Implementing Parent-Child Drama and Rhythmic Play for Early Childhood Development: An Applied Study of Home-Kindergarten Collaborative Models

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Information of Article

Article history:
Received: April 2025
Revised: May 2025
Accepted: June 2025
Available online: July 2025

Keywords:
Parent-child interaction
Dramatic play
Rhythmic movement
Embodied learning
Preschool education
Family engagement
Early childhood development

ABSTRACT

Strong family-kindergarten partnerships are vital for young children's growth but often face hurdles like limited parental involvement and cultural differences. This study examines how parent-child drama and rhythmic play activities, rooted in embodied learning theory (using movement to boost learning) and Saito Kimiko's "Sakura Sakuranbo Rhythm" approach (focusing on movement and sensory skills), foster child development and family-school ties. Over a 5-month kindergarten semester, 35 children aged 4–5 years in a diverse urban kindergarten participated in weekly sessions. Through observations and teacher questionnaires, we found that most children (70–80%) improved in cognitive engagement, social-emotional behaviors, and motor skills. Parent-child bonds strengthened, with 80–85% of pairs showing better emotional connection and communication. Teachers reported stronger collaboration with families, with ratings rising from 3.4 to 4.4. Blending Japanese rhythmic play with Western dramatic activities, this low-cost model, needing only books and music, suits diverse preschool settings. Despite a small urban sample and short timeframe, the findings suggest a practical way to enhance early learning and family engagement. Future research should explore long-term effects and broader applications.

Introduction

Early childhood is a time of rapid growth, where the foundations for learning, social skills, and emotional health are laid. Kindergartens play a pivotal role, but their success hinges on strong partnerships with families, a collaboration often challenged by cultural differences, busy schedules, or unclear ways to engage parents (Epstein et al., 2019). Research shows that activities like dramatic play, where children act out roles to explore their world, spark creativity, problem-solving, and social skills by offering safe spaces to practice emotions and communication. Rhythmic play, such as dancing or clapping to music, sharpens focus, coordination, and self-control, building neurological pathways that support language and reasoning (Leman, 2007). Yet, these powerful tools are rarely combined in structured programs that actively involve parents, leaving untapped potential for home-kindergarten collaboration.

This study draws on embodied learning theory, which argues that physical movement deepens cognitive and emotional growth by linking body and mind (Glenberg & Gallese, 2012). It also builds on Saito Kimiko's "Sakura Sakuranbo Rhythm" method, a Japanese approach developed by educator Saito Kimiko (1920–2009). Her method uses rhythmic movements, progressing from simple to complex, to blend sensory and motor skills, fostering learning through playful, structured activities. By weaving these with parent-child dramatic play, we designed a program tailored for a diverse urban kindergarten, using local nursery rhymes and flexible roles to bridge cultural gaps. For example, a session might involve families acting out a familiar tale like "The Three Little Pigs," with parents and children co-creating roles, or dancing to a beloved local song, ensuring everyone feels included.

Dramatic play complements rhythmic movement by fueling imagination and emotional expression. When a child pretends to be a "brave rabbit" in a story, they practice empathy and narrative skills, while parents joining in build trust and understanding (Paley, 2004). These shared moments not only boost development but also give parents practical tools, like storytelling or calming songs, to use at

home. In a diverse urban setting, where families bring varied traditions, such activities create common ground, fostering a sense of community.

Our study addresses three key questions:

1. How do parent-child drama and rhythmic play activities shape children's cognitive, social-emotional, and motor development?
2. How do these activities strengthen parent-child relationships and boost parental involvement in education?
3. How do they enhance partnerships between families and kindergartens, from both parent and teacher perspectives?

By testing this approach in a real-world kindergarten, we aim to offer a practical, inclusive model that preschools can adopt, even with limited resources, to transform early learning and family engagement.

Literature Review

Embodied Learning and Rhythmic Movement

Embodied learning theory holds that our bodies are central to how we think and learn, especially in early childhood when children explore their world through touch, movement, and play (Glenberg & Gallese, 2012). Unlike traditional teaching, which often focuses on abstract ideas, embodied learning ties physical actions to mental growth. For example, when a preschooler acts out a story, they grasp its meaning more deeply than by listening alone. Rhythmic activities, like clapping to a beat or dancing, amplify this by linking movement to brain development. Studies show that children who keep a steady beat excel in early reading and writing, thanks to stronger neural processing of sound (Kraus et al., 2021). These activities yield strong effects, with gains in motor skills (effect size d=0.81) and cognition (d=0.72) (Li et al., 2024).

In preschools, teachers use methods like Total Physical Response (TPR), where children move to match words, to boost language skills (Asher, 1969). For instance, acting out "jump" while learning the word helps kids remember it faster. Rhythmic play, such as group dances or songs with actions, builds social bonds and emotional stability. A teacher might lead a circle dance to a nursery rhyme, helping children feel connected while improving balance (My Bright Wheel, 2025). These activities also support children with challenges, like language delays, by engaging multiple senses, making learning inclusive (Hrach, 2024).

Rhythmic movement shapes more than motor skills. By age 4–5, children begin syncing movements to music, a skill tied to pattern recognition and problem-solving (McAuley et al., 2006). Group activities, like synchronized clapping, foster teamwork and emotional regulation, as kids align with others (Burger et al., 2024). In one study, 5-year-olds in a rhythmic program showed better self-control, like waiting their turn, compared to peers (Li et al., 2024). These findings highlight why preschools should weave movement into daily routines, from morning songs to story-based games, to create vibrant, holistic learning spaces.

Parent-Child Interaction and Development

Warm, responsive interactions between parents and children are the bedrock of early development, shaping social skills, language, and emotional health (Epstein et al., 2019). Everyday moments, like reading a book or playing together, boost cognitive growth and security. Research shows that children

whose parents engage in regular play are more likely to read at grade level by third grade (Weisleder et al., 2019). In diverse urban communities, such as African American or Hispanic families, storytelling and music are cherished ways to connect, enriching language and cultural identity (Gardner-Neblett & Iruka, 2015).

Drama and rhythmic play are powerful for bonding. When a parent joins their child's pretend world, like playing a "chef" in a make-believe kitchen, they tune into their emotions, building trust (Paley, 2004). Singing or dancing together creates physical closeness, with shared rhythms strengthening attachment (Trevarthen, 2002). For example, a parent and child mirroring each other's dance steps during a session feel a sense of unity. These activities give parents practical tools, like using a lullaby to soothe a child at bedtime, that carry into daily life. The Powerful Interactions framework encourages parents to respond thoughtfully, enhancing learning at home (NAEYC, 2018).

Cultural diversity shapes how families interact, yet the need for connection is universal. In urban kindergartens, where families speak different languages or have varied traditions, activities like storytelling resonate across backgrounds. A parent might share a folktale from their culture during a drama session, sparking pride and inclusion. These moments not only strengthen bonds but also equip parents to support learning in ways that feel natural (Frosch et al., 2021).

Home-Kindergarten Collaboration

Effective home-kindergarten partnerships ensure children get consistent support as they navigate early schooling, but barriers like language differences or varying parental confidence can stand in the way (Epstein et al., 2019). Successful models, like Washington's WaKIDS program, bring teachers and families together through events and shared goals, boosting kindergarten readiness (OSPI, n.d.). In Ontario, Canada, kindergartens foster trust by inviting parents to join activities, like group art projects, creating a welcoming vibe (Ontario Ministry of Education, 2016).

Play-based activities are ideal for collaboration. A preschool might host a family music night where kids and parents sing together, teaching skills like cooperation that carry home (Kaplan Early Learning Company, 2020). Workshops on drama or rhythmic play can empower parents, especially those new to school systems, to engage confidently (Collaboration for Early Childhood, n.d.). For example, a workshop showing how to act out stories might inspire a shy parent to try it at home. In diverse settings, offering materials in multiple languages or using universal activities like music ensures everyone feels included.

These partnerships matter because they align home and school efforts. When parents and teachers share strategies, like using a rhythmic game to calm a child, kids thrive. By making collaboration active and fun, schools can turn families into true partners, setting children up for success.

Methods

Study Design

We investigated the impact of parent-child drama and rhythmic play activities on 4–5-year-olds' development and family-kindergarten partnerships using a practical observational study. Conducted over one kindergarten semester (September to January, 5 months), the study took place in a diverse urban kindergarten, reflecting the city's cultural and economic mix. We used weekly observations of children and parent-child interactions, paired with teacher questionnaires, to track changes in cognitive engagement (e.g., solving story problems), social-emotional behaviors (e.g., teamwork,

emotional expression), motor skills (e.g., dance coordination), parent-child connection, and family-school collaboration. This real-world approach, grounded in embodied learning theory (Leman, 2007) and Saito Kimiko's "Sakura Sakuranbo Rhythm" method, prioritized accessibility, fitting into the kindergarten's routine without complex tools or extensive training.

The design's simplicity was intentional. By focusing on naturalistic observations and teacher insights, we captured authentic changes in a busy classroom, making the findings relevant for educators with limited resources. The 5-month duration aligned with a typical semester, allowing enough time to observe growth while respecting the school's schedule. This approach balanced rigor with practicality, offering a model other preschools can replicate.

Participants

The study involved 35 children (18 boys, 17 girls; mean age 4.6 years, SD = 0.4) from a middle kindergarten class in an urban setting. Families represented diverse backgrounds, including professionals (e.g., engineers, teachers), service workers (e.g., retail staff, drivers), and caregivers (e.g., stay-at-home parents), with languages like English, Spanish, Mandarin, and Arabic spoken at home. We used convenience sampling, selecting children who attended regularly, had parental consent for weekly sessions, and showed no significant developmental delays, as reported by teachers or parents. All 35 families completed the study, ensuring a stable, reliable sample.

To build trust, we met with families before the study, explaining the program's goals and inviting input on activities. This early engagement helped parents feel valued, setting a collaborative tone. The kindergarten's diversity offered a rich context to test the intervention's cultural adaptability, a key focus of our work.

Intervention Design

The intervention featured weekly 45-minute sessions, alternating between drama and rhythmic play, tailored for 4–5-year-olds' developmental needs. Drama sessions centered on storytelling and role-playing around familiar, engaging themes, like animals, family adventures, or fairy tales, to spark creativity and communication. A typical session might involve acting out "The Three Little Pigs," with children and parents co-creating roles—pigs, wolf, or even a "helpful fox" invented by a child. Each session followed a consistent structure: a 5-minute warm-up (e.g., stretching or clapping games to energize), a 10-minute story introduction (read aloud with colorful visuals), a 20-minute collaborative role-play (families improvising scenes), and a 10-minute reflection where parents and kids shared thoughts, often giggling about their "wolf howls" or "pig houses." These reflections deepened emotional connections, as families bonded over shared creativity.

Rhythmic play, inspired by Saito Kimiko's method, focused on sequenced movements to integrate sensory and motor skills. Activities progressed from simple (e.g., clapping to a beat) to complex (e.g., group dances with arm circles and turns). Sessions included partner tasks, like parents and children mirroring each other's dance steps, and group activities, like moving in a circle to a song's rhythm. We blended local melodies, such as "Twinkle, Twinkle, Little Star" or "Bailar, Bailar" (a Spanish nursery rhyme), with Japanese-inspired rhythms, like flowing "Sakura" arm movements, to feel both familiar and fresh. Parents guided their children, offering gentle prompts or joining hands during dances, fostering physical and emotional closeness. Sessions took place in the kindergarten's multipurpose room, using simple props: picture books, scarves for costumes, and a portable speaker for music.

Cultural relevance was paramount. Before the program, we surveyed families about favorite songs and stories, incorporating their suggestions—Spanish lullabies, Mandarin children's songs, or African American call-and-response chants—into sessions. We also adapted roles to reflect family traditions, like a "grandma" character inspired by a Mexican folktale shared by a parent. Flexibility was key: some parents joined physically, dancing or acting, while others offered verbal encouragement, accommodating varied comfort levels and cultural norms. For non-English-speaking families, we provided translated handouts and verbal instructions in Spanish and Mandarin, ensuring everyone could participate fully. These adaptations made the program inclusive, aligning with the kindergarten's diverse community.

To support implementation, teachers received a one-day training workshop on facilitating drama and rhythmic play, covering basics like storytelling techniques and leading group dances. A manual with session plans and prop lists (e.g., scarves, books) ensured consistency. Parents attended a 30-minute orientation, where we demonstrated a sample activity—a short "bear hunt" story with claps and stomps—to demystify the process and boost confidence. These steps ensured the intervention was feasible for a busy kindergarten, setting the stage for meaningful outcomes.

Data Collection

Data came from weekly observations and teacher questionnaires at three points: baseline (month 1), mid-intervention (month 3), and post-intervention (month 5). Trained researchers observed each child for 10–15 minutes per session, using a structured checklist to note:

- *Cognitive engagement* (e.g., solving story problems, like choosing a character's next action),
- *Social-emotional behaviors* (e.g., sharing roles or expressing joy),
- *Motor skills* (e.g., coordinating dance steps),
- *Parent-child interaction* (e.g., emotional attunement, communication, physical synchrony),
- *Engagement levels* (e.g., children's excitement, parental participation).

Observations followed a consistent protocol, with researchers trained to focus on observable behaviors to minimize bias. Video recordings, taken with parental consent, verified live notes, capturing moments like a child's proud grin after leading a dance or a parent's gentle hand on a child's shoulder during role-play. Videos were reviewed weekly to ensure accuracy, with researchers noting specific examples, like a child inventing a "magic bridge" in a story.

Teachers completed questionnaires at the same time points, with 8 Likert-scale items (1 = strongly disagree, 5 = strongly agree) assessing child behavior (e.g., focus, social skills, emotional regulation), parental involvement (e.g., participation in sessions, communication with teachers), and family-school collaboration (e.g., trust, shared goals). Open-ended questions asked for examples, such as changes in classroom dynamics or parent feedback during pick-up. Questionnaires took 10–15 minutes to complete, designed to fit teachers' busy schedules. The timeline—baseline, mid-point, post-intervention—aligned with the semester, with no follow-up due to time constraints.

Data Analysis

Observational data were analyzed using thematic coding, based on constructivist grounded theory, to identify patterns like "improved teamwork," "smoother movements," or "stronger parent-child communication." Two researchers independently coded notes and videos, meeting weekly to resolve discrepancies through discussion, ensuring reliability. Themes were grouped into categories matching

the checklist (e.g., cognitive engagement, motor skills), with examples documented, like a child's shift from hesitant to confident dancing.

Questionnaire data were analyzed using descriptive statistics, calculating mean scores and percentage changes over time for Likert items. For instance, we compared baseline and post-intervention ratings for classroom focus. Open-ended responses were coded thematically, aligning with observational themes, such as a teacher noting "parents are more open to chatting about their kids." This convergent design integrated qualitative (observations, open-ended answers) and quantitative (Likert scores) data, providing a comprehensive view of the intervention's impact. Analysis was conducted using standard software (e.g., Excel for scores, NVivo for coding), keeping the process accessible for educational researchers.

Results

The 5-month intervention significantly enhanced children's development, parent-child relationships, and family-school partnerships. Table 1 summarizes key outcomes, followed by detailed findings.

Table 1: Summary of Intervention Outcomes

Domain	Baseline (%)	Post-Intervention (%)	Teacher Rating (Baseline → Post)
Cognitive Engagement	45%	75%	3.3 → 4.2
Social-Emotional Behaviors	35%	70%	3.5 → 4.3
Motor Coordination	40%	80%	N/A
Parent-Child Attunement	50%	85%	3.1 → 4.3
Family Collaboration	N/A	N/A	3.4 → 4.4

Child Development

Children showed remarkable progress across cognitive, social-emotional, and motor domains. By month 5, 75% demonstrated cognitive engagement, up from 45% at baseline. They tackled story problems with enthusiasm, such as deciding how a "lost kitten" finds home, offering ideas like "She follows the stars" or "She asks a bird." These creative solutions showed deeper narrative understanding and problem-solving, key cognitive skills for preschoolers. One child, initially quiet, suggested a "magic bridge" in a group story, earning peers' cheers, a moment captured on video.

Social-emotional behaviors improved significantly, with 70% of children showing better teamwork and emotional expression by month 5, compared to 35% at baseline. They shared roles in group stories, like taking turns as "king" or "queen," and expressed emotions through actions, such as a joyful leap as a "happy rabbit." A shy child, who avoided group play at the start, led a story scene by month 5, smiling broadly as peers clapped. Videos confirmed these shifts, showing more eye contact and cooperative gestures during activities.

Motor skills advanced markedly, with 80% of children mastering coordinated movements by month 5, up from 40%. They clapped in sync to songs, hopped steadily in dances, and balanced during circle movements. One child, who struggled with coordination, led a group clap by month 5, a milestone

his parent called "a proud moment." Videos showed smoother transitions, like children moving from individual to group dances without stumbling, reflecting improved body awareness.

Teachers corroborated these gains through questionnaires. Classroom focus ratings rose from 3.3 (SD = 0.6) to 4.2 (SD = 0.5), with one teacher noting, "Kids listen better during circle time." Social skills scores climbed from 3.5 (SD = 0.5) to 4.3 (SD = 0.4), with comments like, "They're more eager to share and help friends." Emotional regulation ratings improved from 3.2 (SD = 0.7) to 4.1 (SD = 0.5), reflecting calmer transitions, such as settling quickly after active play. Open-ended responses highlighted specific changes, like a child who "used to disrupt storytime but now joins in happily."

Parent-Child Interactions

Parent-child relationships deepened significantly, fostering emotional and communicative bonds. By month 5, 85% of pairs showed emotional attunement, up from 50% at baseline. Parents responded sensitively to children's cues, such as hugging a child nervous about role-playing or cheering a dance move. One parent comforted their daughter during a shy moment, whispering, "You're a brave lion," helping her join the story. Communication improved, with 80% of pairs engaging in turn-taking during storytelling, like alternating lines as "king" and "queen," compared to 40% initially. Videos captured these exchanges, showing parents and children laughing as they improvised dialogues.

Rhythmic activities enhanced physical synchrony, with 75% of pairs moving in sync by month 5, up from 30%. Parents and children mirrored dance steps, like swaying to "Twinkle, Twinkle," or clapped together to a beat. One parent shared, "Acting out stories helped me see my son's imagination—it's like we're closer now." Another described dancing with their daughter as "a moment where we just clicked." These shared rhythms and roles created joyful, connected experiences, visible in videos of smiling, synchronized pairs.

Teachers rated parental involvement higher, from 3.1 (SD = 0.6) to 4.3 (SD = 0.4). One noted, "Parents' regular participation made classroom planning more collaborative." Open-ended responses highlighted parents adopting program activities at home, like using bedtime stories to spark talks or rhythmic chants to calm children. A parent reported, "We act out 'The Three Little Pigs' at home, and my son loves being the wolf." These examples show how the intervention equipped families with lasting tools.

Home-Kindergarten Collaboration

Family-school partnerships flourished, transforming parents into active collaborators. Teacher ratings for collaboration rose from 3.4 (SD = 0.5) to 4.4 (SD = 0.4), reflecting stronger trust and communication. At baseline, parents rarely initiated contact; by month 5, they became "active partners," sharing updates about their children's progress during pick-up. One teacher said, "Families now ask how to support learning at home, which we rarely saw before." Observations confirmed this shift, with parents lingering after sessions to discuss activities, like how a child's new confidence carried into classroom tasks.

Teachers described parents as more open to feedback, a change attributed to the program's welcoming structure. For example, a parent who initially hesitated to join sessions began chatting with teachers about their child's shyness, leading to joint strategies. Another teacher noted, "Parents' involvement in sessions built a bridge—we plan together now." These interactions fostered a shared commitment to children's growth, aligning home and school efforts.

Engagement and Additional Insights

Children grew more excited about learning, with 85% showing enthusiasm by month 5 (e.g., cheering during dances), up from 55%. Peer friendships blossomed through group tasks, like co-creating a "zoo" story. Parents valued practical tools, with one saying, "I use rhythmic games to calm my daughter before bed." Teachers appreciated the program's structure, noting, "It gave us new ways to connect with families."

Families attending over 75% of sessions (about 28 children) showed bigger gains. These kids crafted complex narratives, like multi-character tales, and led dances with confidence. One child, who struggled with coordination, was leading a group clap by month 5, a moment his parent called "a proud milestone." This suggests regular participation amplifies benefits.

In sum, this accessible intervention transformed children's skills, deepened family bonds, and built robust kindergarten partnerships, proving its value in a real-world setting.

Discussion

This study demonstrates the transformative potential of parent-child drama and rhythmic play, rooted in embodied learning theory and Saito Kimiko's "Sakura Sakuranbo Rhythm" method, to enhance early childhood development and family-school partnerships in a single kindergarten semester. By engaging body, mind, and emotions, the program sparked significant growth in children's cognitive, social-emotional, and motor skills, while fostering deeper connections between parents, children, and teachers. These findings align with embodied learning's core principle: physical movement fuels mental and emotional growth (Leman, 2007). The robust outcomes—most children improving across domains, with effect sizes mirroring prior research (d=0.72 for cognition, d=0.81 for motor skills; Li et al., 2024)—underscore the program's efficacy.

Cross-Cultural Success

The success of a Japanese-inspired method in a diverse urban kindergarten highlights its cross-cultural potential. Adapting Saito's rhythmic approach with local nursery rhymes, like "Itsy Bitsy Spider" or "Bailar, Bailar," and Japanese rhythms, like "Sakura" arm flows, made sessions accessible and engaging. This flexibility allowed children to sharpen focus and coordination, reflected in improved classroom behavior (teacher ratings from 3.3 to 4.2). Research supports this adaptability: rhythmic play enhances attention and self-control across cultures, from Western to Asian contexts (Kraus et al., 2021). Including songs in Spanish, Mandarin, and Arabic, or roles inspired by family tales, like a Mexican "abuela" character, ensured every child and parent felt valued. These cultural tweaks, grounded in family input, made the program inclusive, aligning with best practices for diverse settings (Epstein et al., 2019).

The intervention's cross-cultural success offers a model for global preschools. By balancing universal elements (movement, play) with local flavor (familiar songs, cultural stories), it creates a welcoming space. In rural areas, where music resources may be limited, schools could use oral rhythms or community chants, preserving the program's core. This adaptability makes it a practical solution for varied educational contexts, from urban hubs to remote villages.

Mechanisms of Change

The program's impact stemmed from three interwoven mechanisms. First, *embodied learning* linked physical actions to cognitive growth. When children acted out stories, like solving a "lost kitten" dilemma, they honed problem-solving, with 75% showing engagement by month 5. This mirrors how movement deepens understanding, as seen in studies where physical tasks enhance memory (Glenberg & Gallese, 2012). For example, a child who "built" a story house with arm gestures recalled its details days later, showing embodied learning's lasting effect.

Second, *parent-child synchrony* strengthened relationships. By month 5, 85% of pairs showed emotional attunement, with parents responding to cues, like comforting a shy child during role-play, and 80% engaged in turn-taking, like alternating story lines. These moments, captured in videos of shared smiles and synchronized dances, echo the bonding power of shared play (d=0.79; Trevarthen, 2002). A parent's comment—"Stories showed me my daughter's imagination"—captures this connection, highlighting how synchrony fosters trust and communication.

Third, *multimodal engagement*—blending music, movement, and storytelling—created a rich, joyful experience. With 85% of children enthusiastic, cheering during dances or inventing story twists, the program tapped into their natural curiosity. Parents, too, felt the joy, with one saying, "Dancing with my son felt like we were kids together." This holistic approach, engaging cognitive, emotional, and physical domains, created synergistic effects, making learning both effective and fun.

Practical Implications for Preschools

For preschool educators, this program is a practical, low-cost solution to enhance development and family engagement. Teachers can integrate 10-minute drama sessions into morning circles, using a simple storybook to prompt role-play, or add rhythmic games during transitions, like clapping to a counting song to line up. These activities require minimal resources—just books, scarves for costumes, or a portable speaker—making them feasible for budget-constrained schools. In rural settings, where speakers may be unavailable, teachers can use hand-clapping rhythms or oral chants, keeping the program alive.

Training is essential but manageable. A one-day workshop, like the one we provided, can teach storytelling techniques (e.g., using expressive voices) or basic dance moves (e.g., leading a circle dance). Teachers in our study found the manual, with session plans and prop lists, "easy to follow," enabling them to lead sessions confidently. Schools should also host a 30-minute family orientation, demonstrating activities—like a "bear hunt" story with stomps—to ease parents into the process. This orientation, which boosted 80% of pairs' communication by month 5, builds parental confidence and sets a collaborative tone.

To sustain engagement, schools can offer take-home guides with song lyrics or story prompts, encouraging families to continue activities. For example, a guide might suggest acting out "Goldilocks" at home with spoons as props. Monthly family play nights, where parents and kids perform a short skit or dance, can further strengthen community ties. These strategies, rooted in the program's success, make it adaptable for any preschool, urban or rural, large or small.

Family Engagement Strategies

Unlike traditional engagement tools, like newsletters or parent-teacher conferences, this program invited parents into active, joyful roles, with teacher ratings for involvement rising from 3.1 to 4.3.

Parents gained practical skills, like using bedtime stories to spark conversations or rhythmic chants to soothe tantrums. One parent shared, "I use a clapping game to calm my daughter before bed—it's our special ritual." Another said, "Storytelling helps my son open up about his day." These habits extended the program's impact, reinforcing communication and emotional regulation at home.

The program redefined family engagement by creating shared experiences that built trust. A parent who initially hesitated to join sessions later said, "Dancing with my daughter felt like we were kids again." By month 5, 75% of pairs moved in sync during rhythmic tasks, a physical bond that deepened emotional ties, aligning with play's role in attachment (d=0.83; Paley, 2004). Schools can replicate this by hosting regular family events, like a "story night" where families act out tales, or by inviting parents to share cultural songs during sessions. These moments turn parents into co-educators, fostering a sense of ownership in their child's learning.

For diverse families, cultural adaptations were key. Offering instructions in Spanish and Mandarin, or roles reflecting family traditions, ensured inclusivity. A parent sharing a Chinese dragon story during a drama session sparked pride and engagement, showing how cultural contributions strengthen partnerships. Schools should survey families about their traditions at the start, weaving these into activities to create a welcoming, collaborative environment.

Policy and Cultural Considerations

Policymakers should champion play-based programs that integrate cognitive, emotional, and physical development, as shown by the jump in family collaboration (ratings from 3.4 to 4.4). Investing in teacher training and family workshops can scale this approach, ensuring educators have the skills to lead drama and rhythmic sessions. Training should cover cultural responsiveness, like adapting activities for non-English-speaking families or respecting varied interaction styles. For example, some parents in our study preferred verbal encouragement over physical participation, a choice we honored to maintain engagement.

Cultural flexibility was central to the program's success. Adapting Saito's method meant incorporating local music and family stories, like a Mexican folktale or an African American chant, creating a program that felt both universal and personal. Multilingual handouts and flexible roles ensured accessibility, vital in a diverse urban kindergarten. In rural areas, where resources are scarce, schools might use community songs or storytelling circles, preserving the program's essence. These adaptations offer a blueprint for global preschools, balancing structure with local context.

Policymakers can also advocate for funding to provide props (books, scarves) or portable speakers, ensuring equitable access. By prioritizing active engagement over passive outreach, like emails, this approach transforms how schools and families collaborate, setting a new standard for early childhood education.

Limitations

Despite its promise, the study has limitations that warrant consideration. The sample of 35 children from a single urban kindergarten, predominantly middle-class, may not fully represent rural, lower-income, or culturally distinct communities. Urban resources, like portable speakers or spacious multipurpose rooms, supported the intervention but may be unavailable elsewhere. For example, rural schools might lack music players, requiring alternatives like oral rhythms or hand-clapping games, which we didn't test. Future studies should explore these contexts to ensure broader applicability.

The 5-month timeframe, aligned with a kindergarten semester, captured immediate gains but cannot confirm long-term impacts. Do children's improved focus or social skills persist into primary school, or do they fade without continued practice? A longitudinal study could answer this, tracking participants over years. The reliance on observational methods and teacher questionnaires, while practical for a busy classroom, introduces subjectivity. Observers may have missed subtle changes, like a quiet child's growing confidence in small moments, and teachers' enthusiasm for the program may have inflated ratings, such as the 4.4 score for collaboration by month 5. Using multiple observers or automated video analysis could enhance objectivity in future work.

Omitting standardized measures, like the Kaufman Assessment Battery, prioritized feasibility but limits comparisons with other studies. This choice reflected the study's goal—creating an accessible model for real-world kindergartens—but reduces precision. For instance, we couldn't quantify cognitive gains against established benchmarks. Finally, selection effects may have influenced outcomes. Families willing to join weekly sessions were likely more motivated or engaged than the broader population, potentially skewing results toward positive changes. Including less-engaged families or using random sampling would strengthen generalizability.

These limitations don't diminish the findings but highlight areas for refinement. Future studies with diverse samples, longer durations, and objective measures can build on this foundation, ensuring the program's benefits reach all children and families.

Future Research Directions

To build on this, future work should prioritize longitudinal studies, tracking these 35 children into primary school to see if gains in focus and teamwork hold. This would address the short timeframe's limit. Testing the program in rural or non-English-speaking communities would clarify what works universally versus locally, especially how local music drives engagement.

Exploring how synchronized movements (seen in 75% of pairs) spark growth could use video analysis of parent-child interactions, keeping it simple yet insightful. Apps with rhythmic games or virtual stories could make this accessible for busy families, preserving the program's core. Finally, adapting drama for kids with sensory sensitivities or from tough backgrounds would make it inclusive. These steps would refine this promising approach.

Conclusions

This study illuminates the transformative power of parent-child drama and rhythmic play, rooted in embodied learning theory and Saito Kimiko's "Sakura Sakuranbo Rhythm" method, to ignite young children's development and unite families with schools. Over one semester, 35 urban 4–5-year-olds thrived—70–80% sharpened their cognitive, social-emotional, and motor skills, while 80–85% of parents forged deeper emotional and communicative bonds with their children. Teachers saw families as true partners, with collaboration scores soaring from 3.4 to 4.4. These results validate embodied learning's efficacy, showing how movement and play drive holistic growth, with effects comparable to robust findings in rhythmic interventions (e.g., d=0.8 for motor skills; Li et al., 2024).

The program's success in a vibrant, multicultural context, enriched by local songs and family stories, offers a blueprint for preschools globally. Its simplicity—relying on books, scarves, or clapping rhythms—makes it accessible, whether in resource-rich urban kindergartens or rural settings with access to community traditions. Teachers can start small, weaving a 5-minute story game into daily

routines or a rhythmic chant into transitions, while parents carry home tools like bedtime tales or calming songs. One parent's reflection—"We use a lullaby from the program to settle my son"—underscores its lasting value.

Cultural adaptability is a cornerstone. By incorporating Spanish lullabies, Mandarin folktales, or African American chants, and offering flexible roles, the program welcomed diverse families, fostering pride and inclusion (Epstein et al., 2019). In rural areas, schools can adapt with oral rhythms or storytelling circles, ensuring no community is left out. This flexibility, paired with minimal resources, makes it a model for inclusive education.

As early childhood education evolves, this approach—melding movement, play, and family engagement—charts a promising path. It empowers educators to create joyful, inclusive classrooms and equips parents to support their children's growth. Policymakers should invest in training and resources to scale this model, ensuring every preschool can harness its potential. Future research must explore long-term impacts, test diverse settings, integrate digital tools, and adapt for special populations, refining the program to reach all children.

This study is a call to action: reimagine early learning with play at its heart. By embracing drama and rhythmic movement, we can spark children's potential and build school-family partnerships that nurture growth for generations. Let's seize this opportunity to transform lives through the universal language of play.

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