Resources and Strategies for Engaging Bilingual Audiences





NISE Network Partner Meeting Tempe, Arizona - February 2019



Presenters

- Kevin Dilley, Explora, kdilley@explora.us
- Dan Steinberg, Princeton University, dsteinbe@princeton.edu
- Felipe Peña, Children's Museum of Brownsville, felipe@cmofbrownsville.com
- Marcie Benne, Omsi, MBenne@omsi.edu
- Daniel Allison, Challenger Learning Center of Tallahassee, daniel.allison@challengertlh.com
- John Gordon, Science Museum of Minnesota, jgordon@smm.org



Existing NISE Network Resources

- Bilingual design guide
 (http://www.nisenet.org/catalog/bilingual-design-guide)
- Translation process guide (http://www.nisenet.org/catalog/translation-process-guide)
- Bilingual Audiences Workshop resources
 (http://www.nisenet.org/catalog/bilingual-audiences-workshop-resources)
- Hosting a bilingual event, recorded discussion (http://nisenet.org/catalog/online-brown-baghosting-bilingual-nanodays-recorded)



Kevin Dilley Community Listening



Community Listening in New Mexico



Creating opportunities for inspirational discovery and the joy of lifelong learning through interactive experiences in science, technology, engineering, art, and math.

Kevin Dilley, kdilley@explora.us



Community as a Core Value





Welcome, Listen, Co-create community engagement strategy



Community Listening Sessions

Harwood Institute Approach



- What kind of community do you want?
- What are the 2-3 most important issues/concerns when it comes to the community?
- What do you think is keeping us from making the progress we want?
- What could we try that might make a difference?
- Who do we trust to take action?

www.theharwoodinstitute.org/tools/



Partnering for Success



- Sawmill Community Land Trust
- Wells Park Neighborhood Association
- New Mexico Autism Society
- Partnership for Community Action
- Nurse Family Partnership
- Albuquerque Cyclists
- Heading Home Albuquerque
- International District Healthy Communities Council
- New Mexico Montessori Network
- Crossroads for Women
- New Mexico School for the Blind & Visually Impaired
- New Mexico Asian Family Center's Chinese and Vietnamese Families Group



Access



- No-cost community partner memberships
- Pay what you can memberships
- Partnership with Albuquerque Public Schools Title 1
- Programs in their neighborhoods



Explora Ingeniería



a community-embedded, bilingual after-school engineering program for first generation students



Explora Ingeniería

What's working well



- Working through a community partner with an established relationship of trust with families
- Mentors and educators in whom students can see themselves
- Multigenerational programs
- Inclusion of character traits, work skills
- Repeated engagement that supports relationship-building
- Community center locations
- Word-of-mouth student recruitment
- Maker-style activities



Explora Ingeniería

What remains a challenge?



- Transportation
- Parent engagement and confidence
- Be prepared to start 30 minutes late!
- Building staff capacity and finding mentors

Dan Steinberg "Dia del la Ciencia"

Princeton University Día de la Ciencia

Dr. Daniel Steinberg
Education Outreach Director
Princeton Center for Complex Materials
Princeton University
February 13, 2019





PCCM Education Mission

- ☐ Materials Education Resource in the Region
 - ☐ Community resource through multiple events
 - ☐ Introduce Materials Science to High Schools in the region
 - ☐ Professional Development for teachers E.g.: Princeton Public Library, NJ State Museum, Nano

mini exhibit, etc.

- ☐ Increase Diversity
 - ☐ By growing talent pool of underrepresented and disadvantaged populations
- ☐ 100% participation of PCCM faculty
- ☐ Partnership (leverage impact)
- ☐ Synergy between programs







Education & Public Outreach

Director: Daniel Steinberg Coordinator: Sara Rodriguez

K-12 Student Programs

- PUMA: Princeton University Materials Academy
- Materials Science Day
 - School Visits (e.g., Latin School, Harlem Prep, GEAR
- YWC: Young Women's Conference
- Harlem Prep

Undergraduate Student Programs

- REU: Research Experience for Undergraduates
- CUWIP

Teacher Professional Development

• Teachers as Scholars Workshops

Graduate Student Programs

- Princeton Summer School on Condensed Matter Physics
- Poster night
- Science Communication, SCENE
- Fellows program

Public Education Programs

- Holiday: Science Lecture
- Frankenstein
- Marie Curie
- Spring Science Lecture: Stars of Materials Science
- Día de la Ciencia
- Informal Science Partnerships
 - E.g.: Princeton Public Library, NJ State Museum, Nano mini exhibit, etc.





Community Programs

Organizers of science education outreach programs at Princeton University for over 20 years:

- Science Days/Nano
 Days/Día de la
 Ciencia/Frankenstein
 Day
- Science film screenings
- Super Science Weekend
- Science shows (Holiday Lecture, SOMS)













Día de la Ciencia









- Launched in 2016
- Over 40 Princeton
 University faculty and researchers presenting scientific demos
- Spanish & English speakers at every table
- Over 500 members of the Princeton Community
- Efforts to increase family interactions with science, especially amongst the Spanish-speaking communities around Princeton.





New Community Partnerships:

- Graduate Student Groups, such as the Graduate Women in Engineering and Science (GWISE)
- Diversity & Inclusion
 Organizations, such as the
 Hispanics Inspiring Student's
 Performance and Achievement
 (HISPA), LGSA, SACNAS
- Princeton Public Library, the most visited municipal public library in New Jersey





Princeton Public Library







Dia de la Ciencia 2019

- 3rd edition
- Saturday, April 13
- Carl Fields Center, Princeton Center for Equality & Diversity
- Increased number of presenters/science tables
- Increased publicity efforts
- All diversity offices/groups in Princeton involved
- New Jersey schools involved, expected even from South Jersey











Next Steps

- Increase family interactions with science, especially for Spanish-speaking families
- Reassess location for number of attendees (is it large enough, is it accessible enough, etc.)
- Increase engagement from local organizations/gather even more volunteers
- Increase number of partners
- Increase efforts to reach all Spanishspeaking communities in our area







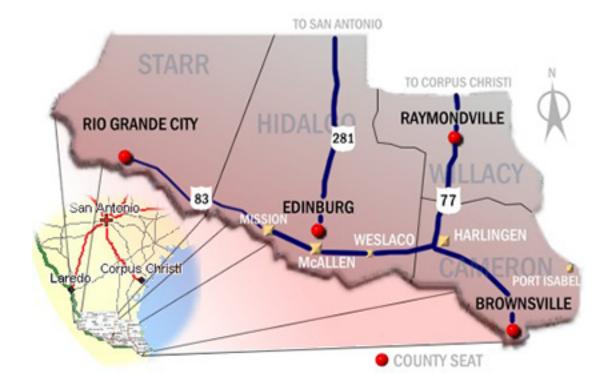
Felipe Peña Bilingual Audiences & Economic Barriers

Children's Museum of Brownsville

Bilingual Audiences & Economic Barriers

About CMB & Region

- Rio Grande Valley runs along the southern border of Texas.
- Population 1.3 M, Texas / 2 M North Mexico
- Only Children's Museum in the Region



Poverty

- ~40% of RGV children live in poverty
- RGV school districts are top 10 list of economically disadvantaged

Perception

"The museum is too nice. It's not for us."

Priorities are basic life needs, not cultural education.

How can we reach the audience?

Free Community Nights











Outreach

Parks and Wildlife Event Edinburg, Texas



Partnerships





Early Childhood Education Coalition







Programming

Free Summer Camps



Extended Hours at Parks and Rec

Housing Authority



Marcie Benne Hiring bilingual staff

Want to hire bilingual staff and not sure where to begin?

Marcie Benne

Director of Engagement Research & Advancement Oregon Museum of Science and Industry

Hire people who will hire people.

For ALL positions

- ✓ Ask interview questions about experience advocating for inclusion in education.
- Select people with demonstrated self-motivation for inclusion.

Establish level of skills needed.

Follow Canada's lead.

- ✓ Create language profiles for each job.
- ✓ <u>historymuseum.ca/about/jobs/linguistic-profile/</u>

Language	French			English		
Skill	Reading	Writing	Oral	Reading	Writing	Oral
Level	С	В	С	С	В	С

Create a language assessment system.

Assess both languages (e.g. English and Spanish).

- Reading
- ✓ Writing
- ✓ Oral
- ✓ Translation

Every candidate should be assessed on the minimum language requirements (e.g. English).

Leverage opportunities with intention.

Every staffing opportunity is an opportunity to appoint bilingual staff.

- ✓ Full time
- ✓ Part time
- √ Special project
- Apprentice
- ✓ On call
- ✓ Contract
- ✓ Intern
- √ Volunteer

Recruit through networks and ads.

Be clear.

- Describe the types of responsibilities and projects.
- ✓ Include preference for language skill and culturally responsive practices.

Daniel Allison "Noche de Ciencia"







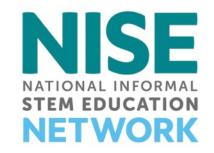
Cultura Latina Magazine





4:30 - 7:00pm Diciembre 7, 2018 en el Challenger Learning Center

200 S Duval St Tallahassee, FL 32301



Daniel Allison
Challenger Learning Center
of Tallahassee

NISE Activities



- Paper Mountains
- Pocket Solar System
- Nature of Dye
- Sublimation Bubbles

Other Activities



- Science demos in planetarium
- Latin music with DJ
- Catering from local Latin restaurants
- Step and Repeat photos

Collaboration

Organizations

- Tallahassee Latin Radio
- DJ with live Latin music
- Cultura Latina Magazine
- Local Latin restaurants

Social Media and News

- Challenger Learning Center –
 Facebook Live
- Cultura Latina Magazine Facebook followers in Latin community
- Local news coverage











Future Plans



- Plans to have as annual event during National Hispanic Heritage Month
- Fall 2019 Kids Free Day -Cuba IMAX and NISE Spanish activities
- Consideration of including Spanish NISE learning labs in 2020-21 school year

Thank You





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