

Fostering Community Through Alumni Outreach:

Design and Development of an
Electronic Alumni Survey for the Latino
Education Institute



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WORCESTER STATE UNIVERSITY
LATINO EDUCATION INSTITUTE



WPI

Fostering Community Through Alumni Outreach:

Design and Development of an Alumni Survey for the Latino Education Institute

An Interactive Qualifying Project submitted to the Faculty of
WORCESTER POLYTECHNIC INSTITUTE

In partial fulfillment of the requirements for the degree of Bachelor of Science

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Worcester Community Project Center

Professor Laura Roberts
Worcester Polytechnic Institute

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



Abstract

For over 22 years, the Latino Education Institute (LEI) in Worcester, Massachusetts has provided quality academic resources to Latino children. To solidify communication with LEI alumni and track longitudinal data on the impact of LEI, we developed a long-term survey system that distributes surveys to update alumni contact information, evaluate the impact of LEI, and future topics as determined by LEI. We also created an application in LEI's QuickBase database to store alumni responses. With this system, LEI will maintain better contact with alumni and gain a better understanding of the Institute's impact on alumni.

Acknowledgements

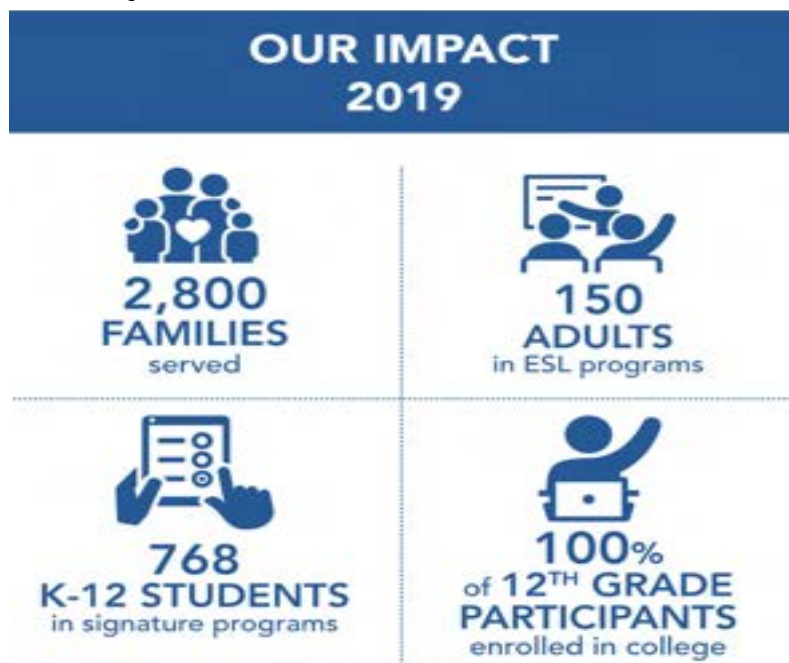
We would like to express how grateful we are for having had the opportunity to conduct this project. This could not have been done without the participation of many people who worked hard to help us meet the objectives of our project. We would like to first thank our advisors, Alice Plane and Laura Roberts, for their guidance, advice, and time, not only in helping us complete the project in a professional manner but also in helping us become better researchers. We would also like to thank our sponsor, Hilda Ramirez, not only for giving us the opportunity to work with the organization but also for allowing us to use their offices for work and meetings; allowing us to be spectators of one of the programs they offer; and for all her time dedicated to working on the joint goal of conducting this project for LEI. And thank you to LEI's Data Analyst, Michael Klein, who was always willing to answer our questions and guide us on what was new in this project. Finally, we would like to say thank you to the people who were part of our focus group and those who helped us by completing the survey for testing. Without them, we could not have conducted some of the fundamental steps to make possible the completion of this project.

Executive Summary

Introduction and Background


One of the main contributors to financial well-being and success in America is the salary one obtains from their job. The job of an individual is in turn largely dependent on the quality and level of education the individual has. Unfortunately, many communities of color and new immigrants do not have access to quality academic resources for various environmental, societal, and physical reasons. This especially affects the Latino and Hispanic populations of America. Latinos and Hispanics make up the largest communities of color in the United States and the second-poorest group by ethnicity, with the average Hispanic family making a mean income of \$75,193 in 2020, in comparison to the average white family having a mean income of \$88,686 (Bureau, n.d.). There are also many Latino and Hispanic students who do not speak English as their main language, with there being about 3.8 million Hispanic public school students being enrolled in English Language Learner programs in 2018, constituting over three-quarters (77.6%) of ELL student enrollment overall (Irwin et al., n.d., p. 15). With these disadvantages, students from these families can struggle with their academics and, in most cases, are set up for failure in their school systems.

One of the organizations that is leading the charge in combating educational disparity amongst Latino and Hispanic students is the Latino Education Institute (LEI) based in Worcester, Massachusetts. LEI was founded in 2000 and has focused on providing educational resources such as English language learning and aid programs to thousands of Latino families in need over their 22 years of service. While the services they provide are exceptional, the organization is relatively small and is currently investing in more insight in their programs via usage of a new internal database and solidifying communication from their alumni network. These two components of the organization would help LEI have a bird's eye view on the quality of their programs and their alumni's opinions about the Institute.



Approach and Methods

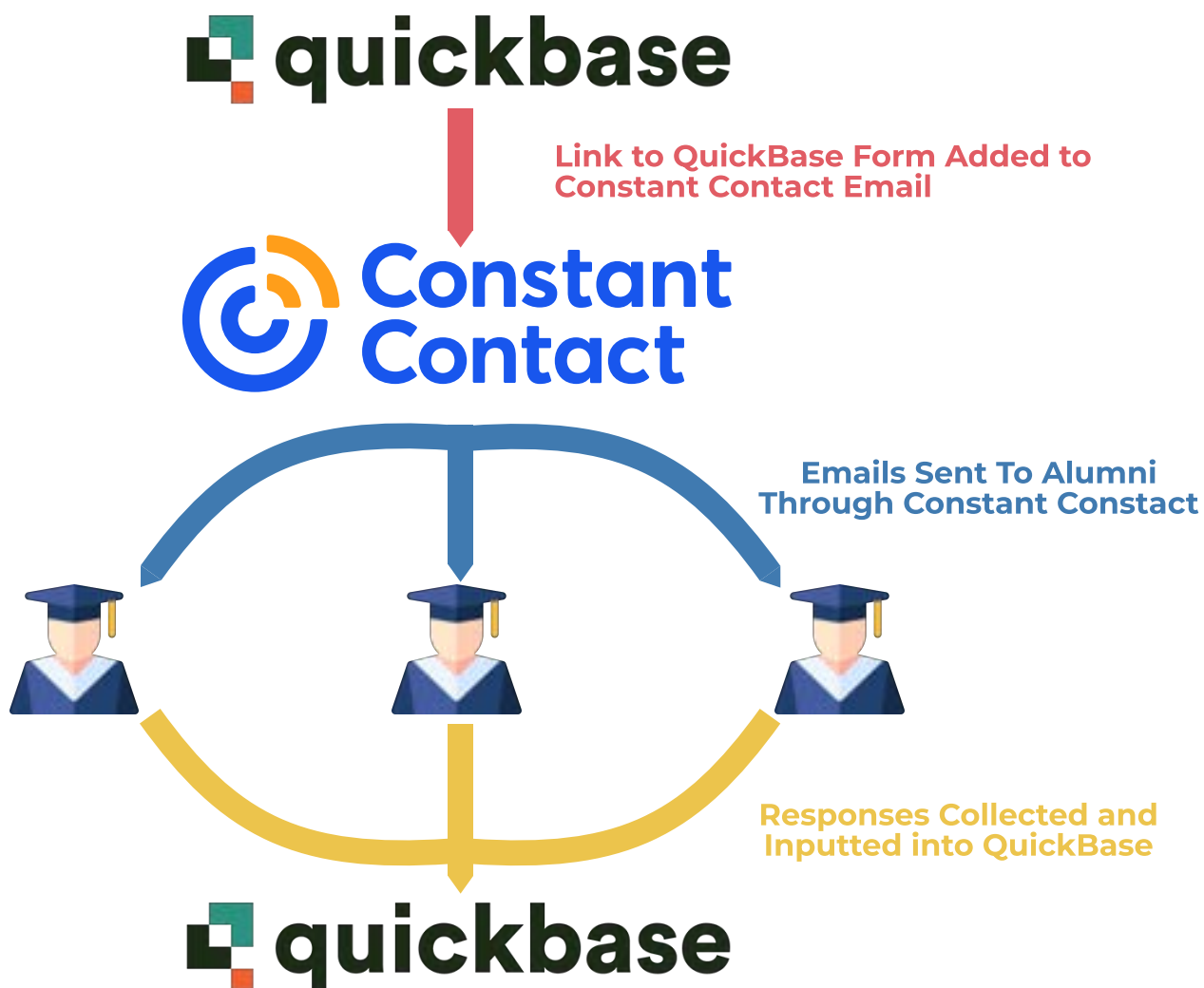
The issue facing the Latino Education Institute today that we tackled was understanding the impact the organization had on its thousands of alumni throughout its 22 years of operation and maintaining communication and connections with their alumni. To address this, we developed a long-term survey system that would be sent to alumni and store their contact information, optional thoughts on the Institute and their programs, and longitudinal data such as their salary, marriage status, and housing status. When setting up the plan to create the system, we developed a roadmap that split the project into three main objectives:

1. Develop a survey addressed to the alumni of LEI that analyzed their overall experience within the Institute's programs.
 2. Research survey distribution systems such as Google Forms and SurveyMonkey to see which system would best suit our needs for reaching as many alumni as possible.
 3. Determine the best way to read the data obtained from the survey, and create tables within LEI's new database that are consistent with the existing information in the database.
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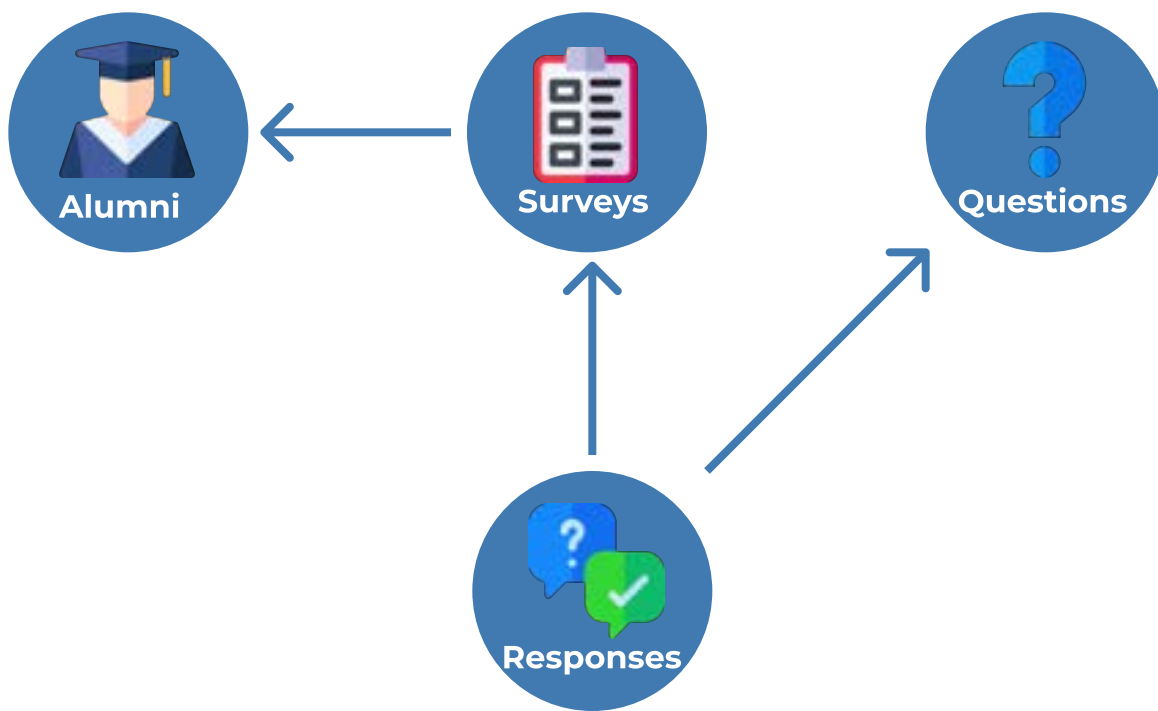
Due to the nature of our objectives, we completed functional prototypes for all of the objectives that can be changed and modified to LEI's needs as LEI itself changes. We worked closely with LEI staff to improve our overall productivity. The staff took the time to familiarize us with their work and we quickly became immersed within LEI's culture and understood their needs much better. For the first objective, we generated questions that surveyed participants about their contact information, civic and community engagement, their experience at LEI, and consent for LEI to use their responses for internal and/or external use. We also conducted meetings with Hilda Ramirez, LEI's Executive Director, and a focus group with LEI staff members in order to receive feedback on the questions we developed and the format of the survey.



For the second objective, we researched a few software tools for housing and distributing the survey such as Google Forms and SurveyMonkey, weighing each of their advantages and disadvantages. Once we evaluated our options, we opted to house the survey within LEI's database(QuickBase) and send the survey to alumni using Constant Contact.

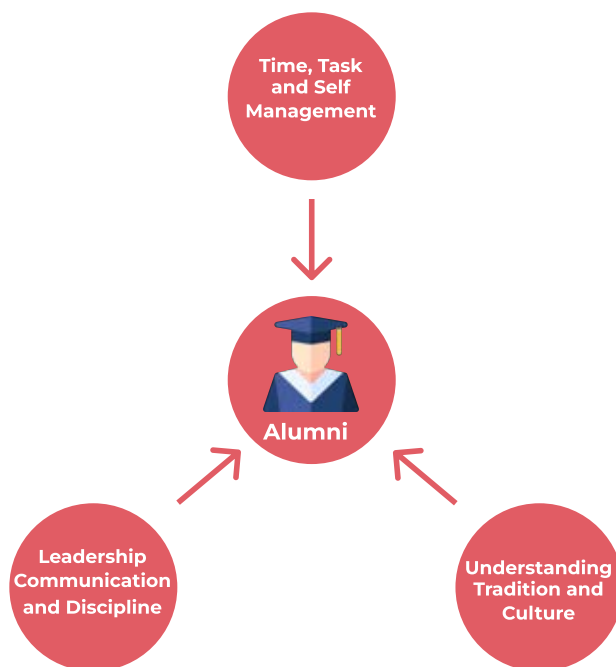


For our third objective, we learned about basic database architecture and how to operate Quickbase, the application LEI was using to build their database. This would be useful when developing the database application that would store the alumni data.

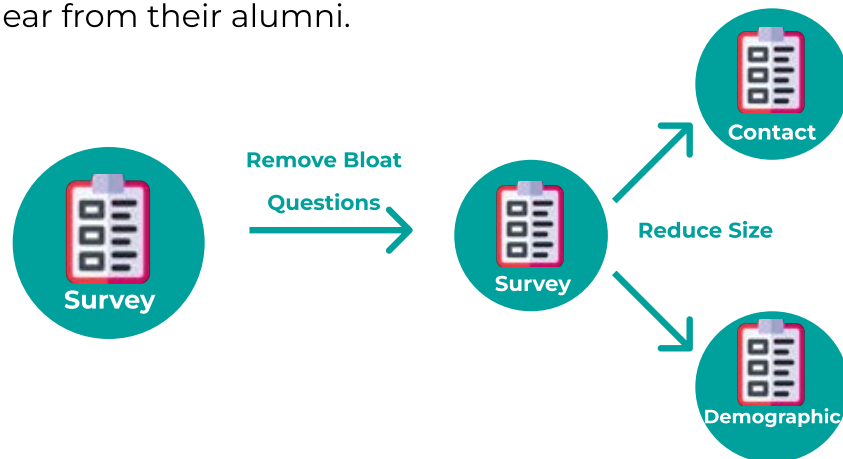


Results

Throughout our period of research and development for the survey and the alumni database, we discovered four major findings. The first of these findings was learning about the qualities of a successful LEI alumnus. During our focus group with select LEI staff, we wanted to learn what was deemed a success for LEI when their alumni graduate from their programs. The most important aspect of alumni success LEI focused on were the retention and application of the skills that were taught to alumni during their time at LEI. These include qualities that are focused on organization, such as self-management, task-management, time-management, etc., but also communal qualities such as civic engagement.



Our second finding during our time at LEI was learning how to minimize survey fatigue within our survey. With our first survey, we had produced close to fifty questions ranging from multiple choice to short responses. It became apparent to us during our meetings with LEI and the LEI focus group that the survey needed to be shortened in order to keep the attention of the survey taker and sustain the integrity of the responses, as survey takers may become bored, fill in the same option with each questions, and in turn provide inaccurate results on their LEI experience in order to finish the survey at a faster rate. To solve this, we went through several revisions that focused on shortening the length of the survey while also asking the crucial questions LEI wanted to hear from their alumni.



The third finding discovered in our research was the importance of maintaining contact between LEI and their alumni. The biggest obstacle for LEI for remaining in contact with alumni is LEI not receiving updated contact information from students. LEI relies on Worcester State University's (WSU) email domain to send assignments and updates to their students; when an alumnus graduates from LEI, their WSU email is deleted from the email system, causing LEI to lose contact with their graduates. When developing the survey, it was important to us to focus on updating each graduate's contact information and asking for consent to be subscribed to LEI's newsletter and promotional emails. Having these responses updated regularly will provide LEI a stronger connection with their graduates.

Our final main finding found during this project was determining the best method for creating and storing survey data. Before the start of this project term, we had learned that LEI was using QuickBase to develop and monitor their internal database, so our research for database development was focused on how to develop applications within QuickBase and connect the responses from our survey to said database. Using QuickBase's form system, we consulted with Michael Klein about how the application should be organized. Michael taught us an overview as to how databases work, how objects in a database (i.e. alumni, questions, responses, etc.) should be organized, and how that information can be pulled. From his responses, we

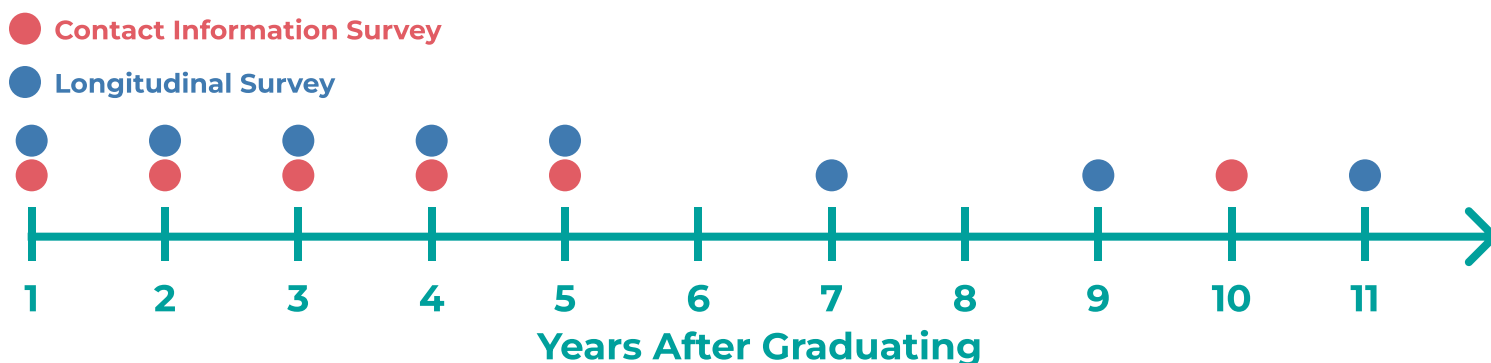
developed five tables within the alumni application that handled contact information, survey questions, survey responses, dates surveys were taken, and character to decimal conversion for alumni keys. Having a better sense of how databases work helped us refine our quality in our developed application.

Recommendations and Conclusion

The survey and database we created were designed with the future in mind. We focused on three main goals to ensure the survey would be useful to LEI for years to come. First, we made the survey applicable to all current and future alumni. Second, we created both the survey and database with change in mind. We believe that modularity is the most important aspect to any project for extending its usability into the future. We want it to be possible for changes to easily be made by future staff unfamiliar with us or our work here. Finally, we designed both the survey and the database to be easy to understand from the perspective of a non-English speaking and non-technical person.

Going forward we have several recommendations for LEI as they move to deploy the survey and begin collecting data on their alumni. Our most pertinent recommendation is that LEI sends out both surveys to recent alums every year for the first five years after exiting a program. During the first five to six years after graduating highschool, college students change their contact information quite often as they move out of their parent's house, begin using their personal email and not a school email, as well as purchasing their own phone plan. These factors indicate that frequent surveys are more likely to capture these changes as they occur and not leave LEI unable to contact their alumni.

Alumni Survey Timeline



Our team's second recommendation is that changes made to the survey maintain the current layout and design of the database so as to avoid inaccurate information when compiling data over several years. Our last and final recommendation is that LEI continues to migrate their survey from Google Forms to Quickbase to form a more integrated survey experience and avoid having to move data from Google Forms into QuickBase.

In conclusion, through our weeks working with LEI, we have directly seen how impactful and invested they are in the local and greater community. After attending an LEI event and speaking with both staff and students, we know that LEI will continue to grow and flourish, and, with the use of the survey and database, they will be able to provide sponsors with sufficient data to better show their impact within the Worcester community, keep in contact with LEI alumni, and further drive Latinos to succeed.

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Meet the Team	Melanie Castillo	Tyler, Nelson
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Glossary

Community of Color Terminology to describe non-white communities.

Poverty Line The poverty line is the minimum amount of money a family can obtain yearly that is considered sustainable in that country

NAEP (National Assessment of Educational Progress)

The NAEP is a national test conducted to students that measures the performance of K-12 schools and compares them to schools within similar regions and financial support.

English Language Learner

English-language learners, or ELLs, are students who are unable to communicate fluently or learn effectively in English, who often come from non-English-speaking homes and backgrounds, and who typically require specialized or modified instruction in both the English language and in their academic courses.

Latino Education Advocacy Partnership

The César E. Chávez Institute established the Latino Educational Achievement Partnership (LEAP) as an advocacy and research initiative to promote the advancement of Latino students in higher education.

Survey Monkey Survey Monkey is paid online software that allows you to create surveys, and quizzes.

QuickBase Quickbase is a professional database creation tool that requires little to no coding knowledge to operate.

R R is a language and environment for statistical computing and graphics. It is a GNU project which is similar to the S language and environment which was developed at Bell Laboratories (formerly AT&T, now Lucent Technologies) by John Chambers and colleagues. R can be considered as a different implementation of S. There are some important differences, but much code written for S runs unaltered under R.

Figma Figma is a web-based graphics editing and user interface design app.

Glossary

continued...

Brigham and Women's Hospital

Brigham and Women's Hospital (BWH) is the second largest teaching hospital of Harvard Medical School and the largest hospital in the Longwood Medical Area in Boston, Massachusetts. Along with Massachusetts General Hospital, it is one of the two founding members of Mass General Brigham, the largest healthcare provider in Massachusetts.

Encouraging Latinos to Achieve Excellence

Latino male leaders from the community serve as mentors and role models for the boys. Through various workshops and activities, the boys engage in opportunities that help them exercise discipline and learn about themselves, culture, and the Worcester community. They also learn the value of education and how aspiring for post-secondary education can impact their lives and their families.

Free Text Analysis

Text analysis, also known as text mining, is the process of sorting and analyzing raw text data to derive actionable insights. It involves extracting meaningful information from large volumes of unstructured data, such as product reviews, emails, tweets, support tickets, and survey results.

Scrum Methodology

Scrum is an agile development methodology used in the development of Software based on iterative and incremental processes. Scrum is an adaptable, fast, flexible and effective agile framework that is designed to deliver value to the customer throughout the development of the project.

Minimal Viable Product Principle

Minimum Viable Product or MVP is a development technique in which a new product is introduced in the market with basic features, but enough to get the attention of the consumers. The final product is released in the market only after getting sufficient feedback from the product's initial users.

Constant Contact

Constant Contact is an online marketing company established in 1995 that caters mainly to small businesses. Its platform enables business owners to launch and monitor email marketing efforts, build websites and online stores, and utilize social media, among other services.

1 Introduction

One of the main contributors to financial well-being in America is the salary one obtains from their job, which in turn is largely dependent on the level of education the individual obtains. As Malcolm X once said, “education is our passport to the future, for tomorrow belongs to the people who prepare for it today.” Having a great education is highly valued in America; unfortunately, many residents, especially communities of color and new immigrants, do not have access to quality academic resources for various environmental, societal, and physical reasons. This especially affects the Latino and Hispanic populations of America, with many having difficulty obtaining academic excellence due to economic inequality, language barriers, and lack of access in their respective communities to quality educational resources.

One of the organizations that is leading the charge in combating educational disparity amongst Latino and Hispanic students is the Latino Education Institute (LEI) based in Worcester, Massachusetts. LEI was founded in 2000 and has focused on providing educational resources such as English language learning and aid programs to thousands of Latino families in need over their 22 years of service. While the services they provide

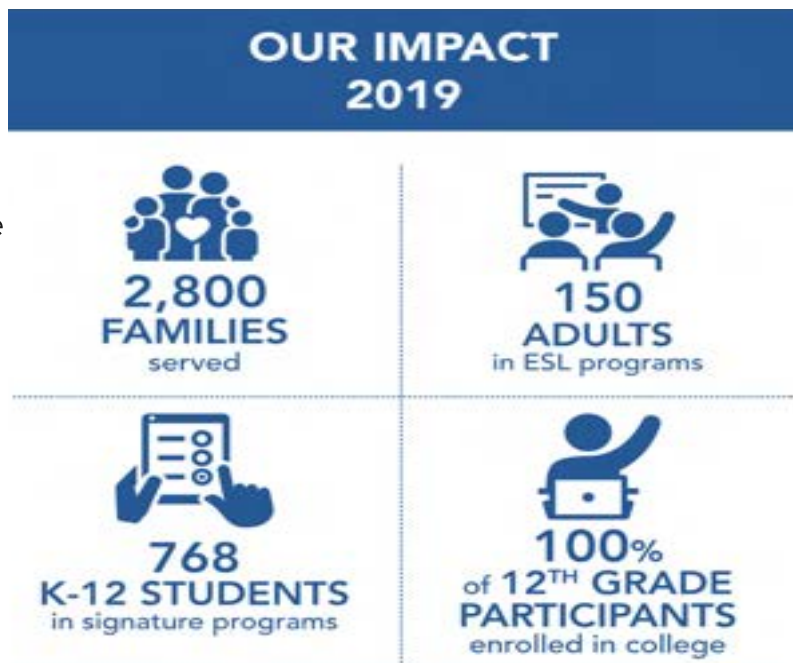


Figure 1: LEI Impact Card 2020 (English)

are exceptional, the organization is relatively small and is currently investing in more insight in their programs via usage of a new internal database and solidifying communication from their alumni network.

In order to maintain better connections between LEI and alumni, we developed a project with the focus of receiving contact information and feedback from various LEI alumni in order for the Institute and potential sponsors of the organization to view the impact LEI's programs have on their students. This was achieved via a survey and interviews addressed to the alumni. In Chapter 2, we will elaborate on the issues facing the Latino populous and their education in America, examine the mission of the Institute with an example of their contributions to the Latino communities in Worcester, and discuss our project goals in more detail. In Chapter 3, we will go into detail about each of the objectives we achieved, the methodologies and tools used to achieve those objectives, and the time frames and amount of work dedicated to every objective during the duration of the project period. In Chapter 4 we will discuss the findings we discovered in our research when working alongside LEI. In Chapter 5 we will close with a few recommendations directed to LEI for maintaining the system we developed for years to come.

2 Literary Review

In the United States, one of the greatest indicators of financial stability and political power is the level of education an individual obtains. Many communities of color suffering from unequal opportunities are unable to achieve higher education at the same rate as the average white Americans, causing repeated cycles of poverty to end up maintaining a firm grasp on a majority of communities of color. Latinos and Hispanics make up the largest community of color in the United States and the second-poorest group by ethnicity, with the average Hispanic family making a mean income of \$75,193 in 2020, in comparison to the average white family having a mean income of \$88,686 (Bureau, n.d.). This, combined with the increase of Latino and Hispanic immigrants in the United States and a lack of English speakers, causes students from these families to be set up for failure in their school systems. The Latino Education Institute, based in Worcester, Massachusetts, is one of the most prominent organizations that helps address, advocate for, and resolve this growing issue. By providing educational resources and financial backing to Latino and Hispanic immigrant and native families in need, the Latino Education Institute is allowing more Latinos to achieve an education that is higher in quality and helps set hundreds of Latino individuals on a successful career path. The following sections will elaborate into more detail the global problem that is affecting communities of color families and their education in the United States, how the Institute is working to address and combat this issue for Latino families in Worcester, and how the goal of our project benefited the work of the Institute and the education of the families that they serve. The term “communities of color” will be used to cover both ethnic groups that do not identify as white alone and non-English speaking immigrant groups in the United States.

2.1 Quality of Minority Education in the United States

The global problem that faced our work with the institute is that minorities nationwide experience difficulty achieving academic excellence due to economic inequality, language barriers, and lack of access to quality educational resources. This, intertwined with a relatively large surge in population of various minority groups, causes issues in minority education to only increase exponentially.

2.1.1 Communities of Color in the United States

While the populous of the United States consists of mainly white Americans, nearly 38.4% of the US population identified as non-white alone in 2020 (Bureau, n.d.) which translates to approximately 100 million people nationwide. The size of many communities of color alone has greatly increased as well, with White Alone or in Combination identifying as Hispanics/Latinos increasing 8.0% in population; African Americans Alone or in Combination, increasing 11.7%; Asians Alone or in Combination, increasing 38.6%; and Other Alone or in Combination, increasing 129.5% nationwide in relative proportions since 2010 (Bureau, n.d.). Despite the relative increase in the population of communities of color, the structure of schools and lessons remain somewhat the same and favor white students. For example, even though the United States does not have an official language, lessons are taught solely in English. The history and cultural customs that are taught in class pertain to white Americans, with many communities of color' history and customs being celebrated only for a month out of the year rather than being a more prominent focal point in the history and culture of the nation. These factors in education can set up a student for either failure or difficulty in association with their culture as the education provided to them is not tailored to their diverse ways of life and skills.

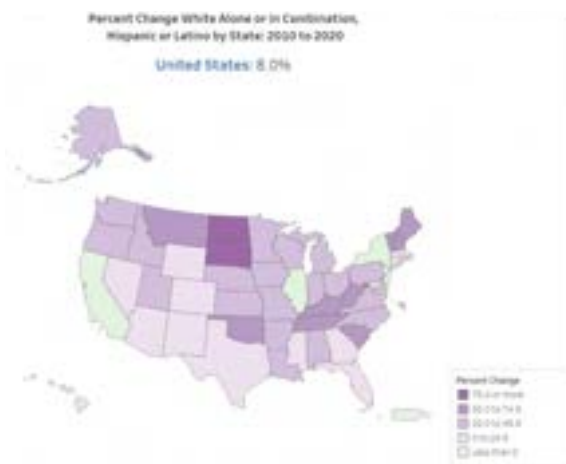


Figure 2: “Percent Change White Alone or in Combination, Hispanic or Latino by State: 2010 to 2020” (Bureau, n.d.). The total white Hispanic population in the United States increased by 2.3 million people since 2010.

2.1.2 Economic Disparity Among Communities of Color in the United States

One of the key factors that determine the quality of education is the funding provided to schools; the less money a school receives, the fewer options the school can research and invest into, such as new lab equipment or new computers. This also results in a smaller salary for the staff. Elementary schools to high schools receive their funding from the communities and neighborhoods they are established in, depending on the property values of the families living in said communities. Unfortunately, many communities of color within the United States do not have financial stability.

In 2020, the two largest populations that earned the lowest mean income in the United States were African Americans and Hispanics, with African American families having a mean income of \$68,736 and Hispanic families having a mean income of \$75,193 compared to white families having a mean income of \$88,686 (Bureau, n.d.). It is also worth mentioning that in 2020,

19.3% of African American families and 17.0% of Hispanic families are below the poverty line (Bureau, n.d.). For reference, the poverty line for a family of four in America in 2021 is \$26,500 (2021 Poverty Guidelines, n.d.). Because of this, communities of color families cannot afford to send their children to private schools and institutions where the quality of education is higher and live in areas where local public schools are underfunded. Funding directly affects what can be focused on and taught during lessons in schools. For example, Figure 4a shows the average reading score for the National Assessment of Educational Progress (NAEP) for 4th-graders in 2019 was 240 in low poverty areas and 206 in high poverty areas; Figure 4b shows the average math score was 258 in low poverty areas and 231 in high poverty areas (Irwin et al., n.d., p. 17-18). This is because many of these schools within high-poverty areas are unable to invest in proper teacher qualification and tutoring systems, causing major negative long-term learning effects to develop within their students.

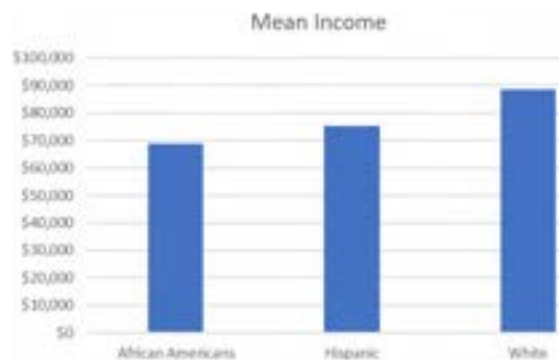


Figure 3: Mean income of communities of color in the United States.

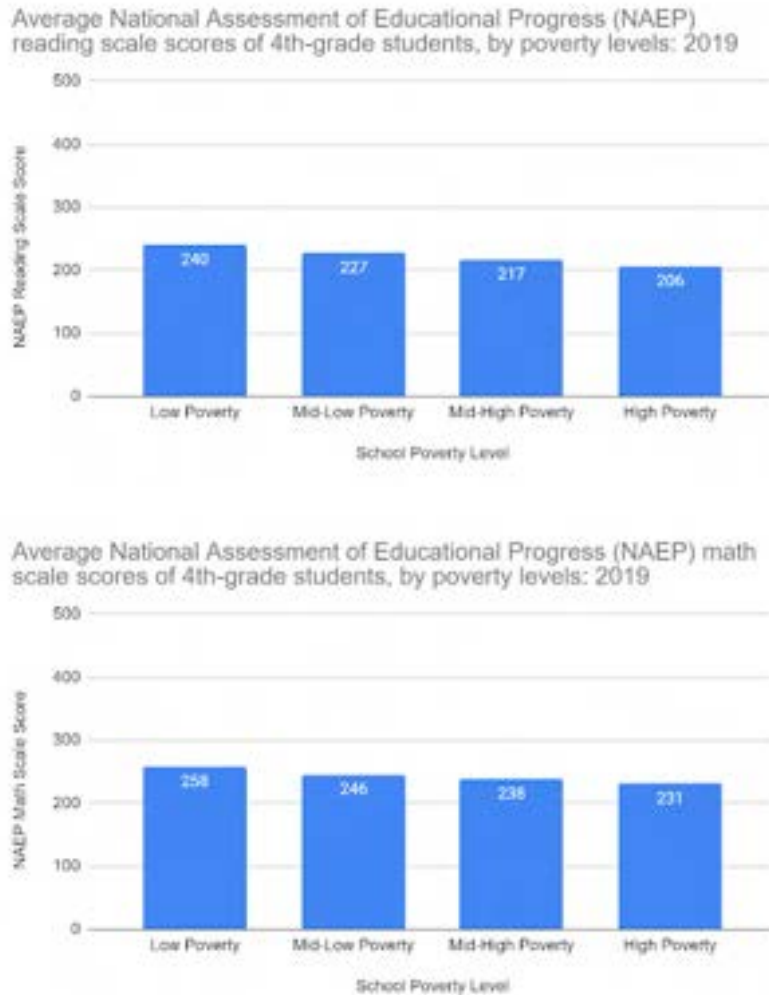


Figure 4a, 4b: “Average National Assessment of Educational Progress (NAEP) reading and math scale scores of 4th-grade students, by poverty levels: 2019” (Irwin et al., n.d., p. 17-18). As the level of poverty within a community increases, the average reading and math scores on the NAEP for students decrease.

2.1.3 Lack of Multilingual Educational Support

Throughout its history the United States has never had an official language. However, schools across this country teach lessons in English and rarely offer support for other languages such as Spanish and French. Many individuals and families of communities of color in the United States, especially immigrant groups, do not speak English either entirely or as their main language. Students that come from these backgrounds have difficulty absorbing the material being taught to them, leading them to have to put in extra work to both understand and translate the material that is being taught

to them. To combat this, students can participate in English language learner programs in order to better understand what is being taught in schools. In fall 2018, there were about 3.8 million Hispanic English Language Learner public school students, constituting over three-quarters (77.6%) of ELL student enrollment overall (Irwin et al., n.d., p. 15). However, while the programs are useful for learning English to non-native speakers, balancing the learning of a new language while receiving a proper education is extremely difficult and taxing on a student's schedule. The added stress and workload can cause students to fall behind in other subjects and be demotivated in their schoolwork. So, while ELL programs are established to combat these issues, there is evidence that suggests it causes more educational problems. Figure 5a shows the average reading score in 2019 for the NAEP for 4th-graders was 191 for ELL students and 224 for non-ELL students; Figure 5b shows the average math score was 220 for ELL students and 243 for non-ELL students (Irwin et al., n.d., p. 17-18). This is because non-ELL students have the advantage of not only being able to easily understand the lessons being taught to them, but having more time to study and retain those lessons in their memory. Providing lessons in a student's native language would allow a student's ability to learn and retain knowledge in school to improve dramatically and offer more time dedicated to studying.

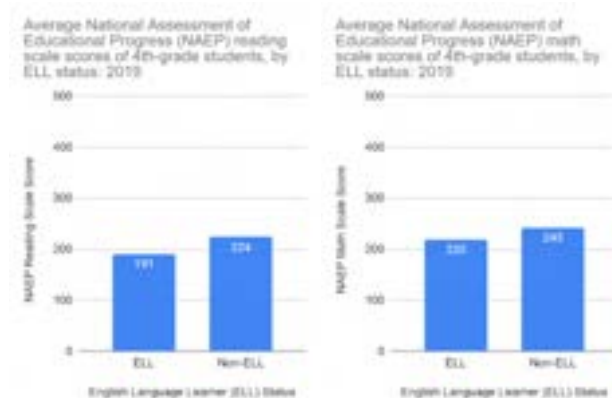


Figure 5a, 5b: “Average National Assessment of Educational Progress (NAEP) reading and math scale scores of 4th-grade students, by ELL status: 2019” (Irwin et al., n.d., p. 17-18). ELL students score lower than non-ELL students due to difficulty retaining information taught in English.

2.2 The Latino Education Institute in Worcester

The communities of color are increasing in population every year, and Worcester is no exception. The African American (non hispanic) population increased in Worcester by 0-1% in 2018 and 0.3% in 2019, while the Hispanic population increased by 0.3% in 2018 and 0.6% in 2019 (Worcester, MA | Data USA, n.d). There are organizations dedicated to helping these communities of color, and in the case of Latinos, LEI is one of them. LEI has been working continuously for the past 22 years as a hybrid organization with Worcester State University in order to help Latinos across Worcester succeed over educational challenges brought about by language barriers, economic inequalities, and lack of educational opportunities.

2.2.1 Impact

LEI's mission is to impact Latino families, helping them in their academic achievement and well being. In order to do this they follow a model to fulfill the Latino Education Success (Figure 4). LEI sponsors events, such as the annual Latino Education Family Day, to help teach both students and parents while also instilling a desire to learn in the young Latino community (Stone, 2006). To do this, LEI provides assistance to Latinos throughout their educational life from elementary school to college through many different forms. These forms place students as teacher assistants at Worcester Public Schools, a program called Our Own Voices which uses theater to “help kids that are maybe struggling in reading to enhance their self esteem,” and through outreach to first generation parents so they can better help and support their children (Robert, 2013). LEI holds English, computer, finance, and parenting classes for Latino parents along with an afterschool program for children to help both parents and children improve their skills to “break a cycle of under-education and poverty and turn that around for our neediest families.” (Reis, 2006).

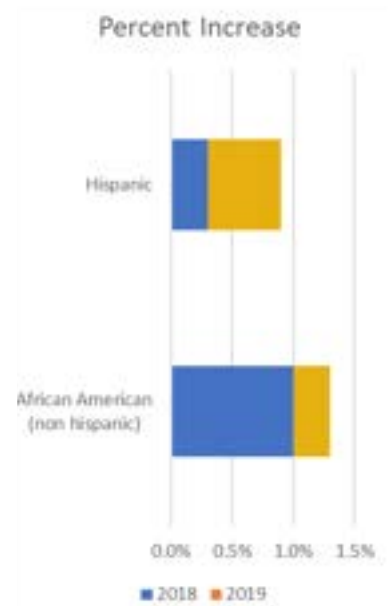


Figure 6: Percentage increase of Hispanics and African Americans in Worcester



Figure 7: LEI's Model for Latino Education Success

Source: <https://www.latino-education-Institute-worcester.org/our-approach>

2.2.2 Work and Recognition

According to a study conducted in 2008, Latino students in Worcester scored worse on statewide standardized tests than any other ethnic group in Massachusetts. For this, LEI worked with Latino Education Advocacy Partnership (LEAP) to help provide a grant to young Latinos to improve student's reading proficiency and improve test scores (Reis, 2008). For these actions and for all the hard work towards the Latino community, in 2015, LEI was recognized by the Youth for Community Improvement as a non-profit initiative helping with "mental health, access to economic opportunity, diversity and cultural awareness in Central Massachusetts," and was given a grant to help further advance Latinos in Worcester. ("Fall Fund Grants for More than \$23,000," 2015).

2.3 Project Goals

Our project developed a complete alumni survey system with three main aspects for LEI:



We created clear and accessible surveys for LEI alumni.



We developed a set of systems to collect survey answers and import them into the new database being produced by LEI's Data Analyst, Michael Klein.



We worked within the database to create a section of it to store the survey responses.

Each of these aspects of our project combined to form a system that allows LEI to quantitatively determine the positive impact each of their programs had on their alumni so they can take steps to improve their programs in the future. Since all of the data from the alumni survey is stored in LEI's new database, which is still in development, we empowered the staff in the use of this data during the time of our project. For each of these goals we researched the best tools, work principles, and each of our skills so that we began our project having already laid the foundations necessary to achieve as many of our goals as possible.

3 Methodology

The issue facing the Latino Education Institute today that we tackled was understanding the impact the organization had on its thousands of alumni throughout its 22 years of operation. Having a better insight on the effects LEI's various programs had on the Latino students and families they have served over the years allowed the Institute to focus on what can be improved within the organization and overall improve the quality of the educational and financial resources they provide. Obtaining this information allowed the Institute to give better opportunities to more Latino students within the organization's reach. To address this, we:

1. Develop a survey addressed to the alumni of LEI that analyzed their overall experience within the Institute's programs.
2. Research survey distribution systems such as Google Forms and SurveyMonkey to see which system would best suit our needs for reaching as many alumni as possible.
3. Determine the best way to read the data obtained from the survey, and create tables within LEI's new database that are consistent with the existing information in the database.

The following sections in the methodology chapter will go further into detail to explain how we achieved these objectives. Methodologies and technologies used include modern pre- and post- surveying techniques, email and SMS distribution systems, analysis and storage of survey data, LEI's new database system, and professional data visualization software.

Note: Because the methodologies involved in completing these objectives involved human participants, these were also reviewed and approved by the Internal Review Board (IRB) at WPI prior to their use to ensure that we followed ethical standards.

3.1 Survey Formulation

The main interest of our sponsor was to have a better understanding on what the alumni of various LEI programs are doing after their time with the Institute and the Institute's impact on their success through two electronic surveys that kept track of alumni contact information and longitudinal data regarding topics such as their degree, housing status, etc. The purpose of this was to maintain communication between LEI and their alumni and tell student stories that helped ensure the Institute continues to provide quality services and encourage future generations to receive support from LEI. We believed that the fastest and most effective communication tool was creating a standardized survey that could be accessed via email or text message. We provided surveys in both Spanish and English so that survey takers had the convenience of responding in the language that was easiest for them.



3.1.1 Focus Group with Staff Members

To complete the first objective, we needed to know which programs and their corresponding services LEI wanted to focus on for feedback. Our sponsor let us know that their main interest was to know the impact LEI services had on the academic and professional careers of their students. For that we needed a small focus group of staff members. A focus group is defined as bringing together a group of qualified people to discuss a particular topic. The focus group application served as a brainstorming tool (The Focus Group Research Handbook, n.d.). Within the focus group we discussed the areas they felt needed to be evaluated, provided sample questions of the survey for them which were subject to change, deliberated on whether the questions met what they needed to know, and formulated new questions based on the results of the discussion – See Appendix A –.

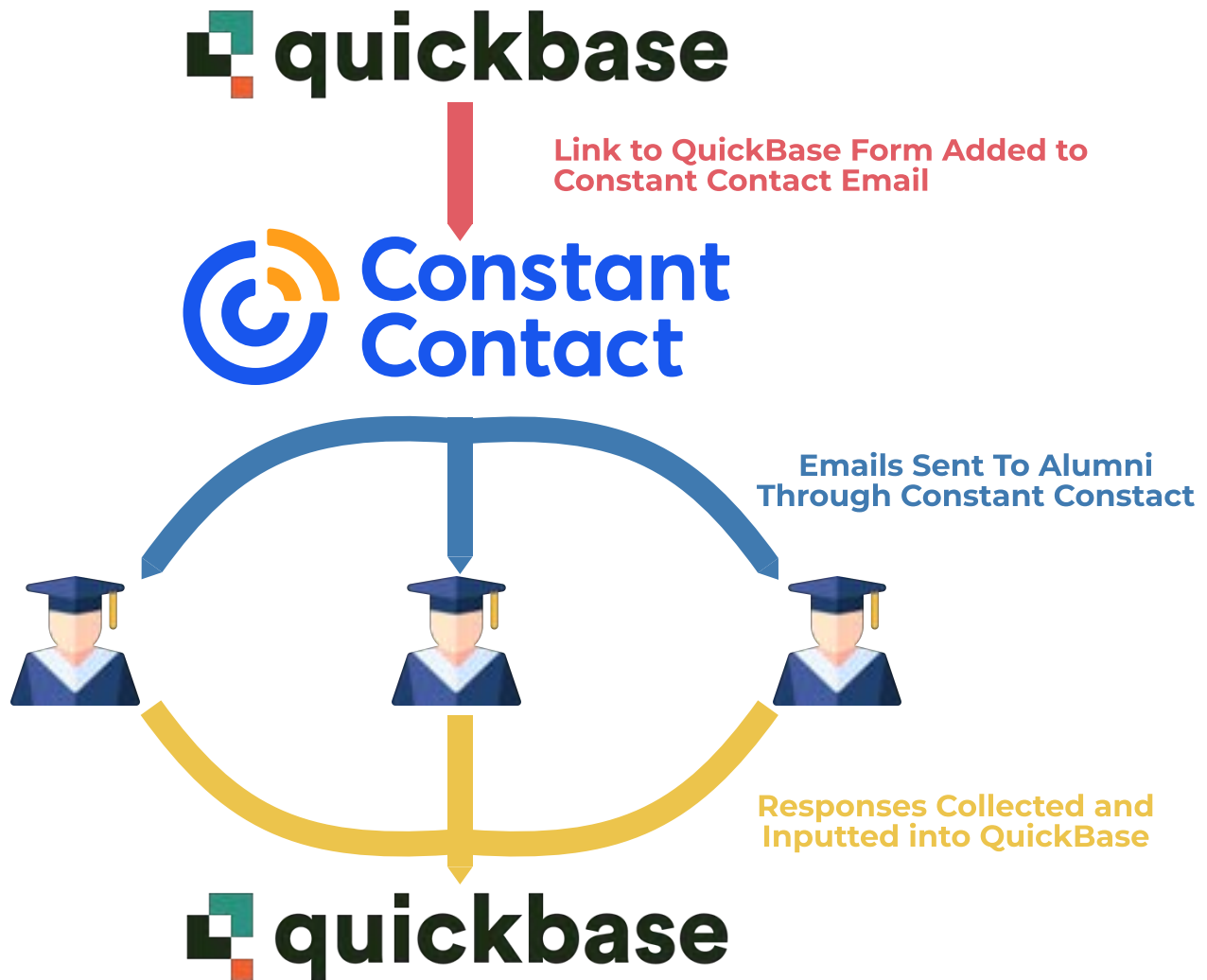
3.1.2 Test Survey with Selected Alumni

Once the questions were finalized, we spoke with our sponsor so that they would either allow us access to the contact information of some former students, or, if possible, recommend some people to us to conduct a test survey. Some of the LEI staff, such as Christian Santana, are university students who are LEI alumni. Christian joined the Encouraging Latinos to Achieve Excellence (ENLACE) program in 7th grade and went on to become its facilitator at Worcester State University.

We contacted him and other alumni that our sponsor helped us to contact so that they could take the latest draft of the alumni survey. This method brought good results in a previous project of the Worcester Project Center in conjunction with a non profit organization (n.d.). The answers from this selected group of alumni helped us know if our questions were suitable for the survey and offered insight into how alumni would approach the survey such as how long the survey would take to complete. We highlighted common topics or words that served as multiple answers to our questions, letting us know if the format of the questions needed to be changed. Once the questions were finished, we reviewed them with a staff member of our sponsor to start working on the survey distribution.

3.2 Survey Distribution and Collection

The second objective during our time at LEI was researching the best medium to collect survey information through. Given that the end goal for the surveys we created was constructing a database containing longitudinal information about LEI alumni, we had three main goals while building the survey distribution system. We first selected a surveying service to house the survey. Next, we created a system to reach as many respondents as possible by employing both email and SMS. Finally, once we established the best way to receive the survey answers we transformed them into useful data that can easily be stored within LEI's new database.



3.2.1 Determining a Survey Service

The first step we were tasked with in creating the survey distribution and collection system was finding the best survey service for us to use. There were a couple of options that were considered, such as Google Forms and SurveyMonkey, which each had their perks in terms of pricing, customization, and longevity. During our period of training using QuickBase to create our alumni database, it was discovered that QuickBase has its own internal form system that would allow us to send surveys to participants and then link their responses to the database tables we were designing. We decided this was the best option for us to distribute the survey as it was built-in to the database, was highly customizable, and provided support for longevity of the survey in terms of revising current questions, adding new questions, and tracking the responses of the alumni as well as any change in their responses when taken again a set amount of years down the line.

3.2.2 Automated Survey Collection System

After we created the survey within QuickBase we needed to create a way to automatically send the survey link to LEI alumni. To reach as many alumni as possible while automating the task of survey collection as much as possible, we elected to use both text messages and email to reach the survey respondents. To achieve this we used the contact information stored in the database. LEI already deployed Constant Contact to create mailing lists for newsletters and other surveys, so we designed the survey to be sent through Constant Contact.

3.3 Alumni Survey Database

The third objective we accomplished while working with LEI was designing and building a section of their new database to house the alumni contact information and their longitudinal data from the alumni surveys we created. There were three major steps we took in this process; the first was to gain a working understanding of the new Quickbase database as a whole and the tools used to create it. The second was to then design the alumni survey database to work in tandem with the other areas of the new database. Finally, we implemented the small section of the database and ran tests as well as created mock survey responses in order to test the alumni database.

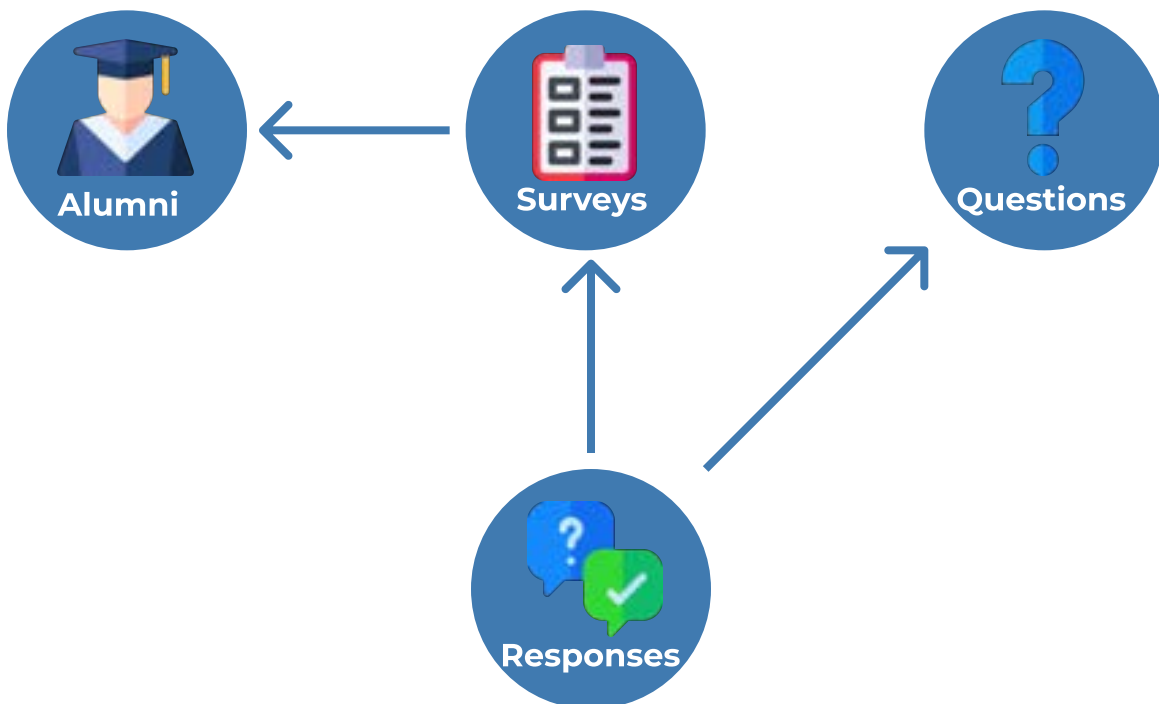
3.3.1 Learning About the Quickbase Database

LEI determined that they would be using Quickbase for their new database. Since this database was still in development by Michael Klein and wasn't scheduled to be finished until the Fall, LEI had not yet purchased full access to QuickBase at the beginning of our project. Given this constraint along with the additional constraint that Michael (LEI's only data analyst working on the database) was unavailable starting at the halfway point of the project, we tasked Tyler Evans during the first half with learning the tools and structure of the Quickbase database from Michael due to his experience designing and using databases in several classes while at WPI. We did this so that he could gain a deep understanding of the tools and database in order to help guide our survey question creation and formulate the best method of entering the information into the database. Once we completed the first two objectives, Tyler became the lead engineer for designing the survey database while the LEI data analyst was unavailable.

3.3.2 Designing and Creating the Alumni Database

During the design and creation phases of the database, we employed the scrum methodology. In short, we conducted weekly sprints. The scrum methodology allowed us to take an iterative approach to our database development and employ the Minimal Viable Product design pattern. With these two principles at play, we accounted for the fact that we would most likely not be able to finish every aspect of this project but would still be able to leave LEI with a functional database which was only lacking some features as opposed to leaving the organization with an incomplete and nonfunctional product. We designed our database in such a way that Michael would easily be able to continue our work once we leave the project.

Our database consisted of four separate tables interlinked. The first table was populated with alumni and their contact information. The second table was filled with each instance of a survey taken by an alumni. Thirdly we had a table that referred to each question within the survey. Lastly we created a responses table that linked every answer to the question it was answering and the survey that it was a part of.



4 Findings & Deliverables

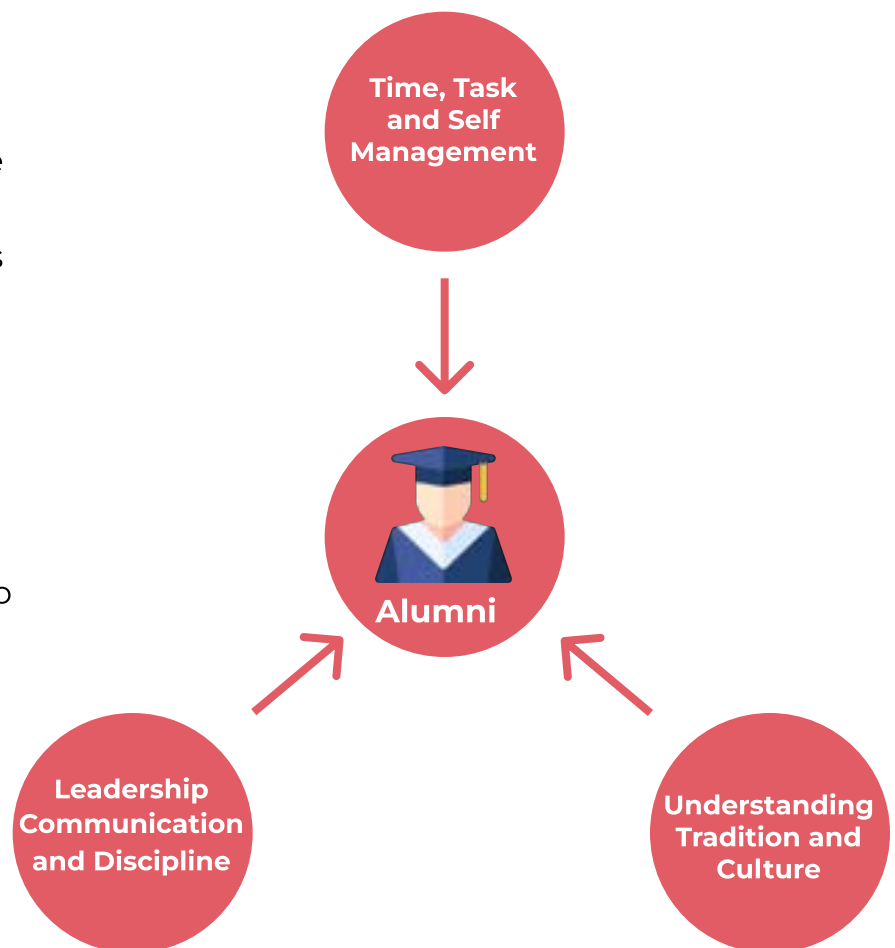
We had three primary objectives at the start of the project. We were to draft and complete a survey for our sponsor's alumni, determine the best way to deploy the survey, and create a database to house survey results. Each of these objectives produced a set of findings and deliverables for LEI that will assist them in tracking alumni success over time.

4.1 Survey Development

4.1.1 Characteristics of a Successful Alumnus

During our survey development process at LEI, one of the most important things LEI wanted to evaluate in the survey was whether or not LEI instilled in students the skills they aimed to teach them. In order to ask questions relating to these skills we conducted a focus group with LEI staff that facilitated their programs to gain an understanding of the skills LEI wants to teach students. We found that LEI primarily aims to instill students with three different types of skills.

The first set of skills relate to oneself and managing one's time. These are listed as time management, task management and self management. The second set of skills we found more so related to a student's ability to complete tasks alone or in a group. These skills include leadership, communication, discipline and problem solving skills. Finally, the last set of skills LEI tries to instill in its alumni are community related skills. The two skills in this category are an understanding or Latino traditions and culture, and the second being community service within the City of Worcester.

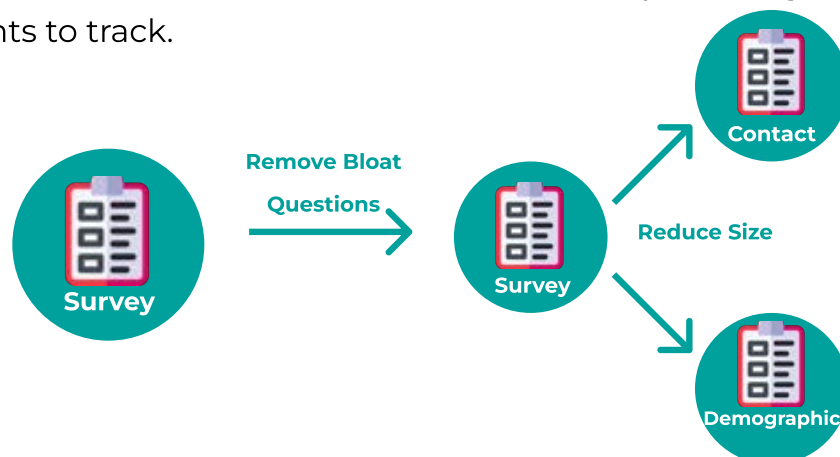


4.1.2 Survey Fatigue

While creating the initial drafts of the survey, we ran into the problem with the length of our survey. After our focus group, LEI staff voiced their concerns over survey fatigue. Survey Fatigue is the lack of motivation to participate in assessments due to incorrect targeting, over-surveying, poor survey design, and long surveys and will generally impact response behavior (Davies, 2021). We found that survey fatigue could cause alumni to click the first answer they see, skip questions, or not fully read questions which leads to not answering with their genuine opinion.

After talking with staff further, through meetings and the focus group, we discovered that LEI does many pre- and post-surveys on students. Over-surveying, one of the causes of survey fatigue, gave us another challenge. With how lengthy and all encompassing our survey was, we decided to revise the survey in two main ways. The first change was to limit the number of questions. After learning how almost every program has pre- and post-surveys, we decided to cut all program specific questions from the survey.

The second change was to the length of the survey. The survey had two main sections of questions: Longitudinal questions, which includes data LEI wants to track over a longer period such as education level, marital status and housing status; and one-time questions, which includes data that would be less likely to change, such as name, ethnicity, and contact information. We decided to partition the survey into these two categories of questions. The initial survey asked for contact information and these one-time questions. It also asked for an optional, brief response for a student to detail their time at LEI and how it impacted them. The second survey would be sent out every couple of years at LEI's discretion which includes only the longitudinal data that LEI wants to track.



4.1.3 Goals of the Alumni Survey

One last important point that we were able to find during the development of the survey was that the survey would also be used to maintain contact with LEI alumni. During a meeting with our sponsor and the LEI data analyst, we learned of a contact list of recent LEI alumni. When we used the list to contact LEI alumni to test our survey, we realized that many of those numbers or emails were no longer used.

The development of this survey will help the organization to have more up-to-date contact information that would help LEI to contact alumni who were available and willing to complete the survey about their experience at LEI and share their stories. Story and data collection will lead to an overall evaluation of the program that will help share success stories with future generations, more Latino families, and potential funders.

4.2 Survey Deployment

4.2.1 Survey Distribution

Our next finding was the best way to house and distribute the survey. Initially we saw three main avenues for sending the survey. The first was to use an API service, such as Twilio, to send SMS messages but found the cost to be too high and wanted to be able to send emails as well. The second option was to determine if LEI had access to Worcester State's emailing service and if the survey could be sent from that service. Lastly, we looked at creating our own email distribution service but determined that the time commitment would be too costly.

In the end we settled on a different option once we began speaking with LEI about the various options we had discussed. We found that the best solution was to use a service that LEI was already paying for to send emails: Constant Contact. By using Constant Contact, we kept things simple for LEI by not introducing new software to learn. This also meant that the cost of mass sending emails was already budgeted for, and LEI would have access to send emails to all of their alumni.

4.2.2 Delivery Service

After we found the best tool for distributing the survey, we needed another tool to deliver the survey in electronic form. During survey development, we used Google Forms because it was easy to use and free. During our time creating the survey, we researched several different options for housing the survey.

The first was Google Forms since it is free to use and we were already familiar with all of its capabilities. However, we decided not to use Google Forms since it lacked multilingual capabilities and would have required creating two separate surveys. This would have increased the complexity of transferring data into the database when trying to work with two different languages.

The second and third options we looked at were SurveyMonkey and Qualtrics. Both of these tools are paid services for hosting surveys that would allow for more complex question conditionals, multilingual surveys, and unique survey links for each alumni. We ultimately decided against these services because of the time required to secure funding and our desire to not increase the number of tools that LEI staff have to learn and interact with.

The final option we looked at and ultimately decided on was using the form system within QuickBase. We determined it was the best option because LEI was already paying to use it to store their data, and QuickBase had a built-in form system that could be used for surveys. By using QuickBase directly, we avoided having to use an API or some other external tool for moving data from the survey to the database. Having both the database and survey within the same tool decreased the complexity of the survey system.

5 Conclusions & Recommendations

The survey and database we created were designed with the future in mind. We focused on three main goals to ensure the survey would be useful to LEI for years to come. First, we made the survey applicable to all current and future alumni. Second, we created both the survey and database with change in mind. We believe that modularity is the most important aspect to any project for extending its usability into the future. We want it to be possible for changes to easily be made by future staff unfamiliar with us or our work here. Finally, we designed both the survey and the database to be easy to understand from the perspective of a non-English speaking and non-technical person. We recommend LEI continue these efforts to ensure that the tools at their disposal are used well into their future.

5.1 Future of the Survey

5.1.1 Longevity

Our main goal when designing the survey was to think of the long-term usage of the survey as this survey will be used for all LEI alumni for the foreseeable future. When designing the survey, we held this concept at the forefront of development. The survey categories for questions fell into two main categories of types of questions we should develop in order to keep the longevity of the survey.

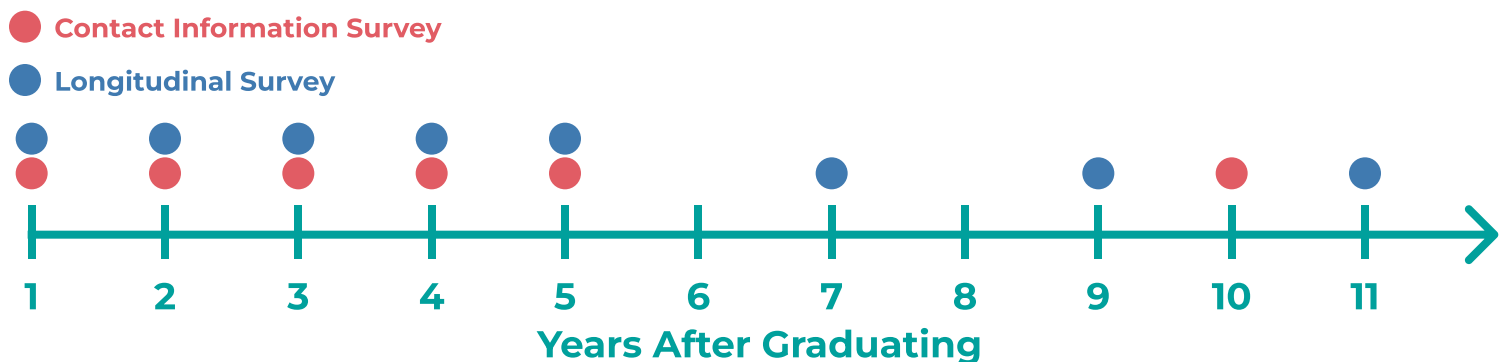
The first category is generalized questions for all LEI alumni. These are questions not pertaining to specific programs that analyze an alumni's experience that could be shared universally. This includes what skills the alumni have gained through their time with LEI. The skills we ask alumni about are skills that LEI continues to provide students with, including leadership, self-management, discipline, and problem solving. These questions are asked directly after someone who was part of LEI becomes an alum.

The second category is longitudinal questions. These are questions that we expect to change over time that LEI wishes to track to determine the success of alumni. LEI wished to track not only demographic questions like the number of children one has or housing status, but also their education and civic engagement. The longitudinal questions analyze undertakings that LEI wants their students to achieve when they leave, for example, whether they are going into higher education and becoming involved in their local

community.

Our most pertinent recommendation is that LEI sends out both surveys to recent alums every year for the first five years after exiting a program. During the first five to six years after graduating highschool, college students change their contact information quite often as they move out of their parent's house, begin using their personal email and not a school email, as well as purchasing their own phone plan. These factors indicate that frequent surveys are more likely to capture these changes as they occur and not leave LEI unable to contact their alumni. After these first five years have elapsed, as alumni finish college and begin to enter the workforce, LEI should reduce the frequency of both surveys, we recommend that the contact information survey be sent out every five years to avoid survey fatigue and send out the longitudinal survey every 2 years to capture major milestones in graduates financial success such as purchasing a home, getting married, and having kids.

Alumni Survey Timeline



5.1.2 Modularity for Change

Our second tenet for extending the life of this project was to design the survey and database in a way that allowed for changes to easily be made without having to completely refactor LEI's database for every change that needs to be made. Practically, this modular approach included three main aspects. The first was the design of the survey itself, second was the design of the database that stores alumni responses and the final aspect of our modular approach consists of our recommendations for LEI going forward.

The design of the survey itself and its questions was the first step towards modularity. We split the survey up into two smaller surveys for people to take. The first was an initial survey for recent alumnus to take after completing their last LEI program and the second addressed LEI far into the future. By splitting the surveys in this way and adding sections to the surveys asking different kinds of questions we have made it easy for LEI to change, remove and add questions. To add questions LEI simply needs to pick a section to add the question to or create a new section to house that survey.

The second point of modular design was in the database itself. By separating the questions and responses into two separate tables, we remove the need to modify a master survey table if questions want to be added or removed. This separation of concerns not only allows the survey to be changed and modified but lays a foundation for new surveys in the future to be sent out while still being stored in the same database.

Finally, going forward we recommend LEI continues to iterate on their database and survey while incorporating this modular design into the rest of their database. In addition we recommend that when LEI needs to update the survey or make changes that they take the time to determine which sections additional questions should be added to or removed from. We also recommend that LEI continues to employ a data analyst to maintain and expand their database to their needs. Without a data analyst we feel that LEI will be unable to fully take advantage of the tools and data within their database.

5.1.3 Use by New Employees

Lastly we wanted to design the database and survey to be easy to understand for current and future employees at LEI. In order to accomplish this, we translated the survey into Spanish for the non-English speaking members of LEI. Beyond this we also provided LEI with a document detailing all of the tools we used and how we used them. This will be especially helpful for LEI staff members that need to edit or view the database but aren't data analysts. We recommend that LEI references this document before making changes to either the survey or the database.

5.2 Final Remarks

There is no doubt that LEI has had a significant impact on program alumni in the last 22 years. Through the organization's passion, commitment, and drive to help communities of color, they've continued to grow and enhance the community around them. As LEI grows in the future, the alumni survey we developed will provide the organization with comprehensive data to evaluate the impact of their programs and events on students for years to come. We recommend that LEI continue to use this survey and expand upon it if needed. With the location and storage of the survey on the database, we also recommend that LEI should try to locate a permanent data-analyst to continue upkeep and development of the database and survey.

Through our weeks working with LEI, we have directly seen how impactful and how invested they are in the local and greater community. After attending an LEI event and speaking with both staff and students, we know that LEI will continue to grow and flourish, and, with the use of the survey and database, they will be able to provide sponsors with sufficient data to better show their impact in the community, keep in contact with LEI alumni, and further invest into the community.

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Appendices

Appendix A: Focus Group with Staff Members

Preamble

We are students at Worcester Polytechnic Institute working on a project with LEI. The goal of our project is to provide LEI with a complete survey system for alumni. In order to do this, we need to complete our first objective, which is the formulation of questions for our survey. Your responses will help us determine if our questions meet our goal of learning about the Institute's impact on its students.

Participation is voluntary and you do not need to answer anything you do not want to. You can also back out of participation at any time. We will be taking notes during the discussion and, with your consent, also an audio recording. We will proceed to use your name in the notes only if you so wish.

We thank you in advance for your time.

Questions and Answers

1. We have brought with us a rough draft of the alumni survey, please take a moment to read through it and mark down any changes you like to see made.

- Long survey - it is over encompassing
- Younger people would be tabbed out
- Solution is split survey into multiple over time
- Need different ways to engage feedback. - game? raffle? some development?
- People don't reach back sometimes or communicate - difficult even a year out to contact some alums

2. What knowledge or skills do you intend for LEI students to achieve from LEI programs?

- Leadership
- Communication - public speaking and pier to pier
- Task management - YCU/LASOS
- Time management - YCU/LASOS
- Self management - key component to learn from kindergarten-college (has to do with academic tools) - did LEI provide you with these academic tools to learn self management.

Appendix A: Focus Group with Staff Members

continued...

3. Would you like there to be any questions on the survey about the retention of these skills?

- Questions 2 and 3 obtained similar responses

4. What information do you feel is most pertinent to collect for LEI? (program specific)

- They want us to provide a definition or concept of skills
- It changes from year to year
- YCU is pretty good but the other ones are very different
- The budget of the program changes the knowledge of it. The facilitator changes it too. Some programs don't get to travel or go far like other ones. Very time sensitive.

5. Which educational programs have the largest enrollment?

- Enrollment doesn't equate to impact. YCU has done amazing work but struggles for enrollment. During covid, they were not allowed to recruit in person so it impacts enrollment.
- All are impactful. Wouldn't take out some programs because they do amazing things. Some focus on health and well being and that's important.
- All are important. The programs need to be able to incorporate all that is unexpected. Some did not have the tools to help the programs. For example, they did not have the tools to help students academically with covid because of things like home wifi and struggling with hybrid/remote work.
- Programs changed with the pandemic like some programs picked up responsibilities that weren't in the scope or promised to the sponsor.
- Reach offered networking and full time jobs for staff - (got offered high paying jobs).
- Got hella awards for reach and they've gotten contracts and proved they are balling the program speaks for itself.

Appendix A: Focus Group with Staff Members

continued...

6. Is there any other information that you want to gain from the survey?

- Be mindful about a person who left if they weren't ok with LEI. Need to ask about both sides. Before the survey, was that person talked to and was able to express themselves on why they didn't like LEI. - a bit outside the scope, we should keep that person in mind.
- Give the space for them to complain. Experience can be dramatically different in different programs. Some programs have more play time while some have a more negative experience because it's less fun and enriching in an active way.

Additional notes

- They have amazing multilingual grads who are qualified to move on - the organization needs to change make themselves more independent
- Some MOUs from funders and their goals are vague, but they have to do stuff in a certain way.
- No handbook or training. No instruction on how to conduct themselves in programs and in a professional way. Learned only through experience and other program facilitators. Fortunate to be trained outside LEI.
- They do above and beyond. Work part time but basically do full time work. They need specific roles. They need to be involved in the hiring process. They have a "rebuilding period" when people leave. How does it affect student experience?: It causes confusion with people filling in the gap that gets created. They had to take a backseat when first in YCU because they didn't know how to run their program. No real understanding.

Appendix B: Survey

LEI Survey (One Time)

If you are receiving this survey, you are either an alumnus of the Latino Education Institute and have turned 18 or you are over 18 and have recently graduated from your LEI curriculum. LEI would like to use your responses to this survey to update your contact information and, with permission, learn about your overall experience with LEI.

Participation is voluntary and you do not need to answer anything you do not want to. You can also back out of participation at any time.

LEI thanks you in advance for your time.

* Required

Contact Information

1. Please enter your first name *
2. Please enter your last name *
3. What is your date of birth? *

Example: January 7, 2019

4. What is your gender? * *Mark only one oval.*

- ☐ Male
- ☐ Female
- ☐ Non-Binary / Non-Conforming
- ☐ Prefer Not to Say
- ☐ Other:

- 5.. What is your race / ethnicity? *

Check all that apply.

- ☐ African-American or Black
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Hispanic
- ☐ Latino, Latina, Latine, and/or Latinx
- ☐ Multiracial
- ☐ Native Hawaiian or other Pacific Islander
- ☐ White
- ☐ Prefer Not to Say
- ☐ Other:

Appendix B: Survey

continued...

6. What is your Family Background / National Origin?

Mark only one oval.

- ☐ Argentina
- ☐ Bolivia
- ☐ Brazil
- ☐ Chile
- ☐ Colombia
- ☐ Costa Rica
- ☐ Cuba
- ☐ Dominican Republic
- ☐ Ecuador
- ☐ El Salvador
- ☐ Guatemala
- ☐ Haiti
- ☐ Honduras
- ☐ Mexico
- ☐ Nicaragua
- ☐ Panama
- ☐ Paraguay
- ☐ Peru
- ☐ Puerto Rico
- ☐ Uruguay
- ☐ Venezuela
- ☐ Other:

7. What is your current email? *

8. What is your primary phone number? *

9. What type of phone number did you provide? * *Mark only one oval.*

- ☐ Mobile
- ☐ Home
- ☐ Work

10. What year did you graduate from High School? *

11. What is your postal address?

12. What city do you live in?

13. What state and/or country do you live in?

14. What is your zip code?

Appendix B: Survey

continued...

15. Do you give LEI your consent to be added to their mailing list and electronic newsletter in order to be contacted in the future? *

Mark only one oval.

- ☐ NO, LEI DOES NOT HAVE my consent to be added to their mailing list and electronic newsletter
- ☐ YES, LEI HAS my consent to be added to their mailing list and electronic newsletter

Thank You for Your Time!

16. Would you be willing to answer a few more brief questions about your experience with LEI? *

Mark only one oval.

- ☐ NO, I DO NOT want to answer questions on my experience at LEI

Skip to question 26

- ☐ YES, I DO want to answer questions on my experience at LEI

Appendix B: Survey

continued...

Purpose of Survey

If you are seeing this, you have requested to partake in a brief survey regarding your overall experience at the Latino Education Institute. These questions will provide LEI information on how to improve their services, and the responses from this survey with your consent will be used to convey the impact LEI has had in the Worcester community to possible LEI stakeholders.

Participation is voluntary and you do not need to answer anything you do not want to. You can also back out of participation at any time.

LEI thanks you in advance for your time.

LEI Experience

17. Were you involved in any of the following programs at LEI?

Check all that apply.

- ☐ Innovative Services for Latino Achievers (ISLA)
- ☐ Latina Achievers in Search of Success (LASOS)
- ☐ Encouraging Latinos to Achieve Excellence (ENLACE)
- ☐ My Voice, My Community
- ☐ Teen Circle
- ☐ Aspire Community Academy
- ☐ Latinos Involved in Discovering Educational Resources (LIDER)
- ☐ Youth Civics Union (YCU)
- ☐ 100 Males to College, Worcester
- ☐ Worcester Club Educación (Club E)
- ☐ College Students as Support Staff
- ☐ WSU Teaching Corps
- ☐ LEI Health Ambassadors / COVID and Health
- ☐ Early College
- ☐ Other:

Appendix B: Survey

continued...

18. Did you remember attending any of the following Family Engagement Programs at LEI?

Check all that apply.

- ☐ Atrévete! Latino Family Workshops
- ☐ Avanza! STEM EXPO
- ☐ Cafecito y Cultura Series
- ☐ Family Academies
- ☐ Worcester Institute for Parent Leadership and Engagement (WIPLE)
- ☐ Parent Navigation Center
- ☐ Reader's Theater
- ☐ Live Bilingual
- ☐ Other:

19. Please answer what best describes the following statements.

Mark only one per row

	No, not at all	No, not really	Yes, somewhat	Yes, very much so
LEI made me feel prepared for my current occupation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEI made me feel prepared for college	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my experience at LEI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEI built a good relationship with me and my family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix B: Survey

continued...

20. How likely are you to recommend LEI to someone else?

Mark only one oval.

- ☐ Very Unlikely
- ☐ Unlikely
- ☐ Neutral
- ☐ Likely
- ☐ Very Likely

21. Are you currently involved in the events that LEI offers?

Mark only one oval.

- ☐ Yes
- ☐ No

22. What prevents you from attending LEI events?

Check all that apply.

- ☐ No free time
- ☐ It's too far
- ☐ I don't want to
- ☐ I don't know when they happen
- ☐ Other:

23. What skills and/or qualities did LEI help teach you about or further develop?

Check all that apply.

- ☐ TIME MANAGEMENT (i.e. planning out when assignments are due, balancing academics and free time, etc.)
- ☐ LEADERSHIP (i.e. being a role model for others to follow, teaching others valuable skills that would benefit them in the future, etc.)
- ☐ COMMUNICATION (i.e. public speaking, communication in both English and Spanish,
- ☐ TASK MANAGEMENT (i.e. splitting project work between a team, getting work done in a timely manner, etc.)
- ☐ SELF MANAGEMENT (i.e. maintaining good physical and mental health, staying respectful of others time and opinions, etc.)
- ☐ DISCIPLINE (i.e. behaving well in professional settings, being respectful of classmates,
- ☐ PROBLEM SOLVING (i.e. idea brainstorming, working with teams to produce a project outcome, etc.)
- ☐ LATINO CULTURE (i.e. different Latino traditions, Latino history, etc.)
- ☐ THE COMMUNITY OF WORCESTER (i.e. community outreach in Worcester, Worcester government and programs, etc.)

Appendix B: Survey

continued...

24. What advice would you give to someone thinking about joining a LEI program?

25. What specific experiences at LEI do you remember being particularly impactful to you?

Consent

26. Do you give LEI consent to use your responses to this survey and your story at LEI for INTERNAL USE (i.e. internal database storage, program evaluation, etc.) and/or ANONYMOUS / PUBLIC EXTERNAL USE (i.e. promotional material, graphics for LEI stakeholders, etc.)? *

Mark only one oval.

- ☐ NO, LEI DOES NOT HAVE my consent to use my survey responses for BOTH INTERNAL and EXTERNAL USAGE.
- ☐ YES, LEI HAS my consent to use my responses for INTERNAL USE ONLY
- ☐ YES, LEI HAS my consent to use my responses for BOTH INTERNAL USE and ANONYMOUS EXTERNAL USE.
- ☐ YES, LEI HAS my consent to use my responses for BOTH INTERNAL and PUBLIC EXTERNAL USE.

Signature

If you are seeing this page, you have given LEI permission to use your responses for internal and/or anonymous / public external usage.

Please enter your initials below to grant LEI the permissions you have requested. If you think this is a mistake, please go back and check your permissions response.

27. Signature *

Appendix B: Survey

continued...

LEI Survey (Longitudinal)

With your consent, the Latino Education Institute is collecting this information for internal use and/or for creating anonymous statistics to be shown to sponsors for things like increasing funding, portraying the organization's growth, and the alumni of the organization's growth. LEI will also use this information to see how LEI has influenced your future academic and professional careers.

Participation is voluntary and you do not need to answer anything you do not want to. You can also back out of participation at any time.

We thank you in advance for your time.

* Required

Demographic

1. What is your current marital status?

Mark only one oval.

- ☐ Single
- ☐ Married
- ☐ Divorced
- ☐ Separated
- ☐ Widowed
- ☐ Prefer Not to Say

2. How many children do you have in your household?

Mark only one oval.

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3 or more

Appendix B: Survey

continued...

3. What is the highest degree or level of education you have completed?

Mark only one oval.

- ☐ Some High School
- ☐ High School Diploma / GED
- ☐ Some College
- ☐ Associate's Degree
- ☐ Bachelor's Degree
- ☐ Master's Degree
- ☐ Ph.D. or higher
- ☐ Trade School
- ☐ Other:

4. What is your current employment status?

Mark only one oval.

- ☐ Employed Full-time
- ☐ Employed Part-time
- ☐ Self-Employed
- ☐ Seeking Employment / Internship
- ☐ Continuing Education (graduate, professional, or certificate program)
- ☐ Not seeking employment / Not continuing education at this time
- ☐ Retired
- ☐ Other:

5. How does your current job compare to what you studied in college?

Mark only one oval.

- ☐ Same field as major(s)
- ☐ Related to major(s)
- ☐ Related to minor(s)
- ☐ Not related to major(s) or minor(s)
- ☐ Non Applicable
- ☐ Other:

Appendix B: Survey

continued...

6. What is your annual salary range?

Mark only one oval.

- ☐ Less than \$20,000
- ☐ \$20,000 - \$29,999
- ☐ \$30,000 - \$39,999
- ☐ \$40,000 - \$49,999
- ☐ \$50,000 - \$59,999
- ☐ \$60,000 - \$69,999
- ☐ \$70,000 - \$79,999
- ☐ \$80,000 - \$89,999
- ☐ \$90,000 - \$99,999
- ☐ Greater than \$100,000

7. What is your current housing status?

Mark only one oval.

- ☐ I am currently renting
- ☐ I currently own a home
- ☐ I currently live with my family
- ☐ Prefer not to say

Civic Engagement

8. How are you civically involved? (Check all that apply)

Check all that apply.

- ☐ I am registered to vote
- ☐ I perform community service
- ☐ I participate in local community activities, charities, and events
- ☐ I participate in national programs and charities
- ☐ Other:

9. How impactful do you believe LEI has been in increasing your civic engagement?

Mark only one oval.

- ☐ Not impactful
- ☐ Very little impactful
- ☐ Slightly impactful
- ☐ Very impactful

Appendix B: Survey

continued...

Consent

10. Do you give LEI consent to use your responses to this survey and your story at LEI for INTERNAL USE (i.e. internal database storage, program evaluation, etc.) and/or ANONYMOUS / PUBLIC EXTERNAL USE (i.e. promotional material, graphics for LEI stakeholders, etc.)? *

Mark only one oval.

- ☐ NO, LEI DOES NOT HAVE my consent to use my survey responses for BOTH INTERNAL and EXTERNAL USAGE.
- ☐ YES, LEI HAS my consent to use my responses for INTERNAL USE ONLY
- ☐ YES, LEI HAS my consent to use my responses for BOTH INTERNAL USE and ANONYMOUS EXTERNAL USE.
- ☐ YES, LEI HAS my consent to use my responses for BOTH INTERNAL and PUBLIC EXTERNAL USE.

Signature

If you are seeing this page, you have given LEI permission to use your responses for internal and/or anonymous / public external usage.

Please enter your initials below to grant LEI the permissions you have requested. If you think this is a mistake, please go back and check your permissions response.

11. Signature *