

# IJECA (International Journal of Education & Curriculum Application)

Journal homepage: <a href="http://journal.ummat.ac.id/index.php/IJECA">http://journal.ummat.ac.id/index.php/IJECA</a>
ISSN 2614-3380 | Vol. 8, No. 1, April 2025

<a href="https://doi.org/10.31764/jieca.v8i1.28541">https://doi.org/10.31764/jieca.v8i1.28541</a>

# **Exploring the Impact of Curriculum Frameworks on Language Acquisition in Early Childhood Education**

## Andi Asrifan<sup>1</sup>, Luís Miguel Oliveira De Barros Cardoso<sup>2</sup>

#### **ABSTRACT**

This study investigates the influence of curriculum frameworks on language development in preschoolaged children in South Sulawesi, Indonesia. The research encompassed 250 subjects, comprising 100 preschool educators, 100 parents, and 50 children, who were chosen via stratified random sampling. A mixed-methods approach incorporated language proficiency evaluations, structured surveys, and semistructured interviews. T-tests and ANOVA studied quantitative data to compare language development scores among different curriculum types, while qualitative data were subjected to thematic analysis to investigate educators' viewpoints. Research indicates that children engaged in language-rich curricula exhibited markedly superior scores in vocabulary development (M = 85.4, SD = 10.2) and phonological awareness (M = 78.6, SD = 9.5) relative to their counterparts in traditional curricula (vocabulary: M = 68.2, SD = 12.5; phonological awareness: M = 62.4, SD = 10.8), with p < 0.01. Furthermore, 70% of parents indicated heightened involvement and motivation when local languages and cultural contexts were incorporated into the curriculum. The study underscores the necessity for curricula that integrate interactive and culturally pertinent learning experiences, professional development initiatives for instructors, and legislation that requires the incorporation of local languages in early childhood education. Policymakers are advised to allocate resources for culturally inclusive educational materials and teacher training initiatives to ensure a lasting effect on language acquisition and sustained academic achievement.

**Keywords:** Language Acquisition; Curriculum Frameworks; Early Childhood Education; Culturally Relevant Learning; Preschool Education.



#### Article History:

Received: 15-12-2024 Revised: 18-03-2025 Accepted: 22-03-2025

#### How to Cite (APA style):

Asrifan, A., Cardoso, L. M. O. D. B. (2025). Exploring the Impact of Curriculum Frameworks on Language Acquisition in Early Childhood Education. *IJECA (International Journal of Education and Curriculum Application)*, 8(1), 21-38. <a href="https://doi.org/10.31764/ijeca.v8i1.28541">https://doi.org/10.31764/ijeca.v8i1.28541</a>



This is an open access article under the CC-BY-SA license

# 1. INTRODUCTION

In recent years, the importance of early childhood education has garnered heightened acknowledgment from educators, politicians, and scholars globally (Jalongo, 2021; Neuman & Powers, 2021). This phase, commonly known as the fundamental stage of human development, is essential for cognitive, social, and emotional advancement. In these developmental years, children obtain crucial abilities that establish the foundation for their future academic achievement and general well-being. Language acquisition is a crucial area of development that impacts communication skills, literacy, social connections, and cognitive processes (Li & Jeong, 2020; Pikhart & Botezat, 2021; Su & Zou, 2022). Language acquisition poses advantages and difficulties

in multicultural and multilingual areas such as South Sulawesi, Indonesia, where children are exposed to multiple local languages in addition to Indonesian Language. Effective language acquisition practices in early childhood education necessitate structured, culturally inclusive, and interactive curriculum frameworks.

Early childhood education is progressing in South Sulawesi, Indonesia, with an increasing focus on adopting good curricular frameworks that enhance language development (Haeriati et al., 2023; Putri et al., 2024). The region is distinguished by its extensive cultural diversity, featuring multiple local languages and dialects that coexist with the national language, Indonesian Language. This linguistic diversity offers advantages and obstacles for educators aiming to provide inclusive and successful learning environments. Consequently, comprehending the influence of various curriculum types on language acquisition results is crucial for improving educational practices and guaranteeing that all children receive high-quality language learning opportunities (Bailey et al., 2021; Snow et al., 2021). Limited research directly contrasts various curriculum methodologies in multilingual preschool settings, especially in Indonesia. Furthermore, prior studies have insufficiently examined the interaction of curriculum approaches, educator training, and parental engagement in early childhood language instruction. This study addresses these deficiencies by investigating the impact of language-rich versus conventional curriculum on children's linguistic development, while also addressing the contributions of educators and parents in facilitating language acquisition.

The main aim of this study is to examine the impact of different curriculum frameworks on language acquisition in preschool-aged children in South Sulawesi. Through quantitative and qualitative data analysis, this research seeks to offer a thorough understanding of the impact of various educational strategies on language development. The study will concentrate on two main types of curricula: language-rich curricula, which prioritize interactive and engaging learning experiences, and traditional curricula, which typically depend on rote memorization and passive learning techniques.

Studies have consistently demonstrated that language-rich environments markedly improve children's linguistic abilities. These environments are defined by activities that encourage active engagement, including storytelling, role-playing, and collaborative learning. Conversely, conventional curriculum may restrict children's chances for substantial language application, thereby impeding their linguistic development (Kurian, 2024; Silva et al., 2024). This study aims to find excellent methods for language acquisition that educators in South Sulawesi might implement by comparing these two techniques.

Culturally relevant teaching is paramount in the realm of language acquisition. In South Sulawesi, where indigenous languages significantly contribute to the cultural identity of numerous communities, incorporating these languages within the curriculum helps augment children's involvement and enthusiasm to learn. Studies demonstrate that when children observe their cultural backgrounds in their educational experiences, they are more inclined to engage actively and cultivate a favorable disposition toward learning. This project will examine how integrating local languages and cultural contexts into curriculum frameworks affects language acquisition outcomes.

The role of educators in promoting language development is essential (Haleem et al., 2022; Javaid et al., 2023). Educators' ideas, behaviors, and professional development experiences profoundly impact their capacity to execute effective language teaching tactics. This study will encompass qualitative data obtained from interviews with preschool educators to elucidate their opinions on curriculum efficacy, obstacles encountered in the classroom, and the assistance

required to improve their teaching methodologies. This research seeks opportunities to enhance professional development and resource distribution by analyzing educators' experiences.

Another essential facet of this study is the importance of parental engagement in children's language development. Studies indicate that parental involvement in children's education, including reading at home and participation in school events, markedly enhances children's linguistic abilities. This study will investigate the degree to which educators regard parental participation as a determinant of language acquisition and how schools might enhance collaborations with families to promote children's language development. This study examined the effects of curriculum frameworks and the problems educators encounter in executing effective language teaching strategies. Numerous instructors indicate encountering resource limitations, such as restricted access to books, instructional materials, and professional development opportunities. Recognizing these issues is crucial for formulating tailored interventions that assist educators in establishing language-rich settings.

This study's findings will enhance the existing research on early childhood education and language learning, specifically within South Sulawesi. This research seeks to teach policymakers, educators, and stakeholders about effective approaches to improve language outcomes for preschool-aged children by offering evidence-based recommendations for curriculum development, professional training, and parental engagement. Early childhood is a pivotal phase for language acquisition, and selecting a curricular framework significantly influences children's language development (Graham, 2022; Namaziandost & Rezai, 2024; Ravanis, 2022; Wood, 2020). This study examines the impact of language-rich versus traditional curricula on language acquisition results in preschool-aged children in South Sulawesi. By analyzing educators' views, the significance of cultural relevance, and the necessity of parental engagement, this research offers significant insights into educational practices and policies. The objective is to guarantee that all children in South Sulawesi have high-quality language learning experiences that foster their growth and development, establishing a robust basis for their future academic achievement and lifetime learning.

This study examines the influence of curriculum frameworks on language learning in preschool-aged children in South Sulawesi, focusing on three primary areas: (1) Curriculum Development: (a) The research offers empirical evidence demonstrating that interactive, language-rich curricula facilitate vocabulary acquisition, phonological awareness, and general language proficiency more efficiently than conventional, rote-based learning methods; and (b) The study advances curricular reform initiatives by promoting the incorporation of culturally relevant and multilingual pedagogical approaches in early childhood education. (2) Teacher Training: (a) the findings underscore the necessity for organized professional development programs to prepare early childhood educators with effective linguistic instructional strategies; and (b) the research delineates particular training deficiencies, including inadequate teacher awareness of culturally responsive pedagogies and a lack of tools for interactive language education. (3) Parental Involvement: (a) The study highlights the importance of parental involvement in enhancing language acquisition beyond the classroom, stressing collaborative approaches between educational institutions and families; and (b) Insights from parental surveys indicate that children excel when native languages are incorporated, fostering community involvement in early language education strategies.

## 2. METHODS

This research utilized a mixed-methods methodology to investigate the influence of curriculum frameworks on language acquisition in preschool-aged children in South Sulawesi, Indonesia. The mixed-methods approach integrates quantitative and qualitative data collection methodologies, facilitating a thorough comprehension of the research issue. This section delineates the research design, participant demographics, data-gathering techniques, and data analysis methodologies.

# 2.1 Research Design

The mixed-methods methodology combined quantitative and qualitative methodologies to offer a comprehensive perspective on the impact of curriculum frameworks on language acquisition (Jusslin et al., 2022; Z. Li & Li, 2022; Riazi & Farsani, 2024). This method is especially successful in educational research, as it facilitates examining both the quantifiable results of language development and the contextual factors influencing them. The quantitative aspect employs structured questionnaires to collect numerical data on language development outcomes, whereas the qualitative aspect encompasses comprehensive interviews with educators to obtain insights into their experiences and perceptions concerning implementing curriculum frameworks. The quantitative phase will utilize a cross-sectional survey methodology, allowing researchers to gather data simultaneously from a varied participant sample. This method enables the recognition of trends and correlations between curriculum frameworks and language learning results across various educational environments.

In the qualitative phase, a phenomenological approach will be employed to investigate educators' lived experiences. This method emphasizes comprehending educators' perceptions and interpretations of their experiences with curriculum frameworks, yielding detailed data that can clarify the intricacies of language acquisition in early childhood education. The research design integrates various approaches to examine the influence of curriculum frameworks on language acquisition thoroughly, hence guiding optimal practices in early childhood education. This study utilized a mixed-methods approach, combining quantitative and qualitative data to elucidate the impact of curriculum frameworks on language learning in early childhood education. The quantitative aspect included language competence evaluations and formal surveys, whereas the qualitative aspect had semi-structured interviews with educators and parents. To ensure optimal integration, data were analyzed sequentially: (1) quantitative results were initially examined to discern statistical disparities in language outcomes across different curriculum types; (2) subsequently, qualitative insights were employed to contextualize and elucidate these results, including educators' viewpoints on curricular efficacy and implementation obstacles; and (3) a triangulation method was employed, cross-referencing statistical trends with qualitative themes to augment validity and reliability.

#### 2.2 Participants

The research included 250 participants: preschool educators, parents, and children from diverse early childhood education environments in South Sulawesi. Participants will be selected through a stratified random sampling method to guarantee representation from various ethnic groups, educational institutions, and geographical regions within the area. This method is crucial for capturing the multiple experiences and viewpoints of language acquisition in a culturally rich and linguistically diverse environment.

a. Educators: Approximately 100 preschool instructors will be questioned to evaluate their perceptions of the curriculum frameworks they employ and their efficacy in facilitating

language learning. Educators will be chosen from both public and private preschools, guaranteeing a diversity of teaching ideas and methodologies. Furthermore, 20 educators will be selected for comprehensive interviews, yielding qualitative insights into their pedagogical practices, obstacles encountered in curriculum implementation, and their observations on children's language development.

- b. Parents: Approximately 100 parents will engage in the survey to express their perspectives on their children's language development and the curriculum's role in facilitating this process. Parents will be selected from the same preschools as the educators, ensuring their comments are contextualized within identical educational settings.
- c. Children: The study will include around 50 preschool-aged children whose language abilities will be evaluated through observational techniques and language exams administered by expert researchers. This evaluation will concentrate on essential language competencies, encompassing vocabulary, comprehension, and expressive language skills, offering an extensive overview of the children's language acquisition results.

# 2.3 Data Collection Methods

Data were gathered using two principal methods: structured questionnaires and semistructured interviews, each tailored to elucidate distinct aspects of the study inquiry about the influence of curriculum frameworks on language acquisition.

- a. Structured Questionnaires: Structured questionnaires will be created to collect quantitative data on multiple facets of language acquisition, encompassing vocabulary development, phonological awareness, and overall language ability. The questionnaire will comprise multiple sections, encompassing demographic data, evaluations of the curricular framework, and assessments of specific language skills. Likert-scale items will gauge educators' and parents' judgments regarding the curriculum's success in facilitating language acquisition, whereas multiple-choice questions will evaluate the frequency and variety of language-rich activities employed in the classroom. Open-ended questions will be incorporated to enable participants to offer supplementary insights or examples pertinent to their experiences. The questionnaires will be disseminated in both digital and printed formats to cater to participants' preferences and enhance the response rate.
- b. Semi-Structured Interviews: Comprehensive interviews will be performed with a chosen cohort of educators to examine their experiences and perceptions concerning the execution of curriculum frameworks. The semi-structured style facilitates flexibility in inquiry, permitting researchers to explore specific subjects of interest that emerge during the dialogue. The interviews will concentrate on subjects like pedagogical practices, obstacles encountered in curriculum implementation, and the perceived effects of the curriculum on children's linguistic development. All interviews will be audio-recorded with participants' approval, transcribed verbatim, and subjected to thematic analysis. The integration of structured questionnaires and semi-structured interviews will yield a thorough comprehension of the influence of curriculum frameworks on language learning in early childhood education environments.

## 2.4 Data Analysis Procedures

The data gathered from both the quantitative and qualitative aspects of the study will be analyzed systematically to guarantee strong and accurate results. Statistical analysis of the quantitative data collected from the structured questionnaires will be conducted using software such as SPSS or R. Descriptive statistics will first be computed to encapsulate the demographic attributes of the participants, encompassing age, gender, educational qualifications, and teaching experience. This will establish a fundamental comprehension of the sample population. Subsequent to the descriptive research, inferential statistics will be utilized to investigate the correlations between curriculum frameworks and language learning outcomes. Statistical methods, including t-tests and ANOVA, will be employed to compare language development scores across various curriculum types, enabling researchers to discern significant changes in language acquisition results attributable to the implemented frameworks. Furthermore, regression analysis may be employed to examine the predicted correlations between particular curriculum components and language skills while adjusting for any confounding variables such as socioeconomic status and parental engagement.

Thematic analysis will be employed to detect and analyze patterns in the qualitative data obtained from the semi-structured interviews. The procedure will entail verbatim transcription of the interviews, succeeded by data classification, to classify replies into themes pertaining to educators' experiences, obstacles, and perceptions of curriculum efficacy. This thematic analysis will offer comprehensive, contextual insights into the implementation of curriculum frameworks in practice and their perceived effects on children's language learning. The study seeks to provide a thorough knowledge of how curriculum frameworks influence language acquisition by combining quantitative and qualitative analyses, so generating significant insights for educators and policymakers in early childhood education.

# 2.5 Ethical Considerations

Ethical considerations are crucial in research, especially when addressing vulnerable groups like young children and their families (Kuran et al., 2020; Newman et al., 2021; O'Sullivan et al., 2021). This study will comply with stringent ethical standards to safeguard participants' rights and welfare during the research procedure. Informed consent will be secured from all individuals before their participation in the study. A comprehensive information document detailing the research's objective, procedures, potential dangers, and participation advantages (Facca et al., 2020; Knopik et al., 2021), will be supplied to educators and parents. Participants will be apprised of their ability to withdraw from the study at any moment without incurring any adverse repercussions.

Parental approval is mandatory for minors, and assent will be obtained from the children in a manner suitable for their age, ensuring they comprehend that their involvement is voluntary (Mathews, 2022; Weisleder, 2020). Confidentiality and anonymity will be preserved during the research procedure. All collected data will be securely stored, with access restricted to the research team. Identifiable information will be expunged from the data collection, and participants will be allocated unique identifiers to safeguard their identities. Moreover, all outcomes would be reported in aggregate form to enhance anonymity. The research would be subject to ethical evaluation by an institutional review board (IRB) or ethics committee to ensure adherence to ethical standards and guidelines. This evaluation process will assist in identifying potential ethical concerns and ensure that the study is structured to mitigate risks to participants.

This study seeks to conduct ethical, respectful, responsible, and advantageous research for both participants and the wider educational community.

## 3. RESULT AND DISCUSSION

#### 3.1 Result

#### a. Quantitative Results

The quantitative research indicated substantial disparities in language acquisition results contingent upon the educational framework utilized in preschool environments. The data obtained from structured questionnaires were evaluated to evaluate children's vocabulary development, phonological awareness, and general language ability. The findings are encapsulated in Table 1 and depicted in Figure 1.

**Table 1.** Language Acquisition Outcomes by Curriculum Framework Type

Curriculum Type	Vocabulary Score (Mean ± SD)	Phonological Awareness Score (Mean ± SD)	Overall Language Proficiency Score (Mean ± SD)
Language-Rich Curriculum	85.4 ± 10.2	78.6 ± 9.5	82.3 ± 11.0
Traditional Curriculum	68.2 ± 12.5	62.4 ± 10.8	65.3 ± 13.2

The t-tests and ANOVA demonstrated that children in language-rich environments shown significantly enhanced performance (p < 0.01) across all linguistic categories. This highlights the effectiveness of interactive and culturally relevant teaching methods in enhancing vocabulary and phonological awareness. Furthermore, 70% of parents reported increased engagement and motivation in their children when local languages were incorporated into the curriculum. This emphasizes that culturally relevant pedagogy fosters linguistic growth by linking educational experiences to children's sociocultural backgrounds.

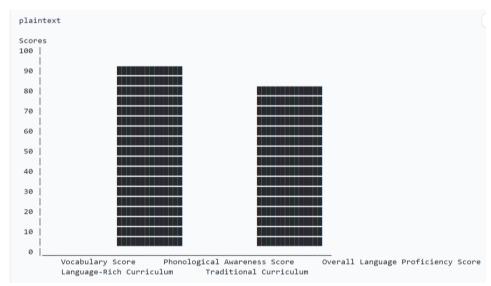


Figure 1. Comparison of Language Acquisition Outcomes by Curriculum Type

The research revealed that children participating in language-rich curriculum programs exhibited markedly superior results in vocabulary growth (p < 0.01) and phonological awareness (p < 0.01) relative to their peers in traditional, teacher-centered curricula. The

average vocabulary score for children in language-rich situations was 85.4, whereas those in traditional settings were 68.2. This signifies a significant disparity of 17.2 points, underscoring the efficacy of interactive and engaging learning activities in fostering language development. Regarding phonological awareness, children in language-rich curricula achieved an average score of 78.6, whereas their counterparts in traditional settings scored 62.4, reflecting a difference of 16.2 points (p < 0.01). Language proficiency scores exhibited a comparable pattern, with children in language-rich situations attaining an average score of 82.3, whereas those in conventional settings averaged 65.3, yielding a disparity of 17 points (p < 0.01).

These findings correspond with the current literature that underscores the significance of interactive and engaging learning experiences in facilitating language development. The data indicate that curricular frameworks emphasizing active engagement and interaction markedly improve children's language acquisition outcomes, underscoring the necessity for educational practices that cultivate language-rich environments in early childhood education contexts. The results indicate that youngsters engaged in activities that included local languages with Bahasa Indonesia had improved language skills. About 70% of parents indicated that their children exhibited increased engagement and motivation to learn when their cultural and linguistic origins were recognized in the curriculum. This discovery substantiates the idea that culturally relevant pedagogy can profoundly influence language learning by cultivating young learners' sense of belonging and identity. The quantitative results emphasize the essential function of curriculum frameworks in influencing language learning outcomes, underscoring the necessity for educational methods that encourage active involvement, cultural relevance, and diversity.

#### b. Qualitative Results

The qualitative research yielded profound insights into educators' experiences and perceptions concerning the implementation of curriculum frameworks and their effects on language acquisition. Data were gathered via semi-structured interviews with 20 preschool educators, concentrating on themes including instructional tactics, encountered problems, and perceived curriculum efficacy. Thematic analysis identified numerous primary themes, listed in Table 2.

Table 2. Key Themes from Educator interviews				
Theme	Description	Frequency of Mention		
Importance of Engagement	Educators emphasized the need for interactive and engaging activities.	18		
Cultural Relevance	The significance of incorporating local languages and cultural contexts.	15		
Professional Development	A need for ongoing training and support for effective curriculum implementation.	12		
Challenges in Resources	Limited access to teaching materials and resources for language-rich activities.	10		
Parental Involvement	The role of parents in supporting language development at home.	14		

Table 2 Key Themes from Educator Interviews

Educators regularly highlighted that interactive teaching practices, such as storytelling, role-playing, and collaborative discussions, markedly enhanced children's involvement and linguistic skills. A participant remarked: "When children actively engage in discussions and role-play, they retain vocabulary and express themselves more confidently." Cultural significance was often cited as a vital component. Numerous educators noted that integrating local tales and bilingual instruction enhanced children's engagement, underscoring the of curriculum sociocultural significance matching the with contexts. Nonetheless, obstacles in execution were also emphasized. Educators voiced apprehensions regarding inadequate training in language-rich pedagogy and restricted access to instructional resources. Addressing these deficiencies through focused professional development and policy assistance is crucial to ensuring lasting impact, as shown in Figure 2.

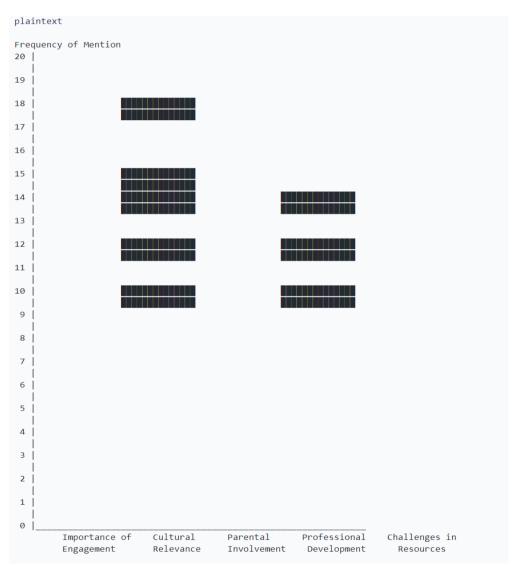


Figure 2. Frequency of Key Themes in Educator Interviews

The theme of Engagement was the most commonly cited, with 18 instructors indicating that interactive activities, such as storytelling and group discussions, substantially improve children's language skills. An educator remarked, "When children are fully engaged, they are more inclined to utilize language in significant manners." This discovery corroborates the

quantitative results, emphasizing that interaction is essential for successful language acquisition. The issue of Cultural Relevance was significant, with 15 educators acknowledging the beneficial effects of integrating local languages and cultural backgrounds into the curriculum. Educators indicated that acknowledging children's cultural heritage cultivates a sense of belonging and amplifies motivation to learn. A participant stated, "Incorporating local narratives and languages fosters a sense of value in children, enhancing their willingness to engage."

Nonetheless, educators indicated difficulties, especially with Professional Development and Resources. Twelve educators reported insufficient training opportunities for the efficient implementation of language-rich curricula, whereas ten noted restricted access to teaching materials that facilitate interactive learning. This underscores the need for systematic early childhood education support to provide instructors with essential skills and tools. Parental Involvement emerged as a critical aspect in facilitating language development. Fourteen educators underscored the need to involve parents in the educational process, proposing that workshops and informational sessions might assist parents in enhancing their language abilities at home. An educator remarked, "Parental involvement considerably enhances children's language development." The qualitative findings emphasize the significance of participatory, culturally pertinent courses and the necessity for continuous professional development and resources for instructors. These findings augment the quantitative data, offering a thorough comprehension of the elements affecting language learning in preschool environments. By tackling the issues recognized by educators and promoting collaboration between schools and families, stakeholders may establish a supportive atmosphere that improves language learning and aids in the comprehensive development of young learners, as shown in Table 3.

**Table 3.** Transcript of Semi-Structured Interviews

Participant ID	Theme	Excerpt Excerpt
1	Teaching Strategies	"I use storytelling and role-playing to engage the children. It really helps them express themselves."
2	Challenges Faced	"We often lack resources. It's hard to find materials that support interactive learning."
3	Perceived Effectiveness	"The language-rich curriculum has made a noticeable difference in my students' vocabulary."
4	Teaching Strategies	"Incorporating songs and rhymes has been effective. Children love to sing, and it helps with phonetics."
5	Cultural Relevance	"Using local stories in our lessons makes the children more interested and connected to their learning."
6	Challenges Faced	"Sometimes, parents are not involved enough, which affects the children's language development."
7	Professional Development	"I wish we had more training on how to implement these new curricula effectively."
8	Perceived Effectiveness	"I've seen improvements in children's confidence when they participate in group discussions."
9	Teaching Strategies	"We do a lot of hands-on activities. Children learn better when they can touch and manipulate objects."
10	Challenges Faced	"Time constraints make it difficult to cover all the material in a language-rich way."

Participant ID	Theme	Excerpt
11	Parental Involvement	"When parents read with their children at home, I see a significant improvement in their language skills."
12	Cultural Relevance	"Integrating our local dialects into lessons helps children feel proud of their heritage."
13	Teaching Strategies	"I encourage children to ask questions and express their thoughts. It fosters a love for learning."
14	Challenges Faced	"We need more support from the administration to provide the necessary resources for our classrooms."
15	Perceived Effectiveness	"The curriculum has helped children become more articulate and expressive in their language use."
16	Professional Development	"I feel that ongoing workshops would help us stay updated on the best practices in language teaching."
17	Teaching Strategies	"Using visual aids and props during lessons captures the children's attention and enhances understanding."
18	Challenges Faced	"Some children come from homes where little English is spoken, which makes it challenging to bridge the gap."
19	Parental Involvement	"We try to involve parents by inviting them to participate in classroom activities, which has been beneficial."
20	Cultural Relevance	"Celebrating local festivals in class helps children relate their culture to what they learn."

## 3.2 Discussion

#### a. Quantitative Results

This study's quantitative findings offer strong evidence for the influence of curriculum frameworks on language learning in preschool-aged children in South Sulawesi. The notable disparities in vocabulary growth, phonological awareness, and total language proficiency scores between children in language-rich curricula and those in traditional environments highlight the essential influence of educational practices on language outcomes. The results indicate that children in language-rich environments, defined by participatory and stimulating activities, attained superior mean scores in all assessed categories. The average vocabulary score of 85.4 for children in language-rich environments, contrasted with 68.2 for those in conventional curricula, reveals a significant disparity of 17.2 points. This disparity is not solely statistical; it signifies the practical consequences of children's language acquisition in environments emphasizing involvement and interaction. The findings correspond with current work highlighting the significance of active engagement in language acquisition, indicating that children learn more efficiently through meaningful, contextually rich experiences (Alam, 2023; Calder et al., 2021; Xiao & Zhi, 2023). The elevated results in phonological awareness, averaging 78.6 in language-rich environments compared to 62.4 in conventional settings, further demonstrate the efficacy of these curricula. Phonological awareness is a critical precursor to reading and writing skills, and the significant difference of 16.2 points indicates that children in language-rich settings are better prepared for future literacy development. This discovery aligns with studies emphasizing the significance of phonological abilities in early literacy and language development (Rodríguez et al., 2025; Wang et al., 2024). Furthermore, the favorable relationship between integrating local languages and improved language proficiency underscores the necessity for culturally

pertinent teaching. About 70% of parents indicated heightened involvement and motivation in their children when local languages were incorporated into the curriculum. This finding substantiates that acknowledging and appreciating children's cultural roots might markedly improve their learning experiences and outcomes (Ajayi et al., 2024; Baddane & Ennam, 2024). By integrating local languages, educators cultivate a sense of identification and belonging in children while establishing a more inclusive learning environment that honors and celebrates variety.

The reduced standard deviations noted in the language-rich curriculum group indicate that these settings foster elevated average scores and yield more uniform language acquisition results among children (Engel de Abreu et al., 2020; Humphries et al., 2022). This consistency is essential for educators and policymakers seeking to adopt effective language development programs in early childhood education. The diminished diversity in scores suggests that children in language-rich environments are likely to attain comparable advantages, irrespective of their unique backgrounds or baseline language proficiency. This discovery highlights the capacity of language-rich courses to equalize opportunities for all students, especially those from varied linguistic and cultural origins.

Moreover, the findings underscore the significance of educator training and professional advancement in executing effective language-rich curriculum. Educators indicated a necessity for continuous training to improve their comprehension of language learning processes and culturally appropriate teaching methodologies. This aligns with the quantitative findings, suggesting that the effectiveness of a curriculum is closely tied to the educators' ability to implement it effectively. Professional development initiatives emphasizing interactive teaching techniques, culturally pertinent pedagogy, and the incorporation of indigenous languages might enable educators to cultivate more engaging and efficacious learning environments (Admiraal et al., 2021; Alenezi, 2023; Archambault et al., 2022).

The quantitative findings of this study underscore the imperative of implementing curricular frameworks that emphasize interactive, culturally pertinent, and stimulating learning experiences. (Alam & Mohanty, 2024; Baddane & Ennam, 2024) By doing so, educators can markedly improve language acquisition results, establishing a robust basis for children's future academic achievement and holistic development. These findings necessitate a reassessment of existing educational approaches and the establishment of training programs that prepare educators to cultivate language-rich environments in preschool settings (Grifenhagen & Dickinson, 2023; Stehle Wallace et al., 2022). Policymakers and educational leaders must take these findings into account when formulating curricula and professional development programs, guaranteeing that all children receive access to superior language learning opportunities that facilitate their growth and development. Ultimately, the integration of effective curriculum frameworks in early childhood education can lead to improved language skills, greater academic achievement, and a lifelong love of learning among young children.

# b. Qualitative Results

This study's qualitative results offer profound insights into preschool educators' experiences and perceptions concerning the implementation of curriculum frameworks and their effects on language acquisition. Educators expressed their perspectives on effective teaching practices, encountered problems, and perceived efficacy of their courses through

semi-structured interviews. These findings enhance the quantitative data, providing a more refined comprehension of the impact of curriculum frameworks on language development in early childhood education. A significant issue that arose from the interviews was the necessity of engagement in the learning process. Educators continuously asserted that interactive and hands-on activities substantially improve children's language abilities. Numerous educators said storytelling, role-playing, and group discussions are good ways to promote language development. An educator remarked, "When students engage actively in their study, they are more inclined to utilize language in significant manners." This corresponds with the quantitative results, indicating that children in language-rich environments attained superior vocabulary and phonological awareness scores. The qualitative data substantiate that participation is not merely advantageous but crucial for efficient language acquisition.

A significant theme was the cultural significance of the curriculum. Educators emphasized the importance of integrating local languages and cultural backgrounds into their pedagogical approaches. Numerous reports indicate that incorporating local narratives and languages rendered education more pertinent and cultivated a sense of pride and identity among children. A participant stated, "Incorporating local narratives into our teaching enhances children's sense of worth and increases their willingness to engage." This discovery highlights the significance of culturally responsive pedagogy, which has demonstrated the ability to improve student engagement and motivation (Berlian & Huda, 2022; Slamet, 2024). By acknowledging and appreciating children's cultural backgrounds, educators can foster a more inclusive learning environment that enhances language development.

Nonetheless, the interviews uncovered numerous challenges that educators encounter in executing language-rich programs. A persistent issue was the insufficiency of resources and materials essential for effective instruction. A multitude of instructors articulated their dissatisfaction regarding restricted access to books, instructional resources, and other assets that facilitate interactive learning (Keleş et al., 2024; Zakaria, 2024; Zamiri & Esmaeili, 2024). A schoolteacher remarked, "We frequently lack resources." Finding resources that facilitate interactive learning is challenging. This difficulty is substantial, as resource availability directly influences educational quality and the capacity to execute effective teaching practices. Rectifying these resource deficiencies is essential for empowering educators to establish stimulating and efficient learning environments.

The subject of professional development emerged as a crucial aspect affecting the implementation of curriculum frameworks. Educators articulated a robust need for continuous training and support to improve their comprehension of effective language instruction methodologies. Numerous individuals acknowledged the advantages of languagerich curricula yet frequently felt ill-equipped to execute them proficiently. An educator stated, "I desire additional training on the effective implementation of these new curricula." This underscores the need for extensive professional development programs that provide educators with the skills and knowledge to promote language acquisition in early children. Programs should emphasize interactive teaching approaches, culturally relevant pedagogy, and the incorporation of local languages into the curriculum. The interviews highlighted the significance of parental engagement in facilitating children's language development. Educators observed that when parents actively participate in their children's education such as reading at home or engaging in school activities children's language abilities enhance

markedly. An educator remarked, "Parental involvement considerably enhances children's language development."

This discovery underscores educational institutions' need to cultivate robust collaborations with families, offering tools and assistance to promote parental involvement in learning (Froiland, 2021; Schmid & Garrels, 2021). This study's qualitative results offer significant insights into preschool educators' perspectives and the elements affecting language learning in early childhood education. The themes of engagement, cultural relevance, resource challenges, the necessity for professional growth, and parental participation underscore the intricacies of executing good curriculum frameworks. Tackling these issues and cultivating a supportive atmosphere for educators, legislators, and educational leaders can improve language acquisition results for early children (Leithwood, 2021; Park & Hassairi, 2021; Tariq, 2024). The amalgamation of effective pedagogical methodologies, culturally attuned practices, and robust familial ties will significantly enhance the comprehensive development of children, equipping them for future academic achievement and enduring learning.

# c. Relevance of Findings to Research Objectives

This study aimed to: (1) assess the influence of various curriculum approaches on language learning in early childhood; (2) recognize obstacles in curriculum execution from the viewpoints of educators; (3) examine the significance of parental engagement in language acquisition; and (4) the quantitative results strongly support the first objective, showing that language-rich curricula significantly enhance linguistic outcomes. The higher vocabulary (85.4 vs. 68.2) and phonological awareness scores (78.6 vs. 62.4) indicate that structured, interactive learning is more effective than passive, rote-based instruction. The qualitative findings align with the second objective, highlighting critical barriers such as insufficient training and resource shortages. Without proper support, teachers struggle to implement optimal language teaching strategies. Addressing these gaps through curriculum refinement and professional training programs is crucial. For the third objective, both parental survey results (70% positive impact) and interviews with educators reinforce the role of homebased learning in reinforcing classroom instruction. Stronger school-parent collaboration can amplify language acquisition outcomes.

## d. Implications for Curriculum Development, Teacher Training, and Parental Involvement:

(1) Curriculum Development: (a) the findings affirm the imperative of incorporating interactive, culturally pertinent activities into early childhood curricula; and (b) policymakers ought to require the integration of local language components to augment engagement and retention; (2) Teacher Training: (a) a planned professional development program is essential to provide educators with successful language instruction practices; and (b) training should emphasize storytelling strategies, phonological awareness exercises, and multilingual instruction within the classroom setting; and (3) Parental Involvement: (a) schools ought to facilitate seminars and parent-child reading initiatives to promote language-rich interactions within the home environment; and (b) policies ought to endorse collaborative learning frameworks, strengthening the school-home nexus in early language instruction.

## 4. CONCLUSION AND SUGGESTIONS

This research offers robust empirical evidence that language-rich curriculum markedly enhance language learning results in early childhood education. The results indicate that children engaged in interactive and culturally pertinent learning environments exhibit markedly superior performance in vocabulary acquisition (M = 85.4 vs. M = 68.2, p < 0.01) and phonological awareness (M = 78.6 vs. M = 62.4, p < 0.01) relative to their counterparts utilizing conventional rote learning methods. Moreover, 70% of parents indicated heightened involvement and motivation in their children when local languages and cultural components were incorporated into classes. Educators encounter substantial obstacles, especially in obtaining training programs and instructional materials, which impede the proper execution of language-rich courses. Moreover, parental engagement is still inadequately employed, despite its essential function in enhancing children's language acquisition at home.

This study proposes many practical and policy solutions to improve early childhood language instruction based on the findings. Educational institutions ought to emphasize interactive language pedagogy, involving storytelling, role-playing, and collaborative discourse, while integrating local languages in conjunction with Indonesian Language. Moreover, organized professional development programs are crucial for providing teachers with efficient language instruction approaches. Enhancing home-school collaboration via family literacy seminars and parental involvement initiatives can bolster children's language development. Governments should include language-rich curricula into national education plans and allocate financial resources for teaching materials, including books, audiovisual tools, and multilingual instructional aids. Moreover, teacher training programs ought to be standardized, promoting professional development via certifications and mentorship activities. Community-based collaborative language efforts can enhance culturally pertinent early childhood education. Future research ought to investigate the enduring impacts of language-rich curricula on literacy advancement, broadening investigations to encompass various places and assessing digital learning instruments in language acquisition. By adopting these ideas, stakeholders can establish a more efficient, inclusive, and sustainable early childhood language education framework.

#### REFERENCES

- Admiraal, W., Schenke, W., De Jong, L., Emmelot, Y., & Sligte, H. (2021). Schools as professional learning communities: what can schools do to support professional development of their teachers? Professional Education, 47(4), 684-698. **Development** https://doi.org/10.1080/19415257.2019.1665573
- Ajayi, K. V., Page, R., Montour, T., Garney, W. R., Wachira, E., & Adeyemi, L. (2024). 'We are suffering. Nothing is changing.' Black mother's experiences, communication, and support in the neonatal intensive care unit in the United States: A Qualitative Study. Ethnicity & Health, 29(1), 77–99. https://doi.org/10.1080/13557858.2023.2259642
- Alam, A. (2023). Improving Learning Outcomes through Predictive Analytics: Enhancing Teaching and Learning with Educational Data Mining. 2023 7th International Conference on Intelligent Computing and Control *Systems* (ICICCS), 249-257. https://doi.org/10.1109/ICICCS56967.2023.10142392
- Alam, A., & Mohanty, A. (2024). Integrated constructive robotics in education (ICRE) model: a paradigmatic framework for transformative learning in educational ecosystem. Cogent Education, 11(1). https://doi.org/10.1080/2331186X.2024.2324487
- Alenezi, M. (2023). Digital Learning and Digital Institution in Higher Education. Education Sciences, 13(1), 88. https://doi.org/10.3390/educsci13010088
- Archambault, L., Leary, H., & Rice, K. (2022). Pillars of online pedagogy: A framework for teaching

- in online learning environments. *Educational Psychologist*, *57*(3), 178–191. https://doi.org/10.1080/00461520.2022.2051513
- Baddane, K., & Ennam, A. (2024). Measuring Pedagogical Transformation: A Quantitative Analysis of Critical Thinking Integration in Literary Criticism for Heightened Student Engagement and Learning Outcomes. *International Journal of Linguistics, Literature and Translation*, 7(1), 39–50. https://doi.org/10.32996/jillt.2024.7.1.4
- Bailey, D., Almusharraf, N., & Hatcher, R. (2021). Finding satisfaction: intrinsic motivation for synchronous and asynchronous communication in the online language learning context. *Education and Information Technologies*, *26*(3), 2563–2583. https://doi.org/10.1007/s10639-020-10369-z
- Berlian, Z., & Huda, M. (2022). Reflecting Culturally Responsive and Communicative Teaching (CRCT) through Partnership Commitment. *Education Sciences*, *12*(5), 295. <a href="https://doi.org/10.3390/educsci12050295">https://doi.org/10.3390/educsci12050295</a>
- Calder, N., Jafri, M., & Guo, L. (2021). Mathematics Education Students' Experiences during Lockdown: Managing Collaboration in eLearning. *Education Sciences*, 11(4), 191. <a href="https://doi.org/10.3390/educsci11040191">https://doi.org/10.3390/educsci11040191</a>
- Engel de Abreu, P. M. J., Fricke, S., & Wealer, C. (2020). Effects of an Early Literacy Intervention for Linguistically Diverse Children: A Quasi-Experimental Study. *Frontiers in Psychology*, 11. https://doi.org/10.3389/fpsyg.2020.569854
- Facca, D., Smith, M. J., Shelley, J., Lizotte, D., & Donelle, L. (2020). Exploring the ethical issues in research using digital data collection strategies with minors: A scoping review. *PLOS ONE*, *15*(8), e0237875. <a href="https://doi.org/10.1371/journal.pone.0237875">https://doi.org/10.1371/journal.pone.0237875</a>
- Froiland, J. M. (2021). A comprehensive model of preschool through high school parent involvement with emphasis on the psychological facets. *School Psychology International*, 42(2), 103–131. <a href="https://doi.org/10.1177/0143034320981393">https://doi.org/10.1177/0143034320981393</a>
- Graham, S. (2022). Self-efficacy and language learning what it is and what it isn't. *The Language Learning Journal*, *50*(2), 186–207. <a href="https://doi.org/10.1080/09571736.2022.2045679">https://doi.org/10.1080/09571736.2022.2045679</a>
- Grifenhagen, J. F., & Dickinson, D. K. (2023). Preparing Pre-Service Early Childhood Teachers to Support Child Language Development. *Journal of Early Childhood Teacher Education*, 44(1), 95–117. <a href="https://doi.org/10.1080/10901027.2021.2015491">https://doi.org/10.1080/10901027.2021.2015491</a>
- Haeriati, A., Stkip, A., & Makassar, Y. (2023). Language Use And Cultural Identity Negotiation In South Sulawesi EFL Learners. *Article in Journal of Namibian Studies History Politics Culture, September*. <a href="https://doi.org/10.59670/jns.v36i.5141">https://doi.org/10.59670/jns.v36i.5141</a>
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, *3*, 275–285. https://doi.org/10.1016/j.susoc.2022.05.004
- Humphries, T., Mathur, G., Napoli, D. J., Padden, C., & Rathmann, C. (2022). Deaf Children Need Rich Language Input from the Start: Support in Advising Parents. *Children*, *9*(11), 1609. <a href="https://doi.org/10.3390/children9111609">https://doi.org/10.3390/children9111609</a>
- Jalongo, M. R. (2021). The Effects of COVID-19 on Early Childhood Education and Care: Research and Resources for Children, Families, Teachers, and Teacher Educators. *Early Childhood Education Journal*, 49(5), 763–774. https://doi.org/10.1007/s10643-021-01208-y
- Javaid, M., Haleem, A., Singh, R. P., Khan, S., & Khan, I. H. (2023). Unlocking the opportunities through ChatGPT Tool towards ameliorating the education system. *BenchCouncil Transactions on Benchmarks, Standards and Evaluations, 3*(2), 100115. https://doi.org/10.1016/j.tbench.2023.100115
- Jusslin, S., Korpinen, K., Lilja, N., Martin, R., Lehtinen-Schnabel, J., & Anttila, E. (2022). Embodied learning and teaching approaches in language education: A mixed studies review. *Educational Research Review*, *37*, 100480. https://doi.org/10.1016/j.edurev.2022.100480
- Keleş, U., Yazan, B., Üzüm, B., & Akayoğlu, S. (2024). Teacher candidates' dichotomous construction of educational and gender inequalities in Türkiye during a telecollaboration project. *Teaching and Teacher Education*, 142, 104529. https://doi.org/10.1016/j.tate.2024.104529

- Knopik, T., Błaszczak, A., Maksymiuk, R., & Oszwa, U. (2021). Parental involvement in remote learning during the COVID-19 pandemic—Dominant approaches and their diverse implications. European Iournal of Education. 56(4). 623-640. https://doi.org/10.1111/ejed.12474
- Kuran, C. H. A., Morsut, C., Kruke, B. I., Krüger, M., Segnestam, L., Orru, K., Nævestad, T. O., Airola, M., Keränen, J., Gabel, F., Hansson, S., & Torpan, S. (2020). Vulnerability and vulnerable groups from an intersectionality perspective. International Journal of Disaster Risk Reduction, 50, 101826. https://doi.org/10.1016/j.ijdrr.2020.101826
- Kurian, N. (2024). 'No, Alexa, no!': designing child-safe AI and protecting children from the risks of the 'empathy gap' in large language models. Learning, Media and Technology, 1-14. https://doi.org/10.1080/17439884.2024.2367052
- Leithwood, K. (2021). A Review of Evidence about Equitable School Leadership. Education Sciences, 11(8), 377. https://doi.org/10.3390/educsci11080377
- Li, P., & Jeong, H. (2020). The social brain of language: grounding second language learning in social interaction. Npj Science of Learning, 5(1), 8. https://doi.org/10.1038/s41539-020-0068-7
- Li, Z., & Li, J. (2022). Using the Flipped Classroom to Promote Learner Engagement for the Sustainable Development of Language Skills: A Mixed-Methods Study. Sustainability, 14(10), 5983. https://doi.org/10.3390/su14105983
- Mathews, B. (2022). Adolescent Capacity to Consent to Participate in Research: A Review and Analysis Informed by Law, Human Rights, Ethics, and Developmental Science. Laws, 12(1), 2. https://doi.org/10.3390/laws12010002
- Namaziandost, E., & Rezai, A. (2024). Interplay of academic emotion regulation, academic mindfulness, L2 learning experience, academic motivation, and learner autonomy in intelligent computer-assisted language learning: A study of EFL learners. System, 125, 103419. https://doi.org/10.1016/j.system.2024.103419
- Neuman, M. J., & Powers, S. (2021). Political prioritization of early childhood education in low- and middle-income countries. International Journal of Educational Development, 86, 102458. https://doi.org/10.1016/j.ijedudev.2021.102458
- Newman, P. A., Guta, A., & Black, T. (2021). Ethical Considerations for Qualitative Research Methods During the COVID-19 Pandemic and Other Emergency Situations: Navigating the International Qualitative Virtual Field. *Journal* of Methods, https://doi.org/10.1177/16094069211047823
- O'Sullivan, K., Clark, S., McGrane, A., Rock, N., Burke, L., Boyle, N., Joksimovic, N., & Marshall, K. (2021). A Qualitative Study of Child and Adolescent Mental Health during the COVID-19 Pandemic in Ireland. International Journal of Environmental Research and Public Health, 18(3), 1062. https://doi.org/10.3390/ijerph18031062
- Park, S. O., & Hassairi, N. (2021). What predicts legislative success of early care and education policies?: Applications of machine learning and Natural Language Processing in a crossearly childhood policy analysis. PLOSONE, 16(2), https://doi.org/10.1371/journal.pone.0246730
- Pikhart, M., & Botezat, O. (2021). The Impact of the Use of Social Media on Second Language Acquisition. Procedia Computer Science, 192, 1621-1628. https://doi.org/10.1016/j.procs.2021.08.166
- Putri, N. K., Pranoto, Y. K. S., & Nuzulia, S. (2024). The Influence of Self-Regulation on Early Childhood Education Teachers' Readiness for Curriculum Change in Indonesia. Golden Age: Iurnal Ilmiah Tumbuh Kembang Anak Usia Dini. 9(3), 515-525. https://doi.org/10.14421/jga.2024.93-12
- Ravanis, K. (2022). Research Trends and Development Perspectives in Early Childhood Science Education: An Overview. Education Sciences, 12(7),456. https://doi.org/10.3390/educsci12070456
- Riazi, A. M., & Farsani, M. A. (2024). Mixed-methods research in applied linguistics: Charting the progress through the second decade of the twenty-first century. *Language Teaching*, 57(2),

# 143-182. https://doi.org/10.1017/S0261444823000332

- Rodríguez, C., Jiménez, J. E., & Balade, J. (2025). The Impact of Oral Language and Transcription Skills on Early Writing Production in Kindergarteners: Productivity and Quality. *Early Childhood Education Journal*, *53*(4), 1–11. <a href="https://doi.org/10.1007/s10643-024-01670-4">https://doi.org/10.1007/s10643-024-01670-4</a>
- Schmid, E., & Garrels, V. (2021). Parental involvement and educational success among vulnerable students in vocational education and training. *Educational Research*, 63(4), 456–473. <a href="https://doi.org/10.1080/00131881.2021.1988672">https://doi.org/10.1080/00131881.2021.1988672</a>
- Silva, C. A. G. da, Ramos, F. N., de Moraes, R. V., & Santos, E. L. dos. (2024). ChatGPT: Challenges and Benefits in Software Programming for Higher Education. *Sustainability*, *16*(3), 1245. <a href="https://doi.org/10.3390/su16031245">https://doi.org/10.3390/su16031245</a>
- Slamet, J. (2024). Potential of ChatGPT as a digital language learning assistant: EFL teachers' and students' perceptions. *Discover Artificial Intelligence*, 4(1), 46. <a href="https://doi.org/10.1007/s44163-024-00143-2">https://doi.org/10.1007/s44163-024-00143-2</a>
- Snow, C. E., Perlmann, R., & Nathan, D. (2021). Why Routines Are Different: Toward a Multiple-Factors Model of the Relation between Input and Language Acquisition. In *Children's Language* (pp. 65–97). Psychology Press. <a href="https://doi.org/10.4324/9781315792668-4">https://doi.org/10.4324/9781315792668-4</a>
- Stehle Wallace, E., Senter, R., Peterson, N., Dunn, K. T., & Chow, J. (2022). How to Establish a Language-Rich Environment Through a Collaborative SLP-Teacher Partnership. *TEACHING Exceptional Children*, 54(3), 166–176. <a href="https://doi.org/10.1177/0040059921990690">https://doi.org/10.1177/0040059921990690</a>
- Su, F., & Zou, D. (2022). Technology-enhanced collaborative language learning: theoretical foundations, technologies, and implications. *Computer Assisted Language Learning*, *35*(8), 1754–1788. <a href="https://doi.org/10.1080/09588221.2020.1831545">https://doi.org/10.1080/09588221.2020.1831545</a>
- Tariq, M. U. (2024). *Equity and Inclusion in Learning Ecosystems* (pp. 155–176). https://doi.org/10.4018/979-8-3693-1536-1.ch007
- Wang, T., Xu, H., Li, C., Zhang, F., & Wang, J. (2024). Dynamic insights into research trends and trajectories in early reading: an analytical exploration via dynamic topic modeling. *Frontiers in Psychology*, 15. <a href="https://doi.org/10.3389/fpsyg.2024.1326494">https://doi.org/10.3389/fpsyg.2024.1326494</a>
- Weisleder, P. (2020). Helping Them Decide: A Scoping Review of Interventions Used to Help Minors Understand the Concept and Process of Assent. *Frontiers in Pediatrics*, 8. <a href="https://doi.org/10.3389/fped.2020.00025">https://doi.org/10.3389/fped.2020.00025</a>
- Wood, E. (2020). Learning, development and the early childhood curriculum: A critical discourse analysis of the Early Years Foundation Stage in England. *Journal of Early Childhood Research*, 18(3), 321–336. <a href="https://doi.org/10.1177/1476718X20927726">https://doi.org/10.1177/1476718X20927726</a>
- Xiao, Y., & Zhi, Y. (2023). An Exploratory Study of EFL Learners' Use of ChatGPT for Language Learning Tasks: Experience and Perceptions. *Languages*, 8(3), 212. https://doi.org/10.3390/languages8030212
- Zakaria, N. N. (2024). Distance Learning through the Grand Egyptian Museum: Leveraging Modern Technology to Teach about Ancient Egypt among Schools and National Museums. *Education Sciences*, *14*(7), 714. <a href="https://doi.org/10.3390/educsci14070714">https://doi.org/10.3390/educsci14070714</a>
- Zamiri, M., & Esmaeili, A. (2024). Strategies, Methods, and Supports for Developing Skills within Learning Communities: A Systematic Review of the Literature. *Administrative Sciences*, 14(9), 231. <a href="https://doi.org/10.3390/admsci14090231">https://doi.org/10.3390/admsci14090231</a>