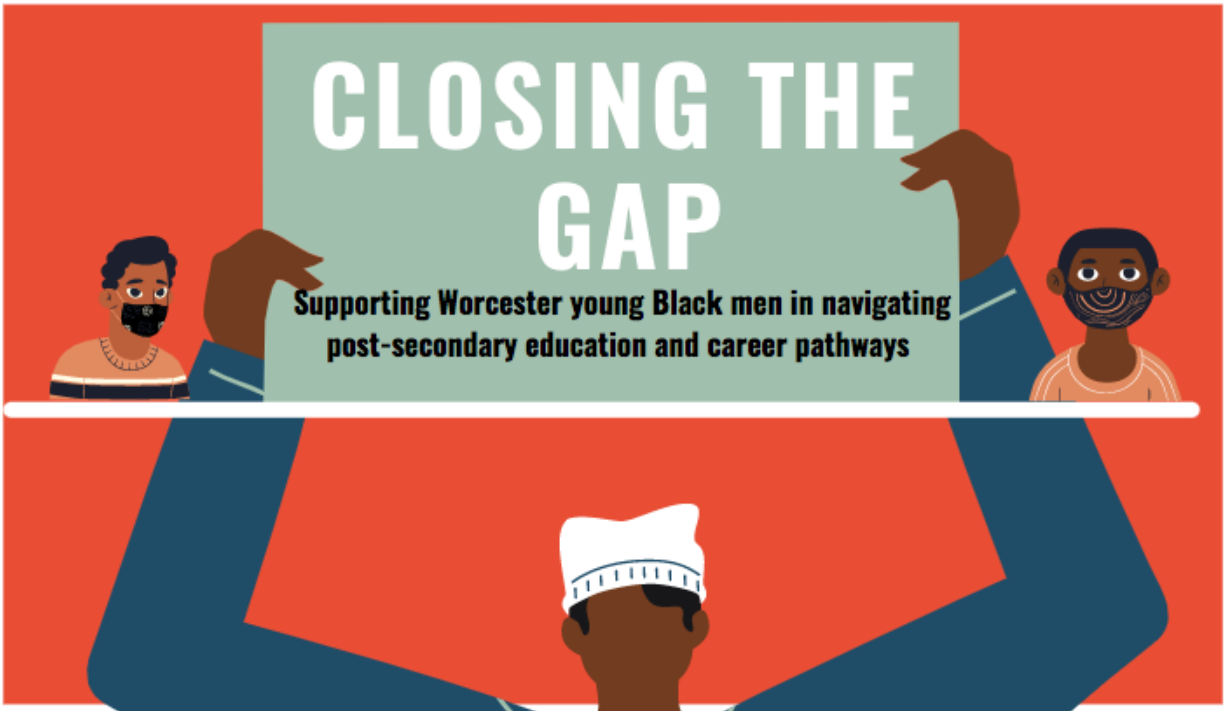


# **CLOSING THE GAP:**

**Supporting Worcester young Black men in navigating post-secondary education and career pathways**



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*This report represents work of WPI undergraduate students submitted to the faculty as evidence of a degree requirement. WPI routinely publishes these reports on its web site without editorial or peer review. For more information about the projects program at WPI, see <http://www.wpi.edu/Academics/Projects>.*

# **ABSTRACT**

Black males in the United States experience significant obstacles in preparing for college and are historically the lowest performing demographic group (by race/ethnicity) to obtain a college degree. This project researched local community and after-school programs through interviews and focus groups to identify culturally responsive and asset-based strategies and practices. A mentoring plan was proposed for WPI to support Black male high school students in Worcester with navigating their college and career pathways.

# **ACKNOWLEDGEMENTS**

The project team would like to take this opportunity to thank the individual program coordinators and directors that we have interviewed. Without your drive to support minority students in the city of Worcester, as well as nationwide, we would not have been able to learn from your experience and conduct our study. It has been an amazing opportunity to speak with you.

The project team would also like to acknowledge our advisors: Dr. Katherine Chen and Kimberly Hollan. Without your oversight and advice we would not have known where to start! We truly appreciate the time you both put into making this IQP a learning experience for all of us.

# EXECUTIVE SUMMARY

*“We will all, at some point, encounter hurdles to gaining access and entry, moving up and conquering self-doubt; but on the other side is the capacity to own opportunity and tell our own story.” —Stacey Abrams.*

During our time in high school as Black students in Worcester and Springfield, Massachusetts, we felt that though we were able to enter college and are making our way towards graduation, many of our peers were not given the help they needed to get into or remain in school. Black male students in college face one of the lowest completion rates among male and female racial demographics. This has been due to the lack of support they currently have to prepare them for life after high school. After-school programs and community organizations work locally, as well as nationally, to ensure that students in minority and lower income communities receive the support outside of regular school required to do well in high school and life afterward. However, students within our demographic (Black males) have not shown a rise in college graduation at the same rate as other groups.

This Interactive Qualifying Project (IQP) team sought to have the young black men in Worcester (ages 13-18 years old) be supported in navigating the college and career pathways in culturally responsive and asset-based ways. We sought to accomplish this by: 1) researching the literature on current effective support practices for Black male youth and other youth-serving programs across the country, as well as talking to education experts, 2) investigating current youth programs in Worcester by interviewing Program Coordinators of Community-Based Organizations through interviews and focus groups to curate their successful strategies and current challenges, 3) collecting personal narratives of Black male individuals on their experiences in navigating their education and career pathways in order to understand common

barriers to preparing our target demographic for college, and 4) proposing a plan for WPI to help achieve the project goal. As a result of the research we conducted, as well as through interviews and focus groups, the project team was able to synthesize a list of common strategies practiced by local programs to properly support our demographic in their college endeavors.

The first of these strategies is **introducing youth to college and career topics early** in their high school career. Programs which gave their youth early career and college exposure have noted a significant increase in the number of their participants who go on to college. Providing students this opportunity to interact with and experience real world options for their post-secondary education and careers, allows them to build a stronger idea for themselves of what they personally are interested in and could possibly want to pursue. Additionally, it allows students to understand early that college is not the only pathway available to students and to encourage students to seek out those other opportunities that align with their interests.

Another strategy practiced by most programs was ensuring the **inclusion of understanding and supportive mentor figures** for their students to look up to within each program. Youth who were involved with a supportive mentor figure throughout the navigation of their future pathways often felt better prepared and the youth reported positive academic growth. The support-relationship (emotional/educational) built between mentor and mentee was found to be extremely beneficial to student transition to college and the work force among our demographic in Worcester. Having a mentor figure or some form of support system for these students has been significantly more impactful for the target demographic recently because of the onset of COVID-19 and the nation's transition to remote learning leaving a lot of under-resourced students feeling left behind and neglected.

Finally, programs where the youth feel they are a part of a **trusted community and brotherhood** were shown to help the youth feel more comfortable engaging and interacting with the program activities and fostered a sense of unity and camaraderie among each other. Black male youth are often uncomfortable having conversations about their futures because they do not have a safe space where they can comfortably communicate what may be on their minds. There are few spaces solely for young men of color to feel supported and uplifted by older male educators and leaders who also look like them or are from the same communities as them. Providing an inclusive community for students within our demographic empowers them, as well as giving them the feeling of confidence in themselves and their aspirations.

Areas for improvement among current organizations were also analyzed in the interview content. The first of these areas for improvements involve the **diversity of the staff of many community programs**. The mentor and staff diversity in the Worcester Public School System, as well as almost every out-of-school-time program the project team studied did not correlate with the student diversity shown in the Worcester community. Teachers of color often found themselves in all white spaces and had to manage biases present in their fellow educators, along with their regular stresses of an educator. Students of color who receive higher education are also usually pushed by their families into careers in medicine, technology, and law to ensure that they can enter careers with guaranteed significant pay. This has led to an overall lack of people of color in a position to be educators and mentors. Without mentors and educators who can properly relate to students of color and their different backgrounds, students will continue to be misunderstood and discouraged from continuing their education.

Using these findings, the project team developed a possible structure for a WPI community program (“Closing the Gap”) that would partner with a Worcester out-of-school time

program and focused on informing Worcester youth of their college options and different paths available to them, as well as providing a Black male mentor figure and other necessary assistance for their education. For a community project like this to function sustainably on campus, we would require a Student organization, office, or department on campus to take up our community program as part of their already existing operations. To properly advertise our community project, we developed an informational pamphlet to be shared which illustrates the critical information from the structure in an easy-to-understand format.



# **AUTHORSHIP PAGE**

Alain-David (AD) Ndiku and Khadir (KD) Zachery both contributed to the research and the writing of this report. The following is a more thorough breakdown of each project member's contributions.

AD contributed to this report by writing the first draft of the introduction chapter, sections of the background chapter containing the information on the causes of educational inequities and the current state of education, and part of the findings and recommendation chapters. Additionally, AD was the main designer of the deliverable Closing the Gap pamphlet in Appendix E.

KD was responsible for the sections of the background chapter containing material about the essential components to success for youth, the first draft of the methodology chapter and the findings chapters, and a part of the recommendation chapter.

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# CHAPTER 1. INTRODUCTION

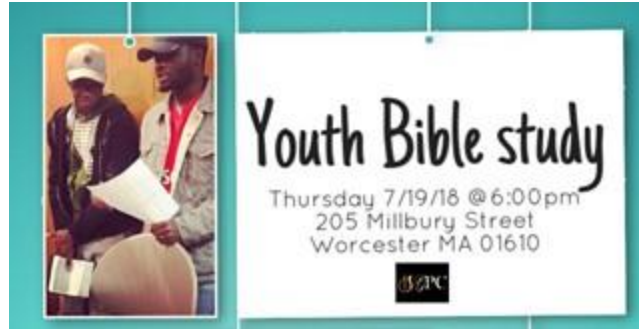
In 2016, a study recorded the percentage of men and women aged 18-24 who were currently at least part-time in a college or institution. It separated students based on gender and race (Black, White, Latinx). It was found that 33% of Black men in this age group were in school (National Center for Education Statistic, 2016). Black men also represented the lowest percentage of the demographics presented. While both members of this project team belong to the 33%, Black men across the nation are continuing to face overwhelming difficulty in attending and finishing college after graduating from high school. This particular issue is present just outside the campus of Worcester Polytechnic Institute (WPI) - within the City of Worcester and among students attending Worcester Public Schools.

As a result of our personal experiences (Alain-David's experiences as a K-12 student within Worcester, MA and Khadir's experiences as a student within Springfield, MA, as well as our shared experience as college students at WPI), we are well familiar with the current situation of young Black men within the local community. Throughout high school and college, we have witnessed many of our peers struggle to attain their post-secondary goals, as they got older, and their responsibilities and stress continued to grow. We took it upon ourselves to investigate why young men like us were not entering and remaining in college at the rate as black women, or men of other races. To better understand why we did so, it is important for us to share our respective stories, and how outside influences, as well as our own work, led us to WPI from our humble beginnings.

# 1.1 Our Stories

## 1.1.1 AD's story

My name is Alain-David Ndiku. I was born October 29th, 2000 and have been a Worcester resident since I was 13 years old. My parents are both Congolese citizens by birth, and moved to Boston, Massachusetts from Belgium during their college years to seek better educational opportunities for themselves. My mother received a master's degree from Northeastern University while my father entered small business. Their individual plans changed, however, once they met again in Boston. Between 1997 and 2003 they: got married, had my sister, had me, decided to become full time pastors, moved to Worcester, and had my younger sister. In 2008, I was screened, and lottery chosen to attend Abby Kelley Foster Charter Public School from 2nd grade until my graduation in 2018. I did well in school when I was younger, but for different reasons from my peers. My parents, being pastors from a very different culture in Congo, were extremely strict with my lifestyle to make sure I only focused on school. Barring the occasional trip to the movies or a classmate's birthday party, I did not really go anywhere other than church (Figure 1), home, or school until I got my driver's license at 17 years old. I attended and volunteered during church services Wednesday nights, Friday nights and Sunday mornings. It was difficult to bear with sometimes, but I was doing well in school and my parents were satisfied.



*Figure 1. Alain-David Ndiku working with Green Pastures Church Youth Bible Study*



*Figure 2. Alain-David Ndiku on the Abby Kelley Foster Charter Public High School Football Team*

The lifestyle I led built up strong discipline for work and exposed me to responsibility and service early, and I continued to practice this commitment often. I joined multiple clubs while I was in middle and high school, such as: chess club, the math team, debate club, the drama club, Student Council, the National Honor Society (where I was the president), and the football team (where I became captain) (Figure 2). I also joined the International Baccalaureate (IB) Program my Junior and Senior year of high school. While I would like to say that I involved myself in all these activities because of my individual passions for each, the reason I

joined all these clubs was to ensure colleges would see the level of work that I was able to produce given the opportunity. Out of the clubs and programs in school that I was involved with, I believe that the IB best prepared me for the rigors of college.

Classes in the IB Program are student-led and research based for the most part. We were often given interactive assignments to work on and student presentations rather than lectures. I would say however, we did face a lack of classes available for students in the IB, with it only covering the 4 main subjects of Math, Science, History, and English with a choice of Music or Art as a final course. Teachers also were not always efficient in teaching the subject material required for the exams. In years prior, our school had kids coming in on Saturdays to prepare for the IB Final Exams. We also had to begin school early both Junior and Senior Year so that we could complete our assignments for the IB Diploma.

Regarding college preparation, I was introduced to possible pathways for college through signing up for college visits as well as a career day at my high school. At that point, the only colleges I knew or cared about were MIT and UMass Amherst, and all I knew that I wanted to do was build things. Green Pastures Church of God also had a career night, where I was able to ask members of the church how they were able to finish college as an immigrant, as well as strategies they feel we should employ to succeed when we go through the college process. It was there that I learned about websites to search colleges based on my desired career path and my financial status.

When the Upward Bound program visited Abby Kelley the same year, I took the opportunity to learn more about dual enrollment and how it could benefit me. I did not personally attend the Upward Bound summer program at Worcester State University, but I was better informed by representatives that visited my school about how to use the College Board



and plan my SAT exams. I was thankful to learn this information, as I was able to take the SAT twice and use my scores to apply and get into multiple colleges my senior year. I also used online guides and carefully filled out my own FAFSA as a senior. I got into most schools I applied to and decided to attend WPI for its focus on project-based learning.

While I feel I was prepared for college academically, in hindsight I was nowhere near prepared to enter college as an adult, as I felt I had no one to confide in or reach out to for help. I had spent my high school career working hard to ensure that I went to a good school. But I had not spent time with an adult talking about what I wanted to do and why I wanted to do it. While in high school, I primarily looked to my music teacher, Gregory Shannon, and my math teacher and football coach, Matthew Lemire, for guidance and to speak to about my life. I kept things far from personal, however, as I felt that I could not trust them with all my thoughts, as they were also my teachers for my classes here at school. This hurt me later, as when I was struggling at WPI, I was not able to find personal motivation for a while, as I had not prepared myself for what would happen when I got into college. Subjects such as what I would want to do for a living specifically, and how to manage work, life, and family responsibilities when you are not restricted at all. I eventually was able to get myself back on track here at WPI, but I felt as though I lost precious time I had in my life trying to get myself together alone. I would not like to see this repeat for students like myself, and so I believed that it would be important to investigate why young men of color such as myself were not able to get into college or remain there.

### **1.1.2 KD's story**

The first time that I realized and understood that because of the color of my skin, that because I was a young Black boy, the safety and trajectory of my life is not solely in my own

hands, was with the death of Trayvon Martin. Growing up throughout childhood my parents would educate me about the racism in the current world and tried to ensure that I was aware and was living as cautiously as possible to try and protect myself. I would hear our conversations and try my best to understand, but I was young and naïve to the reality that Black Americans face. It took seeing a young Black boy, not too much older than I was, being killed for doing exactly what it is I do every single day, living while Black. Trayvon's death is an example of the American racism which is historically systemic and has been ingrained into American society and government as made evident by the racist laws and practices, such as the red lining for housing or the pipeline to prison, which has affected and continues to affect the lives of Black Americans. I later began to understand that I would have to work twice as hard and be twice as good as my white classmates and peers, and that because of the color of my skin, the American system is inherently working against the people that look like me. It is because of this reason that there are very few Black people and men especially pursuing STEM, many times because the men are approached by racist stereotypes which suggest that Black men would not persist and that they do not belong in STEM. However, I was also taught the importance and the significance of the word sacrifice. I grew up knowing that sometimes when I got home, I would not always have hot water to readily take a bath and sometimes my Dad would have to boil our bathwater on the stove. I understood that if I wanted to get to my dream college, I would have to make sacrifices and work as hard I could, because my goal was to make sure I would get to college without having my parents pay for it all. When I was younger, I did not understand why I could not also obtain the luxuries I saw many of my white friends and classmates had, and this frustration I felt continue to grow until for a period, I felt as if my family and I were cursed to be in our situation. However, once I got a little older, I scorned myself for my ignorance in the

past, because while my parents were persevering through the struggles and sacrificing to keep me and my sister afloat, I reacted with unappreciation and ungratefulness. I realized that the opportunity my parents were trying to create for me, and my family was one of the biggest blessings in my life, and that I had my eyes closed.

I realized that the time I have with my family is not permanent, and Trayvon's death made me finally open my eyes and understand the different world Black Americans live in. This realization helped me start thinking about what I wanted to create and accomplish in my life with the future my parents sacrificed for me to have. Although, my parents never finished college themselves, their hard work ethic and powerful drive to persist and struggle past all adversaries, and all the sacrifices they made so that my family and I can continue to live a comfortable life has been the most important motivation for me in my life, pushing me forward throughout my high school and college career. Along with my parents however, I was also significantly influenced by the W.E.B DuBois Black Men of Greater Springfield (BMGS) which is a program for young Black Men and boys of color in the Springfield community. Ever since I was 10 years old, I have been affiliated with the BMGS, and throughout my years with this program I have developed into a much more confident student and an even prouder young Black man. The program was focused on providing young boys of color with an older male figure, to help guide them and teach them healthy ways to navigate growing up as a young man of color. The older Black mentors would aid youth participants with their schoolwork, engage with them in sports and fun teamwork activities, as well as occasionally take the youth on field trips for a change of pace. The BMGS program was especially impactful and successful because it was led by older Black men and Black college students who could represent as big brother figures and role models for the Black youth students. This was especially significant since many

of the youth program participants did not have their fathers in their lives, or they were living mainly with just their mothers, and so the connections they built with these men was all they had. The BMGS program's mission is to bring together those who have common interests in wanting to uplift minority and Black youth and to provide them the proper resources they need to maximize their potential and the opportunities to promote their excellence. The BMGS was the first place I was able to find assistance with my schoolwork from someone who looked like me and who was not related to me. The BMGS program operates during the academic school year and during the summer (Figure 3), so that young Black boys and boys of color can have the opportunities to stay out of trouble and instead, they can interact with individuals who wish to keep them safe, see them thrive, and help them prosper. Additionally, the BMGS program provides a safe and comfortable environment for the participants to complete their homework and study for classes, as well as they would always learn something about Black American culture and history that would be either presented to the students by an older Black man in a presentation or the students would research and present to the rest of the program themselves. This was especially significant since learning about Black Americans was not something that I experienced throughout my primary and secondary schooling. Additionally, my experience with the BMGS program was the first time I was educated by a Black male teacher since almost all the faculty and teachers at my school were white or women. This was the first time I realized it was possible for me to achieve whatever dreams I had and achieve anything I set my mind to was when the BMGS program invited guest speakers for the students, and among the speakers were Black college students and graduates, who were also alumni of the BMGS program. Some of these men were doctors, there was an aerospace engineer, and an architect, and all these men were speaking to us young, big-eyed Black boys, and telling us their life stories and how many

years ago they were sitting in the seats we were. They might have had no idea that hearing their stories, about the roads they took and the failures and obstacles they encountered and overcame, inspired an entire program of hopeful and bright young Black boys.



*Figure 3. Khadir Zachery's experience with the W.E.B DuBois Summer Academy in 2014*

My experiences with the BMGS helped me feel excited to learn about Black culture and helped me foster a love for learning in the classroom, because I knew I wanted to go to college and achieve greatness as well. School provided me with the knowledge and education that the Springfield school system says children need to learn. The BMGS program gave me the resources to discover and learn the information myself and provided me an environment and a community with other Young Black and non-white boys who were just as eager to learn as I was. The BMGS wants young Black boys to challenge the standard societal norm and they are dedicated to putting young Black boys and non-white boys in those seats and opportunities that the system believes we are not meant for. I look back at my experiences with the BMGS and I

just feel grateful for all the Black men who were involved and devoted to helping me prosper and provided me with the tools I needed to showcase my excellence. It is because of the growth and confidence that fostered within the BMGS program, as well as the unconditional love and support from my parents and family, that I was able to make it to college, and it is because of them that I keep going.

The entirety of my life's lessons, from my experiences with all the people who encouraged me with my future, to my plethora of personal feelings and passions about this society we live in, has shaped the way I live my life as a Black man, and have been my burning fuel throughout the navigation of my academic career. These lessons allowed me to be able to form my own understanding about societal issues, and with this understanding I can vocalize my opinions on these matters and use my educated voice to echo the voices of my overlooked and underprivileged peers. Fast forward to the year 2020, there have been protests and demonstrations representing Black Lives Matter (BLM) happening nationally and globally, almost every day for a period of months. Due to the Coronavirus pandemic, the Internet and the usage of social media platforms have skyrocketed as social distancing laws were being enforced to help halt the spread of the virus. These televised demonstrations were a significant highlight of the media and for a period the media was entirely flooded with information solely relating to the BLM protests. Now more than ever, Black students are watching these live demonstrations and are forming their own opinions about these social topics. They are needing supportive figures to have these conversations about their future pathways that does not only include college and to have somebody who looks like them who is supporting them as they navigate these many routes. My project partner and I are both passionate Black men who want to help create a change for other, less fortunate young Black men, and to encourage these young men to

aspire to be successful because they can be and to not let the historical systems of society be the reason that inexperienced decisions they made growing up define their future. Our team is working to help the young Black men in Worcester, MA aged 13-18 be aware of the opportunities available to them and to encourage the young Black males to seek out opportunities by researching and studying the secondary and career preparatory programs in the Worcester area. Despite how many obstacles, or even words and actions of discouragement they may have and will encounter, our team wants to ensure to these young Black men that there are many individuals and organizations who are devoted to assisting them and helping them achieve their career and educational aspirations, and we want to highlight and promote this excellence that lies within every young Black student, and that is our primary motivation in building our project, **Closing the Gap**.

## **1.2 Connecting our stories to our study**

Through different organizations established throughout the US, youth are being inspired to generate positive change within their own lives. Research has shown that youth who have had engaging interactions and relationships with some type of informal mentoring involved have been shown to benefit significantly and directly promote economic mobility (Ashtiani & Feliciano, 2018). Afterschool and mentorship programs lead this charge in providing engaging mentoring to students, and especially benefits those who may not have a mentor or access to any supportive figures in their lives.

Our IQP Team determined that high school was the most critical age period for the education of students in navigating their future careers and life. This is because students are old enough to understand college and the workforce, while also young enough that they are still

learning necessary skills before leaving high school. For our project, we decided to concentrate specifically on Black men aged 13-18 years old in Worcester.

Project Goal: To have the young Black men in Worcester (ages 13-18 years old) be supported in navigating the college and career pathways in culturally responsive and asset-based ways.

Project Objectives:

- 1) Research the literature on current effective support practices for Black male youth and other youth-serving programs across the country.
- 2) Investigate current youth programs in Worcester by interviewing Program Coordinators of Community-Based Organizations to curate their successful strategies, and their challenges.
- 3) Collect personal narratives of Black male individuals on their experiences in navigating their education and career pathways in order to understand common barriers to preparing our target demographic for college.
- 4) Propose a plan and mechanism for WPI to help achieve the project goal



## **CHAPTER 2. BACKGROUND**

To better understand the issues our study is discussing, background information is required. In this chapter we will first explain educational inequity, its meaning, and why it is a relevant topic today. We will then discuss essential components to furthering student success after secondary education. We will also provide information on out-of-school time programs and community centers, why they have risen to prevalence in low-income communities, and why they are important to adolescent developmental education. This will tie back into our overall goal of the study and then will lead into our methods section.

### **2.1 Causes of Educational Inequality**

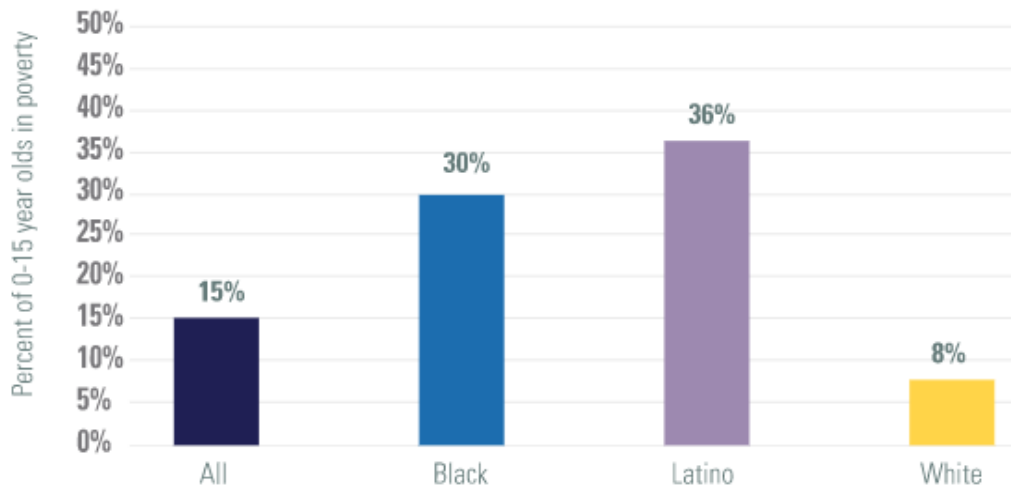
#### **2.1.1 Historical Traces**

Migration and limited education due to racial segregation have had a large impact on the divide in skills between races in the US. The US and England, two nations with large urban economic inequality, have both experienced a drop off in the skills of their college aged population. Within a study conducted on the literacy and numeracy skills of individuals of developed nations, it was found that “[l]iteracy skills are higher among 16- to 24-year-olds than among 55- to 65-year-olds in all countries except England and numeracy skills in all countries except England and the United States” (Green, Green & Pensiero, 2015). The drop off in the skills of US college aged students is due to the education being given to students in preparation for their life after post-secondary education. Schools within this nation vary drastically between communities due to the wealth and ethnic background of the residents. According to data for the 2020-2021 school year from the Massachusetts Departments of Elementary and Secondary Education, it was stated that 58.7% of the Worcester Public school (WPS) district’s student

population's first language was something other than English. Additionally, from this data it was reported that 59.7% of the WPS district's student population falls in the category of economically disadvantaged (*Selected Populations (2017-18) - Worcester (03480000)*, n.d.). In cities such as Worcester, where most students are immigrants or the children of immigrants, preparing for post-secondary success remains incredibly difficult without obtaining outside aid. Many argue that the reasoning for lower test scores for students of color and in cities is the children making up the schools are not able and not the fact that schools are unprepared. A logical argument against this statement would be that communities and schools are not organized by wealth or class, but by geographical location. While this may be technically true, the staggering number of low-income students organized within the inner-city schools of Worcester County as opposed to schools outside the city is also an overwhelming truth and further renders this argument lifeless.

### **2.1.2 Community and environment**

Black students make up a great proportion of these low-income communities and are subject to great economic disadvantages during their school years. This is especially prevalent in Massachusetts, where around 30% of Black students aged 0-15 are growing up in poverty (Figure 4).



*Figure 4. Breakdown by race of children 0-15 facing poverty in Massachusetts (Fitzgerald 2019)*

Though low-income students in the state need support, Massachusetts remains a state that does not distribute most of its state and local dollars to districts that serve their lowest-income students (Fitzgerald, 2019). Without ample finance in these schools and insufficient funds at home to afford private education or outside aid, many students have been highly disadvantaged in their education due to factors that were completely beyond their control. The community around students should be taken into consideration when considering their overall high school experience, as they spend almost all their time out of school. An example of how a community's effect on students can be examined is through the idea of community cultural wealth, which explains how the communities and surroundings of non-white people should be factored into the education of minors.

Dr. Tara J. Yosso of the University of California, Riverside, described the idea of community cultural wealth through the lens of Critical Race Theory. Critical Race Theory is the view that our society's current framework (education, laws, legal institutions) is inherently racist and in favor of the majority race (In this case, white people). Yosso explains that minority communities have a cultural "wealth" that is totaled from their aspirational, navigational, social,

linguistic, familial, and resistant capital (Yosso, 2020). Yosso also identified the work of Daniel Solórzano in determining factors that should always be considered regarding the education of students in minority. The factors are: “(1) the intercentricity of race and racism; (2) the challenge to dominant ideology; (3) the commitment to social justice; (4) the centrality of experiential knowledge; and (5) the utilization of interdisciplinary approaches” (Yosso, 2020). In the classroom, the issue of race is often not discussed past the year 1968, when the Civil Rights Act was passed; and while students are often asked about their different cultures, it is never for the purposes of education beyond surface level information about students’ heritage. Educating students on race and racism today, as well as how different cultures have helped to advance the modern world that we see today, is essential to ensuring the success of students of color. If they can see how their different cultures and people have aided in creating the modern world, rather than the biased information that they are currently receiving, they will stand a better chance of being driven to certain goals they believe they can achieve later in life.

The individuals in a youth’s surroundings can play a significant role in directly influencing the likelihood of their ascent to secondary education. A 2018 study examining youth of low-income found that living among neighbors who possess college degrees means that youth can potentially have interactions with adults who have navigated the college process and can serve to provide very helpful information. This study further noted that living in a two-parent home allows parents more time to spend with their children, enabling children to mimic and translate the parents’ education and knowledge into their own attributes to help increase their likelihood for future success (Ashtiani & Feliciano, 2018). However, for low-income or immigrant children, who are usually also first-generation college students, they do not have the same familiarity and knowledge of college available to them in their household. As a result,

children in these situations often only can learn about college during their K-12 schooling or other out-of-school time programming's.

## **2.2 State of Education**

Despite having the greatest education for students K-12 in the United States, students are not all succeeding at the same level within Worcester Public Schools (WPS). As described in section 2.12, the community of a student plays a large role in their ability to succeed in school. In Worcester, young Black men ages 13-18 need the support and encouragement from their parents, mentors, and teachers to help facilitate their educational growth. This is because Black men have historically been criminalized and dismissed in the classroom because of systemic and internalized racism. Systemic racism has been present in the current educational system since the system originated, and as a result there is internalized racism and biases which persisted throughout the educational system and continue to discourage Black male students. (Communications, n.d.) Currently, the success that our demographic is having in school is not at the same level as the students of other demographics.

The Program for International Student Assessment (PISA) is an international assessment that measures the reading, mathematics, and science literacy of 15-year-old students across different demographics. The PISA score was developed to assess the reading and writing ability of different demographics across the world. For the purposes of this study, we used demographic data regarding Massachusetts and their scores compared to the rest of the world. It was found that if Massachusetts were regarded as its own country, it would be first among participating nations. However, if only including the demographic data for Black or Latino students, Massachusetts would be placed seventh from the bottom of the 35 nations (Figure 5).

FIGURE 5

PISA reading scores by participating OECD country, all students, 2015



Figure 5. PISA Test Scores measuring students in Massachusetts with other nations (Thorson 2018)

This clearly displays a considerable gap in the educational success between Black and Non-Black high school students within Massachusetts, including Worcester. These students are not receiving the tools they require to succeed academically with solely their current schooling and home life. This is the reason why after school programs have become so deeply rooted in low-income communities, especially the African American communities. According to an article on Urban Youth studies (Woodland, *After-School Programs* 2016), researchers have argued that after-school programs are particularly qualified to assist urban young Black males since after-school programs can directly target the specific risks faced by this population. The researchers further stated that the programs offer benefits that are especially critical for urban young Black men such as providing protection from violence and additional opportunities for academic development (Woodland, *After-School Programs* 2016). After-school programs allow for children to have teachers, mentors, and other supportive older figures to interact with and learn from. Despite the added support of after school programs, Black students are still not achieving at the level of their non-Black peers throughout the state of Massachusetts and the world.

Reasoning as to why Black students have not advanced in the workforce has been the focus on finishing high school without a focus for life afterward. The high school diploma is a very powerful tool in today's world, but if more Black students cannot make strides in their college attendance and success, our demographic will continue to populate the lower end of income per household. A 2019 report from the Census Bureau on median household income reported Black Americans making the least income overall and earning on average 20% less compared with the other racial and ethnic demographics (Bureau, n.d.). Furthermore, only 63% of Black students in 2016 were able to show preparedness for college in terms of workload for classes like math and literature (The Massachusetts Education Equity Partnership, 2019). Going into higher education without proper preparation or familiarity with course work is often an immediate detriment that leads to greater difficulty with passing classes. The effect of this was shown with the amount of Black male graduates from 4-year Universities finishing on-time at a low 13.9% (NCES et. al, 2012). Many of these difficulties faced by Black male students are a direct result of systemic issues caused by the historically systemic racism. This systemic racism can be seen in the instances of several under-resourced schools which are predominantly in historically marginalized communities. In many cases this systemic racism in the classroom takes the form implicitly through racial biases as evidenced by the over-criminalization of Black boys. Without the necessary resources to adequately prepare Black male students, they will continue to struggle to overcome these systemic barriers while they are also attempting to overcome the barriers of approaching higher education. To aid in the students' chances to overcome such disparities, several different methods are being currently practiced to help provide support for Black students.

They mostly come in the form of out-of-school time programs and other related mentorship programs. There are multiple ways through which students are currently being informally mentored. These program models continue to experience success through multiple generations of students. In the next section, we plan to discuss several forms of these successful student assistance models.

## **2.3 Essential Support Components**

### **2.3.1 Social Capital**

“Social Capital” is a term used to describe the collection of resources embedded in one’s social networks, and access to social capital has different effects on whether youth enter and/or complete college. Findings from a 14-year study (Ashtiani and Feliciano, 2018) suggest that developing enduring mentoring relationships and new social resources in the higher education context may be especially crucial in facilitating degree attainment for young adults from low-income backgrounds.

Social Capital via different sources can significantly influence the educational attainment of low-income youth. One area of social capital that is especially significant for youth of color is the social capital in family contexts. The Ashtiani and Feliciano study (2018) also showed that youth who have parents with high social capital usually develop high expectations for themselves based on the academics of their parents which they strive to live up to, and this can motivate them to achieve identical upward mobility. The researchers from this 2018 study found that on the contrary, youth of color from communities of poverty find greater difficulty amassing social capital from the family context due to the struggles and obligations that affect their daily life. The study further concluded that youth of color often come from households where the parents are either busy with jobs or unavailable for other reasons, and that this can largely



influence a youth's later Post-Secondary Educational Attainment (PSE) (Ashtiani & Feliciano, 2018).

The Social capital of a mentor plays a very significant effect on the upward mobility of the youth. Students of lower income who have Important nonparental adults (VIPs) of similar social capital face greater difficulties obtaining post-secondary opportunities. Reports from a study on youth Post-Secondary Education attainment (PSE) indicate that VIPs with lower levels of educational attainment may be more inclined to advise youth to enter the occupational world and start working for a living (Chang et al., 2010). Youth during this very critical time in their adolescent development can be much more easily influenced by important figures in their lives. This study's findings support this idea and furthermore assert that the social capital of the mentor is a very significant determining factor in the likelihood of obtaining upward mobility. Additionally, the study reports that VIPs with higher educational attainment are more likely to encourage youth to focus on obtaining further education as they navigate the transition to adulthood (Chang et al., 2010). The term "Informal mentor" is used to describe an adult individual whose goal is to help spark an upward change in someone else, usually a juvenile or someone younger than themselves (Raposa et al., 2018). While informal mentors have been shown to be helpful for upward mobility, there are disproportionate results in their effectiveness towards youth of lower-income communities particularly youth of color.

### **2.3.2 Mentoring**

The most important aspect of being a mentor is the fact that any person has the capability to be a mentor for somebody else. An article by mentoring researchers and practitioners said that the most critical defining characteristics of an informal mentoring relationship are that the young person believes this person has support to offer, cares about them, and makes a positive

difference in their lives (Gowdy et al., 2020). While there may be other factors to consider which can influence the mentoring relationship such as race and diversity, an informal mentor who is passionate and dedicated to supporting their mentee because they sincerely wish to are the cases of mentoring relationships where the youth have blossomed and benefited the most. This is largely due the youth feeling that they can trust and openly confide with their informal mentor and furthermore, it is because of this comfortability which the youth feels and the personal connection which helps to promote upward social mobility for the mentee.

Informal mentoring relationships have been studied by various researchers to determine whether the long-term impact on the youth was ultimately beneficial. A study conducted on adolescent development (Chang et al., 2010) found that VIPs can be a tool in helping adolescents navigate their challenging conditions to focus on a brighter future and overcome adversity. This Chang study (2010) further noted approximately 45–85% of various adolescent samplings in the United States reported engaging in important relationships with nonparental adults or mentors. For youth of lower-income communities, informal mentors and VIPs serve as extremely necessary resources to help the students receive the assistance and attention that may not be present for them in their schools or at home. However, it is this specific population of students who are in the most need of additional assistance, such as informal mentoring, that often find greater difficulty obtaining help. The Ashtiani and Feliciano study (2018) reported that while their previous research has found that although middle-income youth are most likely than others to have mentors, low-income youth benefit more from having a mentor. This is the reason many youths from lower-income and urban communities generally tend to form bonds and supportive relationships with people close to their family or friend network.

Similarly, to VIPs and informal mentors, “natural mentors” are generally non-parental support relationships with emphasis on the intent to help foster growth and excellence in the youth. Natural mentors are the type of mentoring relationships that youth of lower-income communities are more likely to partake in. These relationships are developed out of the mentor’s personal desire to uplift the youth and a mutual connection built between the mentor and the mentee. A 2018 article studying these natural mentoring relationships (Raposa et al.) found that they are more likely to last longer and serve as a more enduring source of support for youth of lower-income than formal mentoring relationships. The Raposa article (2018) further asserted that this interaction with natural mentors predicts reduced psychological distress, as well as better academic and vocational outcomes, in samples of young adults from underrepresented racial/ethnic and socioeconomic backgrounds.

### **2.3.3 The relationship between Mentoring and Income Level**

While there may be debate on the overall impact and effect of mentoring, there has been considerable research done which suggests that youth who have engaged in informal mentoring relationships are more likely to achieve upward economic mobility than those without a mentor (Gowdy et al., 2020). A study looking at the educational attainment of youth of low income found that engaging in some form of mentorship from professionals, distinguishes those low-income youth who persist to degree completion from their counterparts who do not (Ashtiani & Feliciano, 2018). However, the impact of the mentor relationship is affected by other external factors which directly influence the relationship and the overall experience.

One of the factors that has a significant influence over the outcome of the mentoring relationship is the income level of the mentor and the mentee. A study from 2020 (Gowdy et al) focused on the different effects of informal mentoring and reported that middle-income children

generally have more resources immediately available to them than low-income children, and thus are more likely to be economically mobile than their low-income peers. These resources, or social capital, can serve as powerful tools for the youth of the middle-income and give them an incredible advantage towards achieving upward social mobility that often the youth of lower income cannot access or afford.

Youth who have an informal mentor with a similar income status to themselves have been found to benefit but to a lesser extent, and in many cases will aspire to a similar level of social capital achievement as their mentor (Gowdy et al., 2020). This is often because the informal mentor is someone who the youth might look up to or is personally inspired by, and as a result they will try to follow in their footsteps and achieve similar social capital achievements. This is like the influence that the social capital of parents and family members can have on a child's upward mobility. A student feels much more of a drive and a confidence that they can achieve their academic goals and aspirations when there is someone influential in their life who they can see has already achieved similar results.

The Gowdy study (2020) found that informal mentoring has been shown to promote some mobility for youth across demographics and income levels. However according to the same study, the presence of an informal mentor was highly predictive of upward mobility for middle-income youth, who already have greater odds for mobility based on the other resources associated with their economic status. This study further reported that “while informal mentoring has been associated with some immediate benefits like academic engagement and college graduation, for low-income youth these benefits are not strong enough or consistent enough to overcome the persistent structural barriers to mobility low-income youth face” (Gowdy et al., 2020, p.20).

A study focusing on how income affects mentoring relationships (Raposa et al., 2018) has reported increasing class-based segregation within the United States, accompanied by diminishing access to social resources and upward social mobility among poorer youth. As well as having less resources readily available to them, youth of lower income families also generally have more difficulty gaining access to an informal mentor during the critical stage in their adolescence. The study (Raposa et al., 2018) further found that it is much more common for youth from these backgrounds to mainly engage in informal mentoring with a close family relative or a natural mentor who they are familiar and comfortable with as opposed to a professional or an informal mentor.

#### **2.3.4 Afterschool and Out-of-school time Programs**

The Summer Youth Employment Program (SYEP) is an example of a program that has been shown to have a positive effect on youth. SYEPs are initiatives which focus on providing meaningful employment exposure for youth in the hopes of leading to post-secondary and career pathways (Modestino & Paulsen, 2019).

A study (Modestino & Paulsen, 2019) evaluated the effectiveness of SYEPs and found that they can serve as a powerful tool towards lessening the economic inequality among youth especially of lower income. This study further reported that SYEPs help families at or near the poverty line by providing income to youth, of which upwards of one in five contribute directly to their household's expenses.

Afterschool programs, when practiced effectively, have been shown to positively impact student achievement after high school by providing positive mentors. Researchers studying Urban education have found that providing additional time for academic tasks and homework assistance, and by utilizing creative methods to further engage youth in their education, after-

school programs both directly and indirectly complement the education of young Black males and further reduce risks associated with academic failure (Woodland, *After-School Programs* 2016).

## **CHAPTER 3. METHODOLOGY**

The goal of this project was to find effective ways to support young black men in Worcester (ages 13-18 years old) while they are navigating their college and career pathways, in culturally responsive and asset-based ways. The project's objectives included conducting background research of existing programs and using methods of data collection, primarily virtual interviews with youth-serving program coordinators and a focus group with program participants. Using the personal perspectives of the individuals involved in our study regarding their experiences with the post-secondary and out-of-school time programs, we developed a set of strategies to implement for Black youth. We accomplished our goal by completing the following Project Objectives:

1. Research the literature on current effective support practices for Black male youth and other youth-serving programs across the country.
2. Investigating current youth out-of-school time programs in Worcester by interviewing Program Coordinators of Community-Based Organizations to curate their successful strategies, and challenges
3. Collecting personal narratives of Black male individuals on their experiences in navigating their education pathways
4. Proposing a plan for WPI to help achieve the project goal

### **3.1 Researching Worcester Out-of-School Time Programs**

When we approached our initial research, we knew that gaining insight into the operations of academic youth programs would be essential to understanding how they help our demographic. For this reason, we specifically performed research by conducting interviews of program coordinators, as well as program alumni. The program coordinator is usually directly involved with the day-to-day operation of their program. This includes working to understand and adapt to the needs of youth in their specific community. By speaking to the coordinators, especially those based in Worcester, we were able to gain a better sense of the strategies they currently employ to ensure their students' success.

A common detail our team found among the program coordinator feedback was that the programs had different characteristics which they considered in their definitions of success. Many of the programs we spoke to were more focused on the college specific pathways, and success for these programs was measured with seeing their students apply and successfully enroll into college. To determine the perspectives and prioritize receiving specific information from these participant groups, we developed initial metrics which we used to help focus our collection of information from the different groups as shown in Table 3-1. We collected feedback from the coordinators and alumni using interviews while the feedback from the youth were collected using focus groups.

We conducted 14 interviews with program coordinators and one interview with a program alumnus from the 100 Males to College and ACE out-of-school time programs. We also held one focus group with two Black male youth from the YMCA Minority Achievers Teen program.



**Table 3-1. Information Collected from Certain Groups**

<b>Participant Group</b>	<b>Type of Information to Collect</b>
Program Coordinators	Student demographic, Staff/mentor diversity, Successful program practices, Biggest challenges in terms of supporting youth, What more can be done to support Black male youth
Program Alumni	Activities to Note, Program Environment, Program Impact on their Professional/Academic Skills, Mentors Involved, Greatest Takeaways
Youth Program Participants	Personal thoughts and feedback concerning program activities and operations, Effect/ impact of supportive figures, systems and Mentoring, General information about participant's academic interests and their engagement in school and Secondary education programs

### **3.1.1 Performing Research**

Several programs in Worcester teach applicable skills for post-secondary education and career readiness, and a good amount have been extremely active in the community over the last 10 years. We spoke with local Worcester programs including Worcester Education Collaborative, African Community Education, Big Brother/Big Sister, Upward Bound, Eureka Girls Inc. SySTEMic Flow and 100 Males to College. In addition, we spoke to experts in the education field, namely Dr. Mariel Novas of EdTrust and Prof. James Holly, Jr. of Wayne State University. Many of the program coordinators were responsible for more than just facilitation and program operations but were also involved with things like community outreach. We first conducted background research on the programs themselves before we interviewed the individual leaders within each program for the purpose of gaining a better understanding of how the program's missions and goals involved our demographic. This background research allowed our team to better tailor our questions template and ask questions that were most appropriate

depending on the individuals we interviewed. For example, Big Brother/Big Sister required our team to develop our questions which centered more on the individual personal mentoring relationships and how this particularly affected a young Black male student, while programs such as the YMCA had more experience answering questions which entailed a larger group of young students.

### **3.1.2 Developing Interview Questions**

An important discussion topic we brought up is concerning the coordinator's thoughts about what practices best support young Black men navigating the pathways to college and career. These questions were further edited and changed as needed to best correspond to the information and strategies we are seeking to pull from each program coordinator. While we understood the coordinator may not have all the information we are looking for regarding filling our gaps in knowledge from our background literature research, we found that the coordinators were able to provide additional insight into their specific program's goals, the overall vision, as well as other helpful resources, and sometimes additional individuals to contact for more information. The program coordinator interviews were a large portion of our project, as we continued to edit our questions and refine the type of information we sought to receive from each specific program coordinator.

We received IRB approval for 2 different procedures due to our different audiences - adults (program coordinators, alumni, education experts) and youth (program participants) who are minors. The interview with the adults were recorded through Zoom upon the interviewee's permission. For the youth, signed parental consent was required, and video was not recorded and names on Zoom were changed or deleted to keep anonymity. The youth were also allowed to keep their video off and could use the chat feature to type in responses if they desired. The

program coordinator was also present with the youth during the focus group for added safeguard.

### **3.1.3 Interviews with Coordinators**

We structured the interviews as a one-on-one conversation, where one team member facilitated the conversations and guided the questions, and the other member took down notes. The main topics we discussed during the interviews were regarding the program's overall population, logistics, and performances in terms of supporting students according to the program coordinator. Researchers found interviews to serve as an effective method for better understanding which program aspects are especially favorable and useful, or for the contrary in identifying the program's lack in performance quality (Seijas et al., 2018). Due to COVID-19 restricting our access to actual community organizations, we conducted interviews over Zoom. We tried to develop questions that would allow the program coordinators to share their personal thoughts and feelings about how their program was currently serving their participants, more specifically their Black male population. Some examples of the questions we asked were:

- A. How do you ensure that each student receives necessary attention?*
- B. What are the biggest challenges of these types of programs in supporting your students/youth?*
- C. What do you define as success in terms of supporting black male students ages 13-18?*

We conducted a total of 14 interviews with program coordinators and other individuals with the experience and knowledge of working with the out-of-school time programs and the Worcester Black male youth population specifically. The interviews were 25-30 minutes and, with permission from the interviewee, were also video and audio recorded. Our team replayed the interview recordings several times to further collect information that may have been missed during the interviews as part of our analysis of the coordinators' feedback.

### 3.1.4 Interviews with Alumni

We organized interviews with alumni from some of the available programs, as a case study, due to the possible limited number of current program participants for this study. A case study usually involves an in-depth analysis of a group in social science research (Crowe et al., 2011). We wanted to get an accurate depiction of the experiences of Black men who were able to receive the aid of Worcester community programs, and how they personally felt about the programs they were involved in. With the firsthand account of students who were previously involved in a particular program, it allowed our group to connect the plans that the programs intended (which we learned about through our interviews with coordinators) to the actual effect on the students involved. We tried to develop questions that would give us the closest understanding to how the alumni personally felt supported by the out-of-school time programming's they attended. We asked questions like:

- A. *What aspects of the program do you feel helped you specifically? (Feel free to give a specific example)*
- B. *What do you think was missing or could be improved? What would you change about your experience, given the ability to?*
- C. *How do you believe the program you attended helped develop you as a professional?*
- D. *What is your academic story? (Classes taken, Mentors involved, Successes and Failures)*

We conducted an interview with a single alumnus which was recorded over Zoom with the alumni's permission, and the duration and analysis of the alumni interviews was similar with those of the program coordinators. More exact examples of the questions we asked are referenced in Appendix C.

### **3.1.5 Focus Groups with Youth Participants**

We sought to obtain information regarding the Secondary education programs from the perspectives of the youth participants. We achieved this by organizing a focus group in partnership with the YMCA Central Branch's STEAM Achievers youth program. A virtual focus group was an ideal method for gathering our research because conducting research involving youth is a very delicate study subject, and as a result there were many protocols and precautions put in place which ensured protection for this vulnerable population. Although our project team would have liked to be able to speak to a larger focus group of youth participants, there were many limitations and restrictions, including the transition to remote correspondences in the COVID-19 environment. In the end, our team was satisfied with being able to virtually converse and talk to the few students who were interested in participating.

The YMCA focus group consisted of 2 young Black males, where our team asked questions and whichever student wished to respond had the opportunity to do so. We were able to ask the students about how they felt about the YMCA program activities and the support systems they had in their lives. Although it was a challenge to fully engage and interact with the students due to internet connection and audio issues, the youth were eager to respond to our questions and tried their best to share their thoughts and perspectives with our team. The focus group was completely virtual and conducted over a Zoom call, and we also always had the staff from the YMCA program present to help facilitate and to oversee the focus group. Additionally, the focus group questions were constructed with the intention of solely obtaining opinions and comments from the students about their educational and academic experiences without any possibility of collecting any potentially identifying information about themselves. The feedback received from the focus group helped our team better understand the several outside factors which continue to affect the Black male youth of Worcester and may influence their academic

journeys. We also got a better understanding of how confident and/or prepared they felt while navigating and preparing for their future college pathways. For an example of questions which we utilized for the focus group, please reference Appendix D.

### **3.2 Identifying Strategies and Best Practices**

To process the interviewee responses into effective support practices, as well as identify specifically how each program serves our demographic, we searched for similar responses between different interviewees. When doing this, we made sure to consider that coordinators, alumni, and current students working for the same program would already have similar responses. Once the similar responses were noted, we were able to generalize these responses into key strategies to ensure that our demographic was supported in navigating their college and career pathways, and these results are in Section 4.1.

By studying the different program operations, as well as recording interviewees thoughts on the state of education for Black male students, we were able to highlight overall program areas of weakness in terms of assisting our demographic of study. With all the collected data, we were able to trace common issues or areas of improvement for supporting our targeted demographic.

### **3.3 Developing Our Recommendations**

By prioritizing our attention on the topics that the three groups mutually discussed as being especially important, our team was able to determine the practices which positively and effectively uplift Black male youth throughout their college navigation process. Building our recommendations based off the feedback and perspectives of different individuals allowed our team to structure our recommendations to specifically respond to these areas of discussion which

all the groups jointly regarded as essential. We also spoke with WPI's Office of Multicultural Affairs to get a better idea of how we can use WPI resources to serve the Worcester Community. Using information gathered from our multiple conversations different individuals of note in the community and nationally, we recommended a community service program through which WPI could support young black men in Worcester.

## **CHAPTER 4. FINDINGS**

The goal of our project was to study and analyze the post-secondary education and career preparedness programs in the Worcester Community, along with other successful youth programs, and to utilize this information to develop strategies to help improve post-secondary education and career preparedness for Black male students aged 13-18 in Worcester. This chapter is split up into four sections: Key strategies practiced, Areas which need to be prioritized, Other comments and remarks, and then a Summary of the chapter discussing our main findings.

### **4.1 Key Strategies Practiced**

All the program coordinators had positive feedback and comments to share about their programs, but they also did not sugarcoat any details about any areas or aspects of the program where they believe needs to be prioritized, especially to be better supportive of Black male youth. Additionally, both the current and alumni program participants were very transparent and honest about how effective they felt the program was from their personal experience. We analyzed the feedback from all the different groups to find shared strategies and practices considered particularly effective for the program, and they are follows:

- **Early exposure and conversations about career pathways**
- **Actively engaging students**
- **Having a supportive mentor figure**
- **Sense of Community and brotherhood**

#### **4.1.1 Exposure to careers and Work experience**



There is evidence that immersing students with real life career experience while they are still in high school has positive results. Providing students, the opportunity to interact with and experience real world career options allows them to build a stronger idea for themselves of what they personally are interested in and could possibly want to pursue. Additionally, it allows students to understand early that college is not the only pathway available to students and to encourage students to seek out those other opportunities that align with their interests. We received many responses during our interviews with program coordinators which reinforced the significance of early career and pathways exposure for the youth. Our research into the literature has also reiterated this importance of giving early technical experience to students. For students of color and youth of lower-income communities, this early technical experience has proven to be particularly beneficial. Results of programs, such as the Boston Summer Youth Employment Program (SYEP), (Modestino & Paulsen, 2019), have shown that giving youth these early experiences can help shape their future aspirations, whether it be to complete high school, obtain career training, or to enroll in college. For disadvantaged youth, programs like SYEPs can help bolster the student's professional networks as well as contribute to developing their critical professional or 21st century skills. (Spievack, 2019) This early career experience has been extremely important for many students' college navigation, especially for those from low-income communities who do not have the resources at home or in their local community. The early exposure allows the students to immerse themselves directly in technical and career environments to help them begin thinking and deliberating about what their aspirations and future pathways could be.

We asked several program coordinators and a program alumnus a variation of this question: *What are the best practices that your program has to support students making*

*decisions about college and possible career paths?*

We received similar feedback from all groups. Some of the programs we interviewed have a requirement that the students must take college classes or obtain some form of the college experience during their time in the program. Almost all the coordinators of these programs agreed that giving the students this experience before they graduate high school gives them an advantage and helps them to be better prepared over their peers. The program coordinator, Drew Weymouth with WPS Innovation Pathways Program said:

“As a result of the early exposure, along with developing skills ahead of their peers, they [the students] can use their firsthand experience to help them figure out what they actually like doing and might want to pursue as a career.”

Along with taking technical classes and early experiences with college courses, many of these programs also offered their students internships and other training opportunities that would give them additional job experience. This emphasis on boosting the technical aptitude and experience of their students is one of the most crucial qualities that the coordinators greatly attributed to their personal definitions of success for their students, which for many of the coordinators was seeing their students continue to college.

#### **4.1.2 Actively Engaging students**

Focusing on the methods used for engagement is very important. Students are already required to put a lot of time and focus into their personal education, so getting them to engage in an afterschool setting is an obstacle Worcester programs have had to handle long before COVID-19 made education virtual. Students benefit the most from learning approaches that are more interactive, as keeping them actively engaged increases their focus on the topic or activity. Worcester community programs have worked to actively engage students by tightening their

student/faculty ratio, as well as following a holistic learning approach when educating their students.

Gabrielle Hamel, an Interview/Match Specialist for the Worcester Branch of Big Brothers/ Big Sisters (BBBS), explained that they use a 1-1 ratio model to ensure that each staff member can help students create personalized goals for themselves to work towards, whether it be in their education or for interpersonal development. Additionally, having an easily accessible point of contact for each student allows for easier communication between the families of students and BBBS. A 1-1 ratio model would be practiced by more programs nationally if possible, but limitations in funding and available staff keeps programs like this from growing. Hamel also expressed that there was a waitlist process with getting students into BBBS based on their need, a process that can take up to 2 years for some students who apply. A 1-1 ratio does not need to be applied in every situation, but the success of BBBS shows that having a near equal ratio of students to educator helps students engage better with their educator and increases topics being learned. Additionally, along with having smaller ratios of teachers to students, we found that youth interact more with learning materials that are of interest to them. We also conducted a youth focus group with two Black male youth from the YMCA Greendale Family Branch, the aspects of the program which the youth stated they enjoyed and interacted with the most were the hands-on STEM-related activities such as their experiences with hacking and coding.

Taking a holistic approach to learning further helps ensure students remain engaged and continue to think about information they have learned after it is introduced to them. a Holistic Learning Approach “seeks to fully activate all aspects of the learner’s personality (intellect, emotions, imagination, body) for more effective and comprehensive learning” (IRE). The emotions of students and their wellbeing is taken more into account with this holistic method of

teaching and learning. Educators incorporate holistic learning by practicing teaching methods geared towards exploring student interests, as well as topics which can directly benefit them. This, in turn, naturally gets students involved with the content that they are being presented with, along with taking the time to explain how students are directly affected by what is being taught.

#### **4.1.3 Having a supportive mentor figure**

This section presents our findings from the analysis of our interviews and research which both support the idea that interacting with a mentoring relationship promotes greater educational attainment for youth. Having the mentor specifically was not the sole deciding factor of the youth's educational attainment, but rather the support-relationship built between mentor and mentee was most impactful. Big Brothers/ Big Sisters (BBBS) practices a 1-1 mentor-mentee relationship at their Central Mass/MetroWest Center to ensure that each student receives necessary attention from their mentor. Students and mentors have the time to build a personal relationship, which in turn creates a better learning environment for the students involved. We interviewed an alumnus of the 100 Males to college and the ACE programs, which are both Worcester Community out-of-school time programs. The alumni told our team that throughout their high school tenure the only support they were able to get outside of the classroom was at their out-of-school time programs. The alumni also noted that they had a mentor who they described as someone who significantly supported them while they were navigating their future career pathways.

One of the most standout aspects of the alumni's relationship with their mentor was the fact that they were very comfortable with their mentor and they felt their mentor cared about them and supported their success. Research (Gowdy et al., 2020) has shown that the most central components of an effective mentoring relationship revolve around a feeling of trust and support

felt by the mentee. The alumni said that they believed they could “count on their mentor for anything,” and they also noted that their mentor would reach out consistently and check in and try to support them. The reason that the alumni had such a positive experience with their mentor was because their mentor was invested and actively dedicated, genuinely interested in supporting and helping the alumni achieve their success. Furthermore, the alumni said their mentor personally reached out to them and kept in close contact which emphasized their desire to uplift their mentee, and this was understood by the alumni. This feedback from the alumni was particularly significant since the mentor was of a different cultural background and race than the alumni, the alumni being a young Black man and their mentor being a white man. Despite their differences, the fact that the mentor still went above and beyond to show their dedication to assisting the alumni was most critical to their mentoring relationship and ensured the alumni felt cared for and could trust their mentor.

When we conducted a focus group with two Black male youth participants from the YMCA Greendale Family Branch to ask them about their educational experience. The focus group was conducted over Zoom, so the students were slightly less interested, and it was difficult to truly engage and connect with them. Both the students shared an overall dissatisfaction with their current state of learning due to the adjustment to remote learning. One student noted that because of the COVID-19 pandemic their experience with the program is “mainly just zoom activities,” and also that in both their school classes and the out-of-school time program that “it was much more difficult to stay focused.” When we later asked them if they had any recognizable support systems or mentor-like figures, they were not able to name any. This was a detail that greatly stuck out to our project team, especially because the students also informed us that they felt like they were unable to ask for help in their school classes, and when they did ask

for help, the support was very minimal.

The lack of a mentor figure or some form of support system for these students is significantly more impactful now because this transition to remote learning has left a lot of students feeling left behind and neglected. This was also shown in the fact that the youth said they have not had many conversations about college, and the only times they had seen or heard anything relating to college was through TV or radio. However, the youth already formed an idea of some of their potential future interests, a few which would require a college education. One youth stated that they wanted to become a marine biologist because they wanted to one day be able to say, “I am a Black man and I made it.”. While these youth did not name a specific mentor who supported them, they noted that the program staff were supportive, and they felt they were in an environment where they felt comfortable and cared for.

#### **4.1.4 Sense of Community and Brotherhood**

A very important program aspect which was emphasized in our coordinator interviews was how imperative it was for the students to have an environment centered around trust and to serve as a comfortable space for youth participants, especially young men, to feel safe in. Black male youth are a sensitive population, and many do not feel comfortable having conversations about their futures because they do not have a safe space where they can comfortably communicate what may be on their minds. Many Black male youths may also feel more inclined to present a sturdy strong facade and not want to open and discuss their personal feelings, which is something that is exceptionally common among men of color. (Banjoko, 2011) There are not many spaces solely for young men of color to feel supported and uplifted by older male educators and leaders who also look like them or are from the same communities as them. We spoke to the program coordinators associated with 100 Males to College, and they said that

having a sense of connectivity, trust and closeness in the program was exceptionally transformative. The students felt empowered when they are surrounded by similar situated individuals, especially when they are guided by older male mentor figures who they can also more easily relate with. Not only was trust pivotal in this brotherhood community, but it also helped build unity and fostered growth among the young men because they felt comfortable confiding in each other.

Along with out-of-school time programs, the significance of having a community for Black males has been echoed and shown through various other national programs and organizations. Historically Black Colleges and Universities (HBCUs) have been researched to better understand the influence the environment has on the Black male students. A study on HBCUs (Palmer et al., 2010) found that Black male students believe the racial homogeneity of the university to be particularly encouraging, motivational, and an important factor in promoting their success.

The alumni we spoke with from both the 100 Males to College and ACE programs also noted the positive overall impact and benefits of being immersed in a trusted community. The best program aspect to the alumni was being able to talk to individuals who they could easily relate and connect to which emphasized the significance of having a sense of community. They told our team that despite their different academic interests, the program participants felt “connected by their many cultural similarities and backgrounds.”

Although for the alumni, his relatability with his mentor did not cause any significant issues, our team found to have a successful program where Black male youth feel included, there needs to be the community representation inside the program, as represented by the staff and mentor figures.

## **4.2 Areas of Improvement For Supporting Black Male Youth**

When analyzing the information from the interviews, we found a recurring topic of discussion was that individuals believed the programs could be improved in specific categories. We analyzed the comments and feedback from primarily the program coordinators, but we also received comments from the youth and alumni groups as well. This section includes all the comments which collectively describes the areas of possible improvements.

The major topic of discussion that was critical throughout all the interviews was talking about the COVID-19 pandemic and the overall effect on the programs and the students. Unanimous opinion is that COVID-19 has complicated many of the programs' operations and in some cases made certain aspects extremely difficult to achieve. COVID-19 has affected almost every individual in the country in some way. However, many of our interviews have echoed the fact that it is the vulnerable populations, the individuals who were already struggling to obtain sustainable opportunities for success, who have suffered and are still suffering the most. For students of lower-income and historically disenfranchised and marginalized communities, moving to remote learning has introduced more inconveniences and roadblocks than before the COVID-19 pandemic. While the feedback from our interviews addressed many of the programs' concerns regarding continuing operations with COVID-19, our team found that many of the comments highlighted the weaknesses which were already existent but were made more apparent and thus were brought more into the spotlight. The areas for improvement our team found were:

- **Issues and impacts on students which COVID-19 highlighted**
- **Increasing staff diversity**
- **Student Engagement and participation has dropped significantly**



#### **4.2.1 Impacts on students and other issues which COVID-19 highlighted**

The most significant obstacle that all the program coordinators have encountered is the overall impact due to the COVID-19 virus. While the remote learning transition has ensured students were safe and continuing their education comfortably in their homes, there were other factors that were not being considered regarding all populations of students. Historically marginalized communities, which are generally also of lower income, have long been deprived and neglected of the resources needed to attain equitable opportunities for high-quality education. While COVID-19 emphasized the need for reliable and accessible internet to access remote learning, this issue has long existed for these low-income communities before the pandemic (“Y is stem still so white”, STEM Ecosystems, 2020).

The COVID-19 crisis emphasized and brought to light the flaws in the US education system, and then as a result, changes were implemented around the country; changes which were finally brought to the historically marginalized and underrepresented communities though they had made demands for these changes to be made long before the pandemic. Reliable and consistent internet access is something that all students should have without having to struggle or suffer for it. It is a necessity especially now for students to have electronic devices and reliable internet access for remote learning, and it speaks volumes that it required a global pandemic to expose these weaknesses which have been inherent in the system (*The Education Divide: Inequity in the Age of COVID-19*, n.d.). Our educational system has historically not been adaptable or flexible to the needs of what the youth from marginalized communities have, and this same education system has been designed without respect to the most vulnerable youth populations in mind. Virtual learning further complicated and created more burdens for students who were already vulnerable or struggling in the classroom. Additionally, students who moved to a new school and were now learning remotely faced similar difficulties as their first

interaction with the other students and teachers had to be completely virtual, which made building new connections even more difficult.

The program coordinator of Eureka Girls Inc. (Yaa Poku) told our team that COVID-19 times have overwhelmingly enhanced the stress felt by high school students and [their] program staff collectively. Students spend the first half of their day in front of their computer for remote classes and then later log back into Zoom to participate in their remote program activities. Almost every program coordinator we interviewed reported that their students are struggling to stay attentive and engaged in their virtual programming's. The 100 Males to College program requires their students to take college courses along with their regular school classes and any after school programming. The program coordinators informed our team that during COVID-19, while the college classes are going successfully for the students, the virtual afterschool programming has "not been well attended and are minimally effective." The program coordinators said this is because, because of going fully virtual, their program participants are "missing the heart." The Brotherhood aspect was pivotal for the 100 Males to College program participants, and the feeling of being a part of a trusted community was where the students genuinely thrived.

#### **4.2.2 Increasing staff and mentor diversity**

One of the most brought up topics throughout the interviews was the overall influence of diversity for mentoring with the youth. Almost all the program coordinators we interviewed reiterated the fact that their program's participants were diverse because they were closely representative of the Worcester community. On the flip side, almost every program coordinator brought up the fact that the lack of diversity and cultural representation among their staff and mentors has been a long-standing need. Although the Worcester community is very diverse and

the program participants were evidence of this, many of the programs' staff were generally white and not native to the Worcester area.

Gabbrielle Hamel, an Interview/Match Support Specialist at Big Brothers Big Sisters (BBBS) explained that staff diversity was an ongoing challenge experienced by BBBS statewide. She stated that most students in the program have a white mentor, despite the children being primarily Hispanic and black. This diversity gap among mentors makes it more difficult for the program participants to build a connection with their mentor because they cannot relate to their experiences nor can they relate to the individuals culturally.

Mariel Novas, Ed.L.D, used her own story as an educator to better explain this issue in public schools and after-school programming. She initially became an educator in Dorchester, MA, minutes from her childhood home in Roxbury, to teach mathematics to English secondary-language (ESL) students who recently immigrated to the US from Latin America and the Caribbean.

"When I first came into teaching," she explained, "I was told... 'don't worry, those kids will fail the MCAS (Massachusetts Comprehensive Assessment System Exam) anyway".

She expressed that this frustrated her, as she felt her students were being limited by educators who did not believe their students could achieve at the same level as their peers. Without educators and mentors who understand how to view their students' cultural capital, black male students are continuously being discouraged from continuing their education. Black men have historically had to and continue to suffer with learning in the U.S. schools because of the discouragement and biases that they face in the education system.

People of color have long been victim to hostile work environments and unmanageable pay for the work that they do. Teachers of color often find themselves in all white spaces and

must manage biases present in their fellow educators, along with attempting to build a relationship with their students. Students of color who receive higher education are also usually pushed by their families into careers in medicine, technology, and law to ensure that they can enter careers with guaranteed significant pay. Jessica Sanon, MBA, (SySTEMic Flow) agreed that volunteers of color have been difficult to recruit. This has been due to the time and resources involved to maintain volunteer support. Mentor participants would have to be in the position to be able to give time for free to mentor as if another job for up to 10 hours or more per month.

A way that Sanon has worked around this has been the use of student interns as faculty in her organization (SySTEMic Flow). Student interns run the program from summer to summer. The students, being of a diverse background, were able to better create learning experiences catered to students like them. Drew Weymouth, Director of the Worcester Public Schools Innovation Pathways Program (WPS IPP), uses a similar method - recruiting volunteers for short amounts of time and taking on the work of managing the program himself. The WPS IPP already has high school students intern around the city at businesses relating to their trades, so it was not difficult to recruit interns in education to aid with the continuation of the WPS IPP. Through these internships, student interns receive multiple opportunities to work under professionals, rather than direct mentorship.

#### **4.2.3 Student Engagement and participation has dropped significantly**

Every coordinator we spoke with discussed their perspectives on the various ways in which the COVID-19 pandemic has impacted the delivery of their program operations. Regarding the overall student engagement, almost all program coordinators reported a significant drop in attendance/participation in comparison to the years prior to the pandemic. Since many schools switched over to remote learning and students were learning from home, many programs

also moved to remote operations. COVID-19 generally had negative impacts for students and out-of-school time programs in terms of things like learning quality and program facilitation. However, there are other important aspects involved in the student and program connection that have been made drastically more difficult to achieve. General opinions across the interviews when discussing remote learning are unanimously in disfavor. This opinion was especially with respect to the actual learning element which was critical and unfortunately missing for many students. Not only do students feel like they are not truly learning but they also report finding great difficulty staying engaged and paying attention while they are in virtual class. While the transition to remote learning was introduced at an unexpected time, there were students who had living situations which made remote learning more of an obstacle than it already was. Many students from the community have responsibilities in their household which prevent them from having the time available to fully engage and immerse with their education. Additionally, the program coordinators have noted that in 2021 their program has seen significantly lower numbers of program attendance, which they credited to the stress and fatigue that many students are experiencing as well as other factors which COVID-19 had contributed to.

### **4.3 Other comments and remarks**

Our team analyzed the feedback from our interviews and discovered a pattern of comments proposing additional actions which should and must be taken to support young Black male students more effectively. Many of this feedback came from the interviews with program coordinators when we asked them to respond to a question of the form: *What more do you think can be done (locally, citywide, nationally) to achieve success [for Black male youth]?* We used this question format because we wanted to better understand from the viewpoint of these program coordinators, what the solution is when their best strategies are not efficiently or

effectively reaching their students. This section is categorized by the comments we received which we also found were discussed and supported by the outside research we conducted about better supporting Black male youth.

#### **4.3.1 Greater cooperation between community programs**

Our research into out-of-school time programs had found similar results of student growth stemming from the individual programs working separately. Many of the program coordinators noted that this is a cause for inefficiency and have stated that one of the most effective ways we can better support more students is to join efforts and work together with specific intention behind their individual program operations. If Worcester's different programs are more connected with each other, then they will more effectively be able to target their programming's to specifically assist the students who are in the most need of support.

A webinar discussing the lack of diversity in STEM (*Y is stem still so white*, STEM Ecosystems, 2020) talked about an idea of a more connected network of community out-of-school time programs, and one of the speakers said:

“What are our expectations, what do we want the kids to do? We should be intentionally doing things (operating the programs) differently rather than unintentionally.”

This idea was further emphasized by another webinar discussion (*The Education Divide: Inequity in the Age of COVID-19*, n.d.), in which one of the panelists described the necessary actions which must be taken as a direct callout to education leaders:

“Do not do this alone, stop competing, lock arms with [the] government and businesses to get a national investment in education that the states and communities who need it can actually put toward fixing the low-income schools, and under resourced colleges and universities, on the basis of no longer wasting money by putting funds into communities already thriving.”

### **4.3.2 More parent involvement**

Many of our interviewees and research have described the significance of parents being active during the post-secondary education and career navigation process. The program coordinator of SySTEMic Flow explained that it is imperative to involve more parents, so that they can be informed of the different programs and benefits available for their child to prepare for their education beyond high school. She further explained that it is imperative for students to be made aware of how their family can help them financially navigate college if that is their choice.

Jennifer Davis Carey, the Executive Director of the Worcester Education Collaborative, stated that organizations need to be reaching out to the parents more, especially now since it is easier than ever to get in contact with parents with Zoom and Google classroom being widespread and commonly used by students. Additionally, this engagement with parents and family's needs to happen using more meaningful and productive methods, such as Karen Mapp's "*Dual Capacity-Building Framework for Family-School Partnerships*." The framework Mapp designed was focused on providing guidance at different stakeholder levels to better support children throughout their academic journey and ensure that students with the most prevalent needs are receiving the appropriate assistance and resources.

## **4.4 Findings summary**

The interview feedback demonstrated that many of the practices currently used by the Worcester out-of-school time programs are effective, but they can be improved to better serve the Black male youth populations. These findings came directly from our interviews with program coordinators, our interview with a program alumnus, and the youth focus group we

conducted. Most of our findings came because of the interviews with program coordinators, so there was the possibility of response bias to be considered, although it was likely minimized as the program's weaknesses and strengths both came from them. After reviewing the findings, we summarized the best practices and areas of improvement in terms of adequately serving Black male youth students.

#### **4.4.1 Effective practices:**

- Programs which gave their youth **Early career and college exposure** have reported a significant increase in the number of their participants who go on to college and further academic growth and interest within the program and the classroom.
- Youth who are involved with some form of a **supportive mentor figure** throughout navigating their future pathways feel better prepared and are more likely to pursue a college or post-secondary education.
- Programs where the youth feel they are a part of a **trusted community and brotherhood** were shown to help the youth feel more comfortable engaging and interacting with the program activities and helped foster a sense of unity and camaraderie among the program participants.

#### **4.4.2 Areas which need improvement:**

- The **lack of mentor and staff diversity** within programs does not correlate with the representation of the students shown in the Worcester community which can make connecting with the students more difficult
- **There needs to be a stronger connection and communication** with parents and schools/ out-of-school time programs, **throughout** the youth's college navigation process, to ensure that families are receiving the necessary resources and adequate assistance.
- Worcester out-of-school time **programs need to be united and work more together**. To maximize the effectiveness for the Worcester youth, programs need to operate together with clear intentions as to how they wish to serve their students and what specific support they are going to provide.

The deliverables we developed in the next chapter are aimed at addressing the areas of improvements while also incorporating the effective practices we found to provide adequate



support Worcester's Black male youth in asset-based and culturally sustaining ways.

## **CHAPTER 5. RECOMMENDATION FOR A WPI PROGRAM TO SUPPORT YOUNG BLACK MEN IN WORCESTER**

As a project end deliverable, the project team developed a proposed structure for a community outreach project, **Closing the Gap**. This group structure entails involving student volunteers from WPI and youth who are currently involved in out-of-school time programs. Information relating to the Volunteers, Meetings, Mentors and Mentees, along with what our team and the WPI Office of Multicultural Affairs believe are essentials to running such a program are described in the next section.

### **5.1 Closing the Gap: Program structure**

The project team developed an informational pamphlet to advertise to different organizations and offices on campus, for the purposes of finding assistance in implementing a community outreach project on campus. The pamphlet is displayed in Figure 6 and again in Appendix E).



Figure 6. Closing the Gap Informational Pamphlet

The following sections provide a further explanation of the contents of the informational pamphlet being provided.

### **5.1.1 Volunteers**

The project team would look to recruit volunteers for the program from WPI's Black male student population. These students would most likely be recruited via WPI's Black Student Union, African Students Association, and National Society of Black Engineers. The lack of Black male mentors/educators was one of the most common traits viewed among most of the local community organizations studied for the purposes of this IQP. We hope that our college-aged mentors within WPI will be able to use their own experiences as a Black male student to assist their younger counterparts with navigating the college process in culturally appropriate and asset-based ways. All male-identifying students are, of course, welcome to be a part of the program. According to the WPI Dashboard on enrollment as of October 2020, there are 92 full-time Black/African American students, which is 2.8% of the entire full-time male student population at WPI. As there is not an abundance of Black male students at the school, we also hope to recruit volunteers from WPI's Alumni. This program will also serve to build stronger bonds among WPI's Black Male students as they commune to take part in this event.

### **5.1.2 Worcester Black male youth**

We would like to emphasize that the Black male students and other male students of color involved with this program attend Worcester Public Schools and are already in existing Worcester out-of-school time programs. We feel that we would be able to provide them a mentor focused on their long term academic and career endeavors. They will receive someone to bond and relate with over issues faced in their high school and college journey, as well as early exposure to cultural education that usually happens in college.

### **5.1.3 Program Engagement Activities**

The physical engagement with students will consist of two different 2-hour sessions per month during the regular operating hours of community programs. One of the monthly meetings will be focused on academics between students and mentors. These meetings will primarily focus on preparation for college and will include topics such as: College resume building, researching career paths and different schooling/certifications that can move you along that path, and understanding the College Board, how to sign up for and take/retake the SAT, WPI students' career paths in STEM, as well as general math and science help. These topics are important for ensuring students can be better prepared for the college process, however it is imperative that they are receiving this information from an older Black male figure such as a Black male WPI student. Often these materials are provided in schools and out-of-school time programs through the context of a "white lens." **Closing the Gap** would allow Black male youth to learn these topics and understand their pathways under the context of them and their mentor figures identifying as young Black men. Furthermore, the WPI volunteers can talk to them about why/why not they should go to college, the ways college is different from high school, and other obstacles which they can expect as the Black male youth begin to make their own transition to college. There will also be 1 monthly "activity" meeting, where students are introduced to topics such as Global Issues, Black History, and different Black Cultures all over the world. There will also be one-on-one mentoring time between students and mentors involved.

### **5.1.4 Essential Skills for Mentors**

We believe that certain "essential skills" should be present in our mentors to ensure students are being educated adequately. The first of these skills is empathy. We define empathy as being passionate and dedicated to uplifting and supporting youth, as well as understanding

that students are of many different backgrounds and identities, and that must be recognized. Empathy allows for mentors and mentees to better relate, which in turn benefits the student being taught. Mentors must be aware of the cultural differences that may be present in their student, and act accordingly. The second of these skills is knowledge. We define knowledge as recognizing the effects of systemic racism on black students, and students of color in the classroom. Students should be knowledgeable about the shared experiences of being a black high schooler in the US. Mentors must also be keeping a cultural lens in education (i.e., understanding how kids learn differently, as well as what might affect their learning, custom, or mannerisms). The final skill is reliability. We define reliability as being able to commit the time and effort for the students involved. Mentors must be able to consistently show their empathy and understanding. We hoped to mitigate this issue by keeping the program down to 4 hours per month.

### **5.1.5 Costs of Operations**

Along with recommending the program structure, our team also considered the likely fees and costs for integrating Closing the Gap on campus. We initially hoped that costs would be minimal, but we realized that there may be other factors to consider which can be costly. One of the most expensive costs to consider would be the transportation from campus to the program and then back to campus for WPI volunteers. To mitigate this cost an outside party/organization could provide this transportation method, or the WPI Community Service Van might be a possibility. Additionally, there could be an organized plan where transportation could be provided by the out-of-school time program with vans to make a stop at WPI.

Another expense of operating Closing the Gap that potentially that could be costly is the

compensation for any staff involved. Any faculty or staff member who performs extra work outside of their regular job position must be compensated for their involvement in the program. This is especially important for any staff member who becomes the individual in charge of operating Closing the Gap and keeping the program running.

Other costs include the expenses involved with securing and supplying the youth participants with any required resources and supplies they would need for the program. This can include any access to technology or software which are required to fully engage with the program, especially the STEM related activities. Another cost to consider is the expenses involved with allowing the WPI volunteers to participate with the out-of-school time programs. Volunteers should do diversity training and will need background checks to work with minors. Our team determined that to fully operate Closing the Gap, these training sessions would have to be considered, and any costs required to prepare the WPI volunteers would have to be covered prior to working with the youth.

### **5.1.6 Sustainability**

We developed recommended options that describe how WPI can implement Closing the Gap and keep the program structure sustained after our team graduates. One of the methods for this is by utilizing Student-run Organizations. The benefits of utilizing a student-run organization are that this ensures that there can be a continuous group of students involved in Closing the Gap's operations. Additionally, the WPI volunteers can also be pulled from the general student body and organizations like Greek life. One of the drawbacks of using a Student Organization however is that if there is ever a lack of student interest or involvement, then the program's operations would end.

The other method for operation we recommended is by utilizing faculty-driven

Department/Offices. This would ensure that a compensated faculty member would be in charge and would be recruiting students and others to aid in running the program. This would allow for Closing the Gap to be a permanent community service opportunity on campus. It would add to the cost, however, because the faculty/staff member would require considerably more compensation for their services to the project.

## **5.2 Conclusion**

To further serve and support the young Black men (ages 13-18 years old) in Worcester throughout their navigation of College and career pathways, we produced a single deliverable in the form of a program structure recommended for WPI. The structure has been developed using the most critical findings we discovered across all our interviews and research. By delivering this structure to WPI, we hope the structure can be implemented by either a student-run organization on-campus or by a faculty-run department/office.

In conclusion, out-of-school time programs provide substantial support and assistance to youth of Worcester by providing mentoring, community, and other resources which are crucial for youth development. These programs often play a significant role in fostering and preparing youth for college and we wanted to understand how influential the methods they currently use are at achieving this and discover any areas which were lacking in terms of serving Black male youth. The goal of our project was examining and proposing methods to adequately support the young Black men in Worcester (ages 13-18 years old) in navigating their college and career pathways in culturally responsive and asset-based ways.



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# APPENDICES

## Appendix A. Interview Questions Template

Basic Introductory Questions (Questions to establish friendliness and help ease the interviewee in engaging in the conversation. These types of questions were used for all the groups.)

1. What is your name?
2. How long have you worked/lived in Worcester?
3. Can you tell us a little bit about your situation when you started/stopped attending this program (Students/Alumni)?
4. How long have you been participating with this program?
5. How did you discover this program or organization?

## Appendix B. Coordinator Interview Questions

1. Tell us about your history with this program? What your role have you performed, and how have you worked with students)
2. Describe the students/youth you work with.
3. What are the goals of the program? How do you measure whether those goals have been met?
4. If you were to train a new volunteer for your program, what skills do you think are necessary for working with students in the Worcester community?
5. How do you ensure that each student receives necessary attention?
6. What are the biggest challenges of these types of programs in supporting your students/youth?
7. What are best practices that your program must support students making decisions about college and possible career paths?
8. What do you define as success in terms of supporting black male students ages 13-18?

9. What more do you think can be done (locally, citywide, nationally) to achieve this success?
10. Do you have any additional thoughts you would like to share with us?

## **Appendix C. Alumni Interview Questions**

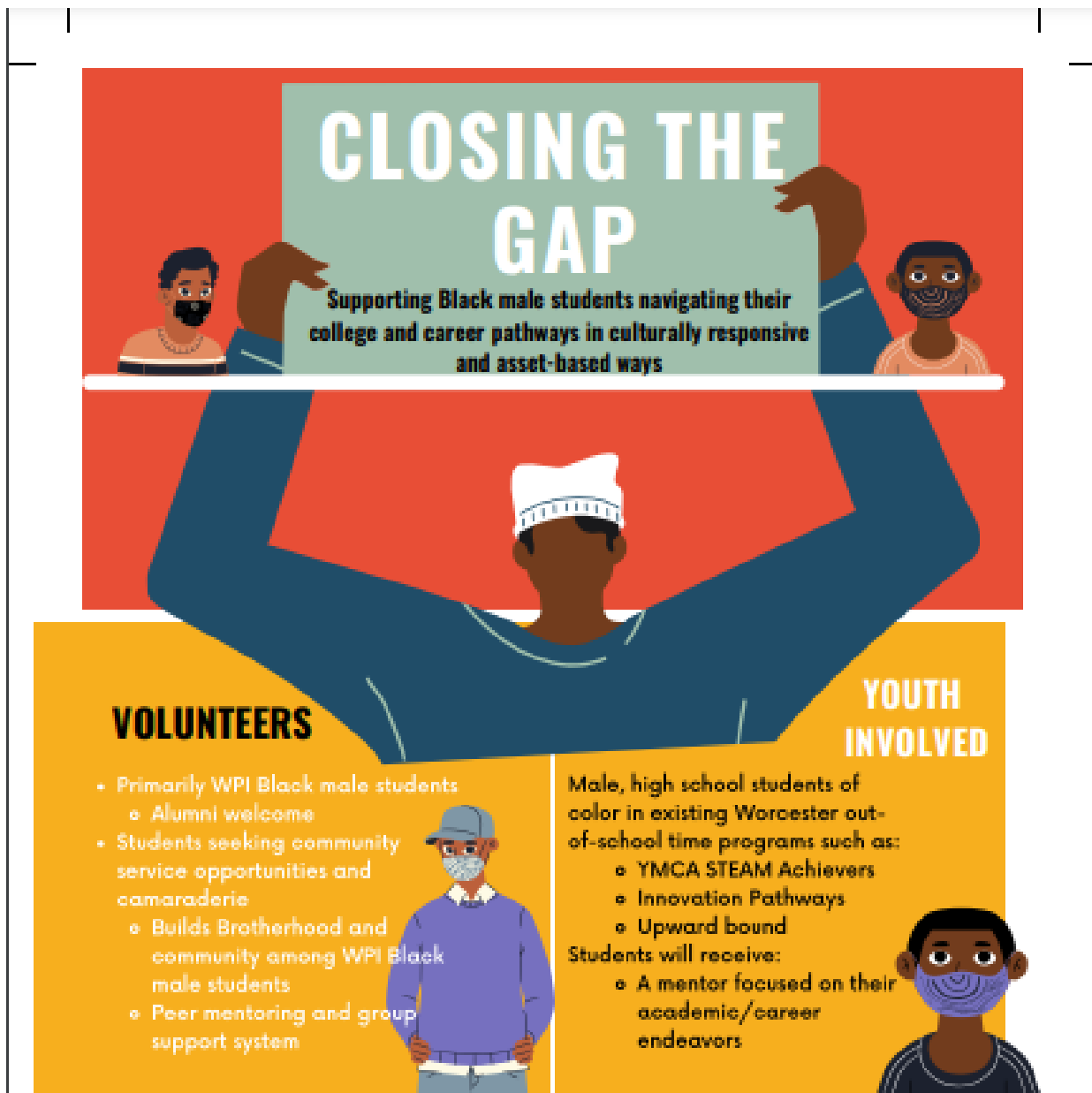
1. Please give us a brief history about your education and career path in Worcester. \*
2. What is your current position? (Student, Employee, Other...)
3. What program did you attend and how did you end up there?
4. What did you like about it?
5. What aspects of the program do you feel helped you specifically? (Feel free to give a specific example)
6. What do you think was missing or could be improved? What would you change about your experience, given the ability to?
7. How do you believe the program you attended helped develop you as a professional?
8. What is your academic story? (Classes taken, Mentors involved, Successes and Failures)
9. Do you have any additional thoughts you would like to share with us?

## **Appendix D. Youth Focus Group Questions**

1. What school/grade are you currently in? Any other background information you wish to share?
2. What have you learned through this program?
3. What activities with this program have you most enjoyed?
4. Tell us about how you are navigating your path after high school? What do you see as your options?

5. What would you wish for in a program to help you explore those options for your own hopes and goals?
6. Who do you look to for advice or assistance? (Parents, teachers, family, friends, etc.)

## Appendix E. Closing the Gap Pamphlet





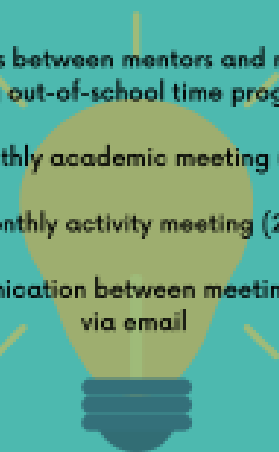
## ENGAGEMENT

Meetings between mentors and mentees during out-of-school time programs

1 monthly academic meeting (2hr)

1 monthly activity meeting (2hr)

Communication between meetings via email



## ESSENTIAL SKILLS

Empathy

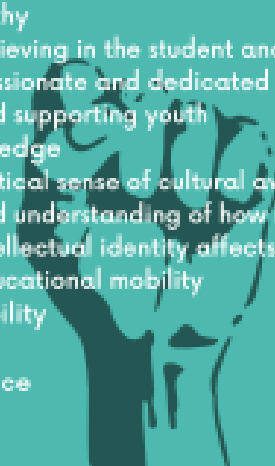
- Believing in the student and being passionate and dedicated to uplifting and supporting youth

Knowledge

- Critical sense of cultural awareness and understanding of how racial and intellectual identity affects students' educational mobility

Reliability

Patience



## COSTS OF OPERATIONS

Necessary Items to consider:

- Transportation for WPI volunteers
- Faculty/Staff Advisor overseeing Closing the Gap
- Youth access to computers/software
- Training/Background Checks for WPI volunteers



## SUSTAINABILITY

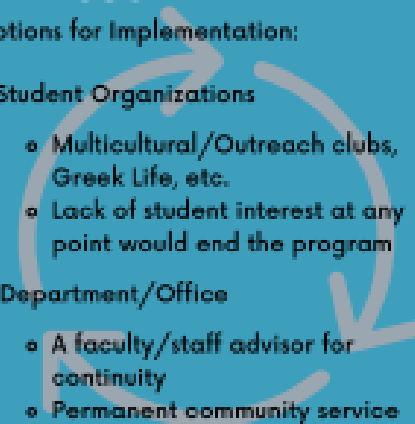
Options for Implementation:

### 1. Student Organizations

- Multicultural/Outreach clubs, Greek Life, etc.
- Lack of student interest at any point would end the program

### 2. Department/Office

- A faculty/staff advisor for continuity
- Permanent community service opportunity



## CONTACT US!

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