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PBS SoCal



Evaluation of the National Expansion of PBS SoCal's Family Math Initiative: Executive Summary

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This executive summary, updated in October 2026, includes minor corrections to the reported effect sizes.

Introduction

PBS SoCal originally designed Family Math to provide families in the Greater Los Angeles Area and Southern California with bilingual, free, play-based tools to engage in math learning in everyday contexts. After expanding the initiative nationwide, **PBS SoCal partnered with the Stanford Center on Early Childhood (SCEC) to evaluate the implementation and impact of Family Math programming in Alabama and Arizona**. When designing this study, we prioritized honoring the "plug and play" nature of Family Math to understand what real-world implementation and impact looked like across the different local contexts of three stations (Alabama Public Television, Arizona PBS, and PBS SoCal). Between September 2024 and January 2025, we collected pre- and post-series data from 218 participants, including parents/caregivers of children ages 2-5 and educators/providers who work with children in that age group. We also collected post-series data from 17 partner station education leads and workshop facilitators. Additionally, we conducted a "dscout" diary study with seven families to understand how they continued to engage with Family Math at home after the end of a workshop series. Evaluation participants primarily identified as people of color, and close to one-third reported a primary home language other than English. Most participants were parents, and many educators/providers reported working in Head Start or licensed home-based child care settings.

Findings

Overall, this study reveals promising evidence about the implementation and impact of Family Math in Alabama, Arizona, and California. **From the pre-series survey to the post-series survey, participants**

reported significant increases in all three core metrics of Family Math: math positivity ($p < .001$, $r = .56$), math confidence ($p < .001$, $r = .50$), and knowledge of children's foundational math skills ($p < .001$, $r = .53$). When disaggregating by participant type, both parents/caregivers and educators/providers reported significant increases in all three core metrics. At the site level, results were mixed, with the largest increases in core metrics in Arizona. Overall, findings indicate some replicability of the Family Math model in Alabama and Arizona beyond the Greater LA and Southern California communities in which it was co-designed. An Arizona facilitator said that the biggest benefit of Family Math to them personally was,

> *"Being able to share the great resources with families and educators. Seeing their excitement and then noticing that math is everywhere! This experience was priceless!"*

Participants **noticed improvements in their children's math skills**, particularly in number sense & counting, after engaging in the Family Math workshop series. Number sense & counting was the top topic in which participants shared examples of math engagement and also the topic of the most attended workshops. A parent/caregiver in California who completed the dscout diary study shared how they have embedded math into daily routines with their child since attending the workshops:

> *"That has helped me a lot because [before] I … didn't think about [how] we can find math anywhere … It has been very nice every time we go for a walk. We always say what we see, what geometric figure we see, how many cars we see, what colors they are, and all that has helped me to increase my mathematics a lot. … I have enough tools and the necessary knowledge to be able to help him strengthen his education … And every time I have the opportunity, I always share it with my family friends, because they are workshops where we really learn a lot."*

Facilitators and education leads reported being well equipped to implement the Family Math workshop series. They also reported **a strong desire for their stations to continue offering Family Math** and prioritizing early math learning moving forward. An education lead in Alabama shared,

> *"It is a great program. Our state is really focused on early math and literacy right now, so it is timely. The fact that it is put together so well and easy to use makes us want to use it."*

Given that we collected data from educators/providers, station education leads, and workshop facilitators (in addition to data from parents/caregivers), our findings are broader than the scope of the current Family Math Theory of Impact (TOI). **Our findings suggest that various components of the TOI could be applied to these other stakeholders as well.** PBS SoCal can adjust the TOI and Family Math evaluation tools (e.g., pre- and post-workshop surveys, which are resources that they often share with other stations) to reflect educators'/providers' engagement with the program. These changes are also consistent with the interest among PBS stations to expand the target audiences of Family Math.

Key Takeaways

We privileged flexibility in this study to ensure that our findings could speak to how PBS stations tailor Family Math according to their communities' unique strengths and needs. **Our findings show that we can collect meaningful information about an early childhood initiative even if implementation varies from site to site**, which is a lesson about the power of adaptability in evaluation design.

As PBS SoCal continues expanding Family Math implementation – by offering resources to a wider audience, embedding intersections with other topics into the content, and distributing content through new channels – **opportunities exist to further build strong evidence for impact**.