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Improving Language Acquisition: Effective Numeracy Literacy Strategies in Early Childhood

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This article explores various strategies aimed at improving language acquisition in children. Realizing the important role of language in human life can be stimulated from an early age through the application of numeracy literacy in children. This research explores innovative methodologies and approaches to cater to diverse learning styles. The authors emphasize the importance of creating an immersive linguistic environment that encourages speaking and writing proficiency. This research evaluates the impact of incorporating technology as a tool to enhance the language learning experience. Utilizing multimedia resources, online platforms, and interactive applications, this research examines how these digital elements can engage students and strengthen language skills. In addition, this article discusses the integration of cultural components into language lessons, emphasizing the role of cultural context in language comprehension and expression. These findings contribute to the ongoing discourse regarding optimizing language teaching methods to children in enriching vocabulary and language learning experiences through the application of literacy and numeracy in children's daily lives. insights that can inform more effective strategies for achieving sustainability goals. Next, the authors investigate the effectiveness of collaborative learning techniques in language acquisition. Children's learning activities, peer interactions, and communicative exercises are explored as means to encourage active participation and increase language retention in children. This study also examines the role of feedback mechanisms in shaping children's language development, emphasizing timely and constructive feedback as an important element in the learning process. In conclusion, this article provides valuable insights into effective child language acquisition strategies. By combining technological tools, cultural elements, collaborative activities, and feedback mechanisms, educators can create dynamic learning environments that meet the diverse needs of young children.

1. Introduction

Reading and writing as the key to knowledge, as well as a very perfect guide in opening the window of the world. However, the reading culture of Indonesian people is still very low. This is reflected in the value of educational achievements from other countries. That is the reason why the literacy culture of Indonesian people is still low.

The low interest and habits of students reading, writing, listening and critical thinking in Indonesia are declared by the World Literacy Institute. According to PIRLS Progress International Study of Reading Literacy (2011) the world's leading institutions conduct research related to reading literacy. Literacy skills are used to measure aspects of understanding, using and reflecting on results in writing, Indonesia ranks 45th out of 48 participating countries scoring 428 out of an average of 500 points (Wulan, 2022). In addition, the PISA Indonesia Ranking 2012 fell, and ranked 64th among 65 participants with a score of 396 out of an average of 496 points. Similarly, The World Most Literate (WMLN) 2016 shows that the reading level in Indonesia is ranked 60th out of 61 countries studied (Miller, J. M., & McKenna, 2016). Meanwhile, the results of the National Library of the Republic of Indonesia study in 2016-2019 show that the reading interest index in Indonesia is very low (National, 2020).

This condition is very worrying because by reading children will get pleasure and gain new knowledge and insights to improve children's intelligence. So that it will be better able to face the challenges of life. One way to anticipate this problem is to facilitate with various methods and media that can foster interest in reading in children.

Early childhood is the most fundamental early period throughout its growth and development. This period is characterized by various important periods that must be well developed and stimulated. One of the periods that characterize early childhood is the golden period, namely the golden age of children cannot be repeated in the following times (Suryana, 2017). In addition, children learn through their experiences so that they better understand the challenges they face and can help increase their learning motivation (Egan, 2012). Therefore, the growth and development of children both psychically and mentally requires special attention. In order for every child to be able to complete his duties and responsibilities well in the future, he needs to get the widest possible opportunity to grow and develop optimally.

In the 21st century, literacy is not only limited to the ability to read and write, but is associated with the ability to speak, count and solve problems in everyday life (Ellysa, Aditya Suryawati, 2021). Early literacy or literacy development is one of the important aspects for children's language development. Language development is a skill used in language to express and interpret a word (Madyawati, 2016). The development of literacy in early childhood is included in a basic position. Starting from doodling paper or walls randomly in the form of letters or numbers. (Niken Eka Priyani, 2022). There are 4 components in language development including the ability to speak, the ability to write, the ability to read and the ability to listen. Language and literacy experiences are gained through special interactions such as reading books together, and opportunities provided by the family environment or parents. Parents have a very important role in children's language development, starting from

simple activities such as reading books to children from an early age, before entering school. There are two types of literacy experiences that can occur in the home environment, namely informal and formal literacy experiences. Informal literacy experiences focus on meaning and exposing children through reading books together, while formal literacy or formal literacy experiences focus more on code and exposing children to print directly through letter and word teaching activities. This experience will have a positive effect on improving literacy skills. Literacy activities are inseparable from numeracy.

Numeration literacy is the ability to use a variety of numbers and symbols related to basic mathematics to solve practical problems in a variety of contexts of everyday life. Numeration literacy in early childhood is encouraged through play. This includes counting, reading the clock, recognizing numbers and many daily activities in the environment around the child. (Clay, 2001) states that literacy is the ability to listen, understand spoken language, communicate through image media, and oral which is formed from experience through interaction with the environment.

Early literacy and numeracy are two abilities that develop early and become important factors in determining a person's success later in life. The basic abilities of children include critical thinking, creative and able to collaborate well. Numeracy literacy activities can be carried out through activities such as recognizing an object, seeing relationships between patterns, symbols and data, besides that it can be used as solving a problem that occurs in everyday life (Fitria et al., 2021). Numeracy skills in early childhood include problem-solving skills, and the application of mathematics in everyday life. Early numeracy refers to the basics of mathematical reasoning acquired early on.

Previous research has mostly focused on theoretical models and cognitive aspects of language acquisition. The research builds on existing literature and uniquely emphasizes translating theoretical insights into actionable strategies for teachers. By testing and synthesizing previous research, we aim to contribute new perspectives to the field.

The novelty of this study lies in its emphasis on practical implementation strategies of numeracy literacy learning in children both at home and at school. Although theoretical frameworks offer valuable insights, translating these theories into real pedagogical practice is crucial. This research seeks to provide practical guidance for educators to improve their teaching methods and meet children's diverse language needs.

The main objective is to identify, analyze, and propose effective strategies to improve children's language development through the application of numeracy literacy in the child's environment, both at school and at home. Therefore parental involvement and good cooperation are very important. This research aims to empower educators with practical tools to create effective learning environments that can improve children's language proficiency.

2. Research Method

2.1. Research Design:

This study used a mixed methods research design, which combines qualitative and quantitative approaches to comprehensively investigate the effectiveness of strategies to

improve children's language mastery at home and at school. The integration of these methods enables a holistic understanding of the diverse aspects involved in children's language learning.

2.2. Participants:

The participants involved in this study were children aged 4-6 years in the Early Childhood Education Institute of Serang City, Banten. Purposeful sampling techniques will be used to select schools with diverse child populations, thus ensuring a representative sample.

2.3. Data Collection:

Surveys and Questionnaires: Surveys will be given to teachers and parents to gather insights into their current practices and perceptions regarding their children's Language acquisition strategies. In addition, children will be given a simple questionnaire to assess their preferences and experience in language acquisition.

Class Observation: Class observation will be conducted to qualitatively analyze the application of children's language acquisition strategies. This will involve assessment of teaching methods, classroom interaction, involvement of teachers, children and parents.

Standardized Tests: Before and after assessments use vocabulary proficiency tests through letter card games, storybooks and environments as their learning resources. This is done to measure the impact of strategies applied on children's language skills, both receptive and expressive language.

Interviews: In-depth interviews with teachers, parents and children are conducted to gain qualitative insight into their experiences with the strategies applied. This interview will provide additional understanding of the effectiveness of different approaches. The interviews conducted for children through play activities get to know objects around children and through other media.

2.4. Data Analysis:

Quantitative Analysis: Surveys and test data will undergo statistical analysis to identify patterns, correlations, and statistically significant differences. This quantitative analysis will provide insight into the overall impact of the implemented strategy.

Surveys and Questionnaires: Surveys will be given to ECCE teachers and parents to gather insights into their current practices and perceptions of language acquisition strategies. In addition, each child will be given a questionnaire in the form of simple questions to assess their preferences and experience in language acquisition.

Limitations: Research limitations may include potential bias in self-reported survey data and contextual specificity of observations at school and in each child's home through interviews with parents. These limitations will be recognized transparently in the interpretation of the results.

2.2. Participants:

Qualitative Analysis: Thematic analysis will be applied to data collected through classroom interviews and observations. This qualitative analysis aims to uncover fundamental themes, challenges, and success factors associated with implementing language acquisition strategies.

Triangulation: Data triangulation will be used to compare and contrast findings from different data sources. This method increases the reliability and validity of research by corroborating evidence from multiple perspectives.

3. Result and Discussion

The analysis and discussion section of this study, "Improving Language Acquisition: Effective Numeracy Literacy Implementation Strategies in Early Childhood," explores the complexity of language learning strategies and their practical application in the application of numeracy literacy in early childhood. This narrative explores the findings obtained from a mixed methods approach, combining quantitative and qualitative data to gain a comprehensive understanding of the effectiveness of these strategies:

Quantitative Analysis:

Quantitative analysis of survey data provides valuable insights into ECCE teachers' practices and perceptions. parents and learners on language acquisition strategies. The survey results show the diversity of approaches currently used, with an important emphasis on two types of literacy experiences that are in the home environment: informal and formal literacy experiences. Informal literacy experiences focus on meaning and exposing children through reading books together, while formal literacy or formal literacy experiences focus more on code and exposing children to print directly through letter and word teaching activities. This experience will have a positive effect on improving literacy skills. Literacy activities are inseparable from numeracy.

Class Observation:

Qualitative analysis of classroom observations reveals nuanced dynamics in the learning environment, both at home and at school. This activity is carried out by teachers while at school, and with parents when they are at home. This strategy is very effective because of the good cooperation between teachers and parents. The qualitative findings highlight the importance of dynamic and engaging pedagogical approaches to encourage student participation and language proficiency development in early childhood.

Interview:

In-depth interviews with teachers and parents can provide valid information on the research, revealing a willingness to tailor appropriate learning approaches or strategies for the child. Interactive and practical learning strategies highlight the importance of parental relevance and involvement in children's learning at home.

Data Triangulation:

Data triangulation can strengthen research results through reference findings from surveys, observations and interviews with teachers, parents and simple questions in enriching children's vocabulary through interesting and fun learning resources and media for children. The material presented is related to the theme closest to the child.

Implications and Recommendations:

This research offers practical implications for ECCE teachers and parents in Efforts to Improve Language Acquisition: Strategies for Effective Numeracy Literacy in Early Childhood. Provide

further understanding of how the application of numeracy literacy for children, as well as the methods used should pay attention to aspects of child development.

4. Conclusion

This study explains the efforts to improve children's language acquisition through effective numeracy literacy implementation strategies in early childhood. This can provide further understanding of its application in the context of effective and enjoyable early childhood education for early childhood.

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