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## **INSIDE: SCIENCE CENTER CAPACITY BUILDING IN DEVELOPING COUNTRIES**

**PLUS: BLENDED LANGUAGE PROGRAMMING, CHANGING THE NAME OF  
A BELOVED MUSEUM, AND MORE!**

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## **BLENDED LANGUAGE PROGRAMMING: AN EMERGING MODEL TO PROMOTE INCLUSION AND LEARNING**

*By Amparo Leyman Pino, Beth Redmond-Jones, and Vicki Wawerchak*

While bilingual and non-dominant language programs in different languages have been seen in many museums for some time, a new and emerging trend is blended language programming. This paper defines the concept of blended language programming, shows how they are beginning to develop in several California institutions, and discusses two early case studies at the San Diego Natural History Museum (The Nat), and Monterey Bay Aquarium (MBA). It highlights the processes they have gone through to create an innovative way to engage audiences who speak English,

Spanish or both languages; and the promising future of the emerging blended language programming.

### **BACKGROUND**

Bilingual signage and exhibit labels, which have long been common in museums around the world, are becoming standard in many museums in the U.S. The impetus for providing bilingual signage and programs varies however. Museums and attractions in international tourist markets often include English language signage and labels as

a matter of course, usually alongside one or more local languages (Garcia-Luis, McDonald, Migus, 2011). Museums in nations with more than one dominant or official language (e.g. Canada) may provide signage and labels in both or all of these languages, usually by government or legal mandates. Museums or exhibitions by, about or for local or indigenous groups may include signage and labels in the language of the people that are the subjects of the museum or exhibitions (e.g. tribal museums in the U.S.). Finally, there are bilingual labels and programs that are aimed more explicitly at inclusion, at making traditionally underserved audiences feel welcome. In the U.S., many of these initiatives are Spanish language signs, labels, and programs.

Even though these practices have been in place for many years, very little literature and research has been produced around this topic. In 2011, the Association of Science and Technology Centers (ASTC) and the Exploratorium in San Francisco partnered on a *Multilingualism in Science Centers and Museums* survey “to gain a baseline understanding of multilingual offerings in science centers and museums around the world” (Garcia-Luis, McDonald, Migus, 2011). The results of the survey show that in the US, only 10% of the affiliated institutions offer information in more than one language, and of this 10%, the second most prevalent language is Spanish at 92%. Most of the “multilingual interpretation offered is through multilingual labels (78%). Other common multilingual resources include marketing materials (47%), public programs (42%), and docents or volunteers (42%). The National Science Foundation-funded *Bilingual Exhibit Research Initiative* (BERI) provided the first comprehensive research on current practices in bilingual (English-Spanish) exhibitions including Spanish-speaking visitors’ uses and audience perceptions of bilingual labels. The BERI report filled a gap in our collective knowledge “responding to a lack of extensive evaluation or audience research in informal science education (ISE) bilingual interpretation” (Yalowitz, Garibay, Renner & Plaza, 2013). Among its main findings, one can learn that visitors use both languages, and do *code-switching*, it identified the bilingual groups’ reading behavior, which complements the way adults facilitate, and the emotional reactions it provokes, as a connection to culture. The results of the BERI report have inspired and guided educators, exhibit developers, and institutions to be more intentional in their efforts and find creative ways to tackle bilingual learning environments in museums.

### **BILINGUAL PROGRAMMING AIMED AT INCLUSION**

There are multiple reasons and motivations, for museums and science centers to become bilingual. These can include institutional or governmental mandate, as an initiative proposed by specific departments trying to outreach

underserved audiences, or the goal of creating exhibits and/or programs for specific groups (Garcia-Luis, McDonald & Migus, 2011). In the Western U.S., some institutions are moving towards a fully bilingual environment (labels, wayfinding, marketing, programs, staff), primarily as a means of welcoming and including growing populations of Hispanic heritage audiences. Examples include the San Diego Natural History Museum, Monterey Bay Aquarium, or the Children’s Discovery Museum of San Jose. Others have provided bilingual elements such as wayfinding, some exhibits and some bilingual staff, like the Oregon Museum of Science and Industry (OMSI) or the Children’s Museum of Houston. Other cases, like the National Park Service’s Alcatraz Island Visitor Center, rely on audio-guides to provide tours in languages other than English.

In the United States, the Hispanic population, as of July 2017, is the nation’s largest ethnic or racial minority; Hispanics constituted 18.1 percent of the nation’s total population (US Census Bureau, 2018). In many Western states, Hispanics make up a third or more of the population. Museum visitation by Hispanics, however, remains low. These facts are motivating many in the museum field and the ISE settings to act to attend to the Spanish-speaking communities. Little by little, professionals in the field have developed valuable documents to support these initiatives, projects and efforts, such as the NiseNet’s *Bilingual Design Guide* and the *Translation Process Guide*; the National Park Service’s *Spanish Style Guide*, to mention the most used. These tools have guided institutions and have informed our practice. However, until the BERI report was published, we had little evidence regarding the ways Hispanic families and/or multigenerational groups behave and react with the bilingual learning environments that have been created.

Bilingual content offers learning opportunities that go beyond the content of the message (Owens Renner, 2003). It communicates the values and mission of the institution, and provides access to audiences who otherwise would not connect or relate to it. Effective delivery of bilingual content requires a cross-departmental effort that encompasses exhibitions, education, marketing, development, and community engagement departments (Garcia-Luis, McDonald, & Migus, 2011). Sometimes it is a grassroots movement, but sustaining it generally requires an institution-wide strategic focus.

Among the most influential findings of the BERI report, researchers found that, beyond providing access to monolingual Spanish speakers, bilingual and even English dominant Hispanics enjoyed and utilized bilingual labels and, “there were cultural affordances, including Spanish/English or for maintaining connections to culture” (Yalowitz, Garibay,

Renner & Plaza, 2013). When visitors interact with content in both languages, it changes the experience for the groups including a sense of welcoming and inclusion. Another interesting finding from this research confirms that language has a key role in learning, and when visitors find two languages they know, they switch between them relatively effortlessly and in a natural way. This code-switching happens naturally, especially when within a group of people there are a variety of degrees of English- and Spanish-speaking persons. Other behaviors were discovered, such as experiencing emotional reactions; the presence of bilingual interpretation had a positive emotional effect on the groups. Visitors expressed that the bilingual text was an opportunity to connect with their culture through language. The fact that the content was in their mother tongue allowed visitors to learn new concepts, learn English or Spanish while comparing the two versions, and gave them the tools to act as “facilitators” of the content with their own family. The BERI report revealed that many family groups use both languages and move fluidly between the two. Lastly, it was evident that the presence of bilingual content yielded twice as many talking behaviors as reading behaviors when adults and children interacted with each other assisting them with understanding content. The finding that visitors to bilingual exhibitions speak in both languages inspired us in designing inclusive learning environments for audiences who speak Spanish, English and both, and led us to pilot Blended Language.



Figure 1: *Desert at Night, ¡Ya párale!, stop messing with me!* Credit Michael Field, The Nat.

### SAN DIEGO NATURAL HISTORY MUSEUM (THE NAT)

In the 1990s, The Nat made the commitment to provide fully bilingual interpretation. They refocused their mission to study and interpret the natural history of southern California and Mexico’s Baja California peninsula (Kelly & Leyman Pino, 2016). The Nat serves a diverse community in an international border region, where Spanish is more commonly used than English, and people feel more comfortable speaking and reading Spanish than English. San Diego’s large Latino population continues to grow; it is expected by 2050 to double from the levels seen in the

2010 census (Keatts, 2013).

The Nat is well on its way to being fully bilingual, and continues to push forward to be more inclusive of all audiences. They began experimenting with blended Spanish and English in “Desert at Night”, a story/object theater in the exhibition *Coast to Cactus in Southern California*. This story theater uses a combination of fabricated habitat, projected video and still imagery, animation, multi-directional sound, spotlighting of mounted taxidermy, mechanical visual effects, and a script written in Spanglish (the seamless dialogue flow between English and Spanish, often within the same sentence) to transport visitors to the nighttime desert. This seven-and-a-half-minute presentation can be experienced with or without Spanglish captions, and is designed to increase awareness of the animals that live in the desert and inspire interest in exploring the desert.

A summative evaluation by Randi Korn & Associates (RK&A), conducted in 2015, found that the highest emotional reactions that visitors had at *Coast to Cactus in Southern California* were in the “Desert at Night.” Local visitors described it as “very San Diego.” Most visitors had positive reactions to hearing Spanglish in the theater. Spanish-speakers from the area were highly complimentary of the narration. For instance, one woman said “we are living this”. A couple of Spanish-speaking visitors appreciated that the presentation represented the diversity of the area. Of visitors who did not speak Spanish, most said the narration did not impede their experience and enjoyment, noting that words were repeated in both languages and there were supporting visuals. In fact, some liked the opportunity to practice Spanish, and a few were observed repeating the words aloud in Spanish during the presentation. Only one visitor group was distracted by the Spanglish; they watched the video with captions and said it may have been less distracting without captions or that English audio with Spanish subtitles might be better (RK&A, 2015).



Figure 2: *Desert at Night, Press button to start. Oprime botón para empezar.* Credit Michael Field, The Nat.

The recommendations that RK&A provided to The Nat, and the takeaways staff at The Nat learned from it, are providing the field with inspiration and guidelines for advancing the multilingual and multicultural science communication and engagement: “If your museum is in a community where Spanglish is spoken, creating story theaters in Spanglish is a way to reflect and embrace the community. It makes visitors feel represented in, and a part of, your institution (Redmond-Jones, 2016). Specific to the use of Spanglish, The Nat recognizes that story theaters, in order to be successful, need to “rely on repetition of the two languages, and there must be visual and audio cues to support the comprehension of the story” (Redmond-Jones, 2016).

The summative evaluation had another layer of analysis as RK&A brought a bilingual advisor who identified areas of opportunity for the usage of the Spanish in the exhibition, such as the use of neutral Spanish, rely on the phonetic nature of the language, and include a bilingual staff member as part of the proofreading process. This process raised the question on how to improve The Nat’s translation methods and assure the quality and accuracy of their Spanish interpretation, “both the product (the language and words [...] used) and the process (how [The Nat] trans-



Figure 3: Kelp Forest Feeding, The Narrator y el buzo. Credit Monterey Bay Aquarium.

lates, reviews, and edits)” (Kelly & Leyman Pino, 2016). The Nat implemented as many recommendations the bilingual advisor suggested, and continues advancing the field in bilingual interpretation.

### MONTEREY BAY AQUARIUM

The Monterey Bay Aquarium (MBA) has developed a comprehensive strategy to engage Spanish-speaking audiences that encompasses the departments of education, marketing, exhibits, and guest experience programs. Their printed materials, online resources and social media channels are all provided in both languages. Exhibit galleries have bilingual labels and they employ bilingual staff across different departments, including bilingual volunteers on the floor.

By putting in practice these strategies, the MBA seeks to welcome guests that mirror the state of California’s ethnic makeup, where 39% of the population is Hispanic. The 2018 Guest and Community Highlights report, shows that 26% of all adult California guests were Hispanic. These efforts started in the early 2000’s and continue to be refined and increased every year.

In spring 2015 the MBA contracted Amparo Leyman Pino to work with them to develop public programs specifically for their Spanish-speaking audiences. MBA staff envisioned Spanish language versions of their popular live presentations (e.g. Kelp Forest Feeding where a diver inside the exhibit has a discussion with a narrator on the outside of the exhibit) as an effective tool to educate and entertain both English and Spanish speakers. While they considered providing two versions of the programs – one in English and one in Spanish, a concern was raised that a Spanish-only presentation would exclude those who speak English only, and vice-versa. They decided to test a blended language format to make the programs accessible and



Figure 4: Penguin Feeding, ¿A quién le encantan los pingüinos? Aren’t they adorable? Credit Monterey Bay Aquarium.

inclusive of a wider range of visitors. In 2016, the MBA’s evaluation team surveyed visitors to learn about their attitudes toward bilingual programs. The results indicated that there is a positive support to have bilingual presentations, so more people could be included (MBA, 2016). The results were encouraging and helped the team to think big.

Inspired by the results of the BERI report and the lessons learned working with the Nat, this project represented for Amparo an opportunity to support the MBA’s strategies for inclusion, stretch her creativity to design a learning environment where visitors could have access to the same content simultaneously; a learning environment where Spanish-speaking and bilingual guests would be able to code-switch; to use both languages to elicit emotional reactions when listening in their mother tongue; and provide an opportunity to interact with a Spanish speaking

presenter, even as English speakers continue to enjoy the program. The approach is to build a single narrative that flows seamlessly between languages, allowing for guests to share the same program at the same time.

### SUCCEEDING WITH BLENDED LANGUAGE PROGRAMMING

Designing blended language programming is not simple; the Monterey Bay Aquarium continues to develop this model through trial and error. After four years and four adapted programs these are the building blocks of blended language programming and the lessons learned.

#### Getting support and buy-in from colleagues.

This is an innovative model and it could create confusion and skepticism on how it works. Therefore, it is fundamental to create a coalition within the different departments to move this project forward. In the beginning, some MBA's staff were resistant to the idea of blended language programming, worrying that the narrative would lose credibility, formality or even content. Even using the word Spanglish was not well received. It took some time to gain the team's trust and support, until the results of the first program yielded the evidence that it works well for most visitors. Once it became clear that this programming works for visitors and expresses the MBA's commitment to inclusion, the MBA team brainstormed together to find a better term to name the English and Spanish public programs. That is when the term blended language was coined.

#### Hiring and supporting bilingual staff.

The MBA is fortunate to count on several bilingual staff members in multiple departments with knowledge and content about the exhibits who have been key to the success of developing blended language programming. To insure the success of the program, the MBA created a "Bilingual Programs Specialist" position to recruit for a skilled person to deliver this programming. The ideal candidate should have proficiency and fluency in both languages, great communication skills and could either be a native speaker or not. Once hired, it is crucial for the entire team who works on these programs to offer support and provide training to this individual, and to understand that blended language programming is different from monolingual programming, and delivering it requires comfort with both languages and with the way they are combined and used in the communities served. As of December 2019, the MBA has two Bilingual Programs Specialists hired, trained and delivering blended language programming.

#### Adapting successful programs.

Successful programs with proven content and delivery, ones the audiences cherish and are well attended, are the best ones to adapt to a blended language version. The

well-written narrative and method of delivery used in the English version can serve as a solid foundation to craft the blended version. At the MBA four programs have been adapted: Kelp Forest Feeding, Penguin Feeding, Open Sea Feeding, and an auditorium program, Luna: A Sea Otter's Story. In these programs, there are one or more presenters having bilingual conversations with each other while engaging with the audience. Because they are all major attractions, where audiences are gathering to see something unique and spectacular, they are ideal for blended language narration.

#### Creating a solid Spanish version.

The first step in adapting programs to become blended language is creating a version in the partner language, in this case Spanish. It is important to note that the Spanish version is a translation of the language and culture of the proven English version, and it will be longer than the English one. The Spanish version is at least as well vetted as the English, meaning it goes through several rounds of proofreading, involvement of scientists, input from native-Spanish speakers from different countries to achieve neutral Spanish (Nanoscale Informal Science Education Network, n.d.), and testing and consensus around the tone and humor of the program. Straight translation is not enough; the actual Spanish language version must stand on its own and deliver the content, tone and experience that the organization desires.

#### Allocating the two languages.

The MBA's approach and methodology are to alternate languages, providing one idea in English and the next one in Spanish. The methodology seeks a balance for the narrative to be 60 percent in English and 40 percent in Spanish. The logic behind this ratio is inspired by the language immersion schools (Howard et.al., 2018); where the language allocation and ratio of the number of children who speak the partner language is carefully balanced to make the program work. In the case of informal education settings, such as museums and science centers, the programs are intended to communicate conservation and science, not learning a language, therefore the driving factor is the ratio of people who speak English and Spanish, and that the core messages and goals of the program are reached in both languages. Per the BERI report, many Hispanic family groups used both languages and the fact that there is information in Spanish prompts more conversations between bilingual visitors. In the case of the Spanish-speaking communities the MBA serves, it is common to find that the adults are monolingual or Spanish-dominant and their children are bilingual.

#### Blending the languages.

Once the Spanish version is ready, it is time to create the

blended version. One needs to read both versions several times to identify where it is best to say something in Spanish, where to say it in English, when to throw in a humorous comment, which words can be used as cognates, and which metrics will need to be explained in both languages (i.e. length feet vs. meters, or miles vs. kilometers, mass pounds vs. kilos, volume gallons vs. liters...). The result will be an even longer narrative that then must be retailed, edited and synchronized with the visual aids to fit the 10-15 minute presentations, assuring that the core messages are delivered in both languages and there is a 60:40 balance between them. A skilled, bilingual team will find new opportunities for content and delivery that were not present in either monolingual version.

#### Narrative Aids.

When listening to blended language programming, bilingual visitors will be code-switching effortlessly, while monolingual visitors could miss some information when the language they don't know is being spoken. To solve this challenge, programs are designed with visual aids and body language, both of which are language neutral. English and Spanish also have a lot of cognate words—words that sound and look the same in both languages—therefore one can pick up some content when listening to words such as *patio*, *pingüino*, *coast*, *lámpara*. Visual aids, body language and cognates play a crucial role in supporting the learning of the audience. While the presenter speaks in Spanish, English-only visitors use the visual aids, read the body language and identify cognate words to decode what the presenter is saying, and vice-versa. For MBA presentations, there are one or two monitors that display animations, videos or photos that are used to enhance the presenters' narrative. The location of the presentation—in front of the Kelp Forest exhibit or inside a highly engaging Penguin exhibit—is another tool that enhances the presentation by allowing different language learners the opportunity to understand content visually.

#### Rehearsing, practicing, testing, fine-tuning, repeat.

Blended language programming requires a lot of practice. The presenter is coding in two languages, controlling video assets with a remote control, interacting with the audience, sharing fun facts, delivering natural history all while interpreting what is happening in the exhibit during a training or feeding session. Practicing in front of staff, volunteers, friends and family who have various levels of language comprehension and are English-only, Spanish-only or bilingual is integral to ensuring the programs are comprehended by guests. Seeking their input and feedback helps improve the program and helps maintain the core messages of the presentation.

#### NEXT STEPS

Although we have yet to evaluate blended language programming at the MBA, we are already noticing that, at the end of the blended language presentation, Spanish-speaking adults approach the presenter with questions and comments, an attitude that doesn't happen when the program is presented in English only. When visitors of either language do interact with the presenter they express their gratitude in seeing a Spanish speaking presenter, they appreciate the inclusiveness to other communities, they enjoy hearing the program in Spanish, and share that they were able to keep up and understand everything that was being said. We have observed that Spanish-speaking adults leave the presentation explaining and repeating to the children in their group what they heard during the presentation, just as the BERI report found in their subjects of study.

The MBA is increasing the number of Bilingual Program Specialists, and designing a training process to create capacity in the team. The MBA is planning to conduct an evaluation of its blended language programming to understand preferred format of delivery, attitudes towards blended language programming, how these programs may/may not affect guest's visit, relevance to the audience and content comprehension. Another possible opportunity to explore is offering blended language tours. MBA is also exploring blended language for audio/video components for an exhibition opening in 2021.

#### REFERENCES

Garcia-Luis, V., McDonald, H., Migus, L. H. (2011). *Multilingual Interpretation in Science Centers and Museums*. Association of Science-Technology Centers, Washington D.C. and the Exploratorium, CA: San Francisco. [http://www.astc.org/resource/equity/Multilingualism%20Report\\_Final.pdf](http://www.astc.org/resource/equity/Multilingualism%20Report_Final.pdf).

Howard, E. R., Lindholm-Leary, K. J., Rogers, D., Olague, N., Medina, J., Kennedy, B., Sugarman, J., & Christian, D. (2018). *Guiding Principles for Dual Language Education* (3rd ed.). Washington, DC: Center for Applied Linguistics.

Keatts, A., How San Diego's Changing, in Three Charts. *Voice of San Diego*, August 30, 2013. Retrieved from <https://www.voiceofsandiego.org/neighborhoods/how-san-diegos-changing-in-three-charts/>.

Kelly, E. & Leyman Pino, A. (2016) Beyond Translation, Towards Better Bilingual Exhibitions, *Exhibition*, 36, number 1 Spring.

Monterey Bay Aquarium (2016) *Bilingual Programming Evaluation Study. Final Report*.

Monterey Bay Aquarium (2018) *Guest & Community Highlights*. Retrieved from <https://www.montereybayaquarium.org/-/m/pdf/about-us/monterey-bay-aquarium-guest-highlights-2018.pdf?la=en>.

Nanoscale Informal Science Education Network, *Bilingual Design Guide*. Retrieved from [http://www.nisenet.org/catalog/tools\\_guides/bilingual\\_design\\_guide](http://www.nisenet.org/catalog/tools_guides/bilingual_design_guide).

Nanoscale Informal Science Education Network, *Translation Process Guide*. Retrieved from [http://www.nisenet.org/catalog/tools\\_guides/translation\\_process\\_guide](http://www.nisenet.org/catalog/tools_guides/translation_process_guide).

National Park Service, (2015) *National Park Service Interpretive Media, Spanish Style Guide*. Retrieved from <https://www.nps.gov/subjects/hfc/upload/Spanish-HFC-Style-Guide-2015-1.pdf>.

Owens Renner, Nancy, (2003) The Bilingual Dilemma: Should We or Shouldn't We? *Exhibitionist* 22, no. 1 : 13-15.

Randi Korn & Associates (2015) *Summative Evaluation Coast to Cactus in Southern California Exhibition*. Retrieved from [http://www.informalscience.org/sites/default/files/2015-09-03\\_2015\\_RKA\\_SDNHM\\_CoasttoCactus\\_Summative\\_dist.pdf](http://www.informalscience.org/sites/default/files/2015-09-03_2015_RKA_SDNHM_CoasttoCactus_Summative_dist.pdf).

Redmond-Jones, B. (2016) Bilingual Multimedia in Ex-

hibitions, *Exhibition*, 35, number 2 Fall. Retrieved from [https://static1.squarespace.com/static/58fa260a725e25c4f30020f3/t/59f7f67708466550b5e64827/1509422713699/15\\_Nuts%26Bolts\\_BilingualMultimedia.pdf](https://static1.squarespace.com/static/58fa260a725e25c4f30020f3/t/59f7f67708466550b5e64827/1509422713699/15_Nuts%26Bolts_BilingualMultimedia.pdf).

United States Census Bureau, (2018) Profile America Facts for Features: CB18- FF.07, September, 12, 2018. Retrieved from <https://www.census.gov/content/dam/Census/library/visualizations/2018/comm/hispanic-fff-2018.pdf>.

Yalowitz, Garibay, Renner & Plaza (2013) *Bilingual Exhibit Research Initiative: Institutional and Intergenerational Experiences with Bilingual Exhibitions*. Retrieved from [http://www.informal\science.org/sites/default/files/2013-10-01\\_BERI\\_Research\\_report\\_Final\\_Sep\\_2013.pdf](http://www.informal\science.org/sites/default/files/2013-10-01_BERI_Research_report_Final_Sep_2013.pdf).

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## ON THE COVER:

*Kelp Forest Feeding at the Monterey Bay Aquarium which is a program conducted in both English and Spanish. Learn more about institutions incorporating blended language programming inside. Full story on page 7.*

