

Rooted

Rooted Research

Keeping the Heritage Language Alive

Our Hypothesis: First and second-generation American families risk shared heritage loss as their children grow up in an English-driven system.

What's the magnitude of the problem?

- 10.8 million U.S. children under age nine—32% of children in that age group—are dual-language learners[1]
- 64% of families whose children attended English-only preschool reported a negative change in home-language use[2]
- By the third generation, the heritage language is often largely lost[3]

What are the consequences of heritage loss?

- **Missed cognitive-development opportunities:** Research supports that managing two languages boosts aspects of cognitive flexibility and attention[5], and children raised in a "high quality language environment" can experience "cognitive, social, and potentially economic benefits."[6]
- **Loss of cultural pride:** A meta-analysis of 68 studies found that family communication about heritage and cultural pride was significantly associated with children's ethnic and cultural identity[7]
- **Weakened family connections:** Lack of a common shared language makes it difficult for parents and their adolescent children to effectively communicate with each other, driving increased parent-child conflict, reduced parental competence, and increased adolescent vulnerability to deviant peer influences[4]

Do families care about heritage loss?

- 85% of surveyed U.S. Latino adults say it was important that future generations speak Spanish[8]
- 80% of surveyed Asian-Americans considered it important that future generations speak their native or ancestral language[9]
- Qualitative research on Korean immigrant parents found children were not maintaining their home language but rather losing it once they began schooling in mainstream English, a pattern parents actively worried about and tried (often unsuccessfully) to counteract[10]

What are parents doing today, and why isn't it enough?

- **Speak with their children:** Most effective, but requires substantial parental time, energy, consistency, and confidence in the heritage language.

- **Hire a tutor:** Can be expensive, difficult to schedule, and unavailable for less commonly taught languages.
- **Enroll in a weekend language school:** Often expensive, location-dependent, inconvenient, and limited to only a few hours of exposure each week.
- **Play YouTube videos and audiobooks:** Usually passive and generic, with limited conversation, personalization, or connection to the child's family culture.
- **Use Duolingo or other learning platforms:** Often centered on drills and screen time rather than interactive conversation, storytelling, family connection, or cultural identity.

How do children learn language & culture best?

- **Interactive & engaging:** Children who experienced more adult-child conversational turns showed greater activation in Broca's area and stronger verbal skills[11]
- **Frequent repetition:** A study showed that three-year-olds retained new vocabulary more successfully when they heard the same story three times in one week rather than different stories containing the same words[12]
- **Culturally meaningful content:** A 1998 study in the Journal of Black Psychology, researchers found that stories reflecting children's sociocultural experiences had a significant facilitating effect on both comprehension and recall[13]
- **Personalized content:** Researchers found that pre-schoolers demonstrated: "Significantly better knowledge" of words appearing in their personalized sections[14]; additionally separate researchers concluded that infants hearing their own name—especially in their mother's voice—produced greater activation in the dorsal medial prefrontal cortex[15]
- **Familiar voices:** A 2019 study in Infancy found that "Maternal speech facilitates the formation of new word-object mappings."[16]

What features would an effective solution require?

- **Interactive and engaging:** "Stop and Chat" capabilities, let children ask the child to point, answer, or predict, give parents simple conversation prompts, and let the story respond or branch based on the child's answer.
- **Frequent repetition:** Prioritize story mastery over endless new content by resurfacing favorite stories and progressing from listening, to answering questions, to repeating phrases, to retelling the story.
- **Culturally meaningful:** Organize stories by culturally relevant dimensions such as cuisine, holiday, and tradition; enable memories, customs, and family-specific details.

- **Personalized:** Incorporate the child's name, age, interests, family members, and language level; adapt vocabulary and story difficulty; and create stories based on real family experiences.
- **Familiar voices:** Offer parent and grandparent voice cloning, let families choose the storyteller, and combine the child's name and personal story details with a trusted family voice.

References:

1. https://www.migrationpolicy.org/data-tool/young-dual-language-learners-united-states
2. https://doczz.net/doc/4679173/when-learning-a-second-language-means-losing-the-first
3. https://www.american.edu/cas/news/multilingualism-on-rise-in-us-illusion-or-reality.cfm
4. https://pmc.ncbi.nlm.nih.gov/articles/PMC8064327/
5. https://www.forbes5.pitt.edu/article/importance-maintaining-native-language
6. https://www.edweek.org/teaching-learning/american-academy-of-pediatrics-endorses-myth-busting-report-on-multilingualism/2014/02
7. https://pubmed.ncbi.nlm.nih.gov/30896188/
8. https://www.pewresearch.org/race-and-ethnicity/2023/09/20/latinos-views-of-and-experiences-with-the-spanish-language
9. https://www.pewresearch.org/social-trends/2012/06/19/chapter-2-life-in-the-united-states
10. https://www.google.com/url?q=https://scholarworks.gvsu.edu/cgi/viewcontent.cgi?article%3D1058%26context%3Dtheses&sa=D&source=docs&ust=1784870235221273&usg=AOvVaw0UdQFFGdjajhu0utl78jsx
11. https://www.psychologicalscience.org/journals/psychological-science/0956797617742725/
12. https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2011.00017/full
13. https://journals.sagepub.com/doi/10.1177/00957984980244004
14. https://journals.sagepub.com/doi/10.1177/0142723714534221
15. https://www.sciencedirect.com/science/article/abs/pii/S1053811914007083
16. https://pubmed.ncbi.nlm.nih.gov/32677360/