

The SHPE Boston Identity: Latino Leaders in Science and Engineering

Introduction

The SHPE Boston chapter was originally founded in 1995, and ceased to operate 2005. Due to significant local interest, in 2009 we started the process of re-establishing the Boston chapter.

Over the last two years, we have been going through a systematic process to build the most dynamic business model we can for our chapter. Our primary goals for the new SHPE Boston are to create an organization that has a strong management foundation, to create a business model that is sustainable and prosperous over the long haul, and to have an organization that meets the needs of its constituents.

In this process, we have learned a number of things about SHPE as an organization, the idiosyncrasies of our regional market, our regional addressable market of members, and who we are. This is our story.

Asking the Right Questions

When we started the process of re-establishing the SHPE Boston chapter, one fact was very clear: There is a solid base of people in Boston who have had some positive experience in SHPE. As a result of this, they wanted to continue supporting the organization.

The majority of these individuals had been exposed to SHPE in high school through the organization's outreach programs, in college through university SHPE chapters, and through the SHPE National conference from which a number of members in this region had attained their first jobs.

However, everyone's SHPE experience was different. Since most of the people interested in establishing the new chapter had different experiences with SHPE in different parts of the country, it became necessary to ask questions to define the type of organization we wanted to build in New England.

Who are we?

We had a board meeting and asked the individuals on the SHPE Boston board two specific questions.

What are your motivations for being involved on the SHPE Board?

- To obtain a good job
- To help Latino professionals and university students succeed in their careers
- To network with other Latinos and engineers
- Encourage pre-college students to pursue careers in science and engineering
- Support the Latino community

What do you personally want to achieve by being a part of the SHPE Board?

- To gain management and executive experience
- To learn how businesses work
- To help redefine and build the chapter

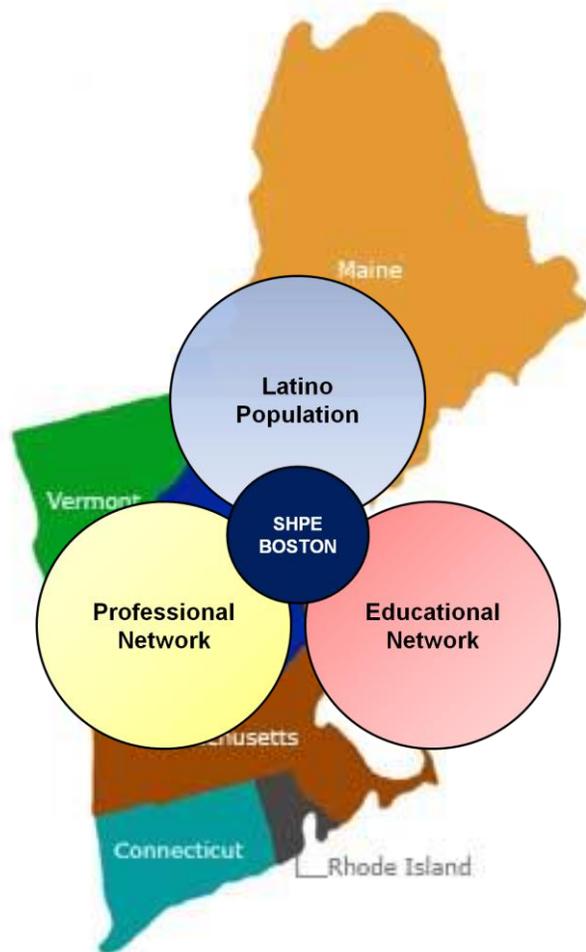
We learned two main things from this exercise.

- 1) SHPE's constituent base in Greater Boston included a broad demographic of people: Corporate partners, SHPE professional and university members, affiliate Latino and engineering-based professional groups, and the Latino community through STEM education.

- 2) We needed to design an organization that provides its board members with practical leadership, management and executive experience that they can use in the development of their own careers.

Where are we?

We conducted some research on the specific characteristics of the New England region.



Latino Population

- The Hispanic population in New England will increase from 11.9% in 2010 to 17.0% in 2025, representing 50% population increase

Engineering Education

- There are approximately 168 universities in the NE
- 22 universities offer standard engineering disciplines
- 13 offer limited/specialized engineering programs

Engineering Pro Network

- The Massachusetts IT industry is home to 10,300 firms
- In December 2009, high-tech companies in New England employed over 500,000 people

These data points determined that the New England region, and specifically the Greater Boston area, should be a nexus for Latino engineering talent, and the SHPE Boston could be an organization that could galvanize this customer base.

Who are our constituents and what do they want?

When we looked at our base of past and current SHPE Boston members and supporters, we discovered a wide range of professionals and university students in different industries.

- Engineering professionals from the Aerospace & Defense, High Tech, Communications, IT, Financial Services, Education, Consumer Goods, Petrochemical, Biomedical and Biotechnology industries
- Non-engineering professionals, including MBAs, university professors, HR and diversity recruiters, non-profit entrepreneurs, etc.
- Corporate partners, including engineering- and science-based companies, as well as non-engineering- and science-based companies
- Members from other professional Latino- and engineer-based organizations
- Non-profit community, arts and mentoring organizations

Through a lengthy process of discussions with corporate partners, professional members, university members and affiliate professional organizations, we defined the type of value our organization needed to deliver to its constituents.

Constituent	What they want?
Corporate Partners	<ul style="list-style-type: none"> • Recruit quality Latino talent for engineering and non-engineering positions • Invest in and associate with worthwhile organizations • Promote STEM education • Enhance their brand by gaining recognition in the community
Professional Members	<ul style="list-style-type: none"> • Network with other engineers and Latinos • Explore new job and career opportunities • Learn professional and leadership skills they may not learn at their job • Participate in outreach and mentorship opportunities
University Members	<ul style="list-style-type: none"> • Management guidance and support for their chapters • Interaction with professional engineers • Support in preparation for the job search process • Network with other Latino engineers at other schools
Affiliate Professional Organization	<ul style="list-style-type: none"> • Locate a base of Latino professional from which to recruit mentors (Big Brother Big Sister of Massachusetts Bay and the Science Club for Girls) • Collaborate with other engineering organizations in Boston (NSBE and SWE) • Collaborate with other Latino professional organizations in Boston (ALPFA, NSHMBA and EI Planeta)

What have we learned?

As we went through the process of assessing what our constituent needs, we also discovered a number of other factors that should be supported by our business model.

- 1) There is an emerging trend for science- and engineering-based companies to recruit at a regional level, rather than at a national level—our engineer membership has typically come from and has been clustered around four main regions: West (California and Washington), South (Texas), North Mid West (Illinois, Indiana, Michigan and Ohio) and the North East (New York, New Jersey, Massachusetts and Washington D.C.)
- 2) Our events program should be focused on three main things: Networking, Leadership and Success Skills, and Outreach.
- 3) There is a common interest in community outreach, in particular mentorship and STEM education
- 4) University SHP chapters are an extension of the professional chapters—there is an opportunity to build SHPE in logical chapter clusters that afford benefits to professional and university chapters that work together.
- 5) Similar Latino and engineering groups support each other, and what each other to be successful—there is a tremendous opportunity to share talent and ideas

Build the Right Organization

Once we learned about whom we are, where we are and what our constituents want, we designed a business model to maximize the value we deliver to our constituents.

We defined a mission and vision statement*

Mission

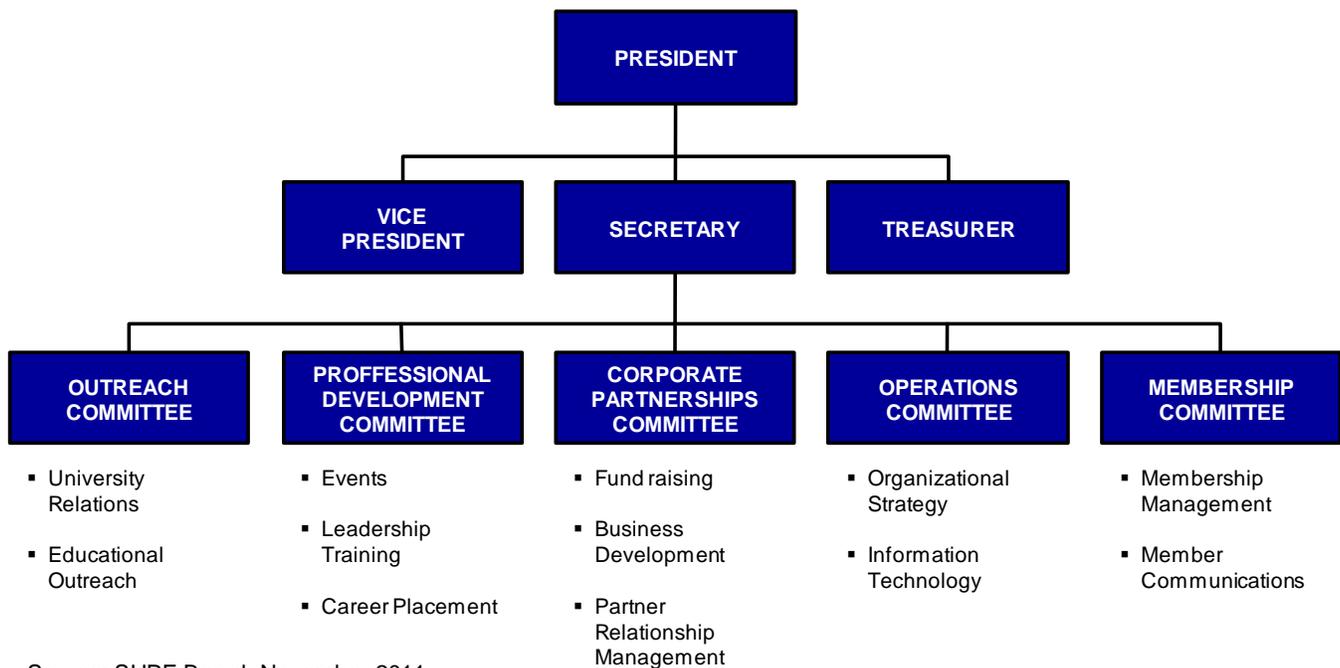
- Enable Latinos in the Boston area to pursue, obtain and develop successful careers with top engineering-based companies (i.e., broaden the membership base)
- Collaborate with its corporate partners to provide professional and career development resources to our members (i.e., develop deeper relationship with companies)
- Promote STEM education (i.e., include a commitment to the community)

Vision

- To be the premier organization in the Boston area for science- and engineering-based companies to recruit and retain qualified and quality Latino talent
- To create the next generation of Latino leaders in engineering-based companies
- To create a model for STEM educational outreach that is a successful example for the entire U.S.

(* We defined this mission and vision in November 2009 prior to SHPE National's promotion of its new mission and vision statement in the summer of 2011.)

We designed an operating structure to achieve our mission and vision



Source: SHPE Board, November 2011

We defined strategies for each committee

We defined strategies for each committee that supports the overall mission and vision of the chapter.

Committee	Sub-Committee	Strategy
Outreach	University Relations	<ul style="list-style-type: none"> Engage SHPE university chapters in the region Provide them with opportunities to network with engineering professionals Provide them with career planning and development workshops
Outreach	Educational Outreach	<ul style="list-style-type: none"> Develop a business plan for Educational Outreach that offers an after-school science-based workshop program that encourages students in high school in the region to consider pursuing careers in engineering Participants include SHPE Boston Board, corporate partners, university SHPE chapters, local high schools (with 30% Latino population) and pre-college students
Professional Development	Events	<ul style="list-style-type: none"> Focus events on 4 topics: Networking, Outreach, Leadership and General Meetings Host ten events per year Establish an event planning process to request funding for specific events, track event progress and create post-event reports
Corporate Partnerships	Fund raising	<ul style="list-style-type: none"> Develop relationships with the top A&D, communications, biotech and high-tech companies in the region Plug into the Latino groups sponsored by large engineering-based companies in the region
Operations	IT	<ul style="list-style-type: none"> Develop an advanced online communications infrastructure Design a business class web site Establish a social networking membership portal using NING Integrate a state-of-the-art talent software platform (Pangea Connect) into our membership portal to facilitate matching our talented members with job opportunities in regional companies
Membership	Membership Management	<ul style="list-style-type: none"> Track and profile our membership base Conduct regular surveys to gain feedback on our events and activities
Membership	Member Communications	<ul style="list-style-type: none"> Develop a standardized schedule for communicating with constituents Keep up to date and publicly published chapter calendar of events

Create the Right Board Culture to Execute the Strategy

Once we had a clear understanding of what our constituents want and had developed an operating structure to accomplish it, the main goal was to create the right context at the board level for the organization to succeed. This required the establishment of a number of policies and procedures to facilitate the management of the organization.

Building a “positive” board culture

Due to a number of challenges we experienced in the past, it was clear that for the organization to be successful, we had to establish an open, collaborative working culture within the board that was bound by positive values.

In addition, since our member base in the Boston region covers from Worcester in the West to Boston in the East, and Providence, RI in the South and Nashua, NH in the North, we had to establish some rules and procedures for our regular teleconference meetings to be the most effective and efficient.

- We emphasized the SHPE National Code of Ethics and wrote our own SHPE Boston Code of Ethics that emphasizes on integrity, transparency and respect.
- We established an Open Door Communications policy that encourages our board members to openly communicate in board meetings.

- We adopted a SHPE Board Confidentiality clause to protect valuable intellectual property developed by SHPE Boston and to ensure that sensitive issues can be openly discussed by the board in accordance with the SHPE Boston Open Door Communications Policy.
- We wrote a Board Policies and Procedures document to provide all board members with an overview of our organization, how it is structured and how it works, and to explain our basic policies and procedures for participating in board meetings, organizing events and other activities.

Setting goals

Once we had gone through this exhaustive process of defining our organization and structure, and our rules of interaction, the only thing that was left was to set goals for each committee. Obviously, goals change depending on context, including funds, resources, venues and the availability of personnel. However, as we have gone through the process of setting goals, we have established some basic principles.

- Establish a specific, measurable and time-bound objective to achieve (e.g., we want to have 50 professional members and 200 university members by March 31, 2012)
- Define the initiatives that will most likely achieve the objective in the time-frame (e.g., we will focus on having better events, we will encourage our member to register for our membership portal, and we will market SHPE into the Latino groups sponsored by major engineering-based companies in the region)
- Establish metrics that measure performance (e.g., we will track our progress by developing monthly reports from OneSHPE)
- Articulate the endgame (e.g., the goal of reaching the 50 member limit is that we can have an election that produce the best results)

The new chapter slogan

At our October 17, 2011 board meeting, the SHPE Boston chapter finally settled on a slogan for our organization, culminating a two and a half month discussion of our chapter's identity.

Latino Leaders in Engineering and Science (LLES, pronounced "yes")

We chose the word "Latino" not only to represent Hispanic heritage and culture, but also to include the racial diversity of people in all Latin America.

We chose the word "Leader" to represent the fact that we want to be more than just successful in our careers—we also want to be leaders in the organizations in which we work and the communities in which we live.

We consider the words "Engineering and Science" to represent the basic focus of our chapter in STEM education and related professional careers. However, we acknowledge that although this is our focus, we are an open organization that welcomes diversity not only in professional careers, but also culture and racial diversity.

Conclusion

In our chapter recent SHPE Boston Hispanic Heritage Month celebration on October 5, 2011, we were fortunate to have a local icon in the Latino community, José Massó, speak about the importance of organizations such as ours.

He left us with two important messages.

- 1) "Create 'un pueblo nuevo' for the 21st century."
- 2) "There is a difference between being a success and being great: Success is based on what you get, greatness is based on what you give."

We believe at SHPE Boston that we have built a “great” organization that is the foundation for our chapter to be one of the strongest SHPE chapters in the country. We have done the work. We have assembled an excellent team. And we have developed a clear vision for how to move forward.

About the Author

Darryl C. Sterling is the VP of Strategy and Operations for the SHPE Boston Chapter. By profession, he is a high tech research analyst with experience in market research, strategy consulting and competitive intelligence analysis.