



SciGirls®

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Engaging Latino Families

Key ingredients
for successful STEM programs



Izzie



Strategies and Tips

Recent studies have found that Latino parents have a strong interest in science (Bruyere & Salazar, 2010). In addition, informal STEM (science, technology, engineering, math) learning activities can strengthen parents' skills and understanding for how they can support their children's science learning and education (Becerra-Davila, 2007; Garibay, 2009). To help your programs achieve this, **SciGirls** offers these tips for developing culturally sensitive approaches that engage Latino families in informal science education.

1. Build relationships and establish trust.

Relationships and trust underlie Latino community living. The lack of either severely limits outreach efforts (Skogrand, Riggs & Huffaker, 2008; Hobbs & Sawyer, 2009; Olsen & Skogrand, 2009; Sorensen, 2010).

- Actively seek and include ideas, thoughts, and opinions from community members. Work with and through local leaders who are trusted figures in the community, such as pastors, priests, community organizers or volunteers (Sanchez & Arce, 2009).
- Utilize staff members who are culturally aware and competent in the Spanish language. It is not necessary that staff be Latino, but it is crucial that staff relate to the target audience and be accepted by them.
- Establish personalized (bilingual) communication with parents and family members and build opportunities for communication in multiple ways (email, in person, fliers, letters, etc.) and at various intervals during program implementation.



2. Offer programming that engages the entire family.

Latino families from a range of backgrounds have a preference for activities that build and maintain cohesion within the family (Springer, Hollist, & Buchfink, 2009; Garibay, 2009). If parents accompany their children to an event or activity, they will feel more comfortable about it and are assured of the safety and well-being of their children (Bruyere & Salazar, 2010).

- Design projects that allow opportunities for adults and children to participate by either working together or separately at the same event.
- For families with very young children, allocate staff (if available) to oversee activities for the little ones in a separate room.
- Make sure that program promotion includes a clear message that this is a family-oriented project and lets people know exactly who is welcome: parents, grandparents, siblings, aunts, uncles, etc.
- Set up self-directed “warm-up” activities, which can be used at the beginning of an event, while families are arriving—with roaming bilingual facilitators.
- Consider incorporating family members as event helpers or facilitators.

Hispanic vs. Latino

According to a recent survey by the Pew Research Center, 50% of Hispanics say they have no preference between the term “Hispanic” or “Latino”. Among those who do have a preference, “Hispanic” is preferred to “Latino” (Lopez, 2013). The term Hispanic may refer more to the heritage, nationality group, lineage, and language – if the person or his/her ancestry comes from a Spanish-speaking country. A person who identifies him or herself as Hispanic may be of any race. The definition of Hispanic or Latino used in the 2010 U.S. Census was as follows: “Hispanic or Latino” refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race. The term Latino refers to geography, specifically people from Latin America (Caribbean, Central and South America). It may also refer more to a cultural aspect. The Latino culture encompasses multiple characteristics such as language and traditions (Keck, 2011).

Strategies and Tips continued

3. Integrate experiences that are culturally relevant and personally meaningful.

To successfully engage Latino audiences, particularly first- and second-generation Latinos, programs must reflect the cultural traditions, beliefs, and values of the people you're trying to reach (Koss-Chioino & Vargas, 1999; Springer, Hollist, & Buchfink, 2009; Johnson, 2011; NanoScience, 2013). If individuals see how STEM topics are relevant to their own lives and interests, their attraction to these subjects is likely to increase.

- Deliver programming in the language that is most comfortable for families and encourage them to use their home language as they participate.
- Incorporate cultural experiences into the program that are recognized and shared by the audience and are therefore personally meaningful (i.e., entertainment, customs, etc.).
- Link science programming to everyday experiences/topics that are culturally relevant (e.g., cooking, exercising, gardening).

Vast Diversity Among Latinos

It is important to recognize that the Latino population in the United States is not homogeneous. U.S. Latinos represent many different countries of origin, comprise both native-born and immigrant residents, and include communities with varied levels of assimilation, socio-economic status, and education. Therefore, before you begin, it is crucial to have an understanding of the makeup of the Latino population(s) within your community. Latinos are assimilating to prevalent U. S. culture, however the path of acculturation is a process of integrating native and traditional immigrant cultural values with the dominant cultural ones (Sonderup, 2010).



4. **Emphasize the program's educational merit.**

Latino parents value education (Fraga & Garcia, 2010; Gasbarra & Johnson, 2008; Casa et al., 2005.) they have high aspirations for their children, hoping they will achieve a better standard of living and quality of life than they themselves have. Activities seen as educational are highly regarded and directly influence leisure choices for families (Garibay, 2009).

- Advertise the fact that your program has a strong educational component, in addition to being fun.
- Make clear that project activities will provide opportunities to learn something new or expose children and families to something they have not done or seen before.
- Provide bilingual take-home activities or fliers in English and Spanish to encourage continued exploration.



Strategies and Tips continued

5. Include a focus on careers.

Latino parents, particularly immigrants, are seeking economic success for themselves and their children. By linking STEM activities and hands-on approaches to careers in science and technology, educators have an opportunity to expose families to an increased repertoire of career options that could serve as wealth generators for families (Sanchez & Arce, 2009).

- Integrate discussions of potential careers into project activities or use video from *DragonflyTV* Scientist Profiles (scigirlsconnect.org or pbslearningmedia.org/collection/dragonflytv) or *SciGirls* (pbskids.org/scigirls) to spark discussion.
- Invite Latinos interested in STEM from all levels (high school, undergraduate, and graduate students as well as professional scientists and engineers) to interact with families and share their career stories.
- Invite guest Latino STEM professionals to help lead an activity. If you are unsure of their comfort level working with children, pair them with other educators or leaders. The experience will be valuable for both the students and the guests!





6. Be willing to try new approaches for programming.

As the U.S. increasingly becomes more multicultural (Colby & Ortman, 2015), organizations must be ready to entertain new perspectives and new ways of developing, promoting, and conducting programs.

- ⊗ Make advertising and promotional materials available in English and Spanish. Latino teens respond best to bilingual advertising messages because it mirrors their own usage patterns (Cheskin Research, 2006).
- ⊗ Think innovatively in terms of promoting programs: consider advertising in church bulletins or posting fliers in community locations (laundromats, bakeries, markets etc.).
- ⊗ Identify appropriate venues for project activities including nontraditional partnerships, such as faith-based organizations or similar entities that are familiar to Latinos.
- ⊗ Determine whether there may be any major impediments that would prevent the target audience from taking part in programming and develop strategies to overcome those barriers (e.g., waive fees; provide snacks/light meal; offer childcare; provide transportation; shorten events).
- ⊗ Make programs more accessible by incorporating extra linguistic cues, such as visuals (models, pictures, charts, etc.), props, and body language, or by providing a glossary of pertinent terms in both languages.



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