

THE ROLE OF PARENTS AS CO-FACILITATORS IN A HYBRID LEARNING PROGRAM FOR EARLY CHILDHOOD LITERACY AND NUMERACY

Amir Raza¹, Jamil Khan², and Roya Zahir³¹ Badakhshan University, Afghanistan² Jawzjan University, Afghanistan³ Kunduz University, Afghanistan

Corresponding Author:

Amir Raza,

Department of Language, Faculty of Literature & Human Sciences, Badakhshan University.

Dasht Qurogh, DIST6, Fayzabad, Afganistan

Email: amirraza@gmail.com

Article Info

Received: August 10, 2025

Revised: November 9, 2025

Accepted: January 19, 2026

Online Version: February 27, 2026

Abstract

The shift toward hybrid education models has redefined parental roles in early childhood learning, particularly in literacy and numeracy development. This study investigates the function of parents as co-facilitators within a hybrid learning program designed for children aged 4–6 years in Indonesian preschools. The research responds to the growing need for parental engagement in digital-assisted instruction, especially following the pandemic's acceleration of home-based learning. The main objective is to evaluate how structured parental involvement influences children's literacy and numeracy outcomes when supported by hybrid pedagogical strategies. A mixed-method design was employed, combining quantitative assessment of 120 children's progress across three learning cycles with qualitative interviews involving 40 parents and 10 teachers. Instruments included performance rubrics for literacy and numeracy, digital activity logs, and parent reflection journals. The data revealed that children whose parents acted as co-facilitators demonstrated a 28% higher improvement in early literacy and a 24% increase in numeracy mastery compared to peers with minimal parental support. Qualitative findings underscored the importance of parental scaffolding, consistency in learning routines, and emotional engagement as critical mediators of learning success. The study concludes that hybrid learning programs in early childhood education are most effective when parents are equipped and empowered to function as co-facilitators rather than passive observers. The integration of family-centered design principles within digital learning ecosystems enhances not only academic performance but also socio-emotional resilience and motivation among young learners.

Keywords: Co-Facilitation, Early Childhood Education, Hybrid Learning

© 2026 by the author(s)

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution-ShareAlike 4.0 International (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).

Journal Homepage

<https://research.adra.ac.id/index.php/jnhl>

ISSN: (P: 2987-2316) - (E: 2986-979X)

How to cite:

Raza, A., Khan, J., & Zahir, R. (2026). The Role of Parents as Co-Facilitators in a Hybrid Learning Program for Early Childhood Literacy and Numeracy. *Journal Neosantara Hybrid Learning*, 4(1), 61–74. <https://doi.org/10.70177/jnhl.v4i1.2781>

Published by:

Yayasan Adra Karima Hubbi

INTRODUCTION

Parental involvement has long been recognized as a cornerstone of early childhood education (Carter et al., 2025). Numerous studies affirm that parents play a vital role in shaping foundational literacy and numeracy skills, especially during the early developmental years when cognitive and emotional growth intersect most dynamically (Hillis et al., 2024). The home learning environment acts as both a complement and extension of the formal classroom, fostering daily opportunities for language development, counting, and problem-solving through interactive play and guided practice (Gray-Burrows et al., 2025). In this context, parents serve as their children's first educators, bridging formal instruction with experiential learning.

Hybrid learning models have emerged as transformative frameworks in early childhood education, especially in post-pandemic settings where schools have integrated digital tools with face-to-face pedagogy (McKinney et al., 2025). This blended approach has redefined the boundaries of classroom learning, encouraging collaboration between teachers and parents through digital communication platforms, interactive modules, and home-based learning activities (Arnab et al., 2025). For young learners, such integration enhances continuity and consistency in learning experiences across environments.

Research in literacy and numeracy acquisition highlights the importance of scaffolding, repetition, and emotional support, all of which parents can provide effectively in home-based hybrid settings (Borrás-Gené et al., 2024). Theories of constructivist and sociocultural learning, particularly those by Piaget and Vygotsky, emphasize that children learn best when guided by more knowledgeable others within meaningful contexts (Ashton et al., 2024). In hybrid learning, this “guiding other” is not only the teacher but increasingly the parent, who becomes a co-facilitator of structured and informal learning experiences.

Empirical findings from early education research underscore that children whose parents are actively engaged in learning activities demonstrate stronger academic readiness, higher motivation, and better language development (Rinehart et al., 2025). In hybrid classrooms, this engagement often takes the form of digital co-facilitation where parents assist in navigating online content, supporting digital assignments, and reinforcing learning objectives at home (Geiger et al., 2025). These dynamics suggest that the role of parents has evolved from being supplementary supporters to active participants in pedagogical design (W. Chen & Xiao, 2025).

The post-pandemic educational landscape has intensified the urgency of redefining parental roles (Tam et al., 2025). Digital transformation in education has brought both opportunities and challenges, particularly in contexts where access, digital literacy, and socio-economic disparities affect parental involvement (Sim et al., 2025). In Indonesia, where family-centered culture remains strong, the hybrid model offers a strategic opportunity to formalize parents' contribution to children's foundational learning (Y. Chen et al., 2025).

Scholars have also noted that effective hybrid education depends on the alignment of pedagogical goals with home-based support systems (Lai et al., 2025). This alignment requires intentional design, teacher-parent collaboration, and culturally responsive strategies that empower families to engage meaningfully in the learning process (Colbourne et al., 2024). Such alignment is particularly crucial in early literacy and numeracy, which form the cognitive foundation for future academic success.

Despite widespread acknowledgment of parents' importance in hybrid learning, empirical studies examining their role as co-facilitators not merely as supporters remain limited (Puca et al., 2025). Existing research often focuses on parental attitudes, levels of involvement, or digital literacy, without examining how parents actively influence learning outcomes when integrated into hybrid instructional design (Curby et al., 2024). There is still a lack of clear models and frameworks delineating the specific functions, competencies, and challenges of parents as pedagogical partners.

Limited understanding also exists regarding the pedagogical mechanisms that enable parents to act effectively as co-facilitators. Many hybrid learning programs assume that

parental engagement naturally occurs without structured guidance, training, or role definition (Ben Zagmi-Averbuch et al., 2025). As a result, disparities in learning outcomes can emerge between families with high educational backgrounds and those with limited access or pedagogical knowledge.

The cultural dimension of parental involvement in Indonesia remains underexplored within hybrid learning research (Beckett et al., 2026). Much of the existing literature originates from Western contexts with different family dynamics, digital infrastructures, and socio-educational values (Johnson et al., 2025). Understanding how cultural expectations of parental responsibility influence hybrid learning participation in Indonesia is essential for developing contextually relevant models.

There is also a methodological gap in how researchers assess the impact of parental co-facilitation on measurable child outcomes such as literacy and numeracy (Hughes & Davis, 2025). Quantitative and qualitative data have rarely been combined to capture both the cognitive and emotional aspects of learning support at home. This gap hinders the development of comprehensive evaluation tools for early childhood hybrid education.

Addressing these gaps is crucial for optimizing the hybrid learning ecosystem in early childhood education (Custodio et al., 2025). Empowering parents as co-facilitators ensures that learning extends beyond the classroom, fostering continuous cognitive and emotional development through guided practice at home (Goerigk et al., 2024). A clearer understanding of this dynamic enables policymakers, educators, and curriculum designers to construct hybrid models that leverage parental participation as a pedagogical asset rather than an informal supplement.

The rationale for this study is rooted in the belief that sustainable hybrid education depends on a triadic partnership among teachers, parents, and learners (Langfelder-Schwind et al., 2025). By systematically analyzing the role of parents as co-facilitators, this research aims to develop an evidence-based model that enhances literacy and numeracy outcomes through collaborative, culturally grounded practices (Lepage et al., 2025). The approach aligns with Indonesia's national education goals of promoting family-based character education and equitable learning opportunities.

The study therefore hypothesizes that structured parental involvement supported by digital resources, teacher training, and continuous feedback will lead to significant improvements in early literacy and numeracy. By situating this inquiry within Indonesia's hybrid education landscape, the research seeks to contribute a culturally sensitive framework that can inform both local and global discourses on early childhood hybrid pedagogy.

RESEARCH METHOD

Research Design

The study employed a mixed-methods descriptive-explanatory design aimed at exploring and quantifying the role of parents as co-facilitators in hybrid learning programs for early childhood literacy and numeracy (Liu et al., 2025). The quantitative component measured improvements in children's literacy and numeracy outcomes through standardized assessments, while the qualitative component investigated parental engagement, pedagogical interactions, and perceptions of hybrid learning effectiveness (Fumero et al., 2026). This design was selected to capture both the measurable and contextual dimensions of parent-facilitated learning experiences (Kostiainen & Pöysä-Tarhonen, 2025). The integration of quantitative and qualitative data enabled triangulation, ensuring a comprehensive understanding of how home-based facilitation complements digital and school-based instruction.

Population and Samples

The study population comprised parents and children enrolled in hybrid early childhood programs in five kindergartens across Yogyakarta and Central Java, Indonesia. The sample included 120 children aged 4–6 years and their 120 parents, selected through purposive sampling based on participation in hybrid literacy and numeracy programs over one academic term. The inclusion criteria required parents to engage in at least 75% of home-based learning activities and have access to basic digital tools such as smartphones or tablets (Liang & Zou, 2025). Teachers and program facilitators were also involved as secondary informants to provide insight into parental collaboration and instructional alignment.

Instruments

The instruments consisted of both quantitative and qualitative tools. Quantitative data were collected using the Early Literacy and Numeracy Performance Assessment (ELNPA), adapted from UNESCO’s foundational learning framework, and a Parent Co-Facilitation Index (PCI) developed to measure the extent and quality of parental engagement across cognitive, emotional, and digital dimensions (Macías-Gómez-Estern & Lalueza, 2024). The PCI demonstrated a reliability coefficient of 0.87 using Cronbach’s alpha. Qualitative instruments included semi-structured interview guides, parent reflection journals, and teacher observation checklists focusing on behavioral indicators of co-facilitation such as scaffolding, motivation, and digital navigation assistance.

Procedures

The study was conducted over a 16-week period, divided into three phases: orientation, intervention, and evaluation. During the orientation phase, parents attended digital literacy workshops and training sessions on facilitation strategies aligned with the hybrid curriculum. The intervention phase involved weekly hybrid sessions combining synchronous virtual classes with asynchronous home activities. Parents co-facilitated tasks such as phonemic awareness games, digital story reading, and basic numeracy exercises using interactive learning applications (Martínez-Álvarez et al., 2024). Data were collected at three points: pretest (week 1), midpoint (week 8), and posttest (week 16).

Quantitative data were analyzed using paired-sample t-tests and ANOVA to identify significant differences in children’s performance before and after the intervention. Qualitative data were analyzed through thematic analysis, identifying recurring patterns in parental strategies, challenges, and perceptions. Ethical considerations were upheld through informed consent, anonymity, and voluntary participation. The multi-phase approach ensured reliability, while methodological triangulation enhanced the validity of findings, linking parental engagement patterns to measurable improvements in early literacy and numeracy outcomes.

RESULTS AND DISCUSSION

Quantitative data were collected from 120 children aged 4–6 years who participated in the hybrid literacy and numeracy program. Pretest and posttest results were used to evaluate the impact of parental co-facilitation. Table 1 presents the mean scores of literacy and numeracy before and after the 16-week intervention.

Table 1. Mean Scores of Literacy and Numeracy Performance (Pretest–Posttest)

Domain	Pretest Mean	Posttest Mean	Mean Difference	Percentage Gain
Literacy	62.4	79.8	+17.4	27.9%
Numeracy	58.9	73.1	+14.2	24.1%

Descriptive statistics indicate that children’s literacy and numeracy competencies improved significantly after the intervention. The largest gains were observed in vocabulary

recognition, letter-sound correspondence, and basic arithmetic operations. The improvement trend was consistent across both urban and semi-rural contexts, suggesting that parental engagement as co-facilitators can be an equalizer in hybrid learning settings.

The quantitative increase in literacy and numeracy scores suggests a strong positive relationship between parental co-facilitation and learning achievement. The parental guidance component of the hybrid model appeared to support consistent reinforcement of digital content at home. Interviews and observations confirmed that structured parental involvement enabled more frequent reading, counting, and problem-solving activities beyond formal sessions.

Parents who engaged more consistently with digital platforms showed higher effectiveness in extending learning beyond synchronous classes. The combination of real-time teacher monitoring and home-based reinforcement provided children with balanced exposure to both guided and exploratory learning environments, aligning with constructivist principles of early education.

The Parent Co-Facilitation Index (PCI) was analyzed to categorize the level of parental involvement. Table 2 shows that 68% of parents demonstrated “high” engagement levels, while 23% were “moderate” and 9% “low.” This distribution revealed that most parents adapted well to their roles as co-facilitators once guided through orientation and digital mentoring.

Table 2. Distribution of Parental Engagement Levels (n = 120)

Engagement Level	Frequency	Percentage
High	82	68.3%
Moderate	28	23.3%
Low	10	8.4%

Parents categorized as “high engagement” reported stronger digital literacy, higher confidence, and closer collaboration with teachers through learning management systems (LMS). Their children exhibited faster literacy decoding and improved numerical reasoning compared to peers in the “low engagement” group.

Inferential tests were conducted to determine the statistical significance of pretest–posttest differences. Table 3 displays the results of paired-sample t-tests for both domains.

Table 3. Paired-Sample t-Test Results for Literacy and Numeracy

Domain	t-Value	df	p-Value	Significance
Literacy	9.34	119	0.000	Significant
Numeracy	8.57	119	0.000	Significant

Statistical results indicate that improvements in both literacy and numeracy were highly significant ($p < 0.001$). The strong effect size (Cohen’s $d = 0.82$ for literacy, 0.76 for numeracy) demonstrates the robustness of parental involvement within hybrid learning frameworks.

The inferential findings validate that structured co-facilitation enhances academic performance beyond chance. This confirms the efficacy of the designed hybrid model in merging classroom instruction with home-based parental engagement.

A positive correlation ($r = 0.71$) was observed between the Parent Co-Facilitation Index (PCI) and children’s posttest literacy scores, indicating that higher parental engagement strongly predicted learning outcomes. The relationship for numeracy was slightly weaker ($r = 0.64$) but still statistically significant ($p < 0.01$). These correlations suggest that literacy development benefits more directly from interactive parental activities such as shared reading, while numeracy improvement requires structured practice guided by both parents and teachers.

Further relational analysis revealed that parents’ digital competency level also influenced co-facilitation quality ($r = 0.59$). Families with better technological access and confidence in using educational apps were more effective in supporting children’s hybrid learning routines.

One illustrative case involved a five-year-old child from Yogyakarta whose parents actively participated in weekly literacy tasks through an integrated storytelling app. Over the 16 weeks, the child's letter-sound recognition improved from 54% accuracy to 92%, with noticeable gains in comprehension and verbal expression. Teachers reported that the parents' consistent participation in online reflection sessions contributed to the child's progress.

Another case from Central Java involved parents with limited digital literacy who initially struggled to support hybrid activities. After targeted mentoring, they successfully facilitated daily numeracy games using physical manipulatives aligned with digital modules. The child's arithmetic performance rose by 18 points, illustrating how guided parental scaffolding can overcome technological barriers.

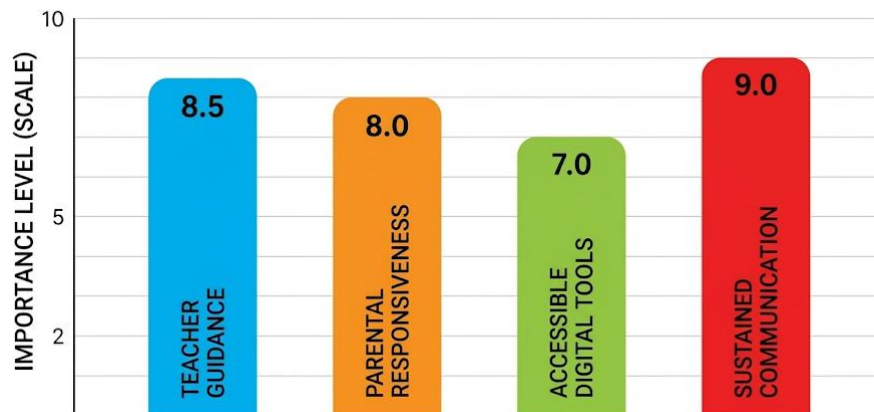


Figure 1. Qualitative Findings: Key Success Factors in Co-Facilitation

Qualitative findings underscore that effective co-facilitation depends on the interplay between teacher guidance, parental responsiveness, and accessible digital tools. Parents valued hybrid programs that offered clear structure, culturally relevant content, and practical support strategies. Teacher feedback emphasized that sustained communication with parents was crucial for maintaining child engagement and bridging gaps in home-school expectations.

Parents also reported that their participation enhanced their understanding of early childhood pedagogy and strengthened emotional bonds with their children. The collaborative process cultivated a sense of shared responsibility, transforming parents from passive observers into active educational partners.

The results affirm that parents function as critical agents of continuity in hybrid learning environments, effectively linking school-based instruction with home-based reinforcement. The hybrid model's success is grounded in a co-learning framework where digital media serve as facilitators rather than replacements for human interaction. The integration of teacher mentoring, parental engagement, and adaptive technology created a synergistic effect that improved both cognitive and affective learning outcomes.

The evidence highlights that the hybrid approach's strength lies in its relational design empowering parents to become co-facilitators who nurture curiosity, persistence, and self-regulation in children. This study thus contributes to the evolving discourse on family-centered hybrid education by demonstrating that early literacy and numeracy flourish most when schools and homes operate as interconnected learning ecosystems.

The findings demonstrate that parental co-facilitation plays a significant role in improving early childhood literacy and numeracy outcomes within hybrid learning environments. Quantitative analysis showed statistically significant gains in both domains, with literacy scores increasing by 27.9% and numeracy scores by 24.1%. Qualitative insights revealed that children whose parents engaged consistently in digital and home-based learning activities displayed greater motivation, focus, and task completion. The presence of structured

parental guidance helped sustain continuity between online and offline learning, ensuring children received consistent reinforcement (Merchán et al., 2025).

Data from the Parent Co-Facilitation Index (PCI) emphasized that parents who demonstrated higher engagement levels through active participation, regular communication with teachers, and integration of learning routines at home were directly associated with children's superior academic outcomes (Nabecker et al., 2025). These results confirm that hybrid education's success at the early childhood level relies not only on technological tools or teacher readiness but also on how well parents are integrated into the pedagogical process as co-educators.



Figure 2. The Power of Cohesive Child Development Systems

The study's findings align with Bronfenbrenner's ecological systems theory, which posits that child development is optimized when family and school systems interact cohesively. Prior research by Sheridan et al. (2019) also found that strong parent-teacher collaboration enhances early literacy acquisition and problem-solving skills. The current study reinforces this notion while extending it to hybrid contexts, showing that digital media can strengthen not weaken parental participation when used intentionally.

A contrast emerges when compared to studies conducted in Western contexts, where digital learning often widens the gap between digitally literate and less literate parents (Goodall, 2021). In contrast, this research shows that structured training and teacher mentorship can mitigate such inequalities, allowing even parents with minimal technological experience to become effective co-facilitators. This divergence highlights the importance of contextual adaptation in hybrid learning design, especially within collectivist cultures such as Indonesia.

The findings signify a paradigm shift in early childhood education one that redefines parents as essential pedagogical partners rather than peripheral supporters. The emergence of parents as co-facilitators reflects a new understanding of learning as a distributed process across multiple environments, where both digital and familial spaces function as complementary learning ecosystems. The hybrid model's success, therefore, lies in its ability to harness the family's educational potential while maintaining professional teacher guidance.

The results also indicate that hybrid learning can become a tool for democratizing early education. Families from various socio-economic backgrounds were able to contribute meaningfully to their children's learning once given access, structure, and mentorship. This suggests that hybrid systems, when properly scaffolded, can reduce not exacerbate educational disparities by extending the learning process into the home.

The implications of these findings are both pedagogical and policy-oriented. For educators, the research underscores the need to integrate parental training and digital mentoring into hybrid program design. Schools must view parents as co-facilitators and provide them with accessible learning materials, clear instructional guidance, and feedback mechanisms. This approach transforms hybrid learning from a teacher-centered to a community-based model of education.

For policymakers, the study emphasizes the necessity of developing national frameworks that support family engagement in early hybrid education. Institutional policies could promote

parental inclusion through incentives, family learning workshops, and the creation of digital literacy hubs for parents. By embedding co-facilitation as a core component of early education, hybrid learning programs can achieve higher sustainability and cultural relevance in Indonesia's diverse educational landscape.

The effectiveness of parental co-facilitation can be attributed to three key mechanisms. First, the cognitive scaffolding provided by parents during hybrid activities allowed children to connect new digital information with real-world experiences, enhancing comprehension and retention. Second, emotional reinforcement from parents helped maintain motivation, particularly during asynchronous learning segments. Third, the hybrid program's structured communication channels enabled constant feedback between teachers and families, aligning learning goals across environments.

The socio-cultural context of Indonesia also played a critical role in shaping these outcomes. Strong familial bonds and communal values facilitated high parental commitment to their children's learning. Parents viewed participation not as an additional burden but as an extension of familial responsibility. The integration of local cultural practices, such as collective storytelling and counting games, further strengthened the hybrid model's effectiveness by making learning culturally resonant and emotionally engaging.

The findings point toward the need for developing comprehensive parent-education frameworks embedded within hybrid learning systems. Future programs should formalize the role of parents as co-facilitators through structured training modules, interactive digital resources, and real-time support networks. Schools could establish "parental learning communities" to exchange best practices and promote shared accountability for child development outcomes.

Longitudinal research is recommended to examine the long-term cognitive and socio-emotional benefits of parental co-facilitation. Further exploration should also address digital equity by ensuring that all families regardless of socio-economic status have access to the necessary infrastructure and skills. The next generation of hybrid learning design must therefore evolve into a family-centered ecosystem where education, technology, and culture converge to support holistic early childhood development.

CONCLUSION

The study identified that the role of parents as co-facilitators in hybrid early childhood education programs generates a unique and measurable impact on children's literacy and numeracy growth. The most distinctive finding lies in the structured nature of parental involvement, where parents move beyond traditional support roles to become active pedagogical partners. The co-facilitation model enabled smoother integration between home-based and school-based learning, enhancing continuity in instruction and cognitive reinforcement. Data analysis revealed a direct correlation between parents' engagement level and children's learning outcomes, signifying that literacy and numeracy proficiency flourished when home interactions mirrored school methodologies. This finding differentiates the research from prior studies by positioning parents not merely as caregivers but as integral collaborators in a multi-modal educational ecosystem.

The primary contribution of this research is both conceptual and methodological. Conceptually, it advances the theory of hybrid pedagogy by embedding family co-learning as a core construct in early education. This perspective expands the conventional school-family partnership model into a triadic framework involving teachers, parents, and digital learning tools. Methodologically, the study offers a replicable model for assessing co-facilitation through the Parent Co-Facilitation Index (PCI), which quantitatively measures cognitive, emotional, and technological engagement dimensions. The dual approach integrating standardized performance metrics with qualitative reflections provides a holistic understanding

of hybrid learning's relational dynamics, positioning the study as a methodological innovation for early childhood hybrid education research.

The research faced limitations related to sample diversity and technological accessibility. The study was geographically limited to urban and semi-rural Indonesian contexts, which may not fully represent parental dynamics in remote or low-connectivity areas. Variability in parents' digital literacy also influenced the depth of engagement, potentially affecting learning outcomes. Future research should expand the scope to include longitudinal data that tracks long-term effects of parental co-facilitation on children's academic and socio-emotional development. Further exploration is also recommended to refine digital training frameworks for parents and to evaluate adaptive technologies that support equitable participation. Investigating cross-cultural applications of co-facilitation models could strengthen the universality and scalability of hybrid early learning innovations.

DECLARATION OF AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

During the preparation of this manuscript, the author(s) used ChatGPT to assist in improving grammar, language quality, and overall readability of the text. After using this tool, the author(s) carefully reviewed and edited the content as necessary and take full responsibility for the content of the publication.

AUTHOR CONTRIBUTIONS

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

- Arnab, S., Masters, A., Purnomo, R. A., Mahon, D., & Minoi, J.-L. (2025). Playful and frugal learning design: A value-based approach to inclusive and sustainable STEM education. *Social Sciences & Humanities Open*, 12, 101923. <https://doi.org/10.1016/j.ssaho.2025.101923>
- Ashton, L. M., Grounds, J. A., Barnes, A. T., Pollock, E. R., Young, M. D., Kennedy, S.-L., Rayward, A. T., Lee, D. R., & Morgan, P. J. (2024). Replicability, adaptability and long-term impact of the 'Healthy Youngsters, Healthy Dads' program in Newcastle, Australia. *Health Promotion International*, 39(4), daae095. <https://doi.org/10.1093/heapro/daae095>
- Beckett, A. E., McLean, N., Miller, A., Heaton, R., & Borisova, D. (2026). Nothing About Us Without Us in the First 1000 Days: Developing Inclusive Early Years Support With Disabled Families. *Sociology of Health & Illness*, 48(1), e70118. <https://doi.org/10.1111/1467-9566.70118>

- Ben Zagmi-Averbuch, S., Rozen, D., Aharon-Felsen, B., Siman Tov, R., Lowengrub, J., Tal-Saban, M., & Gilboa, Y. (2025). Occupation-Based Tele-Intervention for Children with Neurodevelopmental Disorders: A Pilot Study. *Children*, 12(11), 1521. <https://doi.org/10.3390/children12111521>
- Borrás-Gené, O., Hijón-Neira, R., Paredes-Barragán, P., & Serrano-Luján, L. (2024). A Hybrid Escape Room to Foster Motivation and Programming Education for Pre-Service Teachers. *International Journal of Game-Based Learning*, 14(1). <https://doi.org/10.4018/IJGBL.343525>
- Carter, S., Calcar, A. L., Housen, T., Joshy, G., & Lokuge, K. (2025). The development of a caregiver intervention to address child mental health in settings of complex humanitarian emergency: A multi-phase, multi-method approach. *Conflict and Health*, 19(1), 9. <https://doi.org/10.1186/s13031-025-00648-2>
- Chen, W., & Xiao, S. (2025). Childhood trauma and adolescent anxiety: Uncovering emotion regulation pathways through integrated machine learning and traditional statistics. *Psychiatry Research*, 351, 116667. <https://doi.org/10.1016/j.psychres.2025.116667>
- Chen, Y., Zhang, J., Zhang, L., Yu, H., Li, Y., Li, Q., Li, X., & Zhou, Y. (2025). Seedlings in Barren Growth Soil: A grounded theory study on the impact of unmet childhood needs. *Children and Youth Services Review*, 179, 108641. <https://doi.org/10.1016/j.chilyouth.2025.108641>
- Colbourne, R., Ejaz, L., Grinevich, V., Husain, S., & O'Farrell, D. (2024). Hybrid entrepreneurship in just transitions: Dealing with dilemmas facing 'the other.' *Environmental Innovation and Societal Transitions*, 53, 100924. <https://doi.org/10.1016/j.eist.2024.100924>
- Curby, T. W., Zinsser, K. M., Main, C., & Skourletos, J. (2024). Changes in observed and self-reported emotion-focused teaching: Coaching in the context of an early childhood alternative licensure program. *Social and Emotional Learning: Research, Practice, and Policy*, 4, 100059. <https://doi.org/10.1016/j.sel.2024.100059>
- Custodio, Z., Raguindin, P. Z., Bajado, Ma. C. L., Corpuz, P. C., Matugas, R., Rivera, R. M., & Villanueva, D. (2025). Navigating Technological and Learning Engagement Challenges: A Study of Emergency Remote Learning for Students with Autism Spectrum Disorder: [Afrontando los Retos Tecnológicos y de Participación en el Aprendizaje: Un Estudio sobre la Enseñanza Remota de Emergencia para Estudiantado con Trastorno del Espectro Autista]. *The International Journal of Diversity in Education*, 26(1), 105–132. <https://doi.org/10.18848/2327-0020/CGP/v26i01/105-132>
- Fumero, K., Surrain, S., Vaughn, K., & Zucker, T. A. (2026). From Barriers to Bridges: Promoting Multilingual Language Development Through Parent-Teacher Collaborations in Early Childhood. *The Reading Teacher*, 79(5), e70040. <https://doi.org/10.1002/trtr.70040>
- Geiger, I., Kostenzer, J., Matthäus, V., Bösl, S., Mader, S., Krause, V., Hummler, H., Zimmermann, L. J. I., & ESCNH Chair Committee. (2025). Perspectives on Implementing European Newborn Health Standards: Insights From Parent Representatives and Healthcare Professionals. *Acta Paediatrica*, 114(9), 2382–2390. <https://doi.org/10.1111/apa.70125>
- Goerigk, S., Elsaesser, M., Reinhard, M. A., Kriston, L., Härter, M., Hautzinger, M., Klein, J. P., McCullough, J. P., Schramm, E., & Padberg, F. (2024). Childhood Trauma

- Questionnaire-based child maltreatment profiles to predict efficacy of the Cognitive Behavioral Analysis System of Psychotherapy versus non-specific psychotherapy in adults with early-onset chronic depression: Cluster analysis of data from a randomised controlled trial. *The Lancet Psychiatry*, 11(9), 709–719. [https://doi.org/10.1016/S2215-0366\(24\)00209-8](https://doi.org/10.1016/S2215-0366(24)00209-8)
- Gray-Burrows, K. A., El-Yousfi, S., Hudson, K., Watt, S., Lloyd, E., El Shuwihdi, H., Broomhead, T., Day, P. F., & Marshman, Z. (2025). Supervised Toothbrushing Programmes: Understanding Barriers and Facilitators to Implementation. *Community Dentistry and Oral Epidemiology*, 53(3), 256–264. <https://doi.org/10.1111/cdoe.13026>
- Hillis, S., Tucker, S., Baldonado, N., Taradaika, E., Bryn, L., Kharchenko, S., Machabelii, T., Taylor, R., Green, P., Goldman, P., Awah, I., Baldonado, J., Gomez, P., Flaxman, S., Ratmann, O., Lachman, J. M., Villaveces, A., Sherr, L., & Cluver, L. (2024). The effectiveness of Hope Groups, a mental health, parenting support, and violence prevention program for families affected by the war in Ukraine: Findings from a pre-post study. *Journal of Migration and Health*, 10, 100251. <https://doi.org/10.1016/j.jmh.2024.100251>
- Hughes, J., & Davis, K. (2025). Strategic leadership for sustainable innovation in primary education: A case study of forest school integration. *International Journal of Educational Management*, 39(7), 1756–1773. <https://doi.org/10.1108/IJEM-05-2025-0369>
- Johnson, A., Murray, E., Schenke, K. C., & Stephens-Lewis, D. (2025). Efficacy and acceptability of autism training for staff employed in mainstream education: A systematic review and thematic synthesis. *Research in Autism*, 128, 202704. <https://doi.org/10.1016/j.reia.2025.202704>
- Kostiainen, E., & Pöysä-Tarhonen, J. (2025). Meaningful learning over the course of teacher education: Students’ reflections. *Teaching and Teacher Education*, 168, 105241. <https://doi.org/10.1016/j.tate.2025.105241>
- Lai, S. T., Styles, S. E., Boucsein, A., Zhou, Y., Michaels, V., Jefferies, C., Wilshire, E., De Bock, M. I., & Wheeler, B. J. (2025). Parental perspectives following the implementation of advanced hybrid closed-loop therapy in children and adolescents with type 1 diabetes and elevated glycaemia. *Diabetic Medicine*, 42(3), e15448. <https://doi.org/10.1111/dme.15448>
- Langfelder-Schwind, E., Basile, M., Moyal-Smith, R., Polo, J., McGinniss, M. A., Petersen, J., Talavera, J., Schwind, H., Parad, R. B., & Raraigh, K. S. (2025). Increasing Access to Genetic Counselors With Disease-Specific Expertise: Development of a Centralized Cystic Fibrosis Genetic Counseling Telehealth Model. *Pediatric Pulmonology*, 60(12), e71416. <https://doi.org/10.1002/ppul.71416>
- Lepage, S., Whelan, B., Flight, L., Totton, N., & Devane, D. (2025). Lessons learned from building the kid’s trial with an online children’s and parents’ research advisory group: A descriptive, qualitative study. *Research Involvement and Engagement*, 11(1), 72. <https://doi.org/10.1186/s40900-025-00749-5>
- Liang, S., & Zou, N. (2025). From touch to transformation: Value and applications of TUI technology in early childhood development. *Computers & Education*, 239, 105437. <https://doi.org/10.1016/j.compedu.2025.105437>

- Liu, C., Harrist, A. W., Cookston, J. T., & Carrillo, S. (2025). How Parents Play: Play Style as a Function of Gender of Parent, Gender of Child, and Play Context. *Journal of Family Issues*, 46(3), 435–463. <https://doi.org/10.1177/0192513X241263782>
- Macías-Gómez-Estern, B., & Lalueza, J. L. (2024). Navigating I-positionings in higher education Service Learning as hybrid scenarios: A case study. *Learning, Culture and Social Interaction*, 45, 100805. <https://doi.org/10.1016/j.lcsi.2024.100805>
- Martínez-Álvarez, P., Cuevas, I., Sáez, N., & Son, M. (2024). Bilingual pre-service teachers' evolving conceptualizations about curriculum as a hybrid space through multimodal learning experiences. *Teaching and Teacher Education*, 152, 104801. <https://doi.org/10.1016/j.tate.2024.104801>
- McKinney, W. S., Tadevich, L. J., Schmitt, L. M., Horn, P. S., Ruberg, J. R., White, S. W., Reisinger, D. L., Burkett, K. W., Sarawgi, S., Kang, S., & Shaffer, R. C. (2025). Study protocol for a randomized controlled trial of Regulating Together (RT), a group therapy for emotion dysregulation in school-age autistic youth and their caregivers. *BMC Psychology*, 13(1), 436. <https://doi.org/10.1186/s40359-025-02737-6>
- Merchán, M. J., Merchán, P., Pérez, E., Salamanca, S., & Corrales-Serrano, M. (2025). Virtual reality as a didactic tool for teaching history to early childhood teachers in training. *Interactive Technology and Smart Education*, 22(3), 389–409. <https://doi.org/10.1108/ITSE-12-2024-0309>
- Nabecker, S., de Raad, T., Abelairas-Gomez, C., Breckwoldt, J., Chakroun-Walha, O., Farquharson, B., Hunyadi-Antičević, S., Lott, C., Schnaubelt, S., Yeung, J., Lockey, A., Greif, R., Conaghan, P., & Mackie, K. (2025). European Resuscitation Council Guidelines 2025 Education for Resuscitation. *European Resuscitation Council Guidelines 2025*, 215, 110739. <https://doi.org/10.1016/j.resuscitation.2025.110739>
- Puca, C., Wood-Kenney, P., Nelson, N., Hansen, J., Mathews, J., Van Der Helder, E., Kickett, J., Robinson, M., Attwell, K., Phillips, A., Swift, V., Blyth, C. C., & Carlson, S. J. (2025). “Our kids are our future”: Barriers and facilitators to vaccine uptake and timeliness among Aboriginal children younger than five years in Boorloo (Perth), Western Australia. *PLOS One*, 20(5), e0317946. <https://doi.org/10.1371/journal.pone.0317946>
- Rinehart, D. J., Gilbert, A., O’Leary, S., Katz, S. E., & Frost, H. M. (2025). Reducing antibiotic duration for acute otitis media: Clinician, administrator, and parental insights to inform implementation of system-level interventions. *Antimicrobial Stewardship & Healthcare Epidemiology*, 5(1), e3. <https://doi.org/10.1017/ash.2024.469>
- Sim, A., Puffer, E., Eagling-Peche, S., Lwin, K. Z., Melendez-Torres, G. J., Vyas, S., Jirapramukpitak, T., Lachman, J., Soe, S. T., Moo, T., Soan, M., Chalk, J., & Van Vijfeijken, H. (2025). Parenting on the border: Study protocol for a randomized controlled trial of a trauma-informed, edutainment-enhanced intervention to improve parenting and mental health among migrant and displaced caregivers in Thailand. *SSM - Mental Health*, 8, 100516. <https://doi.org/10.1016/j.ssmmh.2025.100516>
- Tam, M. T., Riminchan, A., Wu, J. M., Wiedman, C., Ho, M., Li, L., Blydt-Hansen, T., & Robillard, J. M. (2025). Perspectives on Accessing Mental Health Supports for Youth Living With Post-Traumatic Stress Symptoms After a Solid Organ Transplant. *Pediatric Transplantation*, 29(7), e70170. <https://doi.org/10.1111/petr.70170>

Copyright Holder :

© Amir Raza et al. (2026).

First Publication Right :

© Journal Neosantara Hybrid Learning

This article is under:

