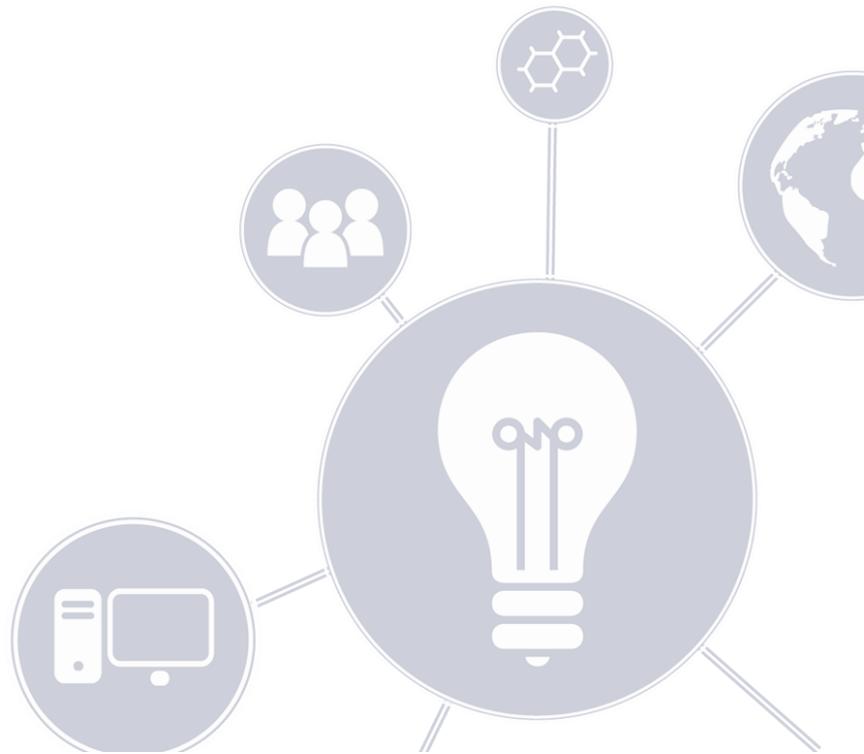


SHPE

SOCIETY OF HISPANIC PROFESSIONAL ENGINEERS

NOCHE DE CIENCIAS MANUAL



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Table of Contents

Noche de Ciencias Manual	4
Introduction to SHPE & Noche de Ciencias	5
About SHPE	5
About Noche de Ciencias	5
Why Noche de Ciencias?.....	5
Hosting SHPE Chapter Expectations	6
Noche de Ciencias Committee Key Tasks	6
Committee Roles and Responsibilities	7
Volunteer Roles and Responsibilities	8
Event Outreach: Fundraising & Marketing	9
Fundraising.....	9
Corporate Sponsorships	9
Marketing Noche de Ciencias	10
Marketing with Media	11
Key Messages	12
Event Planning Checklist	13
Preliminary Tasks:	13
Logistical Tasks:	13
Quality Assurance Tasks:	13
The week of Noche de Ciencias:	14
Noche de Ciencias Event Flow and Logistics	15
Suggested Event Agenda	15
Keep in Mind DURING your Noche de Ciencias.....	16

Noche de Ciencias Manual

Conducting a Noche de Ciencias requires a strong commitment from your SHPE Chapter. This leadership experience will prove to be incredibly rewarding for you and your peers. Follow this manual to learn the best practices and step-by-step approach to plan and execute a successful Noche de Ciencias event. The manual includes practical checklists and details to help you execute an impressive event and maximize your impact in the community.

Introduction to SHPE & Noche de Ciencias

About SHPE

For over 40 years, Society of Hispanic Professional Engineers (SHPE) has been dedicated to increasing the number of Hispanics pursuing careers in science, technology, engineering and math (STEM). SHPE works to address the demonstrated need for increased Hispanic representation in higher education and careers in STEM and is committed to empowering Hispanic youth to realize its fullest potential.

About Noche de Ciencias

The goal of a Noche de Ciencias is to inspire Hispanic youth to pursue STEM degrees and careers. Usually a 2-4 hour event hosted by local SHPE Chapters, Noche de Ciencias events aim to attract a minimum of 50 students and parents in the community to promote the STEM awareness and interest throughout K-12.

Why Noche de Ciencias?

Aside from bringing awareness and education to the next generation of STEM leaders nationwide, some key benefits of attending Noche de Ciencias include:

- **Interactive STEM Activities:** Students have an opportunity to engage with professional and university student leaders in their community and participate in fun, hands-on STEM activities. Activities are designed for students to learn about the scientific process and terminology, while learning about STEM education and careers.
- **Bilingual Parent Workshops:** **Parent workshops are required.** Workshops on college options, financial aid and how to prepare their children for college will be available to parents and students.
- **Networking Opportunities:** Parents and students have the opportunity to interact with college students and/or professionals in the STEM field to answer questions about college life and field of study.
- **SHPE Overview:** Students will learn more about how to get involved with a SHPE Jr. Chapter, become a SHPE Jr. Chapter at-large member and participate in the Pre-College Program at National Conference.

Noche de Ciencias is a great kick-off event if your SHPE Chapter is looking to establish a SHPE Jr. Chapter. As it's often in partnership with a SHPE Jr. Chapter or targeting a school that could establish a Jr. Chapter, the event is also a great way to recruit and showcase the SHPE Jr. Chapter to parents, volunteers and school administration and grow membership if you already have a SHPE Jr. Chapter established. It also provides leadership experience and a way for students and professionals in your SHPE Chapter to pay it forward and give back to your community. Whether you are establishing or sustaining a SHPE Jr. Chapter, Noche de Ciencias creates the momentum and reach you need to get to the next level!

Hosting SHPE Chapter Expectations

While planning the event, the hosting SHPE Chapter should **first identify a Noche de Ciencias Committee** in order to delegate the key leadership roles needed. In addition to the roles defined below, it is suggested you recruit **15-20 volunteers** to help with specific tasks during the program.

***Remember:** Noche de Ciencias may also be executed by a SHPE Jr. Chapter. It is best practice to partner with the SHPE Student and Professional Chapter to maximize your impact and leverage the expertise they can offer.*

Noche de Ciencias Committee

Identify members in your SHPE Chapter to support Noche de Ciencias.

Committee members include:

- Noche de Ciencias Lead
- Noche de Ciencias Marketing and Fundraising Lead
- Noche de Ciencias Volunteer Lead
- Hands-On STEM Activities Leads
- Parent Workshop Leads
- Noche de Ciencias Report Lead
- Survey Monitor Lead

Noche de Ciencias Key Tasks:

The Noche de Ciencias Committee:

- Identifies a target school to partner for the Noche de Ciencias*
- Submits a final report of the Noche de Ciencias to SHPE
- Elects Noche de Ciencias, Marketing and Fundraising, Hands-On STEM Activities and Parent Workshop Leads
- Creates and monitors event budget
- Supports fundraising initiatives
- Manages event planning and logistics
- Promotes event in order to successfully hit the minimum target of **50 attendees** (students and parents)
- Supports the submission of the final Report
- Ensures all required documentation is collected for report (SHPE surveys, all receipts, Accident & Media Liability Release Waivers, etc.)

** If you are unable to find a school to provide event space or expect low participation due to the school's location or any other reason, Noche de Ciencias may be held at a local community center, library, community college or church. It is still important to target one school to invite to the event, but you may invite others to maximize the participation and reach of the Noche de Ciencias.*

Committee Roles and Responsibilities

Noche de Ciencias Lead	<ul style="list-style-type: none"> • Initiates and maintains contact with high school administrators • Submits application to SHPE • Obtains School Participation Agreement signed by partner school administration • Leads the event planning and logistics execution • Ensures adherence to SHPE's timeline and reporting requirements • Compiles and submits Final Report to SHPE (receipts, event photos, completed surveys, etc.)
Noche de Ciencias Marketing and Fundraising Lead	<ul style="list-style-type: none"> • Promotes Noche de Ciencias to students, teachers, administrators, community leaders, media, etc. • Develops Noche de Ciencias flyer and promotional materials • Distributes printed materials and/or electronic communications to invite targeted community, media and general community to attend the Noche de Ciencias • Tracks success of outreach efforts and students/parents interested in attending • Seeks in-kind and monetary support from local businesses and corporations in the community • Manages social media channels • Sends thank you notes to community partners
Noche de Ciencias Volunteer Lead	<ul style="list-style-type: none"> • Recruits volunteers to support Noche de Ciencias • Maintains contact with volunteers throughout planning process • Ensures volunteers are prepared and understand their responsibilities at event • Invites a local university's admissions and financial aid department to conduct the College Workshop • Identifies a key note speaker and STEM panelists • Sends thank you notes to volunteers
Hands-On STEM Activity Leads -- 2 committee members needed (1 for each activity)	<ul style="list-style-type: none"> • Set up stations for activity • Make sure activity stays on track with time • Make sure to use the vocabulary words and engineering connection for each activity • Answer questions during activity • Clean classroom after activity • Recruit additional volunteers to support the implementation of Hands-On Activities
Parent Workshop Leads -- 2 committee members needed (1 for each activity)	<ul style="list-style-type: none"> • Must be able to conduct workshops in English and Spanish or identify additional volunteers to conduct separate sessions in English and Spanish • Make sure workshop stays on track with time • Answer questions during event • Clean up classroom after workshop
Noche de Ciencias Report Lead	<ul style="list-style-type: none"> • Must make sure all required materials are printed and available for event: sign-in sheets, Accident & Media Liability Release waivers, surveys found on Tools & Resources page • Ensures ALL receipts are collected, copied and saved for reporting • Collects pre- and post-surveys for at least 80% of attendees to ensure eligible report submission • Submits final report to SHPE
Noche de Ciencias Survey Monitor Lead	<ul style="list-style-type: none"> • Set up SHPE survey delivery method (print or online) • Ensures surveys are disseminated to the participants at the start of the event • Oversees the administration and collection of surveys • Submits surveys to Noche de Ciencias Report Lead

Volunteer Roles and Responsibilities

One exciting aspect of planning a Noche de Ciencias is involving the members of your SHPE Familia in the process. There are many opportunities for volunteers to be involved the day of the event. The following describes the roles and responsibilities of the volunteers needed to ensure a successful Noche de Ciencias.

Volunteers may serve in more than one role if appropriate. Remember to make use of everyone involved (for example, a volunteer can serve as a workshop lead as well as the Master of Ceremonies (MC) if time permits; the MC can also be part of the clean-up committee, etc.).

Set-Up Committee	3-4 volunteers	Arrive 2 hours before event	<ul style="list-style-type: none"> Set up general session and workshop rooms Set up signage and banners at venue Set up materials, sign-in sheets, food, etc.
Food and Beverage Committee	3-4 volunteers	Arrive 1.5 hours before event	<ul style="list-style-type: none"> Ensure food and beverages are set up Keep food and beverages stocked during event Clean food and beverage station
Master of Ceremonies (MC)	1 volunteer	Arrive 1 hour before event	<ul style="list-style-type: none"> Spokesperson for event Deliver opening and closing remarks Deliver announcements and instructions
Greeter	1 volunteer	Arrive 1 hour before event	<ul style="list-style-type: none"> Point of contact for presenters Confirm presenters before event Greet presenters at the event
Keynote Speaker	1 volunteer	Arrive 1 hour before	<ul style="list-style-type: none"> Deliver a short speech about a relevant STEM topic, an education or career in the STEM field
STEM Panelist Moderator	1 volunteer	Arrive 30 minutes before event	<ul style="list-style-type: none"> Facilitate discussion and encourage students to ask questions of STEM panelists
STEM Panelists	3-4 volunteers	Arrive 30 minutes before event	<ul style="list-style-type: none"> Serve on a panel responding to questions about STEM education paths and careers Provide insights of an average day in a STEM career or university setting
College Workshop Facilitators	2-3 volunteers	Arrive 30 minutes before event	<ul style="list-style-type: none"> Provide insights on financial aid, college admissions and university life
Survey Monitors	2-3 volunteers	Arrive 1 hour before event	<ul style="list-style-type: none"> Set up surveys Ensure every family completes a survey Send completed surveys to SHPE
Floater	2-3 volunteers	Arrive 1 hour before event	<ul style="list-style-type: none"> Provide directions and answer questions Assist presenters during workshops Take photos
Clean-Up Committee	3-4 volunteers	Stay 1 hour after event	<ul style="list-style-type: none"> Clean up general session and workshop rooms Take down directional signs and banners at venue Pack up materials, sign-in sheets, food, etc.

Volunteers can do more than one task during the event. For instance, you can ask the Set-Up Committee to also serve as the Food & Beverage Committee. At the end of the event you can ask all volunteers and attendees to help with clean-up.

Event Outreach: Fundraising & Marketing

Fundraising

Fundraising is a critical component to conduct a successful Noche de Ciencias. Below are some fundraising ideas your Noche de Ciencias Committee may want to consider:

- **Raffle:** Request donations from local businesses and sell raffle tickets.
- **Car Wash:** Schedule a car wash on a weekend in your community. Consider pre-selling car wash tickets in advance to maximize revenue.
- **Dinner or Lunch:** Many restaurants offer fundraising programs. If you bring in the event flyer, a portion of the proceeds are given to your organization.
- **Bake Sale:** Host a bake sale at your place of employment or university.
- **Host a Breakfast:** Invite friends, family, peers and colleagues to a homemade breakfast at your place of employment or school. Ask for a \$5-\$10 donation for breakfast.

There are many other creative fundraising ideas to help fund Noche de Ciencias. Consider working with your school's student government, your college's student government or your employer to understand fundraising guidelines at your school or place of employment.

Corporate Sponsorships

SHPE Chapters are encouraged to contact local businesses and organizations in their community for monetary or in-kind support. Chapters and Jr. Chapters should not limit their outreach to STEM-related businesses and organizations.

Often many local companies are willing to donate supplies, refreshments or other incentives as an in-kind donation. Consider contacting your local grocery store or restaurant to request donations. The more companies you contact, the more likely you are to receive support. Most companies need a formal letter requesting the donation. It is best to contact the manager and be diligent about follow-up. Although many larger chain restaurants will support events like Noche de Ciencias, you may have better luck reaching out to local restaurants or leveraging any personal connections you or your SHPE Chapter may have to local businesses.

In addition to in-kind support, some corporations will consider a monetary donation. If you are associated with a SHPE Professional Chapter, you may want to ask if any member's company would consider sponsoring Noche de Ciencias. The monetary support can cover event expenses. Depending on the level of monetary support provided, a company can be recognized through marketing materials as the official sponsor of the event. The company benefits as they receive positive recognition in the community for their support of the event.

Be sure to recognize your sponsors at Noche de Ciencias and always follow up with a personal thank you note and photos from the event appreciating their contribution.

Marketing Noche de Ciencias

Marketing Noche de Ciencias will be critical to reach the target of **50 attendees**. When hosting a Noche de Ciencias or establishing a Jr. Chapter, every sponsoring Chapter will have to reach out to local media, the target school and the community in order to have the best turnout for the event. Promotion is a key factor to get the attention of the audience you wish to reach, so please take a moment to strategize your outreach implementation.

School and Community Outreach

SHPE Chapters have compiled some of the most successful marketing tactics:

- If there is a SHPE Jr. Chapter at the school, involve them in the planning process. The more invested they are in the event, the more likely they will attend. They will also know the best way to reach their peers to encourage their attendance
- Research the School District's contacts and reach out to them, they may be able to put you directly in contact with schools that have shown high interest or need
- Visit the target school's website to compile emails of STEM teachers and inform them of the event
- Conduct online or in-person registration for parents and students; include their phone number and/or email address, and send out reminders prior to the event
- Consider offering the first 40 registered attendees entrance in a giveaway drawing to be held at the event
- Partner with existing organizations/clubs with similar interests within the school to promote the event
- The PTA and Parental Involvement Office are a great way to invite parents to attend
- Seek assistance in marketing from the college counseling department or the activities director
- Visit the school and set up an information/registration table to recruit students
- Visit STEM classes and give a brief explanation of what SHPE is and the benefits/highlights of attending the Noche de Ciencias
- If the hosting school allows, use the above methods to invite surrounding middle and high schools to gain interest in and boost attendance numbers. In addition, you can promote this at local community centers
- Promote event in school announcements (school newsletter, Principal's communication, school website and high school social media)
- Send an invitation letter to local organizations, community centers and companies to spread the word of the Noche de Ciencias
- Promote your event via social media including Facebook, Instagram, Twitter, etc.
- Leverage your personal social media presence to promote the event to your peers
- Contact attendees from last year's Noche de Ciencias to encourage them to attend again
- Ask teachers to give extra credit for attending the Noche de Ciencias
- Post flyers in community boards at restaurants, coffee shops, community centers, libraries, churches, supermarkets, etc. If possible, create both Spanish and English content for wider reach
- Contact local media to post event information in their community events

Marketing with Media

Here are a few suggestions as you begin your outreach to media outlets and with the use of social media outlets:

Identify your media sources

- Radio – Local and Hispanic radio stations
- Television – Local news, commercials
- Social Media – Facebook, Instagram, Twitter, YouTube
- Community Centers – Churches, city/town hall meetings, local community centers with recurring events, etc.

Prepare a toolkit and message for each of the identified sources

- Message: Identify your audience and your message to reach them
 - Radio: The message needs to be concise. Reach out to local radio stations and ask them to say one or two lines about the Noche de Ciencias. The best thing would be to ask them to interview you.
 - Television: You will need to send a press release to their newsroom. Follow up with a phone call and try to reach out directly to journalists who cover human interest pieces for the community.
 - Social Media: Prepare a number of tweets or posts that you will promote throughout a timeline before the event. (i.e., three weeks prior, two weeks prior, and one week prior)
- Audiovisual Aid: Flyers, YouTube videos linked to your tweets or Facebook posts. You may want to add these links in any promotional material sent to radio stations or news outlets.

How to reach out to media

- The best contact would be any newsroom staff within the radio or television station. Ensure you reach out to them via e-mail as well as on the telephone; do not underestimate the value of initiative shown by making a phone call.
- Social Media: Post the Noche information on the SHPE page or on your own chapter page. You can also utilize Twitter and Instagram.

Here are some texts you could use for tweets, Instagram or Facebook posts:

- JOIN US **January 21st @WestHighSchool at 5pm** for our #NochedeCiencias! #STEM activities for students & bilingual parent workshops! @SHPEnational
- **ÚNANSE! 21 de Enero @WestHighSchool at 5pm:** #NochedeCiencias! Actividades estudiantiles #STEM y talleres bilingües para los padres! @SHPEnational
- Don't miss out: #NochedeCiencias **@WestHighSchool 1/25 - 5pm!** #STEM Student activities & parent workshops; guaranteed fun for all! @SHPEnational
- OJO: **1/25 #NochedeCiencias @WestHighSchool - 5pm!** Actividades estudiantiles #STEM y talleres para los padres! Diversion garantizada! @SHPEnational

- Pitch Idea: It is a family science night through which students in our community will be a part of hands-on activities and view STEM in different and exciting ways outside of the classroom. Parents will learn how to help their kids get into and afford college with workshops in Spanish and English, so that they can see these are attainable goals as well! **Remember to go to these media sources and physically present your pitch if you can.**

Key Messages

When promoting the event, some key messages to highlight could be:

- Event is FREE and open to all interested students
- Interactive, Hand-On STEM activities
- Free scholarship and college workshops will be provided along with handouts
- Opportunity to meet college students and STEM professionals
- FREE food!!
- Drawing for giveaways (if applicable)
- Parents welcomed and encouraged to attend – there will be a special session for parents in English and Spanish

Event Planning Checklist

Preliminary Tasks:

- SHPE Chapter establishes a Noche de Ciencias Committee and elects Leads
- Noche de Ciencias Committee reviews **Noche de Ciencias Manual**
- Noche de Ciencias Committee and Noche de Ciencias Lead identifies a target school to partner with and host event. If the SHPE Chapter has an established Jr. Chapter, it is recommended partnering with that school. Provide school with a personalized **Outreach Letter to School**, if needed
- Noche de Ciencias Lead contacts school to secure commitment from school administrators
- Noche de Ciencias Lead sets the date, time and location of event with school
- Noche de Ciencias Lead recruits partners for Noche de Ciencias activities and volunteers
- Noche de Ciencias Marketing and Fundraising Lead contacts community partners for in-kind donations
- Noche de Ciencias Marketing and Fundraising Lead contacts potential partners for event sponsorship
- Noche de Ciencias Lead maintains a budget for Noche de Ciencias
- Noche de Ciencias Lead involves SHPE Jr. Chapter Executive Board in the planning process, if applicable
- Noche de Ciencias Report Lead reviews the Programs website's [Reports & Funding](#) page for further information

Logistical Tasks:

- Volunteer Lead ensures volunteer roles have been filled
- Volunteer Lead requests involvement of keynote speaker, STEM panelists and community partners
- Volunteer Lead requests volunteers to sign [Accident & Media Liability Release Waivers](#)
- Noche de Ciencias Marketing and Fundraising Lead partners with SHPE Jr. Chapter Executive Board to begin promoting Noche de Ciencias within the school and/or community

Quality Assurance Tasks:

- Noche de Ciencias Marketing and Fundraising Lead reaches out to local media and sends messaging to be disseminated
- Hands-On STEM Activity Leads and Noche de Ciencias Lead review and establish activities
- Parent Workshop Leads and Noche de Ciencias Lead review and establish parent workshop
- Noche de Ciencias Survey Monitor Lead and Survey Monitors review SHPE Surveys (print & electronic)
- Noche de Ciencias Lead identifies promotional incentives, giveaways and additional materials to purchase
- Noche de Ciencias Lead makes required purchases and selects food vendor (if applicable).
- Noche de Ciencias Report Lead makes sure to track purchases as you go and save all receipts
- Hands-On STEM Activity Leads practice facilitating STEM activities
- Parent Workshop Leads practice delivering Parent Workshop presentation
- Volunteer Lead ensures volunteers have signed and returned [Accident & Media Liability Release Waivers](#)
- Noche de Ciencias Lead identifies A/V needs and communicate to event venue

- Noche de Ciencias Marketing and Fundraising Lead partners with SHPE Jr. Chapter Executive Board continues to promote Noche de Ciencias within the school, community and media
- Noche de Ciencias Marketing and Fundraising Lead follows up with community partners for in-kind donations
- Noche de Ciencias Marketing and Fundraising Lead follows up with potential partners for event sponsorship

The week of Noche de Ciencias:

- Noche de Ciencias Lead makes additional copies of materials if needed
- Noche de Ciencias Lead confirms that rooms and A/V needs are in place
- Parent Workshop Leads confirm they have the materials needed for the workshop and save presentations to local computer to ensure they are available for event
- Hands-On STEM Activity Leads confirm they have the materials needed for the workshop and save presentations to local computer to ensure they are available for event
- Volunteer Lead ensures College Workshop Facilitators have the materials they need for the workshop
- Volunteer Lead confirms and reminds volunteers of their roles and responsibilities
- Noche de Ciencias Survey Lead confirms delivery method for SHPE surveys and makes sure Survey Monitors are prepared
- Noche de Ciencias Marketing and Fundraising Lead partners with SHPE Jr. Chapter Executive Board to remind students and parents about Noche de Ciencias
- Noche de Ciencias Marketing and Fundraising Lead confirms in-kind donations if not already received
- Noche de Ciencias Lead confirms food vendor and places order for Noche event

Noche de Ciencias Event Flow and Logistics

Suggested Event Agenda

The following event agenda is to help you with time management and to best structure your Noche de Ciencias. Since the event is designed for both students and parents, there will be several sessions occurring at the same time. The Master of Ceremonies (MC) will begin the event with a short welcome address, ask parents and students to complete the pre-survey if applicable, and provide instructions about the event. While the students are participating in the Hands-on STEM activities, the parents will be attending bilingual sessions on paying for college and helping your child go to college. If possible, it is highly recommended to offer an appropriate College Workshop for 11th and 12th grade students during the second activity. This session is usually facilitated by college representatives from the admissions and financial aid departments or SHPE members.

The students and parents come back together at the conclusion of the event for the STEM panel and closing remarks by the MC. It is important that both students and parents complete both the pre-survey and post-survey. This is an essential component of the event that allows SHPE to demonstrate impact to funders.

Note: You can host your Noche de Ciencias event during the day (i.e. Saturday or Sunday morning or afternoon), or start or end at different times if necessary. Just make sure to take into account what works in your community and helps with the recruitment of volunteers.

Example of a suggested agenda

Time	Students	Parent
6:00 pm – 6:30 pm	Welcome Address/Keynote Speaker/Student and Parent Pre-Surveys	
6:30 pm – 7:25 pm	Hands-on STEM Student Activity #1	Bilingual Parent Workshop #1 – Paying for College
7:25 pm – 8:20 pm	Hands-on STEM Student Activity #2 College Workshop for Students (optional for 11th and 12th graders)	Bilingual Parent Workshop #2- Helping your Child
8:20 pm – 9:00 pm	STEM Panel/Closing Address / Student and Parent Post-Surveys	

Keep in Mind DURING your Noche de Ciencias...

The Noche de Ciencias Report Lead and volunteers should gather information about the event that will be helpful when submitting final report. Some items include the following:

- Required Materials:** *Keep track of all the materials you will need to submit your report*
 - [SHPE Program Surveys](#)
 - Receipts
 - [Program Sign-In Sheets](#)
 - [Accident & Media Liability Release Waivers](#)
- Pictures of attendees during the welcome, workshops/activities, closing (minimum of ten photos)
- Record quotes from attendees about their experience at the Noche de Ciencias
- Take notes for lessons learned
- Identify volunteers during welcome so attendees can approach them if they have any questions

Keep in Mind AFTER your Noche de Ciencias...

- Submit your report to record your outreach and/or apply for funding via our [Reports & Funding](#) page
- Thank your volunteers and sponsors for their involvement in your Noche de Ciencias
- Highlight your event including students, parents, participating schools, volunteers, committee members and corporate sponsors on social media
 - Be sure to tag @SHPEnational and use #NochedeCiencias for a chance to be highlighted on SHPE National's social media pages.
- Celebrate the success and recognize your outreach efforts!
- Discuss lessons learned from event and action plans for future ones. Let SHPE know how they can help improve the process!
- Start planning your next one!