

Enhancing Early English Exposure for Rural Left-Behind Children: Integrating Home-Kindergarten Collaboration and Learning Qualities Development

Abstract

This study examines the challenges faced by rural left-behind children in gaining early English exposure and explores the potential of home-kindergarten collaboration to address these issues. Conducted in three villages in Guangxi Province, a rural area with limited educational resources and a high proportion of left-behind children due to parental migration, the study involved in-depth interviews with 15 left-behind children, 15 parents or guardians, and 10 kindergarten teachers. Despite recent improvements in rural education under the national Rural Revitalization Strategy, barriers such as insufficient caregiver support, inadequate resources, and weak family-kindergarten communication remain significant. While kindergartens introduce English through engaging activities such as songs and games, the lack of family involvement limits the long-term impact of these efforts. The study emphasizes the importance of fostering learning qualities such as curiosity, persistence, and engagement as essential foundations for improving early English learning. To address these challenges, it proposes strategies including caregiver training, simplified take-home activities, and structured teacher-caregiver communication to strengthen collaboration. By addressing gaps in rural early childhood education and the unique needs of left-behind children, this study provides actionable insights for enhancing early English exposure, cultivating positive learning qualities, and promoting educational equity in underprivileged contexts.

Keywords: Early English exposure; Rural education; Left-behind children; Home-kindergarten collaboration; Learning qualities; Educational equity

Introduction

The education of rural left-behind children has become a critical issue in the context of global educational equity, particularly in developing countries like China. Left-behind children, whose parents migrate to urban areas for work, face unique challenges in their academic and developmental progress due to a lack of parental involvement, limited educational resources, and inadequate learning environments. Among these challenges, early English exposure stands out as a significant barrier, as it requires consistent engagement, access to appropriate resources, and age-appropriate guidance—factors often absent in rural settings. Early English exposure has been recognized as a foundational step in developing language and literacy skills, laying the groundwork for academic success and future opportunities in a globalized world (Gao et al., 2021). However, rural left-behind children in China face significant disadvantages in this area, lagging behind their urban peers in terms of access to stimulating learning environments and early language development opportunities. This disparity is rooted in systemic inequalities, including socio-economic disadvantages, insufficient kindergarten resources, and a lack of family support, which collectively hinder their ability to engage with early English learning (Yi et al., 2019; Gao et al., 2021). Addressing these challenges requires understanding the factors influencing early English exposure and leveraging home-kindergarten collaboration to bridge the gap.

Fostering learning qualities like curiosity, persistence, and engagement is crucial for helping children overcome barriers and achieve lasting success in language learning and development.

Research highlights that rural left-behind children face multiple barriers to early English exposure. These include limited interest in English, insufficient access to age-appropriate resources, and unsupportive home and kindergarten environments. Many of these children are cared for by grandparents or relatives with low educational attainment, who are often unable to provide adequate academic support or create a stimulating language-rich environment (Li et al., 2021; Ma et al., 2021). The absence of parents, compounded by the socio-economic disadvantages of rural areas, creates a significant gap in children's early language development compared to their urban peers. Furthermore, rural kindergartens often lack qualified teachers specializing in early English education and appropriate teaching materials, and large class sizes limit opportunities for personalized instruction (Wang et al., 2020). Teaching methods in rural kindergartens frequently rely on rote learning rather than interactive and playful approaches, which are essential for fostering interest, engagement, and the development of positive learning qualities in early language acquisition (Chen et al., 2018). These systemic issues leave kindergartens unable to fully address the needs of left-behind children, further exacerbating the disparity in early English development between rural and urban children.

The role of the home environment in shaping children's early language development has been widely documented. Studies have shown that early home reading activities, caregiver engagement, and family investment are critical for fostering language and literacy skills (Chen et al., 2018; Gao et al., 2021). However, in rural areas, the home environment is often characterized by limited resources and low caregiver literacy levels, which hinder children's early English exposure (Guo et al., 2021). For left-behind children, the situation is even more challenging, as their caregivers—often elderly grandparents—may lack the knowledge or capacity to support their education. This lack of involvement not only affects children's language development but also limits their motivation, interest, and the cultivation of essential learning qualities, such as persistence and self-regulation, which are foundational for academic success (Li et al., 2021). Kindergartens, on the other hand, face their own limitations, including resource constraints, insufficient teacher training in early English education, and a lack of mechanisms for engaging families in the educational process (Wang et al., 2020). These challenges highlight the need for a collaborative approach that bridges the gap between home and kindergarten to support rural left-behind children more effectively.

Home-kindergarten collaboration has been identified as a key factor in improving young children's language development, particularly in early literacy and second-language acquisition. Effective collaboration between families and kindergartens can create a supportive learning environment that fosters children's early language skills, positive learning qualities, and overall development (Blandin, 2017; Iyengar, 2021). However, in rural areas, the potential for home-kindergarten collaboration remains largely untapped. Communication between families and kindergartens is often infrequent or superficial, with limited mechanisms for meaningful cooperation. Caregivers of left-behind children, many of whom are elderly or lack formal education, often feel disconnected from the kindergarten system and are unable to actively participate in their children's early learning (Guo et al., 2021). Kindergartens, meanwhile, struggle to engage families in meaningful ways due to resource constraints and the lack of targeted strategies for fostering collaboration (Zhang & Perkins, 2023). This disconnect

between home and kindergarten further limits the support available to left-behind children in their journey of early English exposure.

Despite these challenges, there is significant potential for home-kindergarten collaboration to improve early English learning outcomes for rural left-behind children. Research suggests that interventions such as caregiver training programs, take-home language activities, and kindergarten-led family engagement strategies can have a positive impact on children's early language development, motivation, and learning qualities (Emmers et al., 2021; Zheng et al., 2022). By addressing the barriers to collaboration—such as low caregiver literacy, inadequate communication channels, and cultural norms that discourage family involvement—kindergartens and families can work together to create a more supportive learning environment. However, existing interventions often fail to account for the unique socio-economic and cultural contexts of rural areas, where traditional models of home-kindergarten collaboration may not be feasible. This study seeks to explore these possibilities by identifying the current challenges, roles, and limitations of families and kindergartens, and developing practical strategies for fostering effective home-kindergarten collaboration in rural settings. Additionally, it emphasizes the importance of cultivating children's learning qualities as a crucial component of improving early English exposure and supporting their long-term educational success.

Research Questions

This study seeks to address the challenges faced by rural left-behind children in early English exposure and the potential of home-kindergarten collaboration by exploring the following research questions:

What are the primary difficulties faced by rural left-behind children in developing learning qualities?

What are the roles of families in supporting rural left-behind children's early English learning and fostering positive learning qualities?

How can home-kindergarten collaboration effectively enhance rural left-behind children's early English learning and learning qualities?

By aligning these questions with the study's objectives, this research aims to fill gaps in existing literature, offering actionable insights to improve early English learning outcomes and foster essential learning qualities. It contributes to the growing body of rural education research by emphasizing home-kindergarten collaboration as a strategy to address educational inequalities and support the holistic development of left-behind children.

Literature Review

The role of home and school environments in shaping children's early language development has been widely studied, with growing emphasis on home-school collaboration as a means to improve educational equity. Recent research highlights the importance of parental involvement, early learning environments, and school-based interventions in fostering language, cognitive development, and learning qualities, such as curiosity, persistence, and engagement. These learning qualities are critical for children's long-term academic success and are particularly important in early language acquisition. However, significant gaps remain in understanding how these factors apply to rural left-behind children

and the mechanisms of home-kindergarten collaboration in underprivileged contexts, particularly in the area of early English exposure. Table 1 summarizes key studies, their findings, and the research gaps they leave unaddressed.

Blandin (2017) emphasized the role of home-school collaboration in narrowing academic achievement gaps but focused on Christian education in developed countries, leaving a gap in understanding its application to rural, underprivileged settings and early childhood education. Similarly, Crampton and Hall (2017) highlighted the importance of early home environments in shaping language and literacy skills but did not explore how these early advantages or disadvantages translate into second-language learning, particularly in rural or resource-constrained contexts. Chen et al. (2018) demonstrated the effectiveness of school-based interventions in improving vocabulary development but did not address the role of families in sustaining these gains, underscoring the need to examine the interplay between home and school environments in early English exposure and the cultivation of learning qualities.

Studies such as Yi et al. (2019) and Wang et al. (2020) emphasized the importance of both home and school environments in fostering literacy but did not explore how these environments could be integrated to maximize their impact in early childhood education. Similarly, Gao et al. (2021) and Guo et al. (2021) highlighted the critical role of supportive home environments but acknowledged that many rural families lack the resources or knowledge to create such conditions, pointing to the need for targeted interventions to bridge the gap between home and kindergarten. Emmers et al. (2021) further noted barriers to parental engagement, such as low literacy levels and socio-economic constraints, which limit the scalability of caregiver training programs in rural areas.

Other studies, such as Iyengar (2021), explored the potential of digital tools to enhance home-school collaboration but noted that rural areas often lack the infrastructure to implement such solutions. Li et al. (2021) and Ma et al. (2021) identified socio-economic constraints and limited parental literacy as significant barriers to creating supportive home learning environments but did not explore how kindergartens could compensate for these limitations. Zheng et al. (2022) and Zhang and Perkins (2023) emphasized the importance of structured reading activities and community-based approaches in early childhood education but did not address the specific challenges faced by left-behind children or the role of home-kindergarten collaboration in fostering early English exposure and learning qualities.

Table 1: Summary of Literature Review

Author(s) and Year	Research Methods	Research Results	Research Gaps
Blandin (2017)	Theoretical analysis	Home-school collaboration narrows the academic achievement gap.	Focused on native language education in developed countries; lacks application to rural, underprivileged contexts and early childhood.
Crampton & Hall (2017)	Quantitative study	Early home environments shape language and literacy	Did not explore second-language learning or rural contexts.

Author(s) and Year	Research Methods	Research Results	Research Gaps
		skills.	
Chen et al. (2018)	Randomized controlled trial	School-based interventions improve vocabulary development.	Did not address the role of families in sustaining gains or fostering learning qualities.
Yi et al. (2019)	Quantitative study	Access to resources improves early literacy habits.	Gains limited by lack of parental involvement in rural areas.
Wang et al. (2020)	Quantitative study	Both home and school environments are critical for literacy development.	Did not explore integration of home and school environments in early childhood education.
Emmers et al. (2021)	Systematic review and meta-analysis	Caregiver training improves cognitive and language development.	Barriers to parental engagement limit scalability, particularly in rural areas.
Gao et al. (2021)	Quantitative study	Supportive home reading environments foster literacy skills.	Many rural families lack resources or knowledge to create such environments.
Guo et al. (2021)	Quantitative study	Home and school environments influence childhood development.	Did not explore integration of home and kindergarten environments.
Iyengar (2021)	Theoretical analysis	Digital tools can enhance home-school collaboration.	Rural areas lack infrastructure for digital solutions.
Li et al. (2021)	Mixed-methods analysis	Socio-economic constraints hinder caregiver investment in early language learning.	Did not explore how kindergartens could compensate for these limitations.
Ma et al. (2021)	Quantitative study	Rich home language environments improve early language skills.	Many rural families lack resources to provide such environments.
Zheng et al. (2022)	Quantitative study	Picture book reading improves language skills in preschoolers.	Focused on early childhood; lacks application to second-language learning or home-kindergarten

Author(s) and Year	Research Methods	Research Results	Research Gaps
			collaboration.
Zhang & Perkins (2023)	Theoretical analysis	Community-based approaches empower families in education.	Did not address challenges specific to left-behind children or early English exposure.

As summarized in Table 1, while existing research underscores the importance of home and school environments in shaping early language development, it leaves significant gaps in understanding how these environments can be integrated to support rural left-behind children in early English exposure. Furthermore, the role of learning qualities, such as curiosity, persistence, and engagement, in overcoming these challenges has been largely overlooked. This study addresses these gaps by focusing on the unique challenges faced by left-behind children in early English learning and exploring practical strategies for fostering home-kindergarten collaboration in rural, underprivileged contexts. By doing so, it contributes to advancing knowledge in this field and provides actionable insights for improving educational equity, cultivating positive learning qualities, and enhancing early language learning opportunities for left-behind children.

Research Methods

This study employed in-depth interviews to investigate the challenges faced by rural left-behind children in early English exposure and the potential of home-kindergarten collaboration to foster essential learning qualities such as curiosity, persistence, and engagement. In-depth interviews, effective for capturing participants' experiences and social contexts (Creswell, 2013; Kvale & Brinkmann, 2015), were conducted with 40 participants: 15 left-behind children (6 years old), 15 parents or guardians, and 10 rural kindergarten teachers. Participants were selected from three rural villages in Guangxi Province, anonymized as Villages A, B, and C for ethical reasons. These villages, representative of underdeveloped agricultural communities with high proportions of left-behind children (40-50%), were chosen for their relevance to rural education challenges and opportunities for home-kindergarten collaboration.

Villages A, B, and C are predominantly agricultural communities where most households depend on farming and small-scale labor as their primary sources of income. A notable social characteristic of these villages is the high prevalence of left-behind children, a result of parental migration to urban areas for work. These children are often left in the care of grandparents or other relatives, creating unique social and educational challenges. Village A has a population of approximately 3,000, while Villages B and C have populations of around 2,000 and 1,500, respectively. Each village is served by two local kindergartens, with an additional four located in nearby towns. These kindergartens aim to provide early exposure to English and help mitigate the educational disadvantages faced by rural children. However, they face significant challenges, including a shortage of trained teachers, limited teaching resources, and underdeveloped facilities. English education, in particular, is hindered by the lack of specialized teachers and essential resources, such as storybooks, audio-visual aids, and interactive learning tools.

To ensure diverse perspectives, children were selected with a gender balance (8 males, 7 females) and varying English performance levels (excellent: 4, average: 6, poor: 5). Parents or guardians represented diverse caregiving arrangements, including grandparents, relatives, and single parents, while teachers were chosen based on their experience teaching English or language-related activities, with varying teaching experience and qualifications. This diverse participant pool provided a comprehensive understanding of the challenges and opportunities in rural early education.

Semi-structured interviews were used to maintain flexibility while ensuring consistency across key topics. Interviews with children focused on their interest in English, learning environment, and development of learning qualities. Parent interviews explored their understanding of English learning, caregiving roles, support methods, and communication with kindergartens. Teacher interviews examined teaching methods, home-kindergarten communication, and strategies for fostering learning qualities. Interviews lasted 15-30 minutes for children and 30-60 minutes for adults, conducted one-on-one to ensure comfort and openness. All interviews were audio-recorded with consent and transcribed for analysis.

Despite recent educational reforms under the Rural Revitalization Strategy, Villages A, B, and C face persistent challenges, including limited teaching resources, a shortage of trained teachers, and minimal family involvement. Local kindergartens introduce English through songs, games, and storytelling, providing children with valuable early exposure to the language. However, the lack of caregiver support often limits the long-term impact of these efforts. By focusing on these villages, the study aimed to uncover barriers to early English exposure and identify strategies to enhance home-kindergarten collaboration.

Participant demographics, summarized in Table 2, highlight the diversity of perspectives. Most parents were grandparents (10 of 15) with low education levels (8 completed primary school or below). Teachers represented a range of class sizes, teaching experience, and qualifications. This diversity provided a robust foundation for analyzing the interplay between home and kindergarten environments and their influence on early English exposure and learning qualities.

By focusing on Villages A, B, and C, this study highlights the unique challenges faced by rural left-behind children in early English learning and offers actionable strategies to improve home-kindergarten collaboration. The findings aim to promote educational equity and foster holistic development in similar rural contexts.

Table 2: Participants' Demographic Information

Category	Subcategory	Left-Behind Children	Parents (or Guardians)	Teachers
Gender	Male	8	5	4
	Female	7	10	6

Category	Subcategory	Left-Behind Children	Parents (or Guardians)	Teachers
Age	6 years old	15	-	-
	Below 40 years old	-	3	2
	40-60 years old	-	9	5
	Above 60 years old	-	3	3
Guardian Type	Grandparent Guardianship	10	10	-
	Relative Guardianship	3	3	-
	Single Parent Guardianship	2	2	-
English Performance	Excellent (Top 30%)	4	-	-
	Average (Middle 40%)	6	-	-
	Poor (Bottom 30%)	5	-	-
Education Level	Primary School or Below	-	8	-
	Middle School	-	5	-
	High School or Above	-	2	-
	Associate Degree	-	-	4
	Bachelor's Degree	-	-	6
Teaching Experience	Less than 5 years	-	-	3
	5-10 years	-	-	4
	More than 10 years	-	-	3
Occupation	Farmer	-	10	-

Category	Subcategory	Left-Behind Children	Parents (or Guardians)	Teachers
	Temporary Worker	-	3	-
	Unemployed	-	2	-
Title	Junior Title	-	-	5
	Intermediate Title	-	-	4
	Senior Title	-	-	1
Residence	Village	12	-	-
	Township	3	-	-
School Type	Village Kindergarten	-	-	6
	Township Central Kindergarten	-	-	4
Communication Frequency	Frequent (Once a Month or More)	-	3	-
	Occasional (1-2 Times Per Semester)	-	7	-
	Rare (Almost Never)	-	5	-
Class Size	Less than 30 Students	-	-	3
	30-50 Students	-	-	5
	More than 50 Students	-	-	2

Data Analysis

The data collected through in-depth interviews were analyzed using qualitative methods to identify key themes and patterns related to the challenges faced by rural left-behind children in learning English and the potential of home-kindergarten collaboration to address these challenges. The analysis emphasized fostering learning qualities such as curiosity, persistence, and engagement. A three-step coding process was used: open coding to identify recurring ideas, axial coding to group related concepts, and selective

coding to refine these into core themes.

Four key themes emerged. First, learning needs and challenges included low engagement, difficulty maintaining interest, and a lack of stimulating home environments. Second, limitations of parental support were evident, particularly among grandparents with limited literacy and unfamiliarity with language learning strategies. Third, challenges for kindergarten teachers included difficulties engaging parents with low education levels or limited time, highlighting the need for structured collaboration mechanisms. Finally, the potential of integrated support mechanisms was identified as critical for improving learning outcomes and fostering essential learning qualities.

Narrative analysis revealed emotional dimensions of these challenges. Children expressed frustration and disengagement due to a lack of support, while parents and guardians reported feelings of guilt and helplessness. Teachers voiced frustrations over limited resources and ineffective communication with families. These narratives emphasized the need for interventions addressing both practical and emotional barriers.

Comparative analysis highlighted differences across guardianship types and kindergarten settings. Children under grandparent guardianship faced greater challenges due to caregivers' limited literacy, while kindergartens with better-trained teachers and resources fostered greater interest and learning qualities. Frequent, high-quality communication between families and kindergartens was crucial for overcoming barriers. This analysis underscores the need for tailored strategies, such as structured home-kindergarten collaboration, to improve English learning outcomes and foster educational equity for left-behind children in rural contexts.

Results

The results of this study, based on in-depth interviews with rural left-behind children (6 years old), their parents (or guardians), and rural kindergarten teachers, revealed several key findings related to the challenges of early English exposure, the roles and limitations of families and kindergartens, and the potential for home-kindergarten collaboration to improve learning outcomes. A critical focus of the findings was the role of learning qualities—such as curiosity, persistence, and engagement—in shaping children's early English learning experiences and the barriers preventing their development in rural, underprivileged contexts. Table 3 presents selected quotes from participants that illustrate these findings and provide deeper insights into the challenges and opportunities for improving early English learning in rural areas.

One of the most significant findings was the challenges left-behind children face in early English learning, including limited access to engaging resources, a lack of stimulating activities, and insufficient support at home. Many children expressed that while they enjoyed singing English songs or playing games in class, they lacked similar opportunities at home, which hindered their ability to retain what they had learned and cultivate positive learning qualities like curiosity and persistence. For example, one child shared that they enjoyed singing songs in English at school but did not have access to similar activities at home. Another child explained that their grandmother, who was their primary caregiver, did not know how to teach them English, leaving them to watch TV instead. These responses highlight the lack of engaging and age-appropriate English learning opportunities outside the

kindergarten environment and the absence of environments that nurture curiosity and active engagement. Without consistent stimulation and reinforcement, children's interest in English wanes, and their ability to develop persistence in language learning is significantly hindered. Some children also noted the lack of English-related materials at home, such as books or visual aids, which further limited their ability to practice and engage with the language outside of school.

Families, particularly grandparents who often act as primary caregivers, face significant limitations in supporting early English learning and fostering positive learning qualities. While parents and guardians acknowledged the importance of English, many felt unprepared to assist due to their own lack of knowledge, low literacy levels, or limited time. For instance, one grandparent explained that they understood the importance of English but did not know any English themselves and could only encourage the child to listen to the teacher. Similarly, a single father working in a nearby town shared that he wanted his child to learn English but did not have the time to teach them and instead allowed the child to watch cartoons or play with toys. Parents also reported minimal communication with kindergarten teachers, often citing embarrassment or a lack of understanding of how to support their child's early English learning. One parent admitted that they did not know how to talk to the teacher about English because they felt they lacked the knowledge to ask questions. Grandparents, in particular, expressed frustration over their inability to assist, with one grandparent sharing that they wanted to help but did not know where to start or how to pronounce English letters. Another grandparent noted that they tried to help with homework but could not understand the teacher's instructions, leading to frustration and missed opportunities to reinforce learning at home.

Kindergarten teachers also reported challenges in promoting early English learning among left-behind children, particularly in engaging families to support learning at home and fostering learning qualities in children. Teachers observed that while grandparents were attentive and caring, they often lacked the confidence or skills to assist with English learning, even in simple ways like practicing songs or games. One teacher explained that grandparents cared deeply about the children but did not know how to help with early English learning and needed guidance on simple activities they could do at home. Teachers also highlighted that left-behind children often lacked motivation or exposure to English outside of kindergarten, which made it harder to sustain their interest in the language or develop persistence in learning. For example, one teacher noted that children enjoyed English songs and games in class but forgot what they had learned at home due to a lack of reinforcement. Another teacher remarked that while they tried to make lessons fun and interactive, the absence of follow-up at home made it difficult for children to stay engaged. Teachers also emphasized the difficulty of cultivating learning qualities like engagement and persistence in children who lacked consistent reinforcement at home. While some teachers attempted to address these challenges by providing additional resources or simplifying lessons, they noted that these efforts were not always sufficient without parental involvement and a supportive home environment.

Despite these challenges, the study found significant potential for home-kindergarten collaboration to enhance early English learning outcomes and foster positive learning qualities in children. Both parents and teachers recognized the importance of collaboration but identified barriers to its implementation. Parents expressed a willingness to support their children but lacked the knowledge or strategies to do so effectively. For instance, one parent suggested that if teachers could provide simple activities or

games, they would be more confident in helping their children. Another parent added that even small tasks, such as teaching them how to say words or sing songs, would make a difference. Teachers echoed this sentiment, emphasizing the need for structured mechanisms to engage families. One teacher suggested organizing more parent-teacher meetings or workshops to show parents how to do simple things like singing English songs or playing word games with their children. Teachers also highlighted the positive impact of even small amounts of parental involvement, noting that when parents showed interest, such as encouraging their child to sing an English song at home, it boosted the child's confidence and motivation. One teacher shared an example of a parent who started reading simple English picture books with their child, which led to noticeable improvements in the child's curiosity and engagement in class. Teachers also suggested providing parents with easy-to-use resources, such as flashcards or audio recordings of songs, to bridge the gap between home and school learning and make it easier for families to participate.

These findings suggest that home-kindergarten collaboration can play a pivotal role in fostering learning qualities such as curiosity, persistence, and engagement by providing children with consistent and meaningful exposure to English in both home and school environments. Structured activities like take-home English games, shared reading practices, or simple instructions for caregivers could help bridge the gap between home and school. Teachers emphasized that even small, guided efforts by families could significantly improve children's motivation and engagement with English learning. By fostering stronger communication and providing parents with simple, actionable strategies, kindergartens can help families create a more stimulating and supportive environment that nurtures children's learning qualities alongside their language skills.

Table 3: Selected Interview Quotes

Theme	Participant Group	Selected Quotes
Challenges in Early English Exposure	Left-Behind Children	"I like singing songs in English, but we don't have many songs or games at home."
		"I want to learn more English, but my grandma doesn't know how to teach me."
		"In school, we have books and pictures, but at home, there's nothing to look at."
		"I want to practice more, but I don't have anyone to help me."
Roles of Families	Parents (or Guardians)	"I know English is important, but I don't know any English myself."
		"I just let him watch cartoons because I don't know how to help him."

Theme	Participant Group	Selected Quotes
		"It's hard to help when I didn't learn English myself."
		"I try to help him with his homework, but I don't understand what the teacher wants us to do."
Challenges for Teachers	Kindergarten Teachers	"Grandparents care about the children, but they don't know how to help."
		"These children enjoy English songs and games in class, but they forget at home."
		"We try to make lessons fun, but without reinforcement at home, it's hard for the children to stay engaged."
		"Sometimes we send home simple worksheets or songs, but the parents don't always know how to use them."
Potential for Collaboration	Parents (or Guardians)	"If the teacher could tell us what to do, like giving us simple activities or games, we could try to help more."
		"Even if it's something small, like teaching us how to say words or sing songs, it would help."
	Kindergarten Teachers	"We need more parent-teacher meetings or workshops to show parents how to do simple things like singing English songs or playing word games with their children."
		"When parents show interest, even just by encouraging their child, it makes a big difference."
		"One parent started reading simple English picture books with their child, and I noticed the child became more curious and engaged in class."
		"If we could send home simple flashcards or audio recordings of songs, parents could use them to help their children practice."

Discussion

The findings of this study provide valuable insights into the challenges faced by rural left-behind

children in early English exposure and emphasize the potential for home-kindergarten collaboration to address these issues. By focusing on the perspectives of 6-year-old children, their parents (or guardians), and kindergarten teachers, the study highlights the unique difficulties in rural, underprivileged contexts and offers practical strategies to strengthen collaboration, fostering essential learning qualities such as curiosity, persistence, and engagement.

This study extends previous research by addressing the specific challenges of fostering early English exposure and learning qualities among left-behind children in resource-constrained settings. Earlier studies, such as Blandin (2017) and Wang et al. (2020), primarily focused on developed countries or later stages of literacy development, leaving a critical gap in understanding how home-kindergarten collaboration can be adapted to rural contexts. The findings reveal that left-behind children often lack consistent English exposure and opportunities to develop learning qualities due to the absence of stimulating and supportive home environments. For example, left-behind children expressed frustration with the lack of resources at home, as one child noted, “In school, we have books and pictures, but at home, there’s nothing to look at.” Similarly, another child remarked, “I want to practice more, but I don’t have anyone to help me.” These quotes illustrate the structural challenges families face, such as the absence of books, games, or guidance, which limit opportunities for children to engage with English learning outside the classroom.

A key contribution of this study is its focus on integrating efforts between kindergartens and families to foster both learning qualities and language skills. The findings show that a blend of efforts from both entities is essential to address the gaps in rural children’s English exposure. Teachers emphasized the importance of small, actionable strategies, such as encouraging parents to sing English songs, play word games, or engage in shared reading. For instance, one teacher explained, “If we could send home simple flashcards or audio recordings of songs, parents could use them to help their children practice.” Another teacher highlighted the benefits of parental engagement: “One parent started reading simple English picture books with their child, and I noticed the child became more curious and engaged in class.” These insights align with the work of Gao et al. (2021) and Li et al. (2021), who identified resource and knowledge gaps in rural families but did not explore practical solutions for kindergartens to actively address these challenges. By providing families with simple tools such as flashcards, nursery rhymes, or picture books, kindergartens can help create a more stimulating home environment that nurtures children’s curiosity and persistence while reinforcing language skills.

The study also highlights the emotional dimensions of learning, particularly the role of motivation and confidence in sustaining children’s engagement with English. Teachers noted that children who received encouragement and support at home were more persistent and enthusiastic in class. For example, one teacher remarked, “When parents show interest, even just by encouraging their child, it makes a big difference.” However, barriers such as low parental literacy, time constraints, and weak communication channels remain significant challenges. Parents also expressed feelings of inadequacy, as one parent admitted, “I know English is important, but I don’t know any English myself,” while another shared, “It’s hard to help when I didn’t learn English myself.” These quotes reveal the emotional toll on parents and guardians, who often feel unprepared to support their children’s education. Unlike studies such as Iyengar (2021), which suggested digital tools as a solution, this study found that low-cost, accessible strategies—such as face-to-face workshops, take-home activities, and

simplified communication-are more feasible and effective in rural contexts. For instance, a parent suggested, “If the teacher could tell us what to do, like giving us simple activities or games, we could try to help more.” These strategies not only address the limitations of rural families but also empower them to actively support their children’ s learning and development of essential learning qualities.

The findings also underscore the importance of collaboration in bridging the gap between kindergartens and families. Teachers and parents alike recognized the potential for structured support mechanisms to enhance children’ s learning outcomes. As one teacher suggested, “We need more parent-teacher meetings or workshops to show parents how to do simple things like singing English songs or playing word games with their children.” This highlights the need for practical, hands-on approaches to equip parents with the skills and confidence to support their children’ s education. By fostering positive and collaborative relationships between families and kindergartens, these interventions can help sustain children’ s motivation and engagement, both at home and in the classroom.

In conclusion, this study underscores the importance of home-kindergarten collaboration in improving early English exposure and fostering learning qualities like curiosity, persistence, and engagement among rural left-behind children. By addressing resource constraints and implementing practical, low-cost strategies such as take-home activities and caregiver workshops, kindergartens can bridge gaps in parental support and create cohesive learning environments, offering actionable solutions to promote educational equity and holistic development in rural areas.

Conclusion and Limitations

This study highlights the challenges faced by rural left-behind children in early English exposure, including limited caregiver support, inadequate resources, and weak home-kindergarten collaboration. It emphasizes the difficulty in fostering essential learning qualities such as curiosity, persistence, and engagement. To address these issues, specific recommendations are provided for stakeholders. Caregivers can benefit from training programs, simplified take-home activities, and consistent engagement strategies to support children’ s learning at home. Kindergarten teachers should focus on structured communication with caregivers, designing adaptable classroom activities, and providing feedback to bridge the gap between school and home. Policymakers should allocate resources for caregiver workshops, learning kits, and teacher training while promoting partnerships to address the unique needs of rural families.

Despite its contributions, the study has limitations. The small sample size, limited to a specific rural region, restricts generalizability, and reliance on self-reported data may introduce bias. Additionally, the qualitative approach, while insightful, lacks broader statistical validation. Future research should expand to diverse rural settings, incorporate quantitative or mixed methods, and explore the long-term effects of interventions like caregiver training and take-home activities.

Overall, this study provides actionable strategies to improve early English exposure, foster essential learning qualities, and promote educational equity for rural left-behind children, offering a foundation for more inclusive and effective early education practices.

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Consent and Ethics Approval to Participate

This study was approved by the relevant ethics committee, and all participants provided informed consent prior to their participation.

Disclaimer (Artificial intelligence)

The author(s) hereby declare that no generative AI technologies, including but not limited to Large Language Models (e.g., ChatGPT, Copilot) or text-to-image generation tools, were utilized in the writing or editing of this manuscript.

Competing Interests

The authors declare that they have no competing interests.

References

1. Blandin, A. (2017). The home/school connection and its role in narrowing the academic achievement gap: An ecological systems theoretical perspective. *Journal of Research on Christian Education*, 26(3), 271–292. <https://doi.org/10.1080/10656219.2017.1386146>
2. Creswell, J. W. (2013). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (3rd ed.). SAGE Publications.
3. Kvale, S., & Brinkmann, S. (2015). *InterViews: Learning the Craft of Qualitative Research Interviewing* (3rd ed.). SAGE Publications.
4. Chen, S., Lawrence, J. F., Zhou, J., Min, L., & Snow, C. E. (2018). The efficacy of a school-based book-reading intervention on vocabulary development of young Uyghur children: A randomized controlled trial. *Early Childhood Research Quarterly*, 44, 206–219. <https://doi.org/10.1016/j.ecresq.2017.12.008>
5. Crampton, A., & Hall, J. (2017). Unpacking socio-economic risks for reading and academic

self-concept in primary school: Differential effects and the role of the preschool home learning environment. *The British Journal of Educational Psychology*, 87(3), 365–382. <https://doi.org/10.1111/bjep.12154>

6. Emmers, D., Jiang, Q., Xue, H., Zhang, Y., Zhang, Y., Zhao, Y., Liu, B., Dill, S.-E., Qian, Y., Warrinnier, N., Johnstone, H., Cai, J., Wang, X., Wang, L., Luo, R., Li, G., Xu, J., Liu, M., Huang, Y., & Rozelle, S. (2021). Early childhood development and parental training interventions in rural China: A systematic review and meta-analysis. *BMJ Global Health*, 6(8), e005578. <https://doi.org/10.1136/bmjgh-2021-005578>
7. Gao, Q., Zhang, Y., Nie, W., Liu, H., Wang, H., & Shi, Y. (2021). It all starts at home: Home reading environment and reading outcomes in rural China. *Journal of Research in Reading*, 44(3), 529–553. <https://doi.org/10.1111/1467-9817.12354>
8. Guo, S., Guan, S., & Yan, X. (2021). Effects of early learning environment on early childhood development in rural areas in China. *Children and Youth Services Review*, 124, 105978. <https://doi.org/10.1016/j.childyouth.2021.105978>
9. Iyengar, R. (2021). Rethinking community participation in education post COVID-19. *Prospects*, 51(1–3), 1–11. <https://doi.org/10.1007/s11125-020-09538-2>
10. Li, R., Rose, N., Zheng, Y. M., Chen, Y., Sylvia, S., Wilson-Smith, H., & Rozelle, S. (2021). Early childhood reading in rural China and obstacles to caregiver investment in young children: A mixed-methods analysis. *International Journal of Environmental Research and Public Health*, 18(4), 1457. <https://doi.org/10.3390/ijerph18041457>
11. Ma, Y., Jonsson, L., Feng, T., Weisberg, T., Shao, T., Yao, Z., & Rozelle, S. (2021). Variations in the home language environment and early language development in rural China. *International Journal of Environmental Research and Public Health*, 18(5), 2671. <https://doi.org/10.3390/ijerph18052671>
12. Wang, N., Wang, H., Chang, F., Lu, F., & Dill, S. E. (2020). Factors linked to cultivating successful readers: Evidence from rural China. *International Journal of Educational Research*, 103, 101636. <https://doi.org/10.1016/j.ijer.2020.101636>
13. Yi, H., Mo, D., Wang, H., Gao, Q., Shi, Y., Wu, P., & Rozelle, S. (2019). Do resources matter? Effects of an in-class library project on student independent reading habits in primary schools in rural China. *Reading Research Quarterly*, 54(3), 383–411. <https://doi.org/10.1002/rrq.238>
14. Zhang, Y., & Perkins, D. D. (2023). Toward an empowerment model of community education in China. *Adult Education Quarterly*, 73(1), 21–39. <https://doi.org/10.1177/07417136211062252>
15. Zheng, Y., Li, D., Chen, Z., & Liu, G. (2022). Picture book reading on the development of

preschoolers in rural areas of China: Effects on language, inhibition, and theory of mind.
Frontiers in Psychology, 13, 1030520. <https://doi.org/10.3389/fpsyg.2022.1030520>

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