Building a Sustainable Volunteer Infrastructure Connecting Worcester Polytechnic Institute and Local Community-Based Organizations

by
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An Interactive Qualifying Project
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Abstract

Worcester community-based organizations often experience a lack of a consistent and long-term flow of volunteers. Our goal was to recommend a sustainable volunteering structure to be implemented to connect student volunteers to these organizations. We worked closely with the Central Community Branch YMCA as a pilot for this sustainable structure and recruited student volunteers to assist with the "School's Out" after-school program. Student volunteers took part in a pilot training session in preparation to volunteer. Interviews with the YMCA administration, student volunteers, project advisors, and other stakeholders guided us as we carried out and evaluated our pilot volunteering program. After the evaluation of this data, we recommended that improvements be made in the areas of communication, recruitment, training, transportation, and volunteer training and orientation.

Acknowledgments

First, we would like to thank our advisor Katherine (Kathy) Chen for all of her assistance with this project. Her knowledge of the subject area, combined with her connections to numerous individuals in the Worcester Polytechnic Institute (WPI) STEM Education Center and Office of Pre-Collegiate Outreach, helped us greatly in making this progress a success. We also would like to thank Katherine (Katie) Elmes of the WPI STEM Education Center for providing additional guidance as we developed our project goal and later as we developed a training program for the volunteers whom with we worked.

At the YMCA we would like to thank Pamela Suprenant, the director of the YMCA of Central Massachusetts, as well as Sarah Levy, the Director of School Age Child Care Services at the Central Community Branch. With this partnership, our team was able to carry out a pilot volunteering program to guide our research and shape our ultimate recommendations for developing a sustainable volunteer infrastructure.

Additionally, would like to thank Suzanne (Sue) Sontgerath, Director of the WPI Office of Pre-collegiate Outreach, and Matthew Alvarado-Ross, AmeriCorps VISTA with the WPI STEM Education Center, for providing assistance and guidance in the early stages of our project as we developed and identified the project goal and scope.

Special thanks go out to Marina and Danny who worked with our pilot volunteering program at the YMCA and all of the other students who expressed interest in participating in this pilot. Additional thanks go out to all of the students who completed our initial school-wide surveys evaluating volunteer culture and interest in volunteering.

Finally, we would like to dedicate this report to Margaret O'Neil, a dedicated woman who always looked for ways to help others and an even more incredible mother. Although her passing was untimely and unexpected, her memory has left an impact and her constant encouragement and dedication have inspired us to never give up, even when things appear to be impossible.

Authorship

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Acronym	Meaning
WPI	Worcester Polytechnic Institute
IQP	Interactive Qualifying Project
CBO	Community-Based Organization
OST	Out of School-Time
SAO	Student Activities Office
POP	Office of Pre-Collegiate Outreach
STEM	Science, Technology, Engineering, Math

Executive Summary

Introduction

The objective of our Interactive Qualifying Project (IQP) is to develop a sustainable infrastructure between Worcester Polytechnic Institute (WPI) and local community-based organizations (CBOs) in the Worcester area to create a reliable and consistent flow of student volunteers. For this IQP, the Central Community Branch YMCA "School's Out" program served as our experimental partner for our pilot program.

Background

Oftentimes, there is a correlation between both the quality and quantity of education one receives with their socioeconomic status. Unfortunately, over the past couple of decades, the gap between the quality of the education that the poor and the rich receive via the public education system, has grown at an increasing rate. As Worcester is a high-poverty area and generally lower resourced, the city receives more government funding for education. However, as the city is large, and the proportion of local taxes the city receives for education is less than more affluent communities, many schools have struggled as funding is spread thin amongst all of the schools of the Worcester district. Our IQP intends to build a sustainable infrastructure in order to send student volunteers to the YMCA and other CBOs to provide extra hands during program hours when volunteers are most needed.

Methodology

We started off our project by surveying (with IRB approval) the WPI undergraduate population on volunteering culture and collected responses regarding interest in volunteering with the YMCA. We then used this information, in combination with interviews and meetings with stakeholders, to develop avenues of communication between our group and both the YMCA and our pilot program volunteers. Before volunteering at the YMCA, the pilot program volunteers attended a training session in which we designed and delivered to address early childhood development, implicit bias, assets versus deficit models of education, and saviorism. The pilot program volunteers then worked with the YMCA over the course of three weeks in late March through early April. The YMCA van was piloted to transport the student volunteers to the program while student drivers were relied upon to transport the volunteers back to WPI. Within the pilot program, volunteers primarily helped patrons with homework. Following the pilot program, the volunteers and one of the YMCA program directors were interviewed and debriefed.

Findings

From our initial school-wide surveys we determined that eighty percent of student respondents have volunteered in some capacity during their time at WPI. Out of the students who had indicated that they had not previously volunteered, approximately eighty-one percent indicated that they would be interested in starting to volunteer. From these surveys we also discovered that the best way to communicate with student volunteers was via email. From our pilot program interest survey, we were also able to choose seventeen volunteers to participate in the pilot program based on their availability. Out of these individuals, eleven students responded to the commitment form, and five of these students committed to volunteering with the pilot. Three additional volunteers were added to the pilot after contacting us to express interest in the program. A schedule was created based on the availability of these eight volunteers for volunteering with the YMCA on Monday and Wednesday afternoons. Four students attended our training session we held on campus and provided feedback on their experience at this event through the use of pre and post assessment surveys and a training feedback survey. By the start of the pilot program, only two volunteers remained who had filled out all necessary paperwork for volunteering with the after-school program. These students volunteered once a week for three weeks and noted that they enjoyed their time volunteering and would continue if given the opportunity to do so. However, based on their experiences, we discovered that they would have preferred the training to have an overview of the YMCA programming, rather than cover the general topics that were addressed. During our debrief with the YCMA, Sarah Levy shared with us that she saw the program as one that potentially could be carried over for a longer time period. From our conversation with her, we determined also that using one email thread with a primary contact person would be most useful and efficient. When we discussed our Pilot Program with Christine Kobza, who is the Associate Director of Student Activities Office, we discovered more ways in which students find volunteering opportunities on campus, shaping our recommendations.

Recommendations

There are various recommendations that our group would make for a future project working to develop a sustainable infrastructure between student volunteers and Worcester CBOs. To increase the volunteer pool, the opportunity should be advertised at the beginning of the year during New Student Orientation. Representatives from the CBO should also participate in the Work Study Fair to answer questions and help students out with any required forms. To improve communication between the organization and the CBO, someone should be assigned as the point of contact and use one email thread. To improve communication with volunteers, we recommend using Slack as you can react to messages when you have read them. Also, there should be days set during which representatives from organizations visit WPI to host a Meet and Greet session to answer questions and to allow for more efficient processing of volunteering forms. Based on the pilot volunteer feedback, we recommend that the training include time to prepare the student

volunteers on what to expect when working on-site and give a brief overview of what the structure or schedule of a typical day is like at the organization. Additionally, we would like to train in areas of proper methods for tutoring and working with children in a more enthusiastic manner. Finally, when possible, it would be beneficial for CBOs to provide transportation to and from the site, as WPI students view lack of transportation as a major barrier from them volunteering at a CBO.

Through our experience with this IQP, we also believe that it is essential to have a third party working as a coordinator between the student volunteers and the CBO. This third party could take on the form of a club or student-based organization developed to connect student volunteers to the organizations in Worcester requesting volunteers.

Conclusion

For our IQP, we recruited WPI students to participate in a pilot program to volunteer at the YMCA in Worcester. Along the way, we learned about the volunteering culture at WPI and interviewed stakeholders and sponsors to determine the common problem areas they have noticed when attempting to build sustainable off-campus relationships with CBOs. In addition, a training session was developed and conducted to prepare the student volunteers to work with children in a more diverse setting than they may be accustomed to. For the pilot, students volunteered as homework tutors at the YMCA every Monday over the course of three weeks and were brought to the site by a YMCA-run van. Finally, data was gathered via debriefs with the pilot program volunteers and the YMCA administration. Based on the data collected throughout and after the program, recommendations were made to suggest ways to improve communication with both CBOs and volunteers, as well as to improve volunteer recruitment and training. Methods for better handling volunteer forms and volunteer orientation with the CBO were also recommended. Additionally, a recommendation was made to form an organization to organize communication and volunteer shifts to better facilitate and develop a long-standing relationship between student volunteers and CBOs.

1.0 Introduction

1.1 Goal

For our IQP, we worked with the Central Community branch YMCA, located on 766 Main St, Worcester, MA 01609 (YMCA of Central Massachusetts, 2019b). Over the course of this project, our team sought to gather information from our partnership with the YMCA to help in developing recommendations for a sustainable volunteering infrastructure to partner WPI students to CBOs on a long-term and consistent basis. In order to gain data from which to base our recommendations, our project focused specifically on partnering students to the Central Community branch YMCA "School's Out" program (YMCA of Central Massachusetts, 2019a). A pilot volunteering structure to be carried out with this after-school program was organized to assist in our data collection and evaluation of both organization needs and student interest in volunteering with local CBOs.

Through our work on this project, we hoped to investigate the attributes that encompass a sustainable volunteering structure by evaluating the experiences of both CBO stakeholders and WPI student volunteers. While WPI students have indicated a general interest in volunteering and many CBOs, such as the YMCA, have noted a need for volunteers, it has been found to be very difficult to build a lasting connection between student volunteers and the organizations with which they work. While the ultimate goal of our project was initially to develop a volunteering infrastructure to provide Worcester CBOs with a consistent and sustainable volunteer flow, we realized, over the course of the project, that a more reasonable outlook was to develop a set of recommendations focused on addressing areas of concern identified during our research and data collection. With these recommendations, future projects and volunteers can continue our work to develop a volunteering structure to better connect WPI student volunteers to Worcester CBOs for years to come.

1.2 Objectives

Although the primary focus of our project was the development of a sustainable connection between the local YMCA and the students of WPI as a model for other CBOs, our team also explored other issues, such as finding safe and reliable transportation for WPI students volunteering with organizations outside of a manageable walking distance. In regards to the Central Community branch YMCA, requiring student volunteers to walk to the organization was neither feasible nor safe as all walking routes between WPI and the YMCA required students to walk approximately 30 minutes through areas of Worcester with high levels of crime (Figure 1.1) (Google Maps, 2019; Trulia, 2019). With this information in mind, our team set the topic of transportation modes as a secondary focus for the project, as a lack of safe and reliable

transportation plan would likely act as a barrier for many student volunteers looking to work with off-campus community organizations.
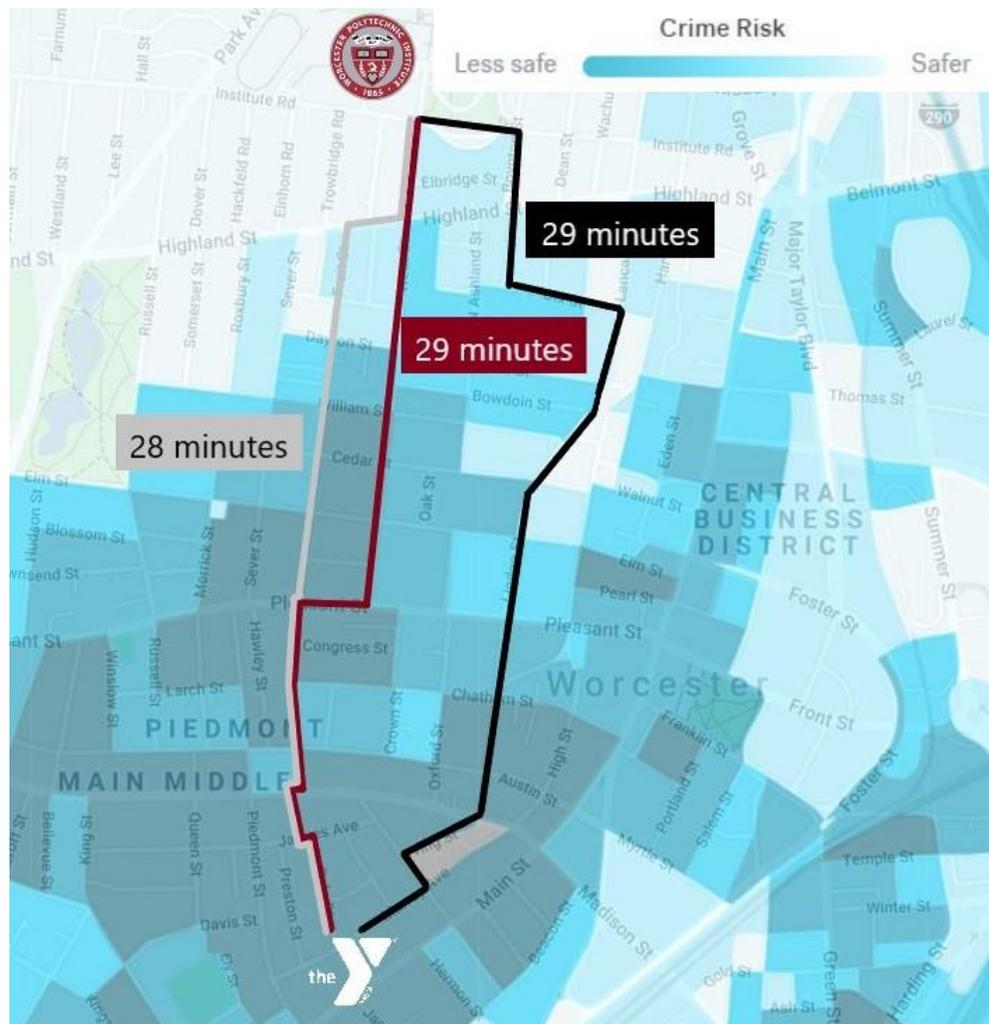
Figure 1.1: Walking routes from WPI to the YMCA overlaid over city crime risk map with highest crime risk indicated in dark blue (Google Maps, 2019; Microsoft Corporation, 2018; Trulia, 2019; Worcester Polytechnic Institute, 2019c; YMCA, 2017)

While we determined transportation was an important component of the project, our team recognized in the initial stages of research, that there was also a need to investigate potential training for the student volunteers. As our team worked specifically with the after-school program at the YMCA, we determined that volunteers should be educated in proper tutoring and mentoring techniques, as well as in topics such as diversity and microaggression. This determination was based on the idea that student behavior and participation should remain consistent and appropriate in reference to the context of the setting they are volunteering in. Additionally, as personal connections make volunteering experiences more meaningful, our team planned to investigate ways to recruit and engage a base of WPI students whom would not only

be committed to volunteering with an off-campus program but would also be excited to assist in mentoring and forming close bonds with those whom they work.

Over the course of this project, we identified many issues that we hoped to resolve through research, problem-solving and collaboration with the YMCA, WPI students, and representatives from the WPI Office of Pre-Collegiate Outreach, the Student Activities Office, and the STEM Education Center. While working to build recommendations for a sustainable volunteering structure, our team strove to address the issues of transportation, volunteer recruitment, and training as we identified these as major components in the ultimate success of designing a sustainable volunteering structure.

2.0 Background

2.1 The Central Community Branch YMCA

This IQP was focused on building a sustainable infrastructure connecting WPI students to Worcester CBOs. In particular, our project team partnered with the Central Community Branch YMCA, to send student volunteers to work with the "School's Out" after-school program.
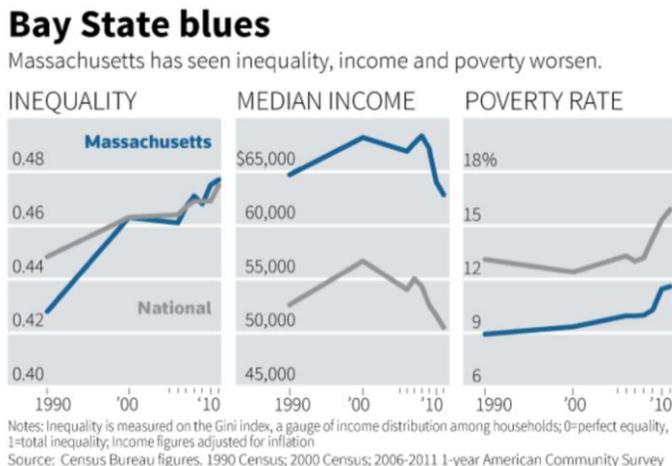
The "School's Out" program at the Central Community Branch runs weekdays from 2 pm until 6 pm. Students attending the program typically arrive at the YMCA from various Worcester schools between the hours of 2 pm and 3 pm. When these students arrive at the YMCA, they are given a snack break before beginning homework and activity time. Within this time period, volunteers help out children with any difficulties that they may have on homework and monitor the students during various other activities, such as art and gym time. After homework time and the initial activity time is complete, participants are given the opportunity to choose activities to participate in, ranging from academic activities to art and physical education. By the time that these activities are completed, parents are beginning to arrive at the YMCA to pick up their children for the day. (YMCA of Central Massachusetts, 2019) In reference to WPI student volunteers, our team determined that these individuals, while they would be useful in any area, would be most beneficial in the areas of tutoring and STEM activities due to their experience in math, science, and problem-solving.

2.2 Inequities and Opportunity Gaps in Education

When the Puritans first established the public education system in America in 1635, the aim was to provide those of lower socioeconomic status with an opportunity to climb up the class structure through hard work (Rhode, Cooke, & Ojha, 2012). The United States public education system was meant to act as a tool to promote equality rather than widen the disparity between those of different socioeconomic statuses, thus nicknamed the "Great Equalizer" (Rhode, Cooke, & Ojha, 2012; Growe & Montgomery, 2003).

The pattern of increasing disparity in income and education is problematic nationwide, but Massachusetts, one of the most educated of the 50 states, experiences this to a greater extent than other states. The Massachusetts median income has experienced a sharp decline in the past ten to fifteen years. At the same time, inequality has increased over the past twenty years. This information indicates that more money has been consolidated in the top percentage of income earners. As more money is consolidated within a small portion of the population, the quantity of money for the rest of society decreases, thus lowering the median income. This disparity has been concerning as, in the past ten to fifteen years, poverty rates have increased, leaving a greater proportion of the American population vulnerable in comparison to past decades. While the earning of degrees has increased amongst those from households in the lowest, middle, and highest income levels by 8.5%, 14.3%, and 21.6% in 2010, respectively, only those from

households in the top fifth income level have seen an increase in their total income (Figure 2.1 and 2.2). (Rhode, Cooke, & Ojha, 2012)

Bay State blues

Massachusetts has seen inequality, income and poverty worsen.

INEQUALITY	MEDIAN INCOME	POVERTY RATE

Notes: Inequality is measured on the Gini index, a gauge of income distribution among households; 0=perfect equality, 1=total inequality; Income figures adjusted for inflation
Source: Census Bureau figures. 1990 Census; 2000 Census; 2006-2011 1-year American Community Survey

Figure 2.1: Graphs revealing increases in inequity and poverty, as well as a decrease in median income (Rhode, Cooke, & Ojha, 2012)

Degrees of importance

Bay State households at all levels of income are getting better educations. But only the richest are seeing income rise.

Change in percentage of people with **bachelor's/associate's degree** or better

Percentage change in average **income**

UP 21.6%

UP 14.3%

UP 15.1%

2010 UP 8.5%

1989

LOWEST FIFTH   MIDDLE FIFTH   HIGHEST FIFTH

DOWN 2.1%

2010 DOWN 10.6%

Sources: Census Bureau; Integrated Public Use Microdata, University of Minnesota.

Figure 2.2: Percent change of college degrees received versus percent change of average income (Rhode, Cooke, & Ojha, 2012)

Unfortunately, the "Great Equalizer" has been losing its power to help those of low economic status due to external factors influencing the overall performance of students. Although those of low economic status have been getting a better education than ever before due to innovations in technology and improved teaching practices, students from well-funded public schools and private schools have had access to these innovations as well, thus continuing to outpace any progress that students from poorly funded schools have made. Well-funded schools have resources to fund programs, such as AP courses, which help students boost their chances of college admission and give them a greater chance of standing out to more elite universities. Additionally, these schools can create programs that provide a support network for students to aid those with low academic performance to increase their chances of earning a high school diploma. Those from higher-income households can afford tutors to help their children with

school work and preparing for standardized tests. The combination of improved GPA and SAT/ACT scores allows students from higher income families to gain admission into top universities around the world. High-income families may also have resources to afford college counselors for their children, who can tailor their high school careers and college applications towards specific colleges. This allows the student to gain an advantage when applying to top universities. Even when students of lower-income households overcome the odds through hard work, they may not be able to fully capitalize on their talents based upon their socioeconomic situation. Wealthy families aren't burdened by the financial costs of college, whereas low-income families feel a large effect, almost to a point where the financial load cannot possibly be carried even with financial aid. For example, Curtis Dorval was class president at his high school and gained admission into Northeastern University. After scholarships, the cost of attendance was $50,000 per year, which deterred Dorval from attending Northeastern University and lead him to enroll in the University of Massachusetts, which cost $10,200 per year after scholarships and financial aid. By making the fiscally responsible decision to attend a public university, Dorval missed out on the resources, small classroom sizes, and opportunities that come with attending an elite university. The combination of the disparity in quality of secondary education, the existence of private tutors and hired college counselors, and the high cost of attendance for colleges all contribute to the continuous and sudden increases in inequity across the United States. (Rhode, Cooke, & Ojha, 2012)

## 2.3 Worcester Public Schools

American public schools are funded through state taxes and local taxes. The doling out of state funding to public schools prioritizes underserved populations, providing poorer towns and cities with larger amounts of funding. However, while public schools receive a large chunk of their budget from state funding, the remainder of this funding must come from local taxes. These Massachusetts local taxes encompass property, fuel, and taxes. Thus, towns with a larger percentage of high-income individuals gain more money in local taxes to go towards public school funding. Although funding isn't the perfect indicator of the quality of education one may receive, there is a noticeable correlation between school funding and quality of education (Ma, Pender, & Welch 2016).

The United States government has an allotted amount of funding for each town or city's public school system. Within a typical public school system, there are two types of schools, public schools and charter schools. Often times, when a public school is poorly run or provides a poor quality of education, parents will seek to enroll their children in charter schools in hopes of allowing their children to receive a higher quality of education. However, as charter schools are for-profit organizations, they are allowed to keep any government funds that are not spent by the school. This creates an incentive for charter schools to spend as little money as possible to ensure that school administrators and staff can pocket as much money as possible. Unlike this, public schools are non-profit. Thus, public school funding is used for the students and any surplus can

be distributed among public charter school staff, making it so that schools have no incentive to hold back on spending. Due to the divide of school funding, public schools suffer greatly as their already underfunded programs do not receive as much funding as the money must be distributed to charter schools as well. (Rhode, Cooke, & Ojha, 2012)

Worcester Public Schools are poorly funded in comparison to well-off suburbs such as Weston. On paper, the Worcester public school system appears to have a large budget, but they serve such a large population in the form of 45 schools. This makes for a low ratio of funding per student. This problem is exacerbated by the fact that charter schools are taking government tax dollars away from public schools. As more parents seek alternative education options for their children's education, the Worcester Public school system's funding situation will continue to worsen. (Rhode, Cooke, & Ojha, 2012)

As a result of insufficient funding, Worcester public schools cannot afford the programs to help those falling behind, potentially hurting their chance of collegiate academic achievement and future income as the earning potential of those with bachelor degrees is much higher than those with high school diplomas (Figure 2.3) (Ma, Pender, & Welch 2016).
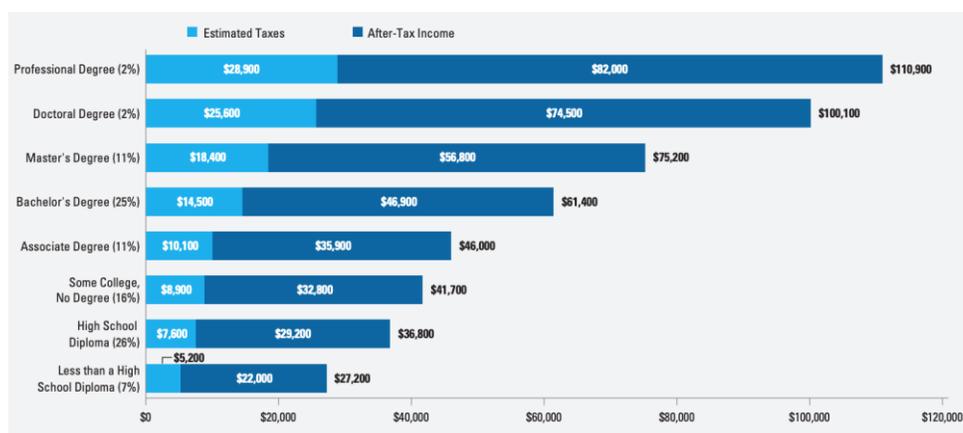
Figure 2.3: Median earnings and tax payments of full-time year-round workers age 25 and older by education level (Ma, Pender, & Welch 2016).

2.4 After-School and STEM Enrichment Programs

In Worcester, two other major CBOs focusing on education and enrichment are Big Brothers Big Sisters and the Worcester African Community Education (ACE) program. In the Big Brothers Big Sisters program volunteers, otherwise known as "Bigs," are paired with a program participant, known as a "Little" with whom they complete activities and form a strong bond. This program is focused largely on one-on-one mentorship for those involved. The Worcester African Community Education (ACE) program, like the YMCA, has a program that runs after-school from 2:30 pm to 6 pm. Program participants are given an opportunity to complete homework and partake in planned activities during this time, much like the structure of

the "School's Out Program. (ACEWorcester, 2019) In Newton, MA, a STEM enrichment program, called K2 Enrichment Program, focuses on learning through science experiments. This program, which is for students from Kindergarten to Grade 5, allows participants to participate in project-based learning in science and engineering over the course of 7 weeks. (K2 Enrichment Program, 2013)

2.5 Benefits of Community Outreach

The youth who participate in out of school time (OST) programs benefit from spending time in a well-controlled environment surrounded by caring individuals (O'Donnell & Kirkner, 2014). For families with full-time working parents or guardians, children are likely to suffer due to the lack of supervision during the hours they are not in school. In a city like Worcester, where the crime rate is relatively high, it is easy for children to get into the wrong crowd (Trulia, 2019). These OST programs serve as safe havens for children during the afternoon and evening hours before their parents can pick them up. By having their children enrolled in OST programs, parents are already ensuring that their children are safe during times when they are not available to take care of their child. Additionally, these youth can get help on their homework during scheduled homework hours. Parents of these children may not come from high education backgrounds, or may not fully remember the content, making it hard for them to personally help their children with their homework. In addition, as some parents are immigrants, it may be difficult for parents to understand the homework their child is doing if English is not their first language. With curriculums that are constantly changing, as well as language and knowledge barriers, many parents find it difficult to help their children with homework, making dedicated homework help at OST programs an important resource. (O'Donnell & Kirkner, 2014)

2.6 Established University Volunteering Structures

Many colleges and universities have organizations or structures in place that allow students to volunteer with local CBOs. At Boston University (BU) a website directory for volunteering opportunities allows students to search for organizations or events with which to work. This method of displaying and advertising volunteering opportunities gives the CBOs more exposure and is useful for students studying in a large metropolitan city because the website format allows all students over the Boston University campus to explore possible volunteer opportunities (Boston University, 2019b). This method also allows for broad outreach to the BU CAS, which enroll 8,902 undergraduate and graduate students in the 2017-2018 academic year (Boston University, 2019a). Because the volunteer opportunities are on the BU CAS webpage and are catered to BU CAS students, there will be a higher chance that those browsing through the website will pursue volunteering opportunities.

Worcester Polytechnic Institute (WPI) has numerous honorary societies. One of which is Alpha Epsilon Delta (AED). This particular organization requires two hours of documented volunteer hours from each member in order to keep an active status. By having this rule in place,

AED members are motivated by a need to fulfill a requirement compared to BU CAS students who volunteer in order to supplement their resumes and applications. Through this method of enforcing active volunteering, AED members have a stronger motivation to volunteer, thus yielding a high volunteer rate. AED facilitates the process of fulfilling the two hours of volunteering per term requirement by holding a blood drive every term and ensuring that there are many opportunities to volunteer. Although these volunteer opportunities are closed off from the general WPI population, the existence of a requirement leads to consistent and reliable volunteering.

3.0 Methodology

3.1 Project Overview

Over the course of this project, our team has worked towards the goal of creating a sustainable infrastructure connecting WPI student volunteers to Worcester CBOs to allow these organizations to gain volunteers on a more consistent and long-term basis. With this goal in mind and a partnership with the Central Community Branch YMCA, our team set out to collect data on WPIs volunteering culture and carry out our own pilot program in partnership with the YMCA "School's Out" program. After completing background research and interviews during A-term and early B-term, we determined major milestones for our project, such as the development and distribution of school-wide surveys, the development of a training and pilot volunteering program, and the proposal of a final solution or list of recommendations based on the data collected over the course of the year (Figures 3.1, 3.2, and 3.3).
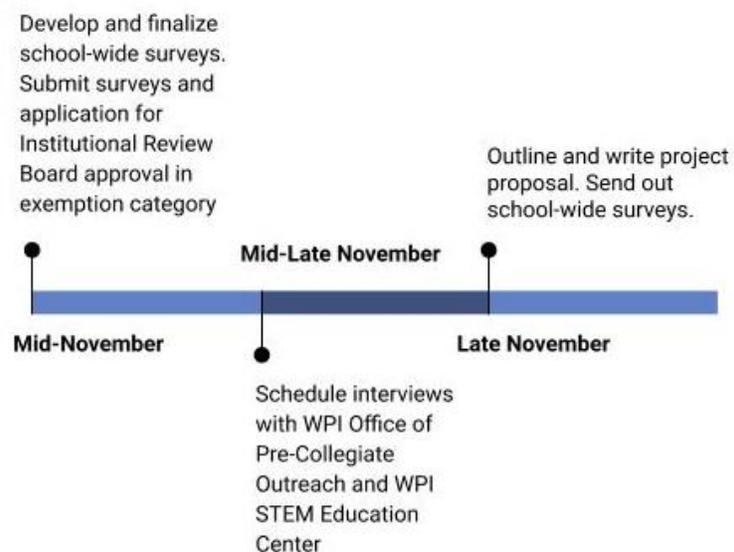
Figure 3.1: B-term proposed major milestones
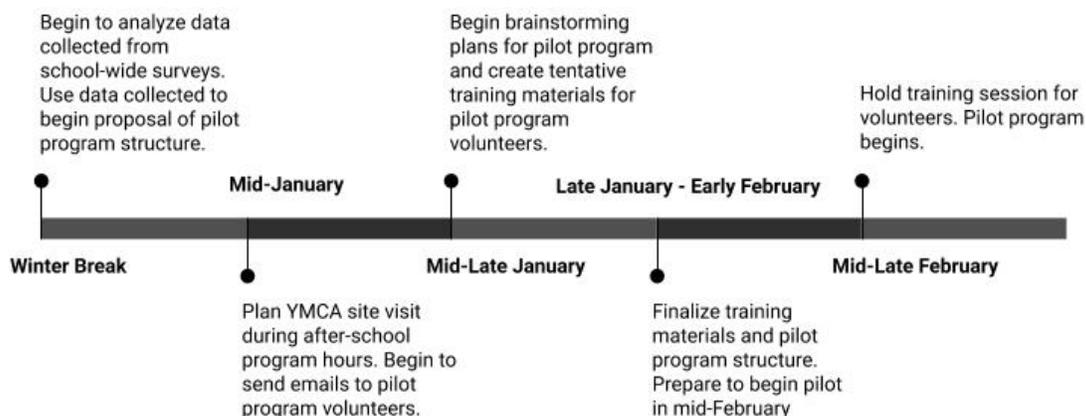
Figure 3.2: C-term proposed major milestones
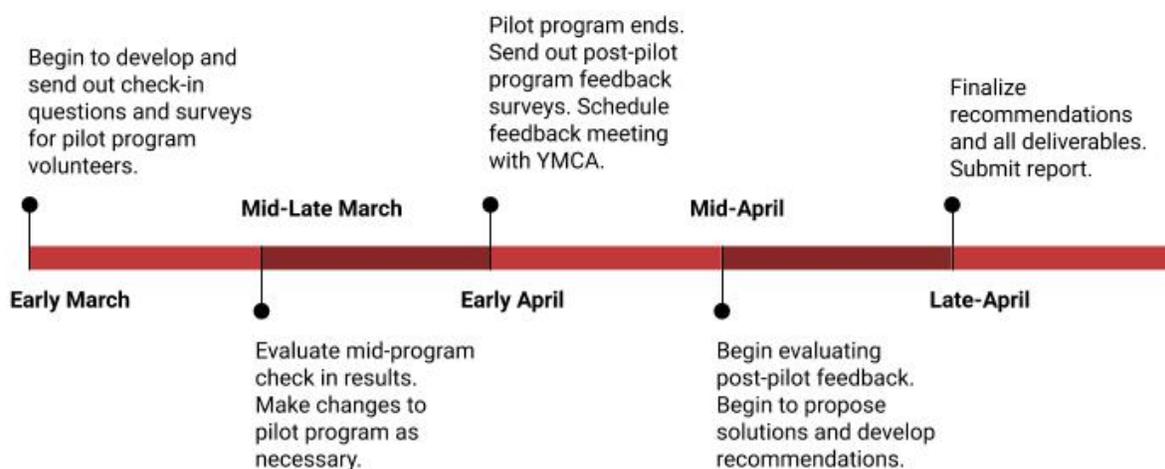
Figure 3.3: D-term proposed major milestones

3.2 Pre-Program Interviews

On Monday, October 29, 2018, our team set up an on-site interview with both Pamela Suprenant, the Executive Director of the YMCA of Central Massachusetts, and Sarah Levy, the YMCA Director of School Age Child Care Services for the Central Community Branch YMCA. Prior to this meeting, our team drafted a set of interview questions (Appendix 1.1) to gather information about the demographics of the after-school program so that we could better understand the program structure, participant demographics, and program staff and volunteer demographics. This information was requested to better identify the most prominent areas of need when building a volunteering structure and recruiting volunteers.

During our second visit to the YMCA on February 15, 2019, we observed the School's Out after-school program with which our pilot program participants would be volunteering. For this visit, we attended as simple observers to gain a better understanding of the typical daily setup for the program. Additionally, we planned to discuss final plans for the pilot program with Sarah Levy to confirm shift times and transportation.

On November 29, 2018, and December 3, 2018, our group met with representatives from the WPI STEM Education Center and Office of Pre-Collegiate Outreach as recommended by our primary advisor, Katherine Chen. During these meetings we specifically met with Katherine (Katie) Elmes, (STEM Education Center Director of Equity Access, and Community), Matthew Alvarado-Ross (an AmeriCorps Vista working with the STEM Education Center), and Suzanne (Sue) Sontgerath (Director of Pre-Collegiate Outreach Programs). Prior to these interview meetings, our team drafted a list of questions (Appendix 1.2), focused on determining how both the Office of Pre-Collegiate Outreach and the STEM Education Center could play a role in building a sustainable volunteer structure. Ultimately, we aimed to direct these questions in such a way to gain insight on the project goal based upon the experiences in the field of education and outreach of our interviewees.

3.3 Surveying the Student Body

To gain a better understanding of the volunteering experiences and interest of the undergraduate population of WPI, we developed two surveys using the survey software Qualtrics (Qualtrics, 2005) that contained 17 questions and takes roughly 5 to 10 minutes to complete. These surveys served to first evaluate student volunteering history and preferences and then to evaluate student interest in participating in a pilot volunteering program with the YMCA. Additionally, these served as a platform for our team to identify and evaluate barriers that prevent students from volunteering so this knowledge could be used in the creation of a volunteering infrastructure. These two surveys were open for responses for approximately a month, part of which included winter break.

Prior to the distribution of these surveys, the proposed questions and survey flow were submitted to the WPI Institutional Review Board (IRB) in the exception category. The exemption category is reserved for studies involving minimal risk to student respondents. Due to the fact that names and contact information were only collected for students consenting to be considered for the pilot volunteering program and that students were given the option to end either survey at any time, our project received approval in this exemption category. (Worcester Polytechnic Institute, 2019b) Once this approval was granted we began to distribute our surveys to the target audience of WPI undergraduate students through emails to aliases for campus fraternities, sororities, and outreach-based clubs and organizations. While attempts were made to send the surveys to the undergraduate email alias, this attempt was rejected by the Student Government Association (SGA) which oversees this email alias. Facebook posts were made to

the Alpha Phi Omega and Pep Band Facebook groups, as well as the WPI pages for the classes of 2019, 2020, 2021 and 2022. Overall, these surveys were distributed to over 30 groups, clubs, and organizations, allowing for the data collected to be more representative of the WPI population.

Students that selected to participate in the survey were first directed to the anonymous Volunteering Culture at WPI survey focusing primarily on student volunteering preferences and experiences. Throughout this survey, options were available to direct the student to additional questions through the use of display logic or the end of the survey through the use of skip logic, both of which were functions embedded in the Qualtrics programming. This was added to streamline the survey process, allowing the survey to be better catered towards the student's previous experience with an interest in volunteering. After completing this survey, student respondents were given the option to complete a second survey to indicate interest in participating in a pilot program at the YMCA during the C and D-terms in the spring. These students were asked to indicate preferred volunteering activities, availability and contact information for purposes of organizing the pilot program. While completing the surveys, students were able to move easily from the end of the Volunteering Culture at WPI survey to the Pilot Program Interest survey through the use of a link provided at the conclusion of the Volunteering Culture survey and, for both surveys, the questions were organized in blocks consisting of questions of similar topics to aid in the survey flow (Figure 3.4, Appendix 3).
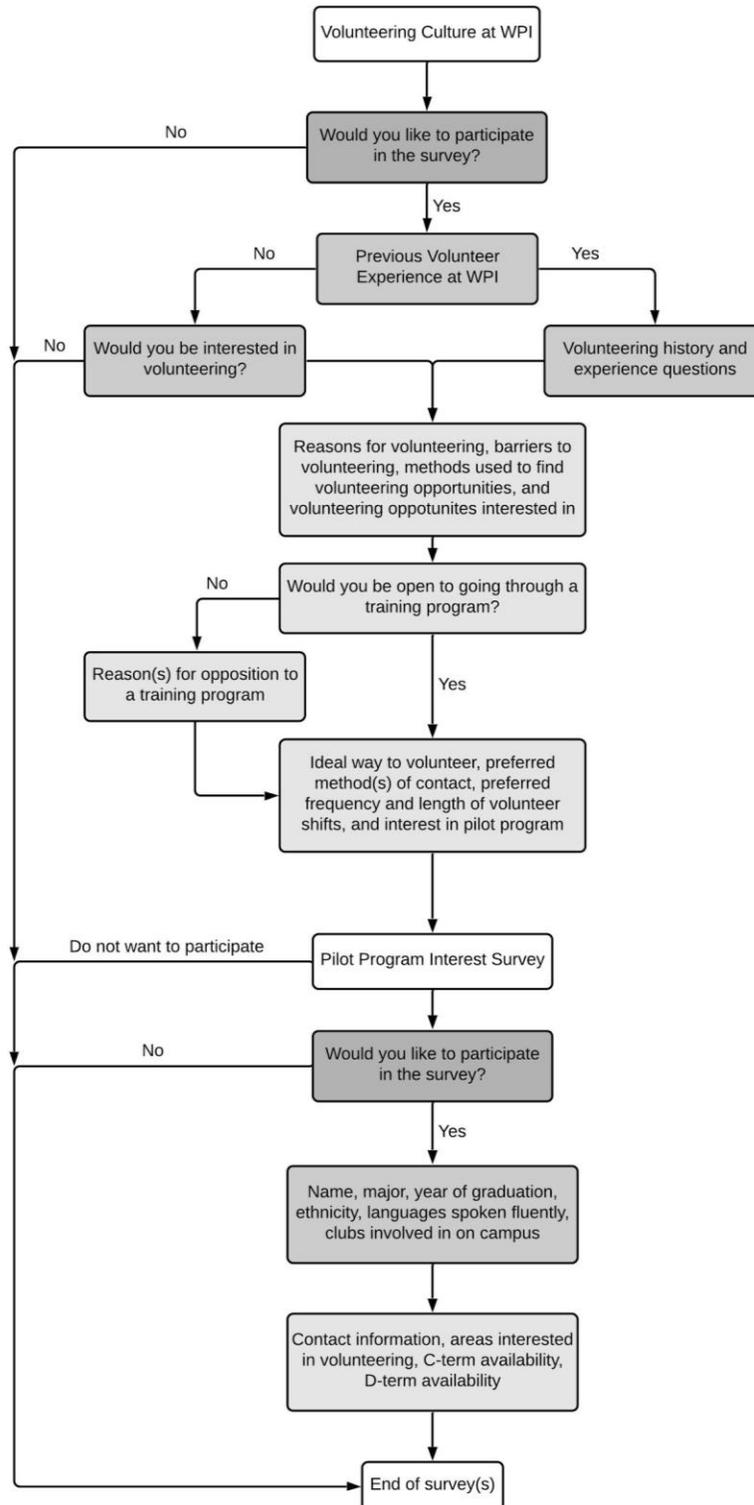
Figure 3.4: Survey flow overview of both the Volunteering Culture at WPI and Pilot Program Interest survey detailing general topics as well as basic skip and display logic

3.4 Development of a Training Program

Prior to the start of the official pilot program, our team determined that a training program would be necessary in order to educate the volunteers to better guide their interactions with the children attendees of the YMCA School's Out program. As Worcester is a very diverse city, of which the racial demographics of WPI do not fully match (Figure 3.5), our team determined that one of the major areas of training should be focused on working with and interacting with more diverse populations to avoid phenomena such as microaggression, saviorism, and unconscious bias. While some WPI students may have experience working with students from nondominant groups, our team recognized a need for a training to serve as both a brief introduction to proper volunteering practices for those who lacked this experience and a refresher course for those with personal experience working with minority groups.
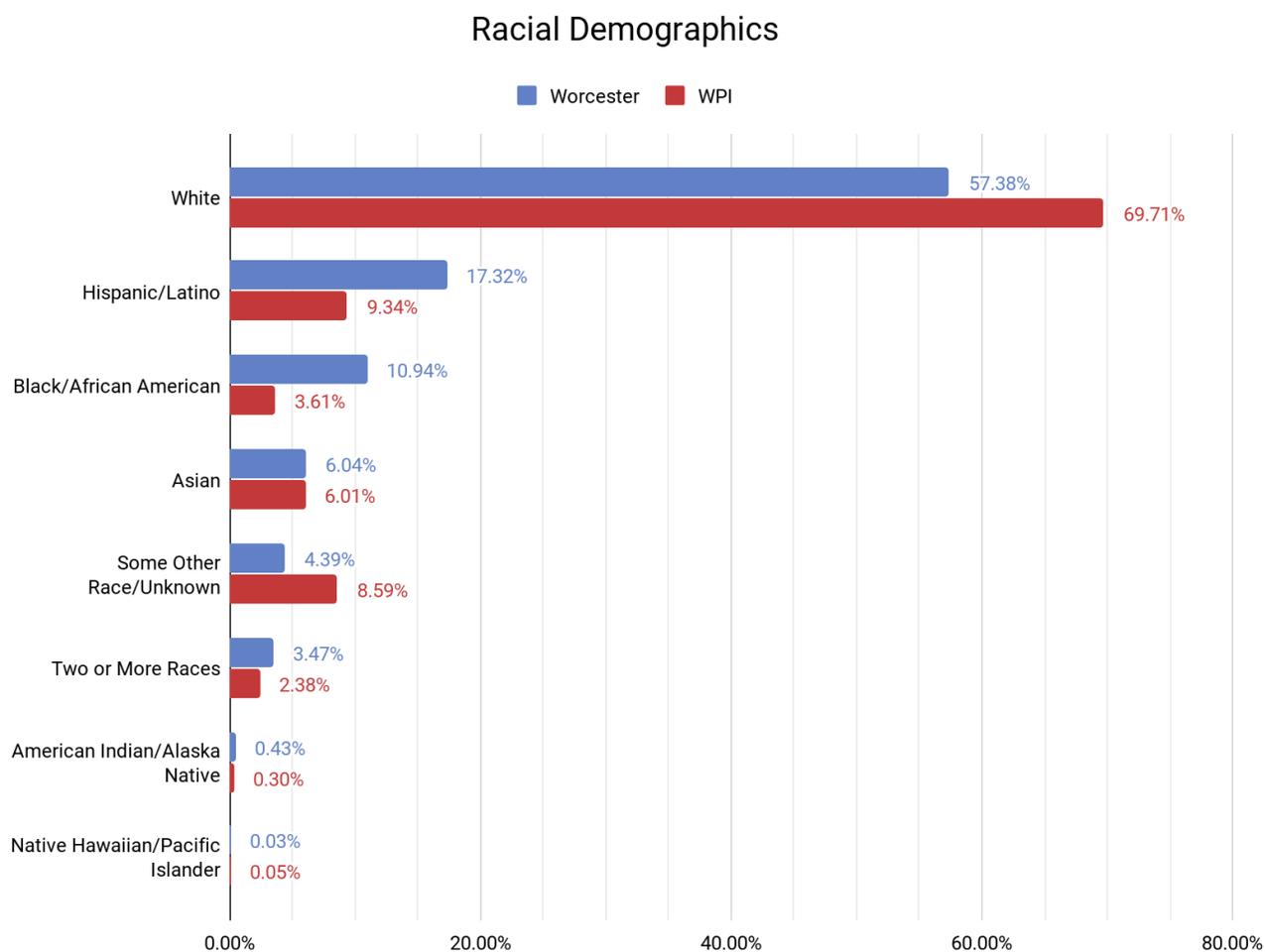
Figure 3.5: A comparison of Worcester and WPI racial demographics by percentage (United States Census Bureau, 2017; Worcester Polytechnic Institute, 2018)

During the development phase of this training, our team spoke with representatives from the WPI Stem Education Center and Office of Pre-Collegiate Outreach, in addition to Pamela Suprenant and Sarah Levy from the YMCA, in order to gain additional insight on potential topics and content. Our team began to research and brainstorm areas in which WPI students may need training in addition to the previously discussed topics of saviorism, microaggression, and biases. Each member of the team drew on their personal experiences and interactions to propose potential topics, ultimately determining that some sort of training to educate volunteers on proper techniques for working with youth would be necessary, in addition to the topics previously noted. During further investigation and discussion with Katie Elmes from the WPI STEM Education Center, our team was able to propose an outline for a training program to cover topics ranging from teaching strategies and mindsets to implicit biases and microaggression which later guided the creation of our training slides (Appendix 4).

3.5 Post-Program Interviews

Prior to the end of our project, our team met with Christine Kobza of the WPI Student Activities Office (SAO) to discuss the role of the office in setting up community service opportunities on campus. During this meeting, we gathered information on community service logistics, such as the processing of CORI forms and other volunteer forms and the breakdown of work-study versus non-work-study volunteers (Appendix 2.1).

On April 19, 2019, our group met with the pilot program volunteers to debrief the program with them. During this time, we asked the volunteers questions regarding transportation, the training program, their experience at the YMCA, communication, and time commitment (Appendix 2.2). These questions were developed to evaluate the volunteer experience as a whole, guiding our recommendations for future projects.

On Thursday, April 25, 2019, our team set up a post-pilot program interview with Sarah Levy at the YMCA. Prior to this meeting, our team developed a list of follow-up questions to guide our discussion regarding the administrative side of the pilot program with the YMCA (Appendix 2.3). These questions were developed to better understand the YMCA's experiences with communication, transportation, and volunteer interactions to help guide us in evaluating the pilot and setting recommendations for future work to be completed.

4.0 Findings

## 4.1 Observation of the Schools Out Program

To get a better understanding of how the YMCA's Schools Out Program operated, we visited on February 15, 2019, and arrived during normal program hours to observe the setup of a typical day at the "School's Out" program. Considering our previous interview, we already expected that the YMCA was going to be understaffed. When we went, they were more understaffed than usual. Something that we were not expecting was that the rooms they use are old racquetball courts, which causes the noise to amplify and travel throughout the area. One unique feature was that one of the rooms was set aside as a dedicated space for students that need more one on one attention or have food allergies. Additionally, there was an open space where volunteers and staff members could work with groups of students on small activities, such as crafts. During our visit, it was brought to our attention that students participating in the after-school program will get attached quickly to any new staff or volunteers, making it easy to cycle through a group of volunteers in cases where it is not feasible for particular individuals to volunteer every single week.

4.2 Results of School-Wide Surveys

4.2.1 Volunteering Culture at WPI

In our initial school-wide survey that we sent out to various aliases, we received a total of 224 responses, which is 0.52% of the undergraduate population of 4,337 (Worcester Polytechnic Institute, 2019a). Firstly, we wanted to get a general idea of how many people on campus have had some sort of volunteering experience in the past. From the data collected, we determined 80% of the students that answered our survey said they had volunteered during their time as a WPI student (Figure 4.1). Out of the 43 people that have never volunteered during their time as a student at WPI, 35 students have expressed interest in volunteering.

Students that have volunteered at WPI
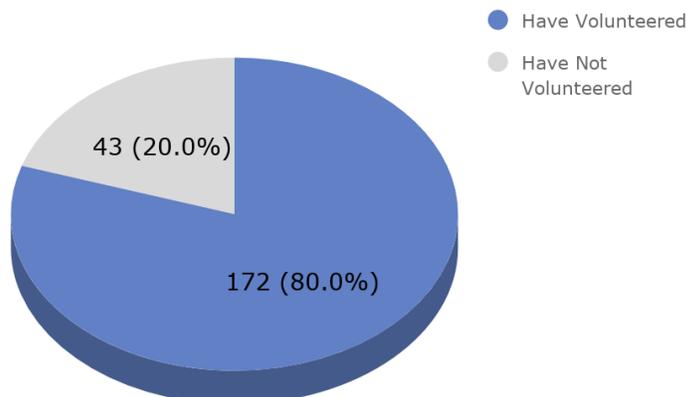
Figure 4.1: Volunteering History from students at WPI (students were allowed to skip questions if they wish to not answer, thus n = 215 rather than 224)

We then wanted to gain a better understanding of the reasons why students volunteer. Students with work-study at WPI, have to complete 15 hours of community service, in addition to an on-campus work-study job, in order to keep their work study. Other clubs and organizations also require a certain amount of community service to be completed to stay active within the group. However, based on our survey results, a majority of the students indicate giving back to the community as one of their reasons for volunteering (Figure 4.2). Additionally, students listed that they wanted to feel good and they enjoy volunteering.

Reasons for Volunteering
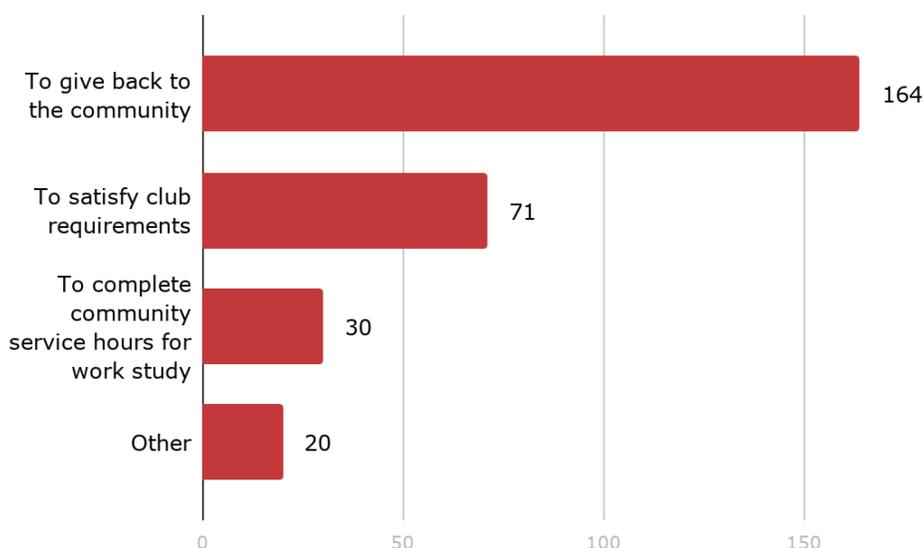
Figure 4.2: Students at WPI reasons for volunteering

In this survey, we asked questions that would help us create a Pilot Program that would best reflect the habits of the WPI students. Based on the students' answers, most students prefer to volunteer on a weekly basis (Table 4.1). Additionally, students had also listed wanting to volunteer biweekly or a few times per term.

Table 4.1: How frequently students at WPI like to volunteer

Frequency of Volunteering	Number of Responses
Daily	1
Weekly	100
Once per term	45
One time event	9
Other	17

Additionally, we asked students what barriers would prevent them from volunteering. As WPI runs on a 7-week term, it was no surprise that 136 students said that timing was one of the barriers they encounter (Figure 4.3). One of the barriers that we had anticipated before we went through the survey results was limited transportation.
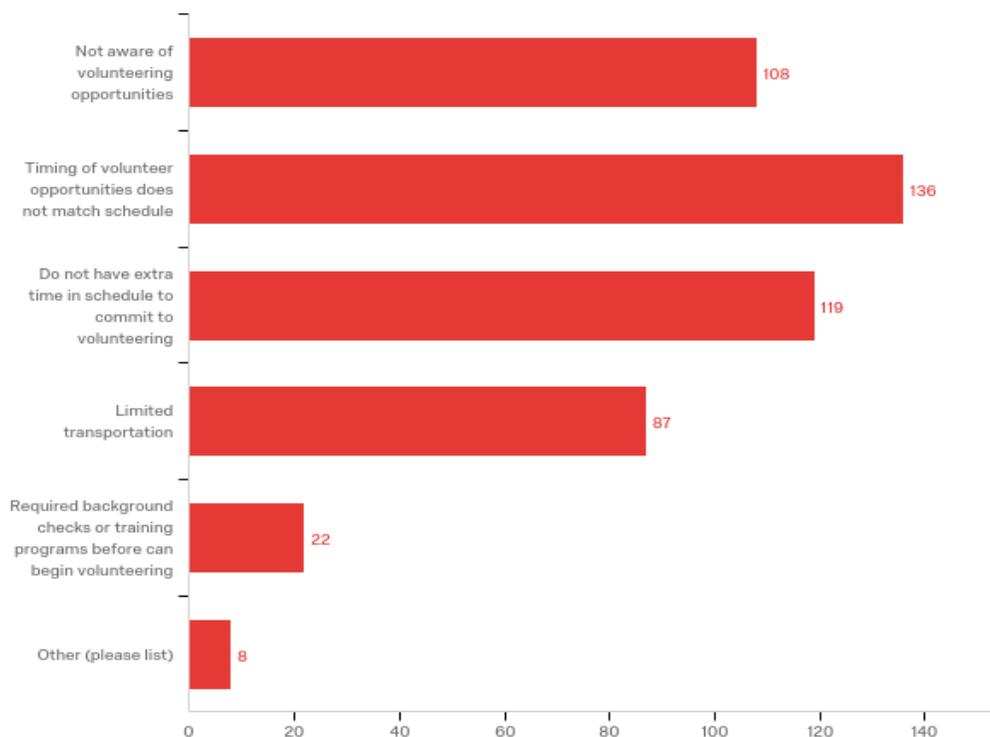
Figure 4.3: Graph showing frequency WPI students identified barriers they encounter that prevent them from volunteering

4.2.2 Pilot Program Interest Survey

Students that showed interest in participating in the Pilot Program were then brought to a second survey. As we kept going completing different stages of our pilot program, the number of responses dropped per stage of the survey (Figure 4.4). From the previous survey, 65 students said they were interested in participating in a pilot program. Once they were brought to the second survey, almost half of the students opted out from participating in the survey from the very beginning. In the end, only 23 people filled out the form completely. Later, we encountered that one other person believed they had completed the survey, but we could not find their responses.

For our selection process for the pilot volunteers, we decided to choose people that would be available during the YMCA's Schools Out after school program. After going through everyone's available times, we found 17 people able to participate in the pilot program on Mondays and Wednesdays. We sent out a commitment survey to the chosen volunteers to see if they would still be interested in participating in the Pilot Program. We received 11 responses, but only five people were still interested in participating in the program. As we wanted to have a larger pool of volunteers, we spoke to the brothers of Alpha Phi Omega, which is the co-ed service fraternity, to see who might be interested in participating. From this, we were able to recruit three more students for a total of 8.

After sending out the needed volunteer documents, there were signs that we had lost volunteers due to them not replying to emails nor surveys. This could have been due to schedules changing or people just not wanting to commit anymore. One student who answered our commitment survey did say their availability did change. One student that filled out our commitment form and said they were able to participate never followed up with any of our emails. Since we did not know the student personally, we had difficulties following up with them.
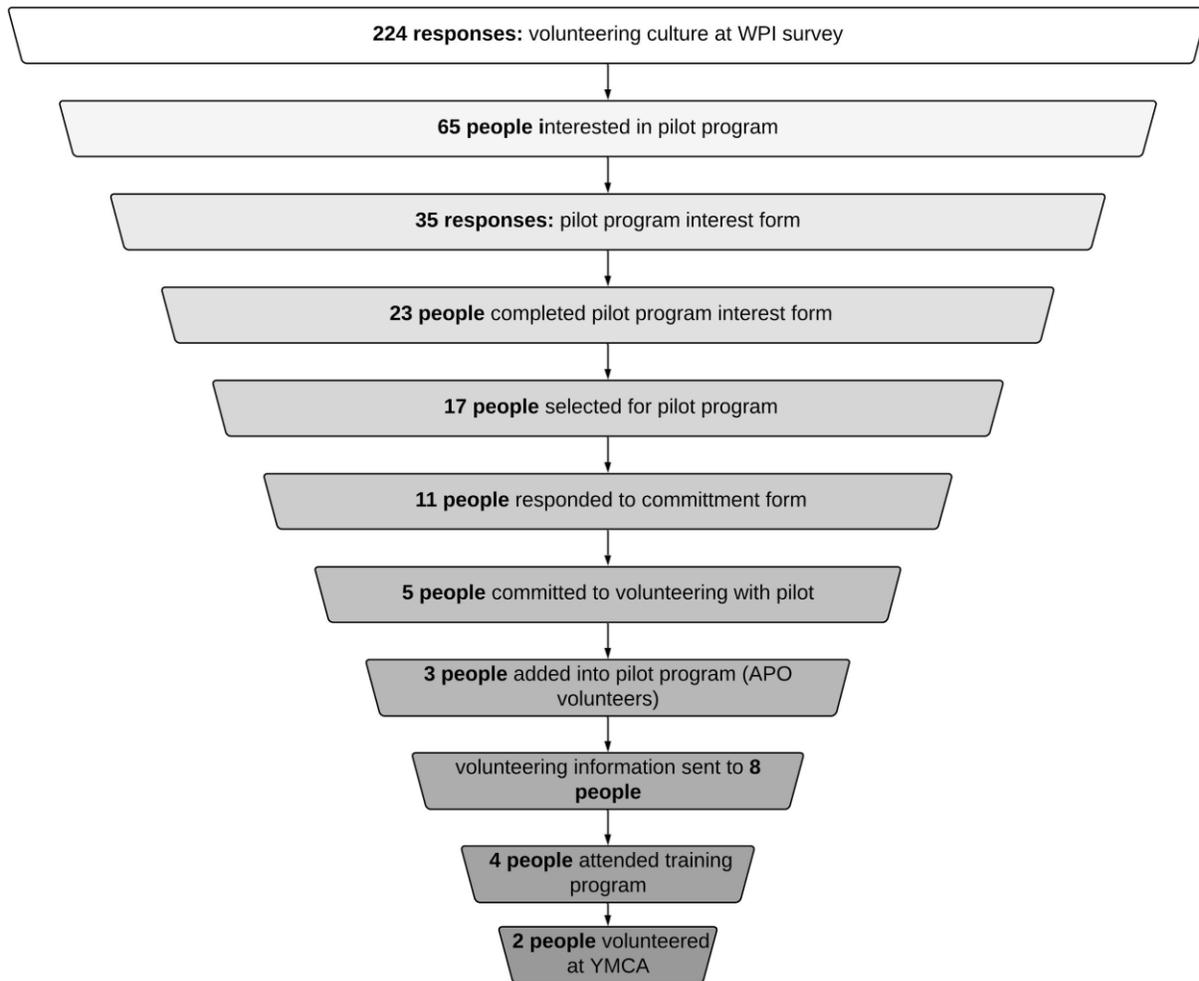
Figure 4.4: Diagram showing the number of students that continued per stage of the pilot program

Once we had our eight volunteers, we started to send out information pertaining to the YMCA and started to prepare a schedule. As many students mentioned that transportation was a barrier for them when it came to volunteering, we hoped to rely on student drivers that would be willing to drive the other volunteers. In the end, we ended up with two student drivers. We divided the volunteers into two groups that would arrive and leave at different times (Table 4.2 and 4.3). In addition, we also coordinated with the YMCA to use the van to pick up the first group of students on both days since we wanted to test out the use and reliability of the van.

Table 4.2: Initial C-term schedule for the eight volunteers

Initial Schedule: C-Term			
Monday		Wednesday	
3-5pm	4-6pm	3-5pm	4-6pm
Driver 1	Driver 2	Driver 1	Driver 2
Volunteer 1	Volunteer 2	Volunteer 1	Volunteer 2
		Volunteer 3	Volunteer 4
		Volunteer 5	

Table 4.3: Initial D-term schedule for the eight volunteers

Initial Schedule: D-Term			
Monday		Wednesday	
3-5pm	4-6pm	3-5pm	4-6pm
Driver 1	Driver 2	Driver 1	Driver 2
Volunteer 1	Volunteer 2	Volunteer 1	Volunteer 4
Volunteer 6		Volunteer 3	
		Volunteer 6	

4.3 Preparation and Training

4.3.1 Communications

In order to set up a communication system with the WPI volunteers, we asked the student volunteers what the best form of communication was for them. The majority of students responded with email being the most preferred method for communication (Figure 4.5). To streamline the process of sending emails out to the student volunteers, we set up a group in Outlook called YMCA Pilot Program Volunteers. We had also set up our own group between all the members and advisors. When we would send out emails about the pilot, we made sure to CC the group alias. What this means for our volunteers is that they will be able to email the whole alias and will be able to get a response from one of us. The only drawback we had with this method was that we were unable to tell if the student volunteers were actually reading the

messages. We used this method to send out surveys, CORI forms and anything about the pilot program.

Preferred Method of Contact
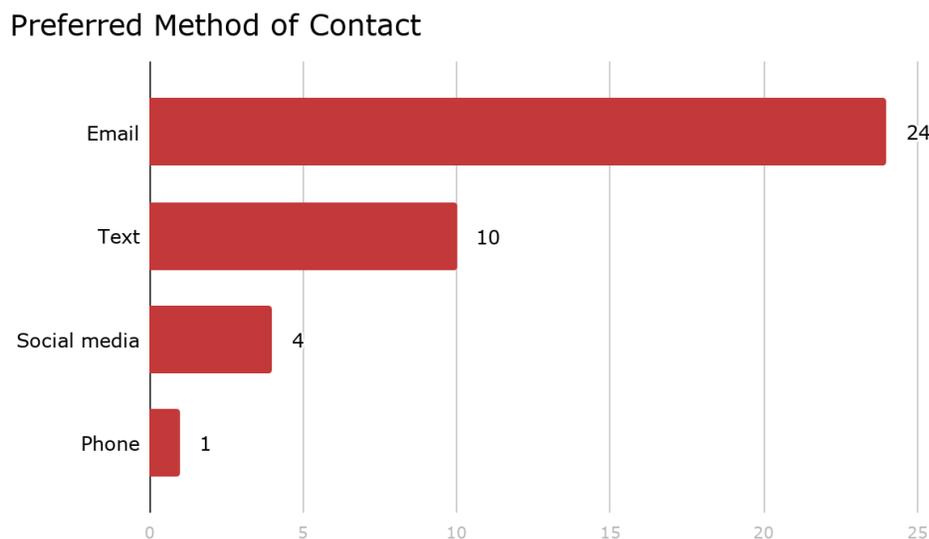
Figure 4.5: Preferred method of contact for the volunteers

4.3.2 Training

The objective of the training session was to ensure that the student volunteers were prepared to volunteer at the YMCA. We wanted to inform the student volunteers about the environment they would encounter.

One of the common discussion topics we maintained throughout our sponsor and advisor meetings, was the topic of training. We wanted to make sure we would send the volunteers prepared to handle children of different ethnicities and socioeconomic status. During our meeting with Sue, she suggested that, for the training, we should present material in a non-lecture style and instead make sure the student volunteers are actively participating throughout the discussion. We made sure to add questions to our slides that would encourage conversation among the volunteers. Additionally, she suggested we focus on child development and ethnic and diversity training. We also met with Katie in preparation for the training. In addition to the suggestions made by Sue, Katie recommended that we talk about bias and the savior mentality and assisted us in creating a training outline to guide the creation of our training presentation (Table 4.4, Appendix 4). The savior mentality, more specifically known as the white savior mentality, occurs when individuals feel the need to help those who they perceive as less fortunate, such as individuals of different race or socioeconomic status. Many of those with this mentality act in the ways they do to gain recognition or praise for their work, making this an important mentality to avoid as volunteers should work to assist others, rather than for self-serving purposes. (Wikipedia, 2019) Additionally, viewing others in a deficit-based mindset like this can be detrimental to education as each student has their own personal strengths to bring to the table.

Table 4.4: Volunteer training topics, main content ideas, and approximate time

Topic	Main Content Points	Time
How children learn at different ages	- growth versus fixed mindset - stages of learning	~10 minutes
Worcester and YMCA demographics	- overview of race and ethnicity breakdown - common languages spoken - financial and socioeconomic breakdown	~5 minutes
Asset versus deficit models of education	- differences between these models - deficits often are linked to stereotypes - discussion on topic	~5 minutes
Implicit biases	- examples of implicit biases (videos) - overview of what implicit biases are - discussion on experience with implicit bias	~10 minutes
Saviorism	- volunteers and children learn from each other - go in with an open and positive mind - look for their strengths, not weakness - discussion on saviorism in the media	~10 minutes
Microaggression	- overview of topic - video explaining microaggression - tips for avoiding microaggression - discussion on experience with microaggression	~10 minutes
Recap	- allow time for volunteers to ask questions - discuss concerns, misconceptions	~10 minutes

Four students attended the training. Before the training session started, we had the student volunteers take a pre-training survey (Appendix 4) so we could get a better idea of their understanding of these topics. Afterward, they took a post-training assessment survey to see if they were more comfortable with these ideas.

One of the topics that the student volunteers seemed to not have that much knowledge on was the topic of saviorism. We addressed this topic by first addressing the fact that an individual should not go into a situation thinking that they are there to save the day as volunteers, and can

learn just as much from those with whom they work, as well as the people they work with learn from them. During the discussion, we asked volunteers to evaluate how saviorism is portrayed in the media, using the portrayal of saviorism in social media as an example to start this discussion off.

Most of the students had a general idea of what microaggression was. There was one student who had hardly any knowledge on the topic. This could be due to the topic of not being introduced or discussed in settings other than workshops and specific training. During the training, we showed a video that went over how microaggression affects some people over others ("How microaggressions are like mosquito bites- Same Difference," 2016). Then during our discussion, we had the student volunteers, who were comfortable sharing, tell us about their experiences. The student volunteers also discussed ways that they could address the problem.

4.4 Pilot with the YMCA

4.4.1 Overview

In the initial stages of the project, our team determined that the most effective way of testing student volunteer participation with local CBO's was to develop a pilot program carried out with the School's Out after-school program at the Central Community Branch YMCA. As the pilot program volunteer pool dropped in size a new schedule was proposed to best accommodate the schedules of both volunteers who completed all necessary training and volunteer forms (Table 4.5).

Table 4.5: Schedule of the remaining two volunteers participating one day a week for three weeks

Final Schedule: D-Term Only
Monday: 3-5 pm
Volunteer 1
Volunteer 6

According to the initial timeline for the project, our team had planned to have the pilot program begin on February 25, 2019, so that the volunteers could begin working with the YMCA during C-term to allow for a longer pilot program and to test the ability for this volunteer program to run across a semester. However, due to difficulties in communication and the delay of the training program until February 27, 2019, the pilot program start date was pushed back to March 11, 2019, the first Monday of D-term. Once again, due to difficulties in communication with both the YMCA and the initial volunteer group, the pilot program had to be pushed back an additional week to allow for time to confirm with the YMCA that the volunteers were cleared to

work with the after-school program. As a confirmation had not been received for March 18, 2019, and the van service had not yet been set up, the volunteers were driven to the YMCA at 4 pm by one of the members of our IQP team. Upon their arrival at the YMCA, it was discovered that the YMCA staff who had been informed of the volunteers coming to work with the program had left early for the day, making it impossible for the volunteers to officially work with the program as the remaining staff did not know where to place the volunteers. On March 25, 2019, the two volunteers were picked up by the YMCA van at 3 pm in front of WPI's Alden Memorial Hall. The volunteers arrived at the YMCA and helped with the School's Out program until their departure at 5 pm when a member of our IQP team drove to the YMCA to pick them up and bring them back to campus. Although the initial end of the pilot program had been scheduled for April 1, 2019, the pilot program was extended an additional week after the two volunteers expressed interest in continuing to help with the after-school program. During these three weeks, the two volunteers worked primarily with homework help.

4.4.2 Post-Program Interview with the YMCA

After the pilot program concluded, we met with Sarah Levy to debrief on her experiences and what she would like to see improved. One of the main concerns we wanted to discuss with her was how we could improve our communication. Since there were two other WPI groups who were also working with the YMCA and communicating with Sarah, she would lose track of which group she was talking to. One of the recommendations she made to combat this was to keep using the same email thread, so all previous emails can be easily accessible. She also recommended that one person per group should be the point of contact and to have a clear team name (e.g., Computational Crafts). One of the ways she started to stay in contact with one of the groups is by texting one of the team members. This allowed for a faster response rate

As for the van, she said that it was fairly easy to implement in their daily routine. The only issue that needed to be resolved was the communication between the volunteers, Sarah, and the driver. She would like if there was a point of contact that would be able to communicate in case the van driver won't be able to come or there are not enough volunteers attending for a particular date. Another thing she mentioned for the use of the van was that she would still like to apply the rule of three that they have in place at the YMCA, which would mean it would be the staff member and at least two student volunteers. When asked if there was a maximum number of volunteers that she would have, she stated that she wouldn't turn anybody away, but seven would be a good maximum number. That way she can still be able to manage the volunteers.

4.4.3 Post-Program Debrief with Pilot Program Volunteers

After the volunteers had finished their final shift on April 8, 2019, we planned to have an in-person discussion to discuss their experiences volunteering with the YMCA and what they thought could be improved upon for the future. During this debrief, both volunteers indicated that enjoyed working with the after-school program and would continue to volunteer if their

schedules allowed. During their time volunteering with the YMCA, the two volunteers noted that they primarily helped with homework, most of which was either math or reading. When asked to rank the usefulness of the training program in reference to the volunteer experience, both volunteers noted that they did not see themselves using much of the training when working with the children. Based on their experiences, they said that the training program allowed them to better recognize cases in which program participants exhibited microaggression towards one another, but they noted that, as the staff is in charge of discipline, it would not be useful to train volunteers in how to discipline for these behaviors. It was also brought to our attention that the volunteers would have preferred the training to focus more on giving an overview of what to expect when volunteering with the YMCA as, going into the first day of the pilot program, both volunteers were unsure of what to expect. Both volunteers also noted that, while they both completed all necessary steps to volunteer with the after-school program, it was quite difficult to fill out all of the required volunteering forms and it would be useful to have an orientation where volunteers could get help filling these out and submitting them to the YMCA. When working on-site, the volunteers also indicated that it was hard to jump into volunteering activities right away as they arrived during the transition time from snack to homework and activities. Although some individuals find it useful to have volunteering opportunities listed online, both volunteers indicated that they likely would not have found this volunteer opportunity if it had only been listed on a school-run community service webpage as they both typically do not check these sites frequently.

4.4.4 Post-Program Interviews with the WPI Student Activities Office

To implement a sustainable infrastructure for WPI volunteers out in local CBOs, we talked to Christine Kobza (Associate Director of Student Activities Office, SAO) to get a better understanding on how volunteer opportunities are advertised around campus. She told us that all the services go through the TechSync. Every time that they send out an email, they redirect everyone to TechSync, an online Campus Labs "platform [that] provides a centralized hub" for information to be posted regarding events, organizations and forms (Campus Labs, 2019a; Campus Labs, 2019b). Christine Kobza also sends specific service opportunities to specific organizations if she knows that they already have some form of connections with the organization.

One of the things we had struggled with was having the student volunteers that were initially committed to participate in the Pilot Program, but then dropped out. We lost a majority of our student volunteers when it came time to fill out the CORI forms. For this issue, Christine recommended that we should have a Meet and Greet by the CBO. When it comes to filling out paperwork, it is easier when someone from the organization is there to answer any questions about filling out the forms and can then collect them. This also allows for the student volunteers and the organization to get to know each other.

4.4.5 Post-Program Reflection

In the wake of the pilot program, our group sought to determine if running a pilot for such a short length of time and with so few volunteers was worth all of the effort put into planning it. While we were faced with many barriers and challenges, our hardships ultimately revealed to us the common areas in which extra attention and focus is needed. Through our work with the YMCA, we were able to alleviate some of the initial transportation stresses as the YMCA offered to pick up the volunteers for the start of their volunteer shift, only requiring our group to provide transportation for the volunteers back to campus at the conclusion of their volunteering shift. Although our group initially struggled with communication with both the YMCA and the volunteers, we ultimately were able to maintain stable communication with our two final pilot volunteers and realized towards the end of the pilot that we were much more likely to receive a response from the YMCA if we sent messages early in the day and relied on a singular group member to handle these communications to cut down on potential confusion for whoever was responding to the emails as the YMCA worked with multiple WPI project groups over the course of the year.

Although there were only two volunteers for our pilot, this worked out very well as our group was able to have an in-depth conversation with these two volunteers to gain their feedback on ways to improve the pilot program. If we had more volunteers, we likely would have not been able to develop this strong connection with the volunteers that allowed us to have an extensive in-person feedback meeting which ultimately helped us shape our recommendations for moving forward with this program. One regret we have when looking back at our project lies in the fact that we were unable to further investigate a partnership with a club or organization to serve as a sustainable flow of volunteers to the YMCA. While we had considered partnering with Alpha Phi Omega, the campus co-ed community service fraternity, we found it difficult to make this connection, despite the involvement of our team in the organization. Due to Alpha Phi Omega's busy calendar, it was not feasible to partner with the club for an extended period of time, as off-campus weekly community service opportunities are often not well attended and we did not want to risk having to constantly cancel volunteer shifts with the YMCA if volunteers did not commit to attending. Overall, although the program did not go as planned, our hardships taught us a great deal about areas in which improvement can be made, shaping our recommendations and showing us that hardships and challenges we face can help us build and develop something even greater than what we had planned.

5.0 Recommendations

Over the course of this IQP, our team was met with many failures and successes, allowing us to determine both areas of improvement and components of our project to be maintained going forward. The following recommendations, based on the data collected over the course of the project, are meant to guide future groups or individuals in continuing the process of developing a sustainable volunteering infrastructure connecting student volunteers to CBOs.

As previously mentioned, the recruitment and retention of student volunteers were difficult, impacting the pilot program extensively. Due to the student volunteers not responding to emails concerning the pilot program, the start of the pilot program had to be pushed back and the volunteers were only able to work with the YMCA once a week for three weeks. Drawing from these challenges, we would like to recommend that volunteers be recruited earlier in the year. Based on our discussion with the Student Activities Office, as well as our combined personal experience in club recruitment, we have learned that students are often more excited and active when it comes to looking for on-campus involvement during the first few weeks of the academic year, most notably during the new student orientation activities fair. During this time, clubs often advertise their groups by table sitting at the campus center or the fountain. Additionally, during new student orientation, a work-study fair is held for all students with work-study to find on-campus jobs and community service opportunities. We would like to recommend that volunteers be recruited at this time as organizations partnered with the school may send representatives to this event who may be able to better promote their program. Additionally, having representatives from the YMCA and other CBOorgans at the fair would allow the students to build a more personal connection with the organization. As discussed in our meeting with the Student Activities Office, this personal connection may increase the chance of a student becoming a dedicated, long-term volunteer. During this event, CBOs can also bring any volunteer forms for students to fill out if they are interested in working with the organization so that, later in the year, they do not have to wait for these forms to be received and processed before beginning to volunteer. This will also provide the students help in filling out forms and answering any questions they may have.

While recruiting students early in the year would be the most beneficial way of forming a large volunteer pool, another recommendation we have developed is to recruit work-study students to volunteer with the program during the last few months of the academic year as, based on information from our meeting the Student Activities Office. Most students wait to complete their required community service hours at the end of the year. Promoting the program at this time can help us gain more volunteers who potentially will stay with the program for the rest of their time at WPI to fulfill their work study community service hours for their remaining years as a WPI student. Advertising our program through WPI's Student Activities Office, as well as TechSync, will also allow for a greater chance of recruiting student volunteers as those seeking community service opportunities are often directed to this office or website to search for organizations to work with.

Although our recommendations for recruiting student volunteers may increase the number of students in the volunteer pool, one issue that has not yet been addressed is the issue of communication. While we initially had a large group of volunteers whom we reached out to while planning the pilot program, over half of these individuals decided to no longer participate in the pilot program by not responding to emails or surveys. Many of these students neither responded to emails nor confirmed receipt of emails. Based on this experience, we recommend that communication methods be further investigated to possibly transition to a combination of multiple communication platforms to better reach out to those who do not frequently check their emails. We recommend that the volunteers be required to provide a phone number when signing up to volunteer with this program so that they can be contacted more easily regarding urgent matters. Additionally, while we would like to maintain the use of e-mail for sending large updates or documents, we recommend that a messaging platform such as Slack be used as this software allows students to react to messages to indicate that they have read a message or to indicate their preference when provided with a poll-style question (Figure 5.1 and 5.2) (Slack, 2019c). Features such as @channel notify an entire group that a message has been sent so that those who may have their notifications turned off still receive important updates (Figure 5.3) (Slack, 2019a). In Slack, channels can also be created so that, if the program is expanded to include more CBOs, channels can be created for each specific organization so that volunteers can join the channels for the organizations they wish to volunteer with (Figure 5.4) (Slack, 2019a). The group moderators of a Slack group, which, in our case, would likely be the group in charge of coordinating volunteer shifts, can also limit who can post messages to specific channels so that they do not become bogged down by irrelevant discussions and rather can be a place for program coordinators to inform volunteers of all updates and changes (Figure 5.5) (Slack, 2019b).
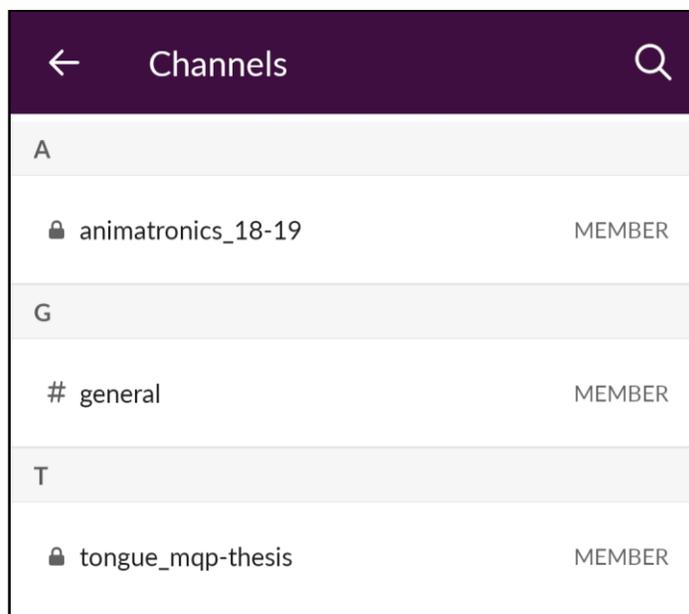

Figure 5.1: React feature to indicate you have read a message
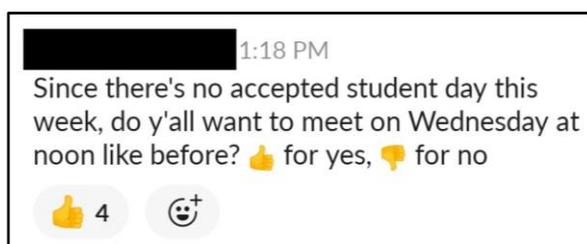
Figure 5.2: Poll style reaction to indicate a preference between multiple options

Figure 5.3: @channel feature to notify all members of important updates

Figure 5.4: Users can join multiple slack channels
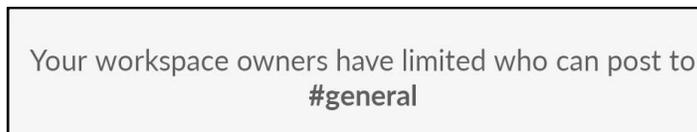
Figure 5.5: Channel can be moderated so only certain people can post information

Our team noted that the next big issue we faced was the lack of volunteers who were willing to fill out the required volunteer forms. Due to this barrier, we recommend that the volunteers be provided with an opportunity to go through the steps of filling out these forms with the help of a staff member or current volunteer from the organization with whom they are planning to work. Meet and Greet sessions can be organized for CBOs to come to campus or to

invite potential volunteers to their site, making it easier for forms to be filled out and questions to be asked. During these Meet and Greets, volunteers can also be given site-specific details and training for working with more specialized programs or groups. Staff or past volunteers from these organizations can also go over their expectations, so the new volunteers have a better idea of what to expect when they arrive at their volunteer shift and what is expected of them when they are on-site. Additionally, as the volunteer handbook is also quite lengthy, we suggest student volunteers be given a list of highlights taken from the handbook to inform them of the information that is most important for them to know.

While the recommendation of an on-site or on-campus meeting may solve the issue of providing an overview of the expectations of the organization for its volunteers, one other area we would like to improve is the on-campus training provided to all program volunteers. While the training we developed focused primarily on topics such as avoiding bias, microaggression, and saviorism, the feedback received from the training participants and pilot volunteers has led us to develop the recommendation of expanding the training to add information for best practices for working with children. We recommend that information be added to the training to educate volunteers on proper methods for tutoring and interacting with children in a more enthusiastic and positive manner to encourage the children to be more interested and invested in the subject area. Additionally, based on our meeting with the YMCA, we recommend that student volunteers be given an orientation day where they can meet the children with whom they will be working as teaching and mentoring is often more effective if volunteers get to know the children first and bond with them through common interests.

As mentioned in section 1.2 of this report, transportation was identified as a major barrier to volunteering at off-campus organizations at the start of this project. Based on the fact that it is not reasonable to depend solely on volunteer student drivers, we recommend that transportation be provided by the CBO if possible. While a van service, such as the one provided by the YMCA, would be the ideal method of transportation, we realize that not all organizations have the resources nor staff to provide transportation to the volunteers. With this in mind, we also recommend that the volunteering program makes use of the WPI community service van as this is a transportation option for students traveling off-campus to complete community service hours. In cases where the van may be unavailable due to scheduling conflicts or a lack of drivers, we recommend that there be a backup driver to provide transportation, or that programs are developed to volunteer at an organization within walking distance from campus. Additionally, to solve the issue of transportation, we recommend that the initial focus of the volunteer program be to volunteer at local organizations that are within reasonable walking distance from campus, before expanding to organizations that are farther away, so that student volunteers do not have to rely on the availability of a driver to in order to attend their volunteering shifts.

While our pilot program with the YMCA was ultimately successful, despite setbacks due to the barriers and issues mentioned earlier, our team recognizes that this volunteering structure is not possible without a group of individuals dedicated to ensuring the success of the program. While we were not able to extensively research the ways in which this project could be

developed into a sustainable club or sub-sector of a campus office, our team would like to recommend the development of a club to maintain a sustainable volunteering structure with off-campus CBOs. This potential solution may be able to address many of the barriers we have faced over the course of this project as a club executive board can act as a governing body to connect volunteers to organizations and organize volunteer shifts, Meet and Greet sessions with organizations, and training sessions for volunteers. On campus, many students look to get involved in volunteering organizations such as the co-ed community service fraternity, Alpha Phi Omega, and other Greek life organizations. However, as our team consists of two members of Alpha Phi Omega, we understand that joining a Greek life organization such as this is a very big time commitment as members must fulfill specific membership requirements in addition to community service hours. For individuals who wish to work in the community, but do not have the time to commit to participate in Greek life organizations, a club such as this may be the perfect fit to handle the organizational details that often act as barriers to volunteering. A club could potentially help solve the issue of transportation. As members start to join, there is a chance someone with a car will participate. Additionally, after a year of existence, a club can request funding from the student government association based on their first-year expenses (Undergraduate Student Government Association Financial Board, 2018). These expenses could include transportation accommodations, such as funding for Uber or Lyft transportation or a membership allowing for the use of the campus Zipcar system (Zipcar, 2019). Overall, the investigation of transitioning the management of a volunteering structure to a newly developed club may be able to address many of the barriers, while also allowing for a more organized connection to CBOs rather than simply asking students to reach out to organizations on their own to find volunteering opportunities in such a manner that is similar to how students reaching out to the students activities office find volunteering opportunities.

6.0 Conclusions

Over the course of this project, our team worked towards our goal of developing a sustainable volunteering infrastructure connecting WPI student volunteers to Worcester CBOs by recruiting WPI students to participate in a pilot volunteer program at the Central Community Branch YMCA. Throughout the recruitment process and implementation of the pilot program, our team collected information regarding the volunteering preferences and experiences of WPI students. During this time, additional interviews allowed us to gather advisor and stakeholder input, based upon their collective years of experience working with college student workers and volunteers. The data collected from WPI students, as well as stakeholders and advisors, allowed us to form a structure for the pilot program and organize our volunteers into shifts based upon individual schedules and survey results regarding preferred volunteering shift frequency and length. Considering the fact that many WPI students do not come from diverse communities, we determined that a training program was necessary to not only educate volunteers on issues of bias and microaggression, but also to train for working with young students in an education setting. Students that participated in the training session and filled out the necessary paperwork, began to volunteer at the YMCA's School's Out Program and continued to do so once a week over the course of three weeks. At the conclusion of the pilot program, we conducted debrief interviews with both the YMCA and the student volunteers to gain input on things that they liked and things that they would change about the program. With this data, we then came up with recommendations for future work on similar projects. Our recommendations were aimed at improving communication with both volunteers and CBOs, as well as improving volunteer recruitment, training, and retention. Overall, our project revealed many of the barriers to developing a sustainable volunteer program linking college students to local CBOs. However, with the recommendations outlined in this report, building a program such as this is likely to be much more feasible than before. Dedication was a key part of our project as we learned that not only do we need dedicated volunteers, but also a dedicated support system for these volunteers in order for ultimate success in a project such as this.

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Appendices

Appendix 1: Pre-Program Interviews

1.1 Pre-Program Interview with the YMCA

1.1.1 YMCA Demographic Analysis

1. What is the demographic like at the YMCA currently?
   a. Age group?
   b. Ethnicity?
   c. Economical status?
2. What are the demographics of the program workers and volunteers? What is the breakdown of the different tasks that workers and volunteers participate in for the program?
   a. How many workers vs. how many volunteers are there currently working in the after-school program?
3. How are YMCA interactions with other colleges besides WPI?
4. On average how many patrons attend the programs offered? Overall, do these patrons attend the programs regularly or do they attend intermittently?
5. Does the YMCA require CORI forms for the volunteers? If so, who pays for them?
6. Have you worked previously with another college before? Currently?
   a. If so, what programs are they doing? Are they doing a mentorship or tutoring program? Are they helping out with any after school activities?
   b. How consistently do you work with this college?
7. How is the program set up (get info other than what's on the website)?
   a. Is After School/School's Out a big program made of smaller programs?
   b. What is the best way to integrate WPI students? Are we going to be working within the 30-90 min "activity" period?
      i. Why is there such a large range of time?
      ii. Is there a way to ensure that when we come, we get periods of longer activity times (since we won't be there every day)

1.1.2 YMCA Experiences and Preferences for a Partnership with WPI

1. What have your experiences with WPI student been like? Clubs vs. organizations vs. one-time events?
   a. challenges/good experiences
2. Have they ever contacted you again after the termination of a program?
3. What are your expectations for the program? Ideal program?
   a. Expected deliverables?

4. Is there a specific program that you would like help with?
5. Is there a specific program that you would like to be created?
6. Are there any problems that you would like to be addressed with the program?
7. How long are you hoping the program will run on average?
    a. Would it be beneficial to have students meet daily? Weekly? Monthly?
    b. Would you like the volunteers to act as mentors? Run STEM projects?
8. What are the key factors of your ideal framework for the program?
9. How involved is Pam going to be?
    a. meetings/recaps?

1.2 Pre-Program Interviews with WPI Offices

1. How would creating a sustainable program be beneficial to you?
2. What is your vision for the project?
3. What is the difference between POP and the STEM education office?
4. What influence do you think POP/the STEM education center will have on our program?
5. Would having a mentoring program be more beneficial?
6. Do you believe students should receive some type of training?/Other than diversity/bias/etc. training what type of other training do you think is necessary?
7. Are there other schools or programs that you would like to work within the future?

Appendix 2: Post-Program Interviews

2.1 Post-Program Interviews with Student Activities Office

Meeting Objective: Our IQP team has been working to build a sustainable structure to allow for a greater flow of volunteers to local CBOs. Our IQP team and our advisor, Kathy Chen, would like to meet with you to discuss our project and how this could potentially be integrated into the community service offerings on campus. Currently, we are working closely with the YMCA of Central Massachusetts with their after-school program and we hope that our proposals can expand to other Worcester organizations.

- Explain the project goal
  - What ways do you think we could integrate our project into the existing SAO community service programming?
- SAO outreach
  - How effective would you say your outreach to the student population is?
  - What are your stats on individuals vs. clubs that go through SAO to find volunteering opportunities? Does your outreach focus more on individual volunteers or groups?
  - Do you reach out to organizations to seek out potential volunteer opportunities or do organizations contact SAO when they need people to volunteer?
  - Do you have any strong relationships with particular CBO's?
  - How much do you work with WPI campus staff? Do staff members reach out to SAO/does SAO reach out to campus staff on a frequent basis?
  - Will do their own outreach
  - Is most volunteering with off-campus organizations?
  - What percentage of volunteering is off-campus vs on-campus?
- Logistics
  - Do you process or handle CORI forms, or is this handled by the individual organizations that students volunteer with?
  - Do students have training programs they have to go through to volunteer for any of the organizations you work with?
  - Do you see any times where students do not show up to volunteer shifts due to other obligations? (homework, midterms, etc.)
  - Is there a system put in place to account for absences students may accumulate during busier times of the year?
  - Is there any recognition given for people who go above and beyond that of an average volunteer? (per week, per term, etc.)
  - Does SAO provide transportation options to services other than the community service van?

- What is the typical usage of the community service van like? Does this run consistently?
    - What is the breakdown of work-study vs. non-work study volunteers?
        - Do you track stats for the volunteers who are non-work study?
        - Do you notice student volunteers are typically in community service organizations or not?
    - What is the breakdown of volunteering opportunities? (STEM education, tutoring, cleanups, etc.)
    - Do you notice any areas where improvement is needed? What areas is the most help needed in?

2.2 Post-Program Interviews with Pilot Program Volunteers

Transportation
- For van transportation:
    - Was the driver of the van late, on time, or early?
    - On average, how long did it take to get to the YMCA?
- For student driver transportation:
    - Was the driver at the designated meeting spot late, on time, or early?
    - On average how long did it take to get to the YMCA?

Training
- Rate how helpful the training was during your volunteering experience
    - Have you had previous volunteer experience in underserved communities?
    - Have you previously spent time in underserved communities?
    - Was there anything that you wished we had emphasized more in the training?
    - Was there anything else that we should have covered to better prepare you for volunteering?

Program
- Rate your volunteering experience
- Is there anything that could be implemented to better facilitate the volunteering experience?

Time Commitment
- Was the length of the volunteer shifts manageable with your schedule?
- Is there anything you would change about the timing of the volunteer shifts?
- Did you volunteer once or twice per week?
- Was this frequency of volunteering manageable for you?
    - If not → In your opinion, what would be manageable for you? once per term for a larger scale, planned activity or event? once per week?
- Did you cancel any of your volunteering shifts? If so, why?

Communication
- How would you rate the mode of communication?

- ○ Is there another form of communication you think would be better? (slack, text, fb messenger)
- How would you change the frequency of reminder emails sent to you? (Increase frequency, decrease frequency, stay the same)
  - ○ If you chose increase or decrease please explain why.
- How would you like reminder emails to be organized? (multiple small emails, one large email)
  - ○ Please explain your answer

2.3 Post-Program Interviews with YMCA

- What is the best way to communicate with the YMCA about volunteering opportunities and volunteer schedules?
  - ○ Is email preferred over phone calls?
  - ○ What is the best time to contact you?
  - ○ Is there another staff member who it would be more beneficial to contact to allow for greater ease of contact?
- Was picking up the volunteers inconvenient at any point?
  - ○ Is there any way that the YMCA van could be used to transport volunteers back to WPI at the end of their volunteer shift?
  - ○ How often would it be feasible for volunteers to use van transportation (per week)?
  - ○ Is there a number of volunteers that would be worth it to shuttle to and from the YMCA using the YMCA van?
- Did you notice it was useful to have extra volunteers on hand?
  - ○ Was the number of volunteers a good amount or too small/too large?
  - ○ What areas was it most useful to have the volunteers work in?

Appendix 3: Survey Questions and Full Survey Flow

3.1 Volunteering Culture at WPI Survey

Volunteering Culture at WPI

Survey Flow

Standard: Survey Introduction (1 Question)
Block: Intro Questions (4 Questions)
Standard: Volunteering Culture Questions (12 Questions)

EndSurvey:

Page Break

Q1.1 We are surveying the students of WPI to collect their thoughts and perspectives on volunteering opportunities both on and off campus. This survey is intended to gather information regarding volunteering habits and how students find volunteering to participate in. Additionally, this survey serves to assist us in learning more about WPI's specific volunteering culture.
This survey will take approximately 5-10 minutes to complete. It is completely optional and can be ended at any time. If you have any questions, comments, or concerns you may contact our advisor at kcchen@wpi.edu.

If you select yes below you are choosing to begin the survey to provide information regarding your volunteering habits and experiences during your time as a student at WPI. All responses are completely anonymous. If you complete any portion of this this survey and fail to contact our advisor requesting to withdraw your responses you are allowing the members of our team and our project advisor to access and evaluate any information provided by you in the following survey.

Would you like to continue with the survey?

○ Yes (1)

○ No (2)

Skip To: End of Survey If Q1.1 = 2

End of Block: Survey Introduction

Start of Block: Intro Questions

Q2.1 Do you currently volunteer or have you volunteered at any point during your time as a student at WPI?

○ Yes (1)

○ No (2)

Display This Question:
    If Q2.1 = 1

Q2.2 How have you gone about finding volunteer opportunities in the past? (please type answer below)

_____

Display This Question:
    If Q2.1 = 1

Q2.3 For what length of time do your volunteering shifts typically last? (please type answer below)

_____

Display This Question:
    If Q2.1 = 2

Q2.4 If you have not volunteered in the past, would you be interested in volunteering?

○ Yes (1)

○ No (2)

Skip To: End of Survey If Q2.4 = 2

End of Block: Intro Questions

Start of Block: Volunteering Culture Questions

Q3.1 Why might you want to volunteer? (select all that apply)

☐   To give back to the community (1)

☐   To satisfy club requirements (2)

☐   To complete required community service hours for work study (3)

☐   Other (please list) (4)

_____

Q3.2 What barriers would prevent you from volunteering or volunteering more? (select all that apply)

☐   Not aware of volunteering opportunities (1)

☐   Timing of volunteer opportunities does not match schedule (2)

☐   Do not have extra time in schedule to commit to volunteering (3)

☐   Limited transportation (4)

☐   Required background checks or training programs before can begin volunteering
(5)

☐   Other (please list) (6)

_____

Q3.3 What methods have you used to find volunteering opportunities? (select all that apply)

☐ Website or database of community service offerings (1)

☐ Through club involvement (2)

☐ Internet searches for community service in the Worcester area (3)

☐ Social media posts or advertisements (e.g., Snapchat, Facebook, Instagram, Twitter, LinkedIn) (4)

☐ Word or mouth (e.g., friends, classmates, etc.) (5)

☐ Other (please list) (6)

_____

Q3.4 Which types of volunteering opportunities might you be looking for or be interested in? (select all that apply)

☐ Volunteering with an after-school STEM "club" or activity for children (1)

☐ Volunteering with an after-school non-STEM "club" or activity for children (e.g., sports, photography, etc.) (2)

☐ Tutoring or homework help for after-school programs (3)

☐ General assistance for after-school programs (e.g., filing paperwork, prepping snacks, organizing children in groups, etc.) (4)

☐ Facilitating a STEM program on WPI's campus for after-school programs in the Worcester area (5)

☐ Other (please list) (6)

_____

Q3.5 If you are interested in a volunteering opportunity, would you be open to going through a training program?

○ Yes (1)

○ No (2)

Q3.6 What would prevent you from being open to going through any sort of training program? (please explain below)

_____

Q3.7
What is your ideal way to volunteer? (select all that apply)

☐　　Volunteering solo (1)

☐　　Volunteering with a small group (2)

☐　　Volunteering with a club or organization   (3)

☐　　Other (please list) (4)
_____

Q3.8 What is your preferred method of contact regarding details of volunteering events you have signed up for? (select all that apply)

☐   Email (1)

☐   Social media posts or messages (2)

☐   Text messages (3)

☐   Phone calls (4)

☐   Other (5) _____

Q3.9 How frequently would you like to volunteer with a specific organization or program? (select one answer)

○ Daily (1)

○ Weekly (2)

○ Once per term (3)

○ One time event (4)

○ Other (please list) (5) _____

Q3.10 Given the frequency that you would like to volunteer, how many hours would you prefer to volunteer per session? (select one answer)

○ 1-2 hours (1)

○ 2-3 hours (2)

○ 3-4 hours (3)

○ Other (please list) (4) _____

Q3.11 If you were to volunteer on a regular basis, which scenario would you prefer? (select one)

○ Volunteer at the same site or location to develop a relationship with the staff and students (1)

○ Volunteer at different Worcester sites or locations to interact with more local organizations (2)

Q3.12 Would you like to be part of the pilot volunteer group at the Central Community Branch YMCA during mid C-term and early D-term?

○ Yes (1)

○ No (2)

End of Block: Volunteering Culture Questions

3.2 Pilot Program Interest Survey

Pilot Program Interest Survey

Survey Flow

Standard: Intro (1 Question)
Standard: Pilot Program Interest Questions (14 Questions)

EndSurvey:

Page Break

Q1.1

In this survey you will have the opportunity to express your interest in volunteering as part of a pilot program during mid C-term and early D-term. This pilot program will be in collaboration with the YMCA Central Community Branch School's Out Program which runs weekdays from 2 pm to 6 pm and caters to approximately 200 students of diverse backgrounds from the Worcester community.

As part of our Interactive Qualifying Project (IQP) we are working to create a sustainable infrastructure which will allow WPI students to work on a consistent basis with community-based organizations in the Worcester area. Both students and our partner organizations will benefit from this infrastructure as it will allow for greater accessibility to volunteering opportunities for students and will provide a more consistent flow of volunteers for organizations in need of volunteers.

This survey will take approximately 2-8 minutes to complete. By submitting this survey you are allowing our team and advisor access to all information provided by you regarding your interest in volunteering in our pilot program (such as name, method of contact, etc.). This interest survey is completely optional and you may withdraw your interest in participating in the program at any time.

If you select yes below you are choosing to begin the survey to indicate your interest in participating in our pilot program at the YMCA. Would you like to continue?

○ Yes (1)

○ No (2)

Skip To: End of Survey If Q1.1 = 2

Q2.1 Name

_____

Q2.2 Major

_____

Q2.3 Year of graduation

○ 2019 (1)

○ 2020 (2)

○ 2021 (3)

○ 2022 (4)

○ Graduate student (5)

Q2.4 Ethnicity

☐ White (1)

☐ Hispanic or Latinx (3)

☐ Black or African American (2)

☐ American Indian or Alaska Native (4)

☐ Asian (5)

☐ Native Hawaiian or Pacific Islander (6)

☐ Other (7) _____

Q2.5 What languages are you fluent in? (select all that apply)

☐ English (1)

☐ Spanish (2)

☐ French (3)

☐ Mandarin (4)

☐ Vietnamese (8)

☐ Arabic (5)

☐ Hindi (6)

☐ Other (7) _____

Q2.6 Are you a part of any clubs, sports, or other on-campus activities?

○ Yes (please list) (1) _____

○ No (2)

Q2.7 Can we contact you or any of the clubs or organizations you are involved in regarding potential volunteering opportunities or our pilot program? (select all that apply)

☐ Yes, please contact me regarding any volunteering opportutnies (1)

☐ Yes, please contact my clubs and organizations regarding any volunteering opportunities (please list person to contact) (2)
_____

☐ No, do not contact me nor my clubs or organizations (3)

Q2.8 Preferred method(s) of contact (select and answer all that apply)

☐ Email (1) _____

☐ Text (2) _____

☐ Social Media (3) _____

☐ Phone (4) _____

Q2.9 Why are you interested in volunteering with an after-school program? (select all that apply)

☐ To complete work study community service hours (1)

☐ To complete community service hours for a club or organizational requirement (2)

☐ For fun (3)

☐ Other (4) _____

Q2.10 Would you be interested in traveling to the YMCA to help with various aspects of their after-school program (assuming transportation is not an issue)?

○ Yes (1)

○ No (2)

Q2.11 What activities are you interested in helping with? (select all that apply)

- [ ] Homework help and tutoring (1)

- [ ] Activities (e.g., sports, arts and crafts, STEM "club", etc.) (2)

- [ ] Filing paperwork (3)

- [ ] Prepping snacks (4)

- [ ] Working as a runner at the end of the day (around 6 pm) (5)

Q2.12 Would you like to help with the YMCA's scheduled activities or would you like to organize a "club" (e.g, photography, soccer, robotics, etc.) for the after-school students to participate in? (select all that apply)

- [ ] Help with daily scheduled activities (1)

- [ ] Help run a club for the after-school students at the YMCA (2)

- [ ] Help run a club for the after-school students at WPI (3)

- [ ] Volunteer at the YMCA during non after-school hours (e.g., filing paperwork, prepping snacks, painting, etc.) (4)

Q2.13 Please select your expected availability for **C-term** this academic year (select all that apply)

	Monday (1)	Tuesday (2)	Wednesday (3)	Thursday (4)	Friday (5)
2-3 pm (1)	☐	☐	☐	☐	☐
3-4 pm (2)	☐	☐	☐	☐	☐
4-5 pm (3)	☐	☐	☐	☐	☐
5-6 pm (4)	☐	☐	☐	☐	☐
Not available during C-term (5)	☐	☐	☐	☐	☐

Q2.14 Please select your expected availability for **D-term** this academic year (select all that apply)

	Monday (1)	Tuesday (2)	Wednesday (3)	Thursday (4)	Friday (5)
2-3 pm (1)	☐	☐	☐	☐	☐
3-4 pm (2)	☐	☐	☐	☐	☐
4-5 pm (3)	☐	☐	☐	☐	☐
5-6 pm (4)	☐	☐	☐	☐	☐
Not available during D-term (5)	☐	☐	☐	☐	☐

Appendix 4: Training Resources

4.1 Training Presentation Slides

Presentable training slides:
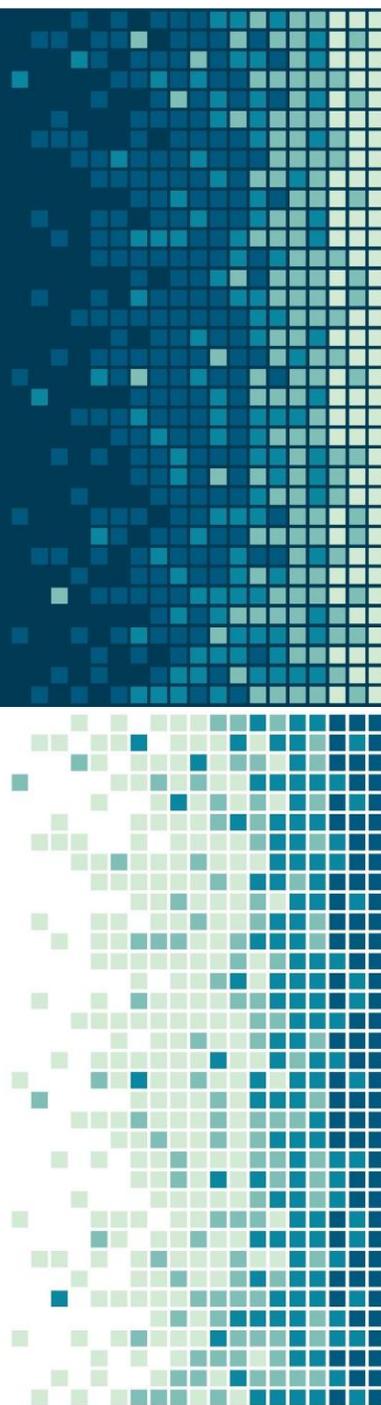https://docs.google.com/presentation/d/1pDGBwboiczxzRXEbiGgZFk-9DlpnYXi2a89O_GUBQyo/edit?usp=sharing

YMCA "School's Out"
Pilot Program Training

Presented by: Joseph Lee, Guadalupe Lira, and Sarah O'Neil

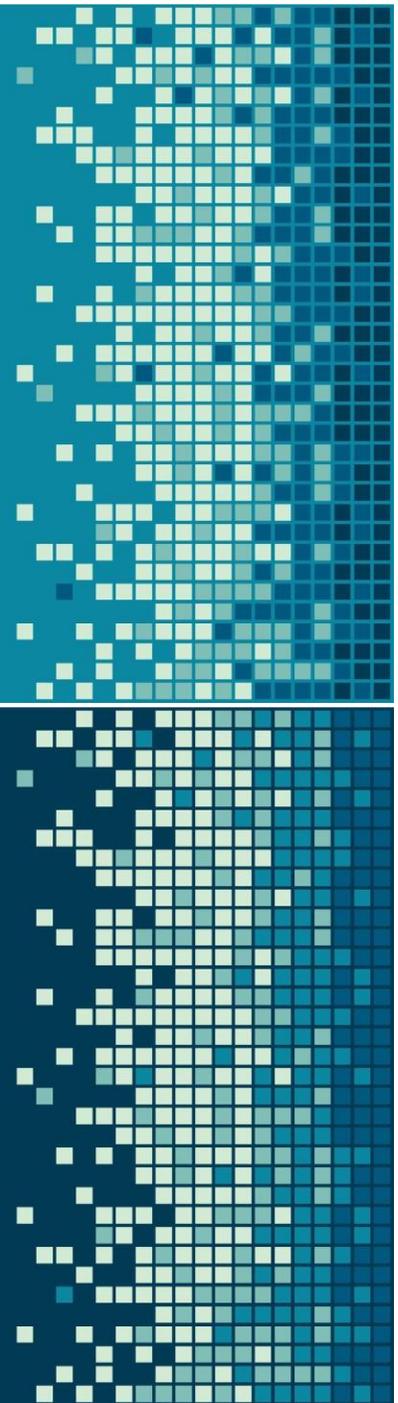Welcome

Thank you for participating!

" Introductions

- ❖ Name/nickname/pronouns
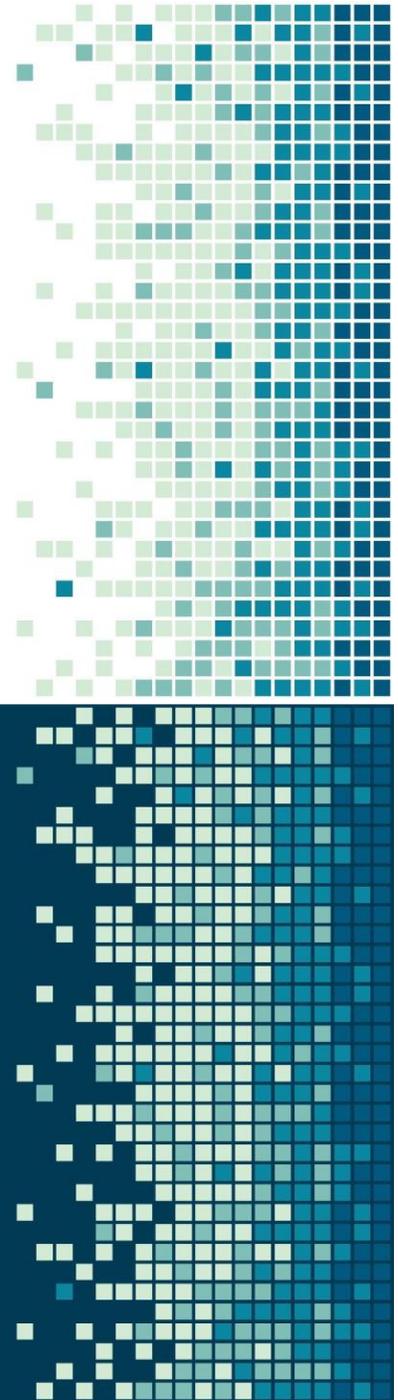- ❖ Major
- ❖ Year
- ❖ What is your spirit animal?

4

YMCA Age Demographic

Age Breakdown

- K-8
  - 5-12 years old

Developmental Learning Stages

Piaget Stages of Development

Stage of Development	Key Characteristics	Observations
Concrete Operational (Ages: 7-12)	-acquire inductive logic -understand reversibility -conservation -lack of egocentrism	-can focus on multiple points of interest -partially sociocentric
Formal Operational (Ages 12-18)	-conceptualizing balance -abstract thought -problem solving -theoretical deductive reasoning	-considers many solutions before acting -concrete objects no longer required to solve problems

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Worcester as an Urban Community

YMCA Demographics

Ethnic Demographics

Large Hispanic and African American population

12 languages spoken

Financial Demographics

- State Subsadized
- YMCA Financial Assistance
- Full Price

49 (24.1%)

114 (56.2%)

40 (19.7%)
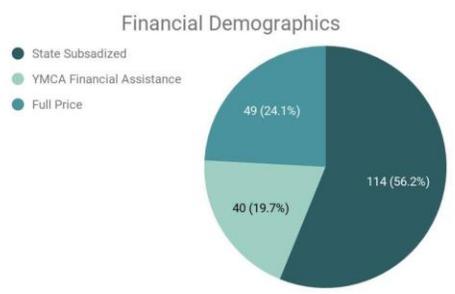
10

Different Environments
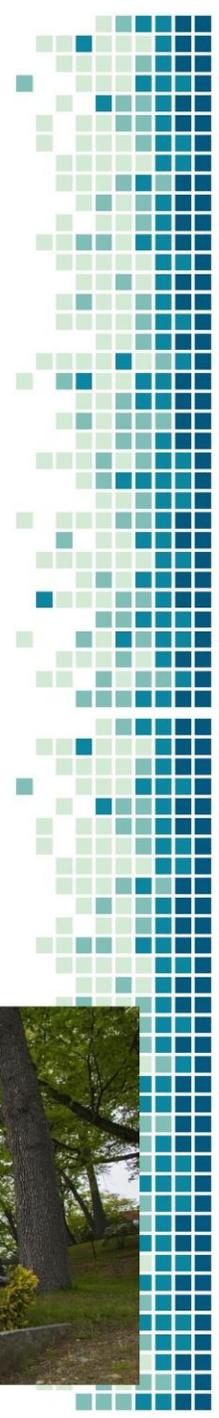
Asset vs. Deficit Model of Education

The Deficit Model of Education

Sees kids as:

- ❖ Lacking in some way
- ❖ Defective
- ❖ Deficient
- ❖ Needing to be fixed
- ❖ Not as good as…
- ❖ Needing to develop skills valued by mainstream society

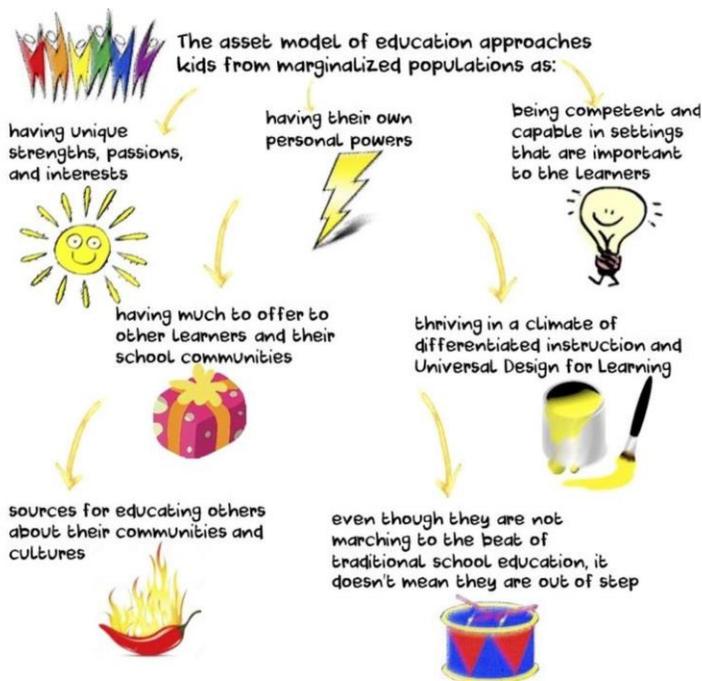The asset model of education approaches kids from marginalized populations as:

having unique strengths, passions, and interests

having their own personal powers

being competent and capable in settings that are important to the learners

having much to offer to other learners and their school communities

thriving in a climate of differentiated instruction and Universal Design for Learning

sources for educating others about their communities and cultures

even though they are not marching to the beat of traditional school education, it doesn't mean they are out of step

Jackie Gerstein – User Generated Education

The Asset Model of Education

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" Asset vs. Deficit Model Discussion

❖ What differences do you notice between the two models
❖ Why do you think the asset approach is more beneficial to students?

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Implicit Biases

How can implicit biases affect our ideas and behaviors?

How can implicit biases affect the experiences of others?

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What are implicit biases?

- ❖ Attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner
- ❖ Are activated involuntarily
- ❖ We do not have awareness nor control over them
- ❖ May not align with our declared beliefs or endorsements
- ❖ Typically favor our own ingroup
- ❖ Can change over time

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" Implicit Bias Discussion

- ❖ After watching the videos, can you think of anytime you experienced implicit bias against you?
- ❖ Can you think of any time you have noticed your implicit bias affecting your behaviors towards a situation?

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Saviorism

Your Attitude

- You are not going in to save the day or to become a hero
- You will also be learning from the children
  - Break misconceptions
- Go in with an open and positive mind
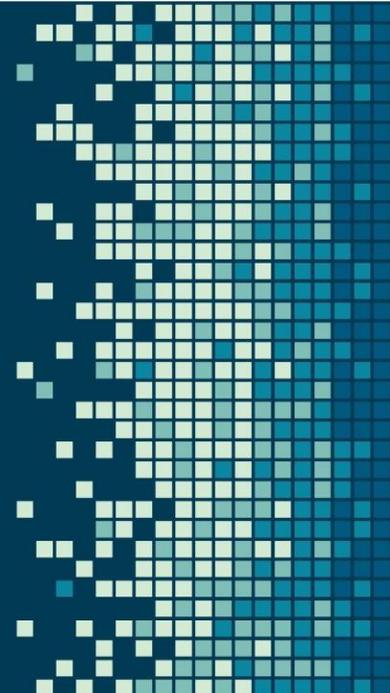 - Look for their strengths

22

" Saviorism Discussion

❖ How is saviorism portrayed in the media?

23

Microaggression

What is microaggression???

Subtle or indirect discrimination towards a minority group

- "Your english is good"

Types of Microaggression

Microassaults

- "Old fashioned racism"
- Conscious
- Meant to hurt and oppress

Microinsults

- Not intentional
- Insensitive toward one's heritage or identity

Microinvalidations

- Not intentional
- Negate individuals thoughts/ feelings

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Think Before You Talk

Gender Microaggression

- "You should act like a lady"
- Cat calling

Racial Microaggression

- "So what are you?"
- "Where are you really from"
- "I don't see color"
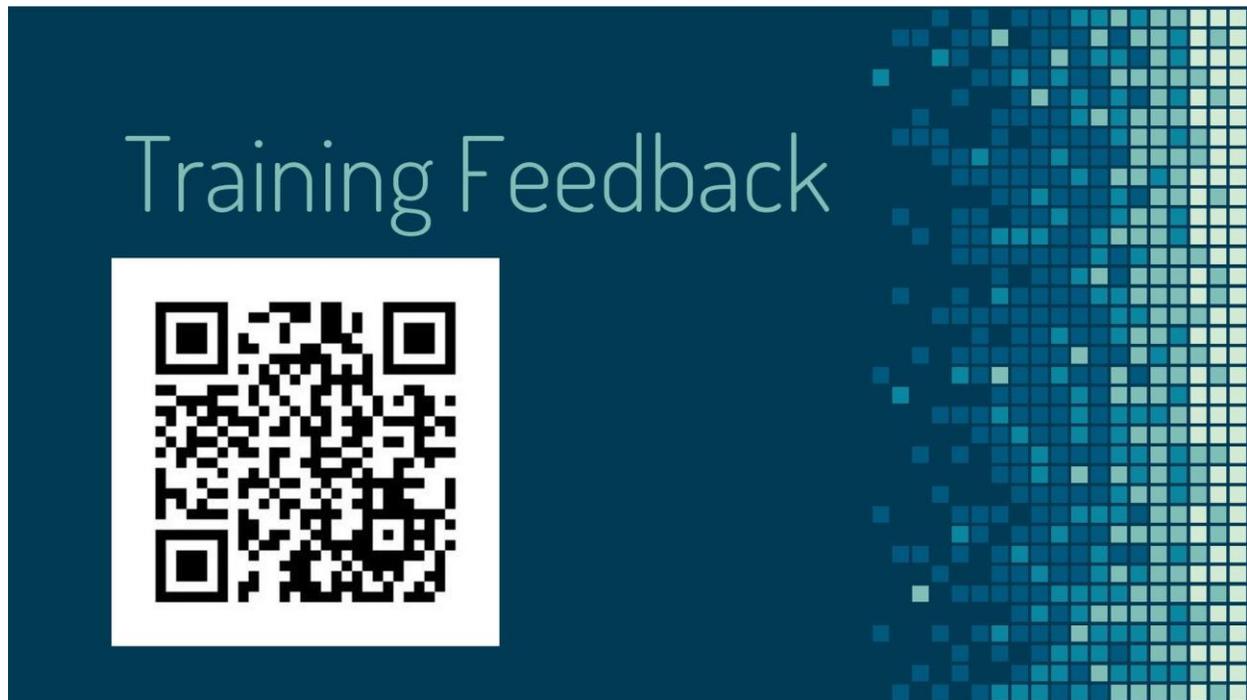
28

" Microaggression Discussion

- ❖ Have you ever experienced or witnessed microaggression?
- ❖ Is there anything you can do to address the problem?

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Questions/ Discussion

Post-Assessment

4.2 Pre and Post Training Assessment Survey

Training Assessment

* Required

Email address *

Your email

Name

Your answer

On a scale of 1 to 5 how well do you think you understand the stages of development, particularly how kids learn at different ages?

	1	2	3	4	5	
Do not understand	○	○	○	○	○	Understand completely

Which of the following are characteristics of development between the ages of 7 and 12? (you may select multiple)

- ☐ Consider solutions before acting
- ☐ Understand principles of conservation
- ☐ Can focus on multiple points of interest
- ☐ Very egocentric
- ☐ Are able to think abstractly
- ☐ Understand reversibility
- ☐ Are able to deductively reason

On a scale of 1 to 5 how well do you think you understand the differences between asset-based learning and deficit-based learning?

	1	2	3	4	5	
Do not understand	○	○	○	○	○	Understand completely

Which of the following are characteristics of the asset model of education? (you may select multiple)

- ☐ Kids are lacking in some way or another
- ☐ Kids have unique thoughts, passions and ideas
- ☐ Kids have a lot to offer to others around them
- ☐ Kids need to develop skills valued in mainstream society
- ☐ Are competent and capable individuals

On a scale of 1 to 5 how well do you think you understand the topic of implicit biases?

	1	2	3	4	5	
Do not understand	○	○	○	○	○	Understand completely

True or false: Implicit biases can be changed over time

○ True

○ False

True or false: Not everyone has implicit biases

○ True

○ False

On a scale of 1 to 5 how well do you think you understand the topic of saviorism?

	1	2	3	4	5	
Do not understand	○	○	○	○	○	Understand completely

Briefly explain saviorism

Your answer

On a scale of 1 to 5 how well do you think you understand the topic of microaggression?

	1	2	3	4	5	
Do not understand	○	○	○	○	○	Understand completely

Give an example of microaggression

Your answer

4.3 Post-Training Student Feedback Survey

Training Feedback

Please rank our training in the following categories:

	1 - Strongly Disagree	2	3	4	5 - Strongly Agree
The training provided me with information about the demographics of Worcester	☐	☐	☐	☐	☐
The trining provided me with information about the demographics of the YMCA	☐	☐	☐	☐	☐
The training gave me an overview of the YMCA "School's Out" Program	☐	☐	☐	☐	☐
The training helped me understand the developmental stages of the children I will be volunteering with	☐	☐	☐	☐	☐
The training taught me the difference between asset and deficit based education	☐	☐	☐	☐	☐
The training helped me be more aware of my implicit biases	☐	☐	☐	☐	☐

	1 - Strongly Disagree	2	3	4	5 - Strongly Agree
The training educated me on how to volunteer without expecting to be a savior	☐	☐	☐	☐	☐
The training helped me understand how to approach situations to avoid microaggression	☐	☐	☐	☐	☐

Please rank our training in the following categories:

	1 - Strongly Disagree	2	3	4	5 - Strongly Agree
The training was complete in a timely fasion	☐	☐	☐	☐	☐
The discussions were helpful to better understand the material	☐	☐	☐	☐	☐
The training was presented clearly	☐	☐	☐	☐	☐

Please provide any written feedback you may have on ways in which we can improve the training.

Your answer