



Abriendo Puertas | Opening Doors

AP-OD 3RD EDITION 2025 NATIONAL EVALUATION RESULTS

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EXECUTIVE SUMMARY

AP-OD (Abriendo Puertas-Opening Doors) offers a comprehensive 10-session parenting skills and advocacy program developed by and for low-income parents/caregivers with children ages 0 to 5. Drawing from the real-life experiences of parents/caregivers and local data about their schools and communities, AP-OD sessions are filled with easy-to-follow, interactive activities that aim to develop parents/caregivers' self-understanding as powerful agents of change to improve their children's lives.

Essential to AP-OD is its focus on parents as their children's first and most influential teachers. Reflecting the integral need for effective teachers to adapt to changing contexts, AP-OD has expanded nationally and has been adopted by many cultural and language communities. In 2020, in response to the pandemic, AP-OD evolved to include both online and – when allowed again – in-person facilitator training and program implementation.

The data presented in this study reflects 3,136 caregivers from a national sample who completed the 40-question AP-OD pre- and post-surveys in 2019-2024. More than half of the participants (57.33%) had graduated from high school or received their GED, while about one-fifth (21.51%) had completed some high school, and the remaining participants (21.16%) had completed grade school or less.

To evaluate the impact of the AP-OD program on the participants' knowledge gains, their results in the pre- and post-survey were compared. Participants in this national sample of AP-OD displayed significant increases in their knowledge in every dimension. The size of these gains, so-called "effect sizes," on four of the ten dimensions are considered "moderate," and the remaining ones are deemed "small." [1] The impact of small and moderate effect sizes can be powerful; early elementary class-size reduction interventions in California typically have effect sizes of 0.15-.2 SD (small), and high-quality preschool interventions range from small to large (see Table 1).



Table 1. Effect size of change scores from the pre- to post-surveys.

Dimension	Question Topics	Effect size ¹
Parenting	Supporting children’s learning and goal-setting to promote well-being.	Small
Early learning	Brain development and how children learn.	Moderate
Language & literacy development	Foundations for communication and how to foster stronger skills.	Small
Nutrition & physical development	Basic health information about diet and exercise.	Moderate
Socioemotional development	Children’s social-emotional skills development.	Small
Use of technology	Approaches to ensure children benefit from technology.	Small
Mathematical development	Mathematical learning and promoting strong math skills through everyday activities.	Moderate
School readiness	Helping young children prepare to succeed in school.	Moderate
Advocacy	Parents/caregivers’ rights in advocating for their child(ren).	Small
Confidence	Cultivating confidence in parenting, advocacy, and teaching skills.	Small

These findings are notable because AP-OD continues to demonstrate growth in participants’ knowledge – “significant effects” – even as its training and implementation were conducted in different modes (in-person or online with the pandemic) and within vastly different communities across the United States. Some 274 facilitators collected these data; they led the program at 258 sites spread across 21 states, and parents/ caregivers consistently made significant gains, in spite of phenomenal challenges. Findings suggest new opportunities for channeling parental agency in shaping the early childhood ecosystem that families need to ensure their young children thrive.



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INTRODUCTION

AP-OD (Abriendo Puertas-Opening Doors) offers a comprehensive, 10-session parenting skills and advocacy program developed by and for low-income parents/caregivers with children ages 0 to 5. Since its launch in 2007, it has grown rapidly in scope and impact to meet the needs of parents/caregivers nationwide. Reflecting the diverse communities of families with young children in the U.S., AP-OD has been adopted by many cultural and language communities. Drawing from the real-life experiences of parents/ caregivers and local data about their schools and communities, sessions are filled with interactive activities that aim to develop parents/caregivers' self-understanding as powerful agents of change to improve their children's lives. The information is accessible for parents/caregivers to understand and act on within their daily lives. This unique curriculum builds on participants' cultural strengths to transform the so-called “achievement gap” into an opportunity to improve and enrich the lives of their children and families.

There is no guide to be a parent – to be a good parent. But there are resources. And there are other people who probably have the same struggles that I do. And this networking – getting to know other parents who have the same issues – it’s important. My wife and I, if we need help now, we can reach out.

– Javier, parent

This study examines the change in knowledge demonstrated by participants of the AP-OD program after completing it. This study also examines the possible impact that the COVID-19 pandemic and the related mandates about in-person meetings might have had on participants' learning. Before 2020, all trainings and programs were conducted in-person; in response to the pandemic, AP-OD evolved to include online and – when allowed again – in-person facilitator



training and program implementation. In particular, these analyses compare the knowledge gains obtained by participants who completed the program in-person or online, and whose program facilitators either completed their certification in-person or online. Finally, some California and New Mexico facilitators were identified as new to their (facilitator) role and invited to participate in additional training to boost their confidence and skills.

METHOD

The data presented in this report reflects the 3,136 participants who completed both Session 1 Survey ("Pre-Survey") and Session 10 Survey ("Post-Survey") and whose data were entered into the new online portal between January 2019 and August 2024. Some 274 facilitators collected these data; they led the program at 258 sites spread across 21 states.

PARTICIPANTS

Most of the participants were Latino or Hispanic American (88.76%), spoke Spanish as their first language (81.23%), and were high school graduates (57.3%). Additional demographic information is presented in Table 2.

Table 2. Participants' demographic information

	Freq.	Percent
Race/Ethnicity		
Asian/Pacific Islander	22	0.7
Black, Afro-Caribbean, or African American	108	3.45
Latino or Hispanic American	2,779	88.76
Non-Hispanic White or European-American	219	6.99
Indigenous American	3	0.1
Language		
English	483	15.42
Spanish	2,544	81.23
Chinese	18	0.57
Tagalog	10	0.32
Punjabi	1	0.03
Russian	1	0.03
Persian	2	0.06
Hindi	4	0.13
Gujrati	1	0.03
Indonesian	1	0.03
Nepali	1	0.03
Twi	1	0.03
Urdu	1	0.03
Armenian	1	0.03
Vietnamese	1	0.03
Indigenous languages from LAC	56	1.79
Unknown	6	0.19
Educational Level		
Grade School	663	21.16
Some High School	674	21.51
High School Graduate	1,796	57.33
Total	3,136	

PROCEDURE

AP-OD knowledge gains were evaluated by comparing parents/caregivers' knowledge after they completed the program with what they knew prior. Participants were asked to complete a survey in the first session (Session 1 Survey) and again in the last session (Session 10 Survey). Their responses before and after AP-OD participation were compared to determine how much they had learned.

The pre- and post-surveys include 40 questions covering 10 key dimensions covered in the sessions: Parenting, Early learning, Language and literacy development, Nutrition and physical activity, Socioemotional development, Use of technology, Mathematical development, School readiness, Advocacy, and Parenting confidence. Each dimension (and session) had four multiple-choice or true-false questions.

ANALYTICAL STRATEGY

To measure any changes in the participants' performance on the survey, we conducted t-tests. This approach allows comparisons between the participants' mean scores in the pre-survey and the post-survey. Any changes in performance are graphically presented in box plots, following.

To determine how participants' attendance arrangements (i.e., in-person, online, or hybrid) and facilitator training (i.e., in-person or online) were associated with the participants' learning, linear regressions were conducted. For the linear regressions, the difference in scores from the pre- and post-survey was used as the dependent variable. Combinations of the attendance arrangement and facilitator training were used as the independent variable. The participants' demographic information (i.e., language spoken at home, race/ethnicity, and educational level) was used as covariates.



RESULTS

All participants who completed the AP-OD program showed significant ($p < 0.01$) positive gains in knowledge and confidence in each of the dimensions (see Table 3). The effect sizes of the pre- and post-survey differences in scores ranged from .48 SD to .61 SD—small to moderate.

Effect sizes are calculations of the magnitude of these "statistically significant" associations, allowing readers to compare these magnitudes to other interventions. For example, the cognitive growth for young children from low-income families who attend a high-quality preschool have been found to range from 0.35 to 1 standard deviation (S.D.) on the outcome. These levels of magnitude are considered small to large. Statisticians consider small effects to range from .20 to 0.49 SD, moderate effects to range between 0.50 and 0.79 SD, and large effect sizes to exceed 0.80 SD. It is worth noting that – given the “small” effects were at the top of the range (0.479-0.499 SD) and incredibly close to what is considered moderate (0.50 SD) – the differences between these small and moderate effects in parents/caregivers’ knowledge gains were very small. Practically speaking, these program effects could be interpreted as in the moderate range.

Effect sizes tended to be bigger when the participants' scores in the pre-survey were lower, like in “Nutrition & Physical Activity” and “Mathematical Development.” For example, on average, participants responded correctly to 1.63 out of 4 questions on the “Mathematical Development” dimension of the pre-survey. However, in the post-survey, they responded correctly to 2.20 questions, corresponding to a medium effect size ($d = 0.607$). On the other hand, the effect sizes were smaller on the dimensions where participants obtained high scores initially—like “Language & Literacy Development,” “Socioemotional Development,” and “Parenting Confidence.” The only dimension that does not follow this pattern is the “Use of Technology” dimension, possibly because recommendations are more nuanced with children.

Standard errors in every dimension decreased in the post-survey. This decrease signals that those participants who had lower levels of knowledge in the pre-survey, compared to their peers, had larger gains in knowledge in the post-survey.

Table 3. Participants' average number of correct responses and program effect sizes (N=3,132).

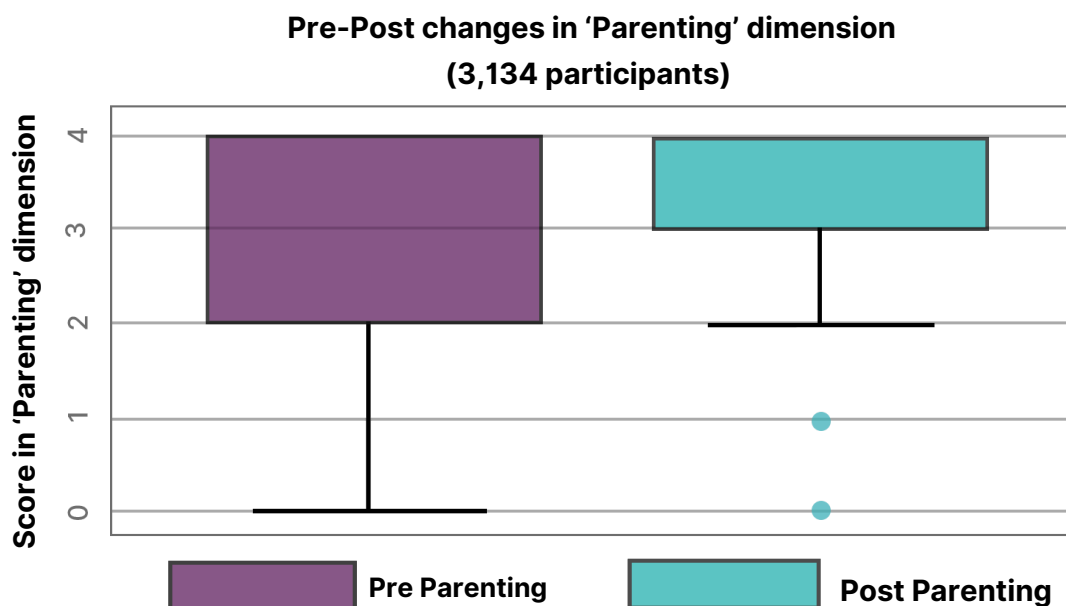
Dimension	Pre Mean	Post Mean	Pooled SD	Sig.	Effect Size (Cohen's d)	Effect size category
Parenting	2.877	03.330	0.945	***	0.479	Small
Early Learning	2.825	3.286	0.918	***	0.502	Moderate
Language & Literacy	3.012	3.443	0.865	***	0.498	Small
Nutrition & Physical Activity	1.977	2.561	1.020	***	0.572	Moderate
Socioemotional	2.975	3.397	0.873	***	0.483	Small
Technology	1.600	2.152	1.117	***	0.494	Small
Mathematics	1.631	2.205	0.946	***	0.607	Moderate
School Readiness	2.002	2.640	1.157	***	0.552	Moderate
Advocacy	2.420	2.966	1.093	***	0.499	Small
Confidence	3.416	3.845	0.865	***	0.497	Small

CHANGES IN PARENT KNOWLEDGE BY DIMENSION

PARENTING

In this section, participants were assessed on their general knowledge about children’s learning and setting goals to promote their children’s well-being. Topics included milestones related to gains in children’s learning and how parents/caregivers can improve their child(ren)’s school success.

Before participating in the AP-OD program, 32.38% of parents/caregivers correctly answered all the questions in this dimension; after the program, 52.12% of the parents/caregivers did. On average, parents/caregivers responded correctly to 2.88 out of the four questions in the pre-survey and to 3.33 questions in the post-survey. Analyses indicated significant gains in parenting knowledge after participating in the AP-OD program ($t = -23.35, p = 0.000$). The effect size ($d = 0.479$) was small.



Source: AP-OD Portal Testing Data

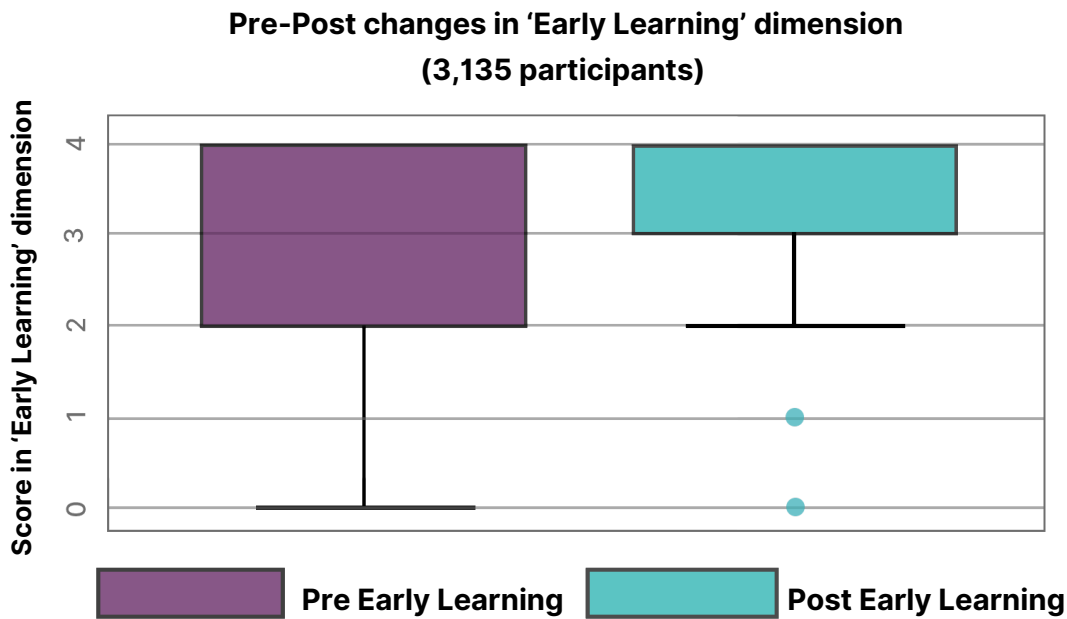
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[3] Note: Boxplots display the distribution of the data. The box (rectangular area) shows the middle 50% of the scores (i.e. the Interquartile Range (IQR)). The whiskers (lines coming from the box) represent the scores outside the mid-range (IQR). The lower whiskers represent the bottom 25% of scores. The upper whisker (not present in this graph due to participants’ high performance) represents the upper 25% of scores, ranging from the upper quartile to the maximum. The line that divides the box in two represents the median score (i.e., the middle score of the distribution). Here, the initial median score was 3 and the post-assessment score was 4, revealing a “ceiling effect”: a high proportion of participants got the maximum score. The data points outside the whiskers in the post-assessment represent “outliers” (i.e., participants whose scores were very different from most of the group).

EARLY LEARNING

The Early Learning section of the survey examined parents/caregivers' general knowledge about how children's brains develop and how young children learn. Specifically, parents/caregivers were asked about the most critical period for children's brain development, the most important areas of children's development, and the consequences of stress on the brain.

Before participating in the AP-OD program, 27.9% of parents/caregivers correctly answered all the questions in this dimension; after the program, 49.8% of the parents/caregivers did. On average, parents/caregivers responded correctly to 2.83 out of the four questions in the pre-survey and to 3.29 questions in the post-survey. Analyses indicate significant gains in Early Learning knowledge after participating in the AP-OD program ($t = -23.71$ $p = 0.000$); the effect size ($d = 0.502$) was moderate.



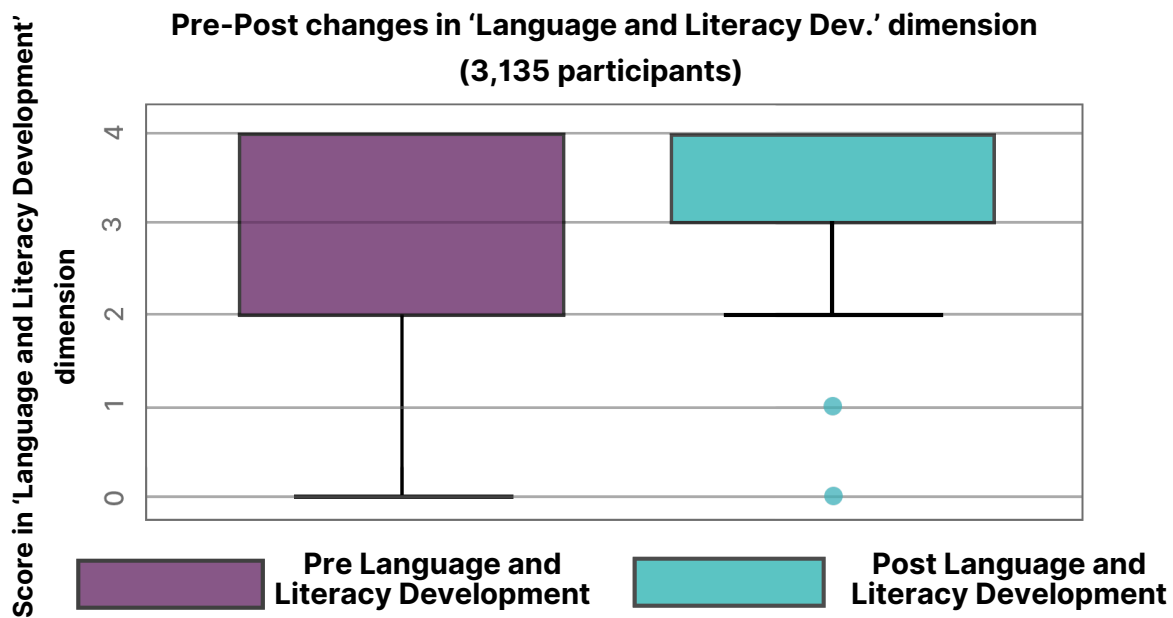
Source: AP-OD Portal Testing Data

I learned that I was my son's first teacher and that I am the foundation to help my son have academic success.
—Claudia, parent

LANGUAGE AND LITERACY DEVELOPMENT

In the language and literacy development scale, parents/caregivers were assessed on their knowledge of the foundations for communication and ways to support the development of strong language and literacy skills. Parents/caregivers were asked, among other questions, about the consequences of using two languages and strategies to promote language skills.

Before participating in the AP-OD program, 36.83% of parents/caregivers correctly answered all the questions in this dimension; after the program, 57.54% of the parents/caregivers did. On average, parents/caregivers responded correctly to 3.01 out of the four questions on the pre-survey and to 3.44 questions on the post-survey. Analyses indicate significant gains in Language and literacy development knowledge after participating in the AP-OD program ($t=-22.63, p=0.000$). The effect size ($d=0.498$) was small.



Source: AP-OD Portal Testing Data

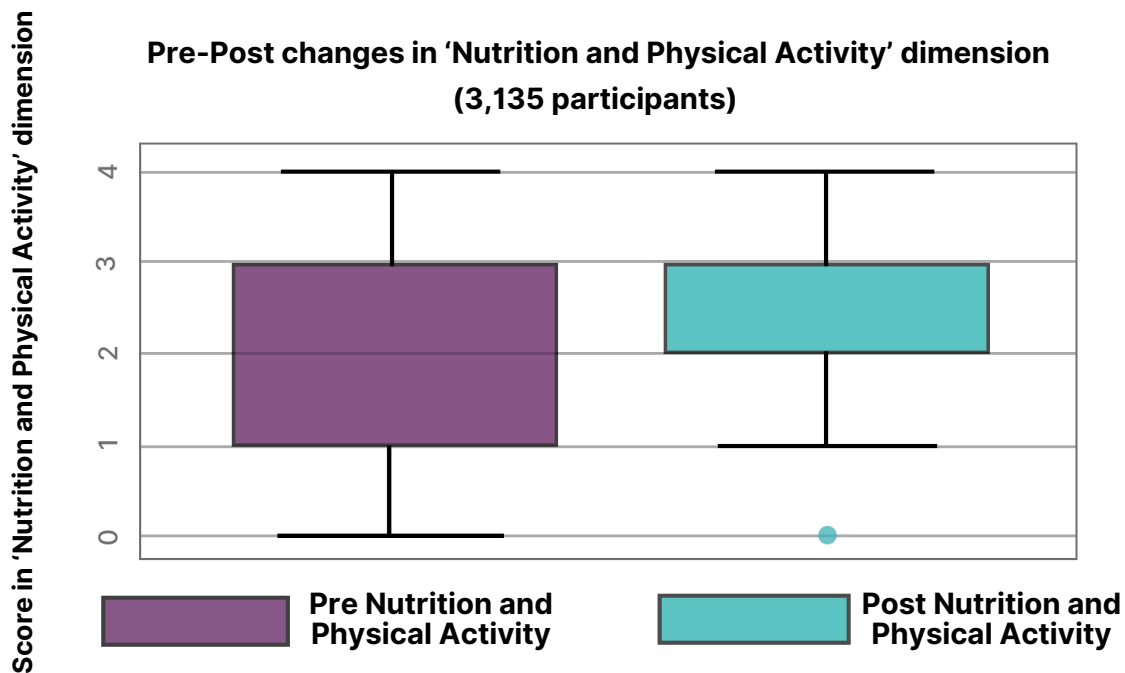
Because of the program, I was able to apply things that I wasn't able to apply with my older daughters – which is having more patience with her and understanding their developmental stages in details. For example, what age she begins to understand words, and the importance of speaking to my daughter at a young age.

– Edwin, parent

NUTRITION AND PHYSICAL ACTIVITY

Parents/caregivers were assessed on their knowledge of basic health information related to diet and exercise for themselves and their children. Questions focused on the consequences of spending too much time in front of screens, the benefits of playtime, and the most effective ways to promote a healthy lifestyle.

Before participating in the AP-OD program, 7.91% of parents/caregivers correctly answered all the questions in this dimension; after the program, 22.30% of the parents/caregivers did. On average, parents/caregivers responded correctly to 1.98 out of the four questions in the pre-survey and to 2.56 questions in the post-survey. Analyses indicate significant gains in Nutrition and physical activity knowledge after participating in the AP-OD program ($t = -28.80, p = 0.000$). The effect size ($d = .572$) was moderate.



Source: AP-OD Portal Testing Data

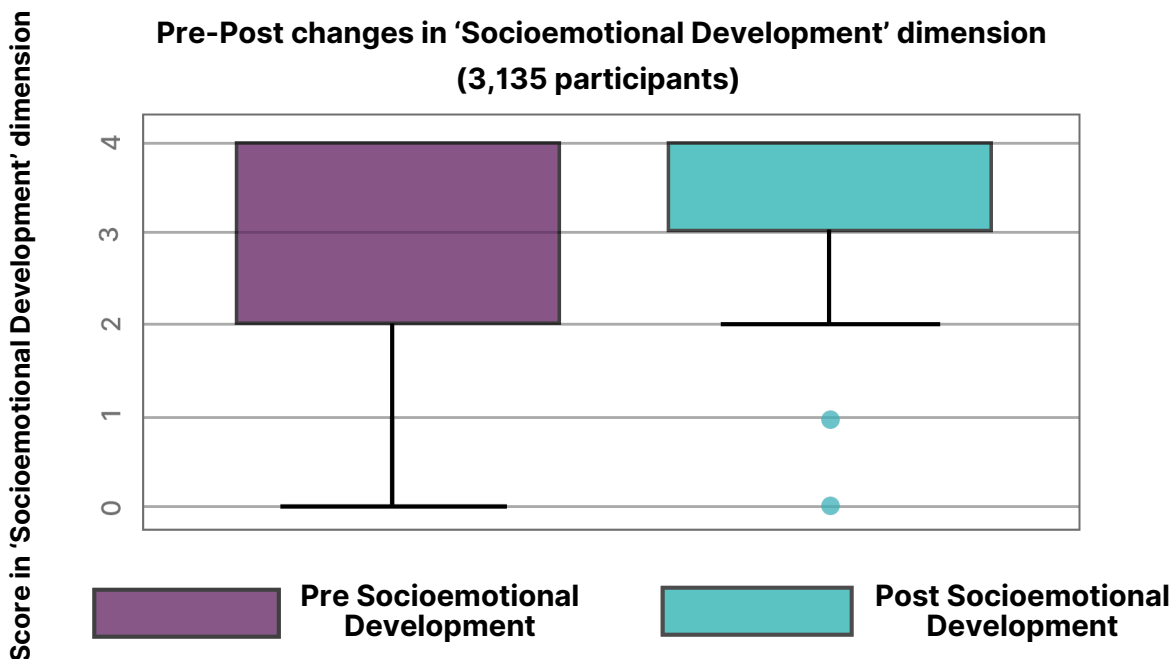
I actually learned that the hard way: our facilitators came with a cup of just sugar, and they put it in front of us and said: "Would you eat it?" And I was like, "No way!" And they said "Well, that's what you're doing with your kids when you give them...that." And they actually showed us, like with the labels, all of the labels we buy, like, cereals, crackers, cheese or yogurt, juice – things that we tend to think are healthy. They showed us how much sugar, you know, each one of those things contain.

– Lizzet, parent

SOCIOEMOTIONAL DEVELOPMENT

The AP-OD survey tapped parents/caregivers' understanding of children's social-emotional development and ways to support it. For example, parents/caregivers were asked to define positive social-emotional skills, how they could help their child learn to express feelings constructively, and the impact of parental socioemotional health on children's development.

Before participating in the AP-OD program, 32.65% of parents/caregivers correctly answered all the questions in this dimension; after the program, 54.83% of the parents/caregivers did. On average, parents/caregivers responded correctly to 2.98 out of the four questions on the pre-survey and to 3.40 questions on the post-survey. Analyses indicate significant gains in socioemotional development knowledge after participating in the AP-OD program ($t = -23.30$, $p = 0.000$). The effect size ($d = 0.483$) was small.



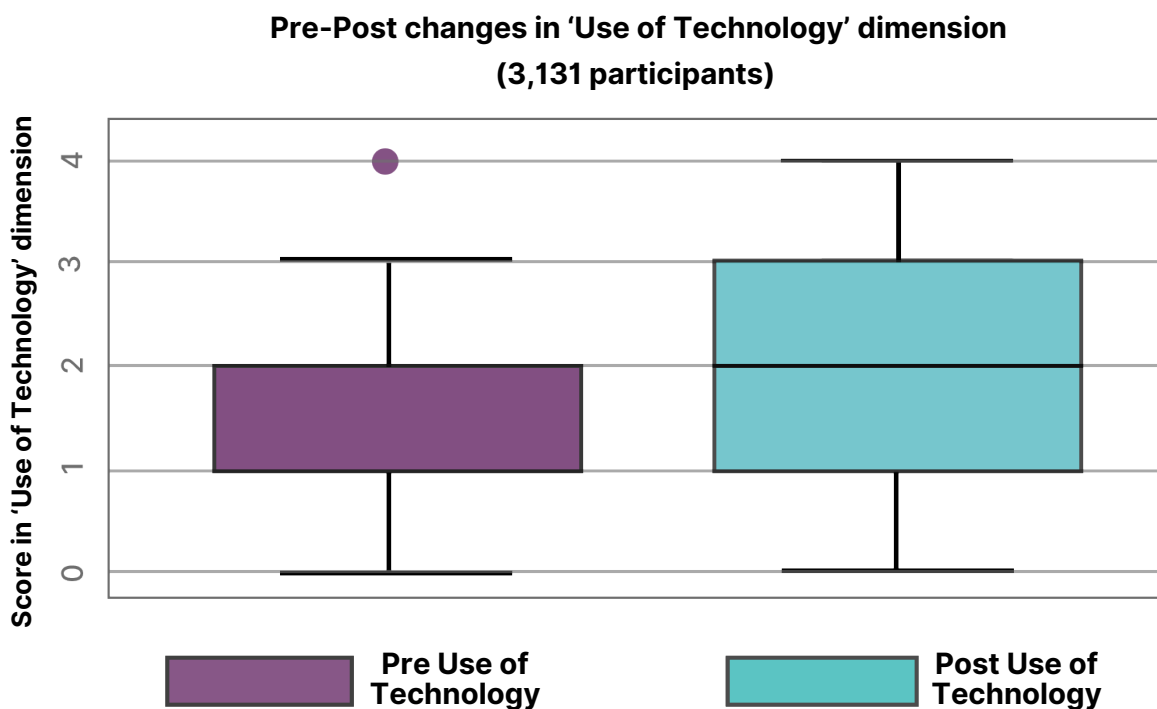
Source: AP-OD Portal Testing Data

Abriendo Puertas/Opening Doors was really the heart of all hearts. I enjoyed learning how to share emotions with my children.... Especially since I was going through a separation during that time and my children were going through it too. It was very helpful as the children and I learned how to manage our emotions. It helped me and my children stay focused on school and stay mentally healthy.
– Elizabeth, parent

USE OF TECHNOLOGY

On this scale, parents/caregivers were asked how one encourages children’s beneficial engagement with and use of technology. Topics included “best practices” around using technology and criteria for choosing shows and apps for children.

Before participating in the AP-OD program, 5.10% of parents/caregivers correctly answered all the questions in this dimension; after the program, 13.06% of the parents/caregivers did. On average, parents/caregivers responded correctly to 1.60 out of the four questions in the pre-survey and to 2.15 questions in the post-survey. Analyses indicated significant gains in Use of Technology knowledge after participating in the AP-OD program ($t= -24.38$, $p=0.000$). The effect size ($d=0.494$) was small.



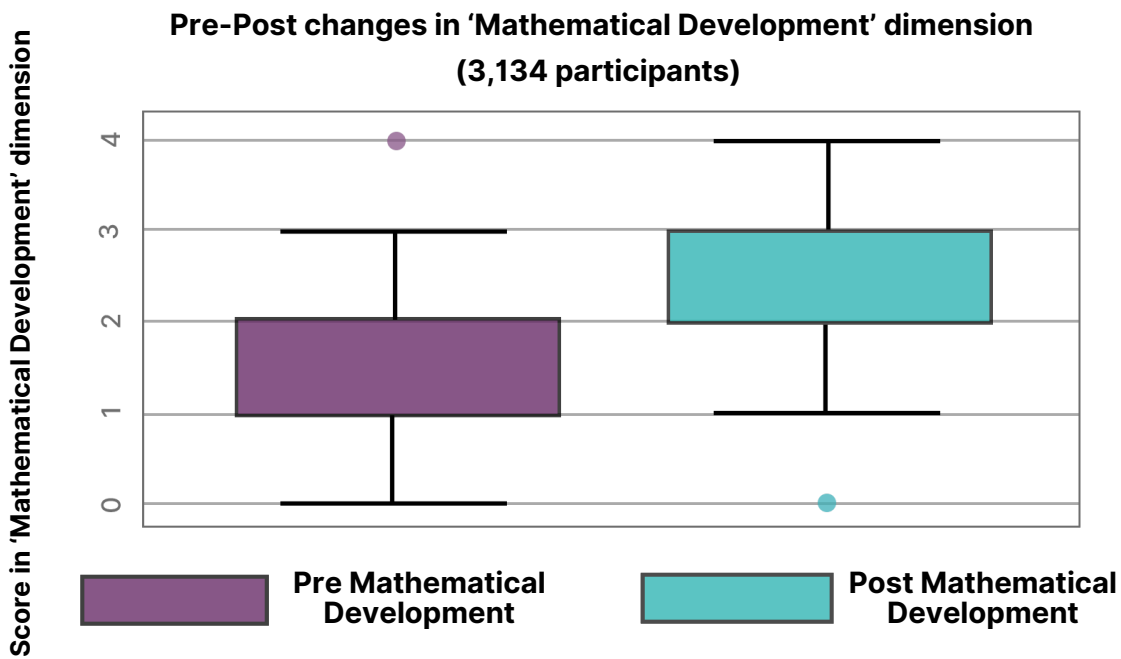
Source: AP-OD Portal Testing Data

I have always wanted to improve and become a better mom. I already had 4 other children but still wanted to learn how to educate my younger child in the modern world of technology. For example, how to not let him be on the devices for too long – both for my children and myself. I learned how to set limits.
– Martha, parent

MATHEMATICAL DEVELOPMENT

The Mathematical Development section examined parents/caregivers' knowledge of children's mathematical learning and the promotion of strong mathematical skills through everyday activities. Questions addressed the age at which children start developing mathematical abilities and the description of essential math skills.

Before participating in the AP-OD program, 2.68% of parents/caregivers correctly answered all the questions in this dimension; after the program, 7.59% of the parents/caregivers did. On average, parents/caregivers responded correctly to 1.63 out of the four questions on the pre-survey and to 2.21 questions on the post-survey. Analyses indicated significant gains in Mathematical Development knowledge after participating in the AP-OD program ($t = -30.44$, $p = 0.000$). The effect size ($d = 0.607$) was moderate.



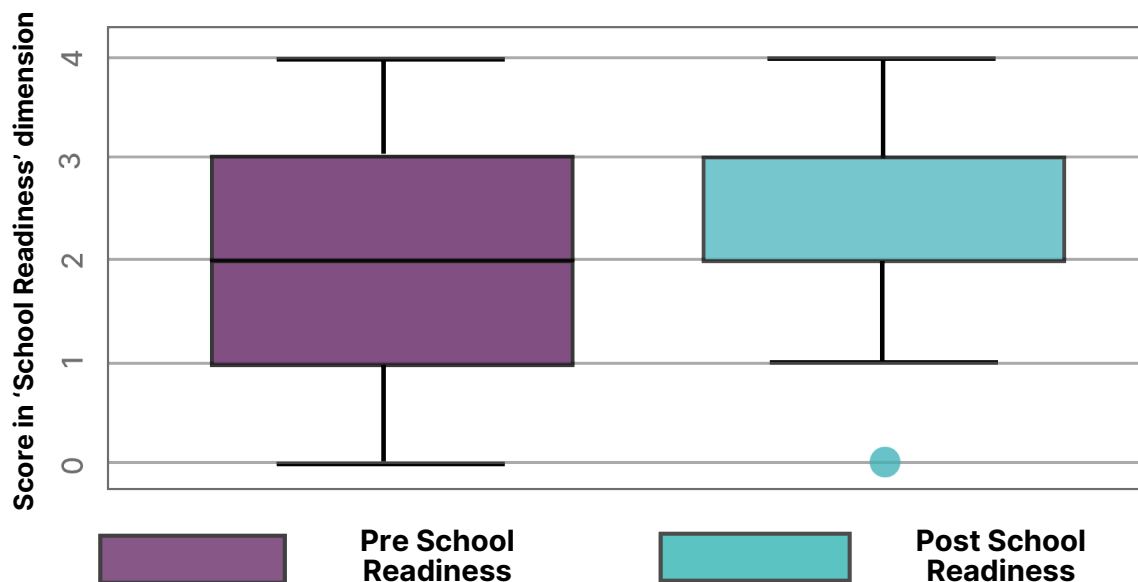
Source: AP-OD Portal Testing Data

SCHOOL READINESS

To assess parents/caregivers' knowledge and beliefs regarding school readiness, they were asked how they could help their young children succeed later in school. For example, they were asked about effective parental involvement and how parents/caregivers can improve their child's opportunities to do well in school.

Before participating in the AP-OD program, 9.66% of parents/caregivers correctly answered all the questions in this dimension; after the program, 21.68% of the parents/caregivers did. On average, parents/caregivers responded correctly to 2.00 out of the four pre-survey questions and 2.64 questions on the post-survey. Analyses indicate significant gains in school readiness knowledge after participating in the AP-OD program ($t = -27.85, p = 0.000$). The effect size ($d = 0.552$) was moderate.

**Pre-Post changes in 'School Readiness' dimension
(3,135 participants)**



Source: AP-OD Portal Testing Data

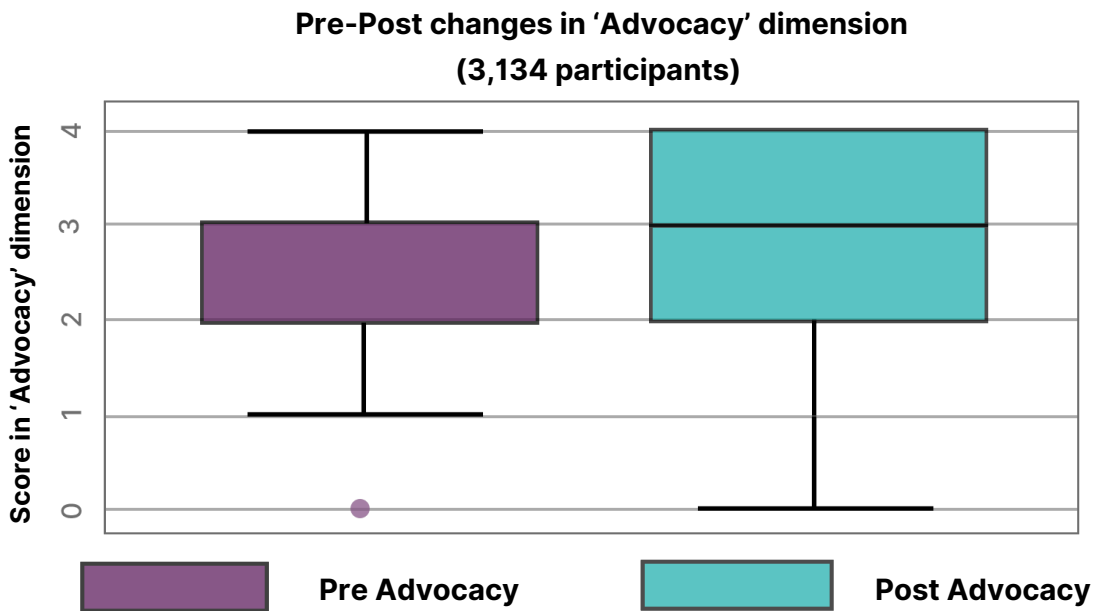
My daughters had good grades, but the school had really bad ratings and the other students were giving my daughters a hard time. After attending AP-OD, I learned that I have a voice and I am the main one to help my children. So I decided to search for schools that would be more appropriate for my daughters. After researching, I found a school and transferred my daughters to the school that has better ratings and is overall better and more suitable for my daughters. My daughters recently started school at the new one and are now happy.

– Martha, parent

ADVOCACY

Parents/caregivers were assessed on their knowledge of their rights in advocating for their child(ren). Specifically, parents/caregivers were asked about rights to be involved in school-related decision-making, effective practices to help advocate for children, and the possible consequences of acting on such practices.

Before participating in the AP-OD program, 19.71% of parents/caregivers correctly answered all the questions in this dimension; after the program, 37.78% of the parents/caregivers did. On average, parents/caregivers responded correctly to 2.78 out of the four questions on the pre-survey and to 2.92 questions on the post-survey. Analyses indicate significant gains in advocacy knowledge after participating in the AP-OD program ($t=-24.31$, $p=0.000$). The effect size ($d=0.499$) was small.



Source: AP-OD Portal Testing Data

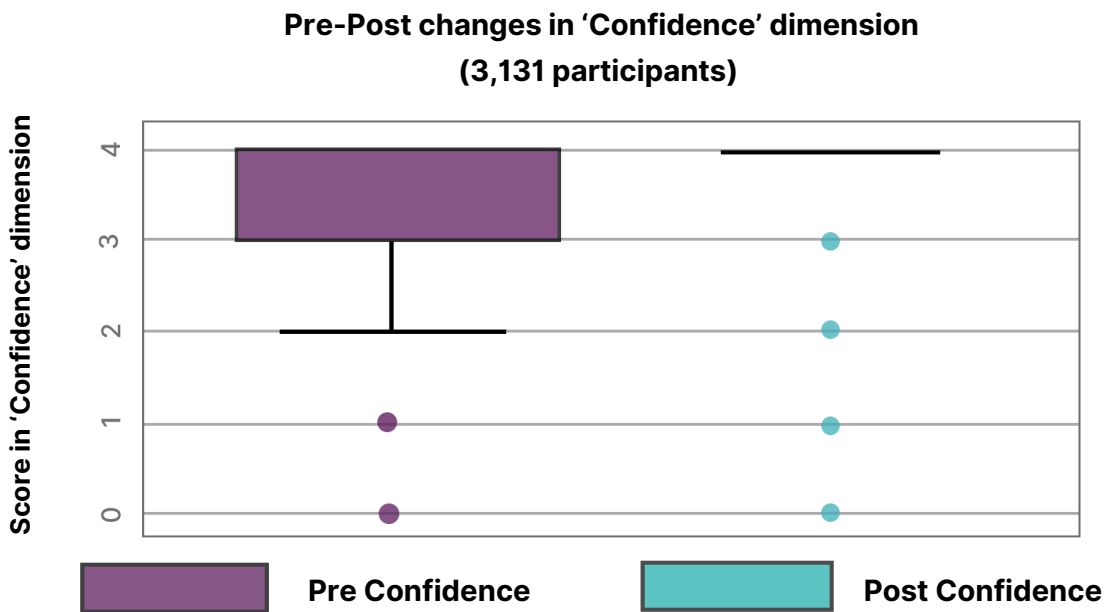
AP-OD opens the horizons, minds, and a better way of living... I didn't know I could talk to the teacher, and I didn't know how. After attending AP-OD, I learned how to advocate for my children. I now schedule meetings with my child's teachers to discuss my son's behavior and my concerns.

– Laura, parent

CONFIDENCE

In this final scale, parents/caregivers were asked about their confidence concerning their parenting skills, their ability to teach children their home language and basic skills for school, and their ability to advocate for their child(ren)'s needs.

Before participating in the AP-OD program, 70.21% of parents/caregivers stated feeling very confident in every question in this dimension; after the program, 90.77% of the parents/caregivers did. On average, parents/caregivers responded feeling very confident to 3.42 out of the four questions on the pre-survey and to 3.85 questions on the post-survey. Analyses indicate significant gains in self-reported confidence after participating in the AP-OD program ($t=-22.04$, $p=0.000$). The effect size ($d=0.497$) was small.



Being a parent and being a leader, those are aligned. We are [our children's] examples, they see you as a leader and want to be like you when they are older. We are their superheroes.

– Javier, parent

PROGRAM PARTNERS

AP-OD partnered with a variety of organizations that facilitate the program for parents and caregivers of young children. Recently, they partnered with organizations – largely in California (n=855) and New Mexico (n=224) – that focused on offering the training to parents of younger children (from pregnancy to age 3, called “PN-3”). Analyses were conducted to examine how – if at all – the two parent groups (PN-3 vs. Standard) varied in their learning gains at program completion.

Compared to the standard AP-OD participant parents/caregivers, those in the PN-3 focused groups started the program demonstrating significantly higher knowledge levels in Language and Literacy Development and Math Development and significantly lower levels of confidence. At the post-test, the PN-3 parents/caregivers in California and New Mexico exhibited significantly smaller gains in knowledge across all dimensions, compared to the standard AP-OD participants. In contrast, they reported significantly larger gains in confidence.

ASSOCIATIONS WITH LEARNING – EDUCATION LEVELS AND APPROACHES TO DELIVERY

Parents/Caregivers were grouped by their level of education (see Appendix B). It was observed that, compared with participants who had completed some or all of high school, those with some grade school had significantly higher gains in Language and Literacy Development; they also had a significantly higher gain in confidence compared with high school graduates. In contrast, those with some or all of their high school complete had significantly larger gains in knowledge about the Use of Technology. These results suggest that participants with lower educational levels may particularly benefit from the sessions on Language and Literacy Development and Building Confidence. In addition, these parent/caregiver participants may need extra support related to the Use of Technology.

From the first day of getting trained in AP-OD, I knew how empowering this curriculum was going to be, not just for me, not just for parents/caregivers, but for the whole family. I know that it goes beyond just reiterating stats and data on child development, it connects participants to who they are as a person and open to learning/growing. Being first generation Mexican American, I was able to relate to AP-OD culturally, emotionally, and proudly! I was able to see myself in the curriculum, making it relatable and easier to facilitate to participants.
– Berenice, Facilitator

Parent/Caregiver participants were also classified into four groups, depending on their attendance arrangement (i.e., in-person or online) and their facilitator's certification (i.e., in-person or online): (1) Fully in-person, with the parent/caregiver attending in-person and their facilitator certified in-person; (2) Parents/caregivers attending in-person with their facilitator certified online; (3) Parents/caregivers attending online with their facilitator certified in person; and (4) Fully online, with parents/caregivers attending online and their facilitator certified online.

Compared to the fully in-person delivery group (#1), the online certification group/in-person implementation group (#2) gained significantly more knowledge on four scales: Language and Literacy Development, Nutrition and Physical Activity, School Readiness, and Advocacy (see Appendix B). However, compared to the fully in-person delivery (Group 1), the in-person certification/online implementation group (#3) gained significantly less knowledge on five scales (i.e., Parenting, Early Learning, Nutrition and Physical Activity, Use of Technology, and Math Development). Finally, the fully online delivery group (#4) gained significantly more knowledge than those in the fully in-person group on all 10 dimensions. This result suggests that conducting the program online can more effectively support participant learning with facilitators who are also trained online.

CONCLUSION

Participants in this national sample of AP-OD displayed significant increases in their knowledge of each dimension of the program: Parenting, Early Learning, Language and Literacy, Nutrition and Physical Activity, Social-Emotional Development, Use of Technology, Math Development, School Readiness, Advocacy, and Confidence. The effect sizes for three of the ten dimensions are “moderate,” on par or greater than those found in other intervention programs, including quality preschool interventions. These findings are notable for multiple reasons:

1. AP-OD has been taken to scale across the country. Some 3,136 participating parents/caregivers completed the evaluation coming from 258 sites led by 274 facilitators across 21 states.
2. AP-OD has demonstrated effective results using second-generation (training of trainers) facilitators who have adapted the program to their local communities. This program was initially developed for Latinx families, and most of the families being served identify as Spanish-speaking (81%) Latinx families (89%). However, there is considerable variability in the individuals participating based on their language(s) spoken – including Indigenous languages from Latin American Countries, Chinese, Hindi, Tagalog, and many others – and in their education levels (Bridges et al., 2020). Facilitators – often members of the community they serve – carefully tailor the program's content to their needs.
3. The AP-OD program yielded significant positive results despite a worldwide COVID-19 pandemic. The pandemic has had a considerable negative impact on families—increasing parental symptoms of stress, anxiety, and depression (Brown et al., 2020; Feinberg et al., 2022; Roos et al., 2021). Simultaneously, it disrupted AP-OD program implementation, precluding face-to-face teaching for a time and requiring substantial re-design: over the past five years, the AP-OD facilitator training and parent/caregiver sessions were conducted online and in-person. Even with these disruptions and challenges, the parents who completed the program significantly increased their knowledge in every dimension.

It is promising that parents/caregivers consistently made significant gains, despite phenomenal challenges. The program’s demonstrated flexibility in delivery approach, in the language of administration, and in the individual and community characteristics of participants are remarkable. Findings suggest new opportunities for implementation and more nuanced assessment to capture the range of learning gains that the AP-OD program fosters among parents and caregivers to promote their children and families’ healthy development.

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APPENDICES



Appendix A. The percentage of questions answered correctly by dimension.

Domain		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
		0 correct		1 correct		2 correct		3 correct		4 correct	
Parenting	Frequency	88	19	262	87	612	367	1,156	1,028	1,014	1,634
	Percentage	2.81%	0.61%	8.37%	2.78%	19.54%	11.71%	36.91%	32.79%	32.38%	52.12%
Early Learning	Frequency	51	9	268	104	737	429	1,204	1,033	876	1,560
	Percentage	1.63%	0.29%	8.55%	3.32%	23.50%	13.68%	38.39%	32.95%	27.93%	49.76%
Language and Literacy Development	Frequency	30	8	231	60	566	272	1,154	991	1,155	1,804
	Percentage	0.96%	0.26%	7.37%	1.91%	18.05%	8.68%	36.80%	31.61%	36.83%	57.54%
Nutrition and Physical Activity	Frequency	148	63	876	452	1,258	982	606	939	248	699
	Percentage	4.72%	2.01%	27.93%	14.42%	40.11%	31.32%	19.32%	29.95%	7.91%	22.30%
Socioemotional Development	Frequency	48	9	217	87	525	273	1,322	1,047	1,024	1,719
	Percentage	1.53%	0.29%	6.92%	2.78%	16.74%	8.71%	42.16%	33.40%	32.65%	54.83%
Use of Technology	Frequency	483	264	1,096	680	906	914	491	865	160	409
	Percentage	15.40%	8.43%	34.95%	21.71%	28.89%	29.18%	15.66%	27.62%	5.10%	13.06%
Mathematical Development	Frequency	248	117	1,262	658	1,107	1,063	434	1,058	84	238
	Percentage	7.91%	3.73%	40.26%	21%	35.31%	33.92%	13.84%	33.76%	2.68%	7.59%
School Readiness	Frequency	439	166	684	345	742	617	968	1,325	303	679
	Percentage	14%	5.30%	21.81%	11.02%	23.66%	19.70%	30.87%	42.31%	9.66%	21.68%
Advocacy	Frequency	201	63	476	242	878	617	962	1,028	618	1,184
	Percentage	6.41%	2.01%	15.18%	7.72%	28.01%	19.69%	30.69%	32.80%	19.71%	37.78%
Confidence	Frequency	136	31	133	26	223	52	441	180	2,199	2,842
	Percentage	4.34%	0.99%	4.25%	0.83%	7.12%	1.66%	14.08%	5.75%	70.21%	90.77%

Appendix B. Parent/Caregivers' gains by their delivery approach and individual characteristics.

	Parenting	Early learning	Language and Literacy Develop.	Nutrition and Physical Activity	Socioem. Develop.	Use of Tech	Math Develop.	School Readiness	Advocacy	Confidence
Online certification In-person imp. (#2)	0.0525 (-0.0514)	0.0597 (-0.0531)	0.106** (-0.0541)	0.135** (-0.0585)	0.0766 (-0.049)	-0.0818 (-0.0645)	0.0842 (-0.0537)	0.184*** (-0.0647)	0.308*** (-0.0635)	0.081 (-0.0548)
In-person certification, Online implementation (#3)	-0.211*** (-0.0577)	-0.112* (-0.057)	-0.0677 (-0.0573)	-0.136** (-0.0607)	-0.0239 (-0.054)	-0.232*** (-0.0688)	-0.151*** (-0.0568)	-0.0443 (-0.0662)	-0.0218 (-0.0666)	-0.0422 (-0.0567)
Fully online (#4)	0.291*** (-0.0499)	0.233*** (-0.051)	0.183*** (-0.0489)	0.283*** (-0.0518)	0.300*** (-0.0474)	0.340*** (-0.0578)	0.251*** (-0.0483)	0.565*** (-0.0584)	0.565*** (-0.057)	0.124** (-0.0511)
Spanish	0.201*** (-0.0521)	0.112** (-0.0535)	-0.0625 (-0.0563)	0.0855 (-0.0602)	0.0218 (-0.0522)	-0.0308 (-0.0693)	0.0587 (-0.0554)	0.197*** (-0.0638)	0.133** (-0.0639)	-0.0587 (-0.0576)
Indigenous Languages of Latin America	0.173 (-0.378)	0.087 (-0.291)	-0.570* (-0.295)	-0.247 (-0.32)	-0.374 (-0.343)	-0.126 (-0.35)	-0.24 (-0.323)	-0.718** (-0.317)	-0.353 (-0.367)	0.0164 (-0.425)
Other	-0.253 (-0.398)	0.016 (-0.248)	-0.257 (-0.249)	0.0594 (-0.432)	-0.574 (-0.375)	-0.934*** (-0.327)	0.409 (-0.377)	-0.219 (-0.265)	-1.346*** (-0.349)	-0.56 (-0.523)
Black	-0.475*** (-0.14)	-0.526*** (-0.135)	-0.425*** (-0.137)	-0.066 (-0.134)	-0.208 (-0.131)	-0.0748 (-0.149)	-0.253** (-0.127)	-0.302** (-0.148)	-0.0976 (-0.164)	0.0186 (-0.145)
Latinx	-0.0656 (-0.0827)	-0.108 (-0.0854)	0.173** (-0.0797)	0.0953 (-0.087)	0.127 (-0.0952)	0.215** (-0.0961)	0.195** (-0.0801)	0.192* (-0.103)	0.0662 (-0.108)	0.136* (-0.0797)
Asian	0.335 (-0.25)	-0.186 (-0.22)	0.34 (-0.243)	-0.0326 (-0.309)	0.427* (-0.254)	0.802*** (-0.298)	0.146 (-0.232)	0.477* (-0.26)	0.258 (-0.39)	1.288*** (-0.492)
Some High School	-0.0376 (-0.0652)	0.0631 (-0.0653)	-0.0645 (-0.0638)	0.00651 (-0.0659)	-0.000333 (-0.063)	0.139* (-0.0726)	-0.0586 (-0.0607)	0.0133 (-0.0764)	-0.0659 (-0.0745)	-0.00718 (-0.0682)
High School Graduate	-0.0869 (-0.0546)	0.00367 (-0.056)	-0.114** (-0.054)	0.0164 (-0.0572)	-0.171*** (-0.0527)	0.125** (-0.0621)	-0.0466 (-0.0534)	-0.0885 (-0.065)	-0.137** (-0.0633)	-0.125** (-0.0575)
Observations	3,014	3,014	3,014	3,014	3,014	3,014	3,014	3,014	3,014	3,013
R-squared	0.037	0.021	0.021	0.02	0.03	0.033	0.027	0.055	0.048	0.011

Reference group: English speakers, White, Grade School, and Fully In-Person (in-person certification and in-person implementation).

Robust standard errors are in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Appendix C.1 Typical vs. PN-3 Parent/Caregivers' pre-post results.

	Parenting	Early Learning	Language and Literacy Develop.	Nutrition and Physical Activity	SE Develop.	Use of Tech	Math Develop.	School Readiness	Advocacy	Confidence	Total Score
PN-3	-0.278*** (-0.055)	0.293*** (-0.0566)	0.236*** (-0.0528)	0.329*** (-0.0608)	0.234*** (-0.0528)	-0.285*** (-0.0662)	-0.242*** (-0.056)	-0.507*** (-0.0667)	-0.301*** (-0.0663)	0.123* (-0.064)	-2.581*** (-0.326)
Observations	1,929	1,929	1,929	1,929	1,929	1,929	1,929	1,929	1,929	1,928	1,928
R-squared	0.011	0.013	0.009	0.013	0.009	0.008	0.009	0.026	0.01	0.002	0.025

Reference group: parents/caregivers whose facilitators did not complete the PN-3 training.

Robust standard errors are in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Appendix C.2 Typical vs. PN-3 Parent/Caregivers' pre-post results – California.

	Parenting	Early learning	Language and Literacy Develop.	Nutrition and Physical Activity	SE Develop.	Use of Tech	Math Develop.	School Readiness	Advocacy	Confidence	Total score
PN-3	-0.0597 (-0.07440)	-0.141* (-0.0753)	-0.213*** (-0.0714)	-0.163** (-0.079)	-0.0291 (-0.0736)	-0.0433 (-0.0873)	-0.0948 (-0.0727)	-0.228*** (-0.0874)	-0.148 (-0.0913)	0.207** (-0.0841)	-0.913** (-0.435)
Observations	855	855	855	855	855	855	855	855	855	855	855
R-squared	0.001	0.004	0.01	0.005	0	0	0.002	0.008	0.003	0.009	0.005

Reference group: California parents/caregivers whose facilitators did not complete the PN-3 training.

Robust standard errors are in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Appendix C.3 Typical vs. PN-3 Parent/Caregivers' pre-post results – New Mexico.

	Parenting	Early learning	Language and Literacy Develop.	Nutrition and Physical Activity	SE Develop.	Use of Tech	Math Develop.	School Readiness	Advocacy	Confidence	Total score
PN-3	-0.0929 (-0.121)	-0.073 (-0.137)	0.0238 (-0.118)	0.0715 (-0.144)	-0.178 (-0.115)	0.111 (-0.154)	0.0734 (-0.13)	-0.0714 (-0.138)	0.0644 (-0.13)	0.00305 (-0.14)	-0.0678 (-0.632)
Observations	224	224	224	224	224	224	224	224	224	224	224
R-squared	0.003	0.001	0	0.001	0.011	0.002	0.001	0.001	0.001	0	0

Reference group: parents/caregivers whose facilitators did not complete the PN-3 training.

Robust standard errors are in parentheses.

*** p<0.01, ** p<0.05, * p<0.1



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