a few more times after school, members could have crafted a proposal and received feedback from student participants before finalizing it.

An unexpected result from the research project was the separation of responses between the female and male student participants. I assumed that all student participants would claim underrepresentation as a reason for not registering. Instead, just the females believed they were the *only person of color in the room* and that *you get rejected from that class*. Alternatively, the male participants saw one of their obstacles due to the challenge of *focus on school and sports at the same time*. It is possible with both genders present at one focus group interview, their responses would have been influenced by each other (Efron & Ravid, 2020; Merriam & Tisdell, 2016).

To strengthen this research project, I recommend performing conducting additional focus group interviews. I chose to use open-ended surveys at the beginning and end of the study for student participant feedback. The beginning survey was used to elicit

qualitative data from student participants to craft interview questions. Correspondingly, the ending survey was utilized to obtain feedback about the final proposals from the committee of inquiry. Surveys do not reveal in depth opinions, thoughts or feelings that a focus group interview would (Creswell & Creswell, 2017; Efron & Ravid, 2020). I may have missed additional ideas or perceptions that student participants had about advanced classes or the proposals presented to them.

Another improvement with this research project would have been conducting committee of inquiry meetings during professional learning community times. It was challenging to get all members to commit to every meeting. As a result, one meeting had no administrators attending. This potentially affected the decision making with the remaining group members. Having no administrative guidance, the committee could have devised proposals later rejected by administrators. Fortunately, this did not take place even with the absence of administrators. However, the absence of certain members limited the amount of insider knowledge and outside experience to create innovative solutions to student participant barriers. Proposals crafted by the community of inquiry were refined by student participant feedback and later accepted by administrators.

My insight and knowledge gained from this research project relates to understanding a reluctant student population and employing a community of inquiry as professional development. I have learned that to gain understanding with a reluctant population, I must obtain phenomenological data from those participants. Their lived experiences will then assist me with uncovering the reasons they have chosen not to participate. The other aspect I learned was that students appreciate being heard by adults. The student participants that I listened to freely gave their perception and ideas about

advanced classes. It also was worthwhile interacting with the student participants. I developed special relationships with the student participants that has extended into the new school year.

Professional value gained from this research project includes the valuable tool of a community of inquiry as an instrument for social justice with professional development. Social justice in education requires a long term commitment by faculty, staff, students and parents (Lopez, 2017; Szpara, 2017). This research project required a sustained commitment by both student and adult participants to examine the reasons behind reluctance with eligible Black students. With time and effort, the student and adult participants created opportunities for equity with underrepresented students by crafting proposals for school change.

Furthermore, effective professional development requires educators to join together as a community of inquiry to investigate problems of practice (Griffith et al., 2014). Dedicated educators worked together over multiple meetings to solve this research site's problems. Members utilized organizational knowledge, outside experience, and student participant responses to disentangle and solve complex school challenges. Therefore, a more effective instrument for professional development would be a community of inquiry rather than a one-day workshop with an outside educator.

Limitations of this research project involved a sample size of six eligible Black sophomores and juniors. It is assumed that in these focus group interviews, the information the student participants provided was due to their personal experiences. Since not every Black student has the same experience, my study only includes the opinions and thoughts of three female and three male student participants. Therefore, this study

may not be generalizable with larger group studies because of the specific knowledge that six participants supplied (Creswell & Creswell, 2017; Merriam & Tisdell, 2016).

Likewise, this research project would benefit with more Black students participating and possibly a lower grade level. A possible addition to this study would be identifying eligible 9th grade students by examining their entrance exam scores and determining the lack of honors classes they enrolled in. Although, the reasons for not registering with advanced classes that the student participants supplied were numerous and diverse.

Accordingly, this research site is a private, college preparatory high school and the findings may be different at public, general education, or vocational high schools. This school requires a particular entrance exam score so students that score below that level were not part of this study. As a result, students at this research site are expected to complete college preparatory courses. Therefore, students that enroll in general education or vocational courses were not included in this research. This study centered on college preparatory students who are college bound and tend to register for advanced classes. To examine differences in school curriculum, this study could be duplicated at a school with general education or vocational courses. The results from the corresponding school would inform educators if curriculum environment affected barriers for eligible Black students with advanced classes or how a community of inquiry identifies and mitigates those barriers. Despite that, there was a mix of ability with student participants. A few student participants had enrolled in AP or honors classes while some had none. Therefore, this research project examined eligible Black students with differing ability and perception of advanced classes.

Another limitation of this study was the regular attendance of adult participants within the community of inquiry. At the first meeting, all seven adult participants attended; this included both associate principals, teachers of advanced classes, and a staff member. Since not all members consistently attended, comments, criticisms, or proposals may have been altered due to absent members. Likewise, one meeting for the community of inquiry had no administrators present so that may have changed the outcome of that meeting. The absence of administrators possibly hindered discussion or decisions made at that meeting. The members present at that meeting may have had limited knowledge and lacked the expertise for crafting solutions for the barriers with advanced classes. To remedy the lack of administrators, it would have been advantageous to share transcripts of the meeting and ask for feedback with proposals crafted by present members. Nevertheless, the community of inquiry was able to craft eight out of nine proposals. All were agreed upon for implementation by administrators.

A further constraint of this research study incorporated the effects of the COVID-19 pandemic. Students at this research site were back to full, in person attendance. Although, at the beginning of this project, many family members along with the student participants experienced a surge of infections from the virus. Thus, some student participants may have been experiencing or knew family members with lingering mental and physical effects from the virus. Stress due to COVID-19 would affect their ability to share thoughts or impressions about registration with advanced classes. Conceivably student participants may not have freely shared their thoughts about advanced classes if they were worried about family members or themselves. To ameliorate this stress, I could have acknowledged student participants' worry and informed them that the focus group

interviews were voluntary and safe places to share their thoughts. With that said, student participant conversations were lively, respectful, and pleasant.

5.6 Recommendations for Future Research

At the beginning of the community of inquiry meetings, members expressed frustration with examining the phenomenological student data. In future studies I will dedicate the entire first meeting to explaining and demonstrating techniques with analyzing qualitative data. I also will offer follow up meetings, if necessary, to ensure group members are comfortable with identifying and consolidating coding of phenomenological text. This was evidence from responses with exit tickets supplied to committee members. Furthermore, community of inquiry members wanted to view the context in which they were analyzing. Additionally, I will have entire copies of focus group transcripts for adult participants that are reviewing only a portion of the transcript. Correspondingly, community of inquiry members articulated concern that the meeting time was not long enough. With a future research project, I plan to schedule additional meetings if time is a concern. Once again, this was articulated by committee members in their responses from exit tickets.

As mentioned in Chapter 1, for effective school reform, an external or outside audit should be conducted to measure success. Once this research site chooses a third-party audit, I plan on reviewing the results and inspecting the efficacy of the implementation of the eight proposals from the community of inquiry. It will tell me if the proposals were effective in mitigating or removing barriers to eligible Black students registering with advanced classes. Likewise, this information will inform my next cycle of action research with this problem of practice (Efron & Ravid, 2020).

Similarly, this research project only considered honors and AP coursework for eligible Black students. During multiple conversations with the community of inquiry, access to CCP courses for eligible Black students were considered. For the next cycle of action research, I want to examine enrollment of Black students with CCP courses. First, I would determine how many Black students are registered for CCP courses versus White students. This will allow me to determine the lack of enrollment with Black students. Then, I would identify eligible Black students not enrolled in CCP courses and conduct focus group interviews to obtain their reasons for not registering for those courses. Next, I would share the phenomenological data with a community of inquiry made up of staff and faculty to examine those reasons and locate barriers. Once those barriers are identified the group would craft proposals to reduce or mitigate them with registration of CCP courses for Black student. This study would iteratively utilize feedback from student participants and have the community of inquiry refine proposals. This study would uncover additional barriers that have not been included in this study.

Lastly, this study investigated the barriers that eligible Black students faced with advanced classes. It would be valuable to scrutinize the barriers that other underrepresented students encounter. I chose not to investigate 9th graders since they have the least choice with advanced classes. However, it would be informative to examine eligible Black students at the 9th grade or lower to determine if their barriers are similar or different to the older students. This information would assist educators to reduce or remove barriers for those younger students with advanced classes. Accordingly, younger students would progress through advanced classes in high school with greater access.

At this research site, the population of Latinx students is smaller but equally deserve the inspection that was conducted with Black student participants and advanced classes. I would examine the barriers that Latinx students encounter with advanced classes. The difference in research participants would generate separate results and would be considered for a different cycle of action research.

5.7 Conclusion

The purpose of this study was to determine the reasons that eligible Black students choose when not registering for advanced classes. Even though there are 300 Black students attending NHS, only three are presently taking AP courses. With this research project I tried to understand why Black students are not choosing to register with advanced classes. From my White, affluent perspective, I believed that if the students qualified for advanced classes, they should enroll. This study showed me that the reasons eligible Black students choose to not register is diverse and valid. By acquiring phenomenological qualitative data from student participants, I was able to view their reasons such as *fearful of the rigor/academic challenge to a misunderstanding of what a class really is to lack of family experience with advanced classes*. I realize now it is crucial to uncover the source of the problem with registration from stakeholders. My response to the lack of Black students with advanced classes would have been off target without the phenomenological data.

I also learned that solving a problem of practice without a community of inquiry would have been inadequate. Having a diverse group of colleagues with expertise from distinct parts of the research site was pivotal. The administrators from the community of inquiry could respond to the barriers with extensive institutional knowledge. Likewise,

the teachers of advanced classes could relate to the intimate challenges of advanced coursework and respond to the needs of eligible Black students. Additionally, staff could recognize the challenges that first time families face with college preparatory classes. Together the members of the community of inquiry acknowledged the barriers Black students faced and created solutions that were tailored to their needs. This would not have occurred if I tried to solve the problem of practice individually.

As a result of this research, I am confident to utilize similar methodology to examine and resolve problems of practice related to CCP coursework and Latinx students. I know how to conduct phenomenological data collection, share transcripts of that data with colleagues and oversee a community of inquiry to solve the problems of practice. I believe that this methodology is an ideal path for ascertaining the sources of problems of practice. Similarly, making use of a community of inquiry allows for stakeholder input which is significant for school reform. School reform requires group consent, and a community of inquiry enables this to take place. Giving members an opportunity to problem-solve together allows for innovative, democratic solutions. Moreover, community of inquiry members take ownership with the problems of practice and find satisfaction in providing answers to these problems.

Now I desire to present to my colleagues so that the results of my research may convince them to embrace this methodology. Consequently, to enact school change, students, faculty, and staff need to connect by sharing their difficulties, allow for feedback, and generate resolutions iteratively to the obstacles that underrepresented students face with institutions. By sharing my knowledge, I hope to develop a rapport with both students and faculty and staff. This will develop a level of confidence and

comfort with knowledge about school change. Furthermore, the success of this research project will convince others that school reform is achievable.

My goal is to translate this success to other research sites that have similar problems of practice. I believe with planning, approval, and execution, other research sites could benefit from this research strategy. Moreover, this research approach will provide specific reasons for problems that exist at those research sites. Institutional stakeholders from that other research site would act as members of a community of inquiry. Those members would interact with student participants to construct innovative solutions to that research site's problem. Thus, this would provide important knowledge not found in the existing literature due to the novel combination of qualitative phenomenological research with a community of inquiry while incorporating change theory.

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Appendix A

Parent and Student Consent Form

Dear Student and Parent/Guardian,

My name is Diane Vrobel, and I am science teacher at your school. I am a doctoral candidate in Curriculum Studies at the University of South Carolina. I am conducting a research study as part of my degree requirements, and I would like for your son or daughter/you to participate. I anticipate conducting this research study in our Spring Semester, starting in February.

I am studying how to uncover reasons for a lack in enrollment of eligible Black students in honors and AP courses. I have identified you/your student based on PSAT/NMSQT or Iowa Assessment test scores and would like to ask you/your student about their opinions or perceptions about registering for advanced coursework. This shared knowledge will be presented to teachers of advanced courses as well as guidance counselors and administrators. This shared information will allow me to create a process with the group of educators to identify eligible Black students, locate any barriers for enrollment and successfully support Black students in advanced classes. My intent is to make access to honors and AP courses equitable towards Black students who may not have felt it possible or necessary for their college preparation in high school.

Implementing school reform with inclusion of underrepresented students in advanced classes has been widely researched and would create positive results for future students. Participating in this study has the potential to increase you/your son or daughter's likelihood of registering for honors or AP classes. If you decide to/have your son or daughter participate, you/they will be potentially asked to fill out surveys and asked about your/their opinions and perceptions of honors and AP classes. The data from these surveys will be scrubbed by removing any names or identifiable features.

My intent with this study is not only to find out why there is lower enrollment in advanced courses amongst our Black students, but to also put equitable systems in place that will assist to prevent those barriers in the future.

Data associated with participation is confidential. Study information will be kept in a secure location at the University of South Carolina. The results of the study may be published or presented at professional meetings, but the identity of the participants will not be revealed. Participation, non-participation, or withdrawal will not affect you/your son or daughter's enrollment options.

I will be happy to answer any questions you have about the study. You may contact me at vrobeld@hoban.org Thank you for considering/your son or daughter to be a participant in this study. If you desire to participate, please sign on the line below. When you are done, please turn this form into me.

Thank you,
Diane Vrobeld

For student:

I consent to participating in this research study (sign below).

_____	_____
Signature	Date

For parent/guardian:

I consent to my child participating in this research study (sign below).

_____	_____
Signature	Date

Appendix B

Community of Inquiry Consent Form

Dear Colleague,

I am a doctoral candidate in Curriculum Studies at the University of South Carolina. I am conducting a research study as part of my degree requirements, and I would like you to participate. I anticipate conducting this research study in our Spring Semester after school.

I am studying how to uncover barriers to enrollment of eligible Black students in honors and AP courses. I have identified students based on PSAT/NMSQT or Iowa assessment test scores and would like to ask about your opinions or perceptions of eligible Black students registering for advanced coursework. I will be creating a community of inquiry to determine initiatives that can be put in place for school change.

The community of inquiry will be meeting during six after school meetings to identify, discuss, develop, and create goals that will allow for change with registration of eligible Black students with advanced classes. If you decide to participate, you will be asked to attend meetings about your engagement and opinions on school strategies for uncovering barriers to enrollment of Black students in honors and AP classes. In a meeting, the session will be audiotaped so that I can accurately transcribe what has been discussed. The audio files will only be reviewed by me and will be erased upon completion of the study.

Data associated with participation is confidential. Study information will be kept in a secure location at the University of South Carolina. The results of the study may be published or presented at professional meetings, but the identity of the participants will not be revealed.

I will be happy to answer any questions you have about the study. You may contact me at vrobeld@hoban.org. Thank you for your consideration. If you would like to

participate, please sign on the line below. When you are done, please turn this form into me.

Thank you,
Diane Vrobel

I consent to participating in this research study (sign below).

Signature

Date

Appendix C

Student Survey

Student Survey About Advanced Classes

Please submit your responses about your perceptions and knowledge about honors and AP classes.

* Required

1. What is your gender? *

Mark only one oval.

☐ Female

☐ Male

2. What is your current grade level? *

Mark only one oval.

☐ 10th grade

☐ 11th grade

3. What do you know about honors courses? *

4. What do you know about AP courses? *

5. How do you decide what courses to take? *

6. What do you think is an advantage to taking honors or AP classes? *

7. What do you think is a disadvantage to taking honors or AP classes? *

8. What is(are) your reason(s) for not taking honors or AP classes? *

9. Who would potentially influence you to take an AP or honors class? *

10. What is your highest educational goal? *

Mark only one oval.

- ☐ High school diploma
- ☐ Vocational certificate (2-year after high school)
- ☐ Associate's degree (2-year after high school)
- ☐ Bachelor's degree (4-year after high school)
- ☐ Graduate degree (Master's, Doctorate or other)

11. How do you think your high school classes are preparing you for your educational goal? *

12. How does your parent/guardian expect you to achieve your highest educational goal? *

13. What suggestions do you have to make honors or AP classes more likely for you to enroll in? *

14. What thoughts, feelings or experiences could you share about your decision not to enroll in honors or AP classes? *

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Appendix D

Focus Group Interview Protocol

Names of participants:

Date: _____ Site: _____

1. What thoughts do you have about honors and AP classes?
2. How do you feel about yourself registering for honors and AP classes?
3. What reasons outside of school make you choose not to register for honors and AP classes?
4. What reasons in school make you choose not to register for honors and AP classes?
5. How are your current educational goals being met with the classes you have registered for?
6. What other thoughts or feelings would you like to share about not registering for honors or AP classes?

Appendix E

Community of Inquiry Exit Ticket

Community of Inquiry Exit Ticket

This is a survey for members to share their additional thoughts about today's meeting

* Required

1. How do you think today's meeting went? *

2. What was our most important accomplishment? *

3. Did you disagree with anything? *

4. Any further thoughts? *

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Appendix F

Proposals for Eligible Black Student Barriers

Eligible Black Student Barriers and Proposed Solutions

Barriers/Obstacles	Removal/Reduction of Barriers
Lack of Time Management Skills	Teaching executive functioning skills to all students.
Fearful of the rigor/academic challenge	Previewing a syllabus for the AP course so students can see what is expected. Q&A with AP course instructors.
Responsibilities to work outside of school/home	
A misunderstanding of what a class really is/how the workload differs from CP to CCP to AP	Preview of Course Handbook during Enrichment A to review descriptions of classes that students are interested in registering for.
Lack family experience with advanced classes	Family information sessions- in person and virtual.
Perception of perfection	
Lack of support/Isolation from peers	During enrichment, partner with student of color that has completed honors or AP course/check-in with honors or AP teacher for additional support

Appendix G

Focus Group Interview Protocol of Proposed Changes

Names of participants:

Date: _____ Site: _____

1. How likely do you think you will register for honors and AP classes?

2. What do you think about the proposed changes with registering for honors and AP classes?

3. What suggestions do you have about the proposal that would make you more likely to register for honors or AP classes?

4. What thoughts, feelings or experiences could you share about the proposal and how it has changed or not changed your decision to enroll in honors or AP classes?

Appendix H

Revised Proposals for Eligible Black Student Barriers

Eligible Black Student Barriers and Proposed Solutions

Barriers/Obstacles	Removal/Reduction of Barriers
Lack of Time Management Skills	Teaching executive functioning skills to all students.
Fearful of the rigor/academic challenge	Previewing a syllabus for the AP course so students can see what is expected. Q&A with AP course instructors. Shadow an engaging class to see how the honors or AP classes function. Attend a seminar with students of color and offer their experiences with AP.
Responsibilities to work outside of school/home	Mentoring/modeling from other students about time management.
A misunderstanding of what a class really is/how the workload differs from CP to CCP to AP	Preview of Course Handbook during Enrichment A to review descriptions of classes that students are interested in registering for. Explaining the progression and differences between AP, CP, and CCP. Have a department flow chart that students can follow for course progression.
Lack family experience with advanced classes	Family information sessions- in person and virtual. To be scheduled in late fall of student's 9th grade year- to introduce course progression that can lead to advanced courses
Perception of perfection	Students can shadow current honors AP students for a small portion of the class to get a sense of what it is like to be a part of these types of classes
Lack of support/Isolation from peers	During enrichment, partner with students of color that have completed honors or AP courses. Check-in with honors or AP teacher for additional support.
Pathways for honors, AP, and CCP classes need to be explained from freshman registration.	Have clear timelines and options for students to see visually where their subject area classes can possibly progress.
AP Teachers will expect new AP students to just be able to jump in - they may need some extra background info given to them.	AP Teachers

Appendix I

Student Survey for Final Proposals

Student Survey About Revised Proposed Changes With Registration for Advanced Classes

Please submit your responses about your perception and knowledge with registering for honors and AP classes.

* Required

1. What is your gender? *

Mark only one oval.

☐ Female

☐ Male

2. What is your current grade level? *

Mark only one oval.

☐ 10th grade

☐ 11th grade

3. How likely would you register next school year for a honors or AP class? *

4. What suggestions do you have about the revised proposed changes to registration *
for honors or AP classes ?

5. What other thoughts, feelings or experiences could you share about the revised *
proposed changes to registration for honors and AP and how it has changed or not
changed your decision to enroll in those classes?

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Appendix J

Final Proposals for Eligible Black Student Barriers

Eligible Black Student Barriers and Proposed Solutions

Barriers/Obstacles	Removal/Reduction of Barriers
Lack of Time Management Skills	Teaching executive functioning skills to all students. Students in honors and AP could be grouped in Enrichment as "as study groups"
Fearful of the rigor/academic challenge	Previewing a syllabus for the AP course so students can see what is expected. Q&A with AP course instructors. Shadow an engaging class to see how the honors or AP classes. function. Attend a seminar with students of color and offer their experiences with AP.
Responsibilities to work outside of school/home	Mentoring/modeling from other students about time management.
A misunderstanding of what a class really is/how the workload differs from CP to CCP to AP	Preview of Course Handbook during Enrichment A to review descriptions of classes that students are interested in registering for. Explaining the progression and differences between AP, CP, and CCP. Have a department flow chart that students can follow for course progression.
Lack family experience with advanced classes	Family information sessions- in person and virtual. To be scheduled in late fall of student's 9th grade year- to introduce course progression that can lead to advanced courses More training for faculty/staff on registration information regarding course progression
Perception of perfection	Students can shadow current honors AP students for a small portion of the class to get a sense of what it is like to be a part of these types of classes
Lack of support/Isolation from peers	During enrichment, partner with students of color that have completed honors or AP courses. Check-in with honors or AP teachers for additional support.
Pathways for honors, AP, and CCP classes need to be explained from freshman registration.	Have clear timelines and options for students to see visually where their subject area classes can possibly progress.
AP Teachers will expect new AP students to just be able to jump in - they may need some extra background info given to them.	AP Teachers