# Developing Literacy and Numeracy Teaching and Learning for Kindergarten: A Case Study

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#### **ABSTRACT**

Literacy and numeracy education for children in kindergarten really needs to be developed. The development of literacy and numeracy in children in kindergarten is closely related to the ability to read and write and count in children. Literacy and numeracy activities are also related to children's ability to receive, analyze and communicate regarding literacy and numeracy concepts. Emergent literacy is a concept that supports learning to read and write when children are in the process of becoming literate or can be called understanding letters. The theoretical foundations used in this study include the notion of literacy, emergen literacy, types of literacy, and the teacher's role in literacy development. The research used is qualitative research. The instrument that is the subject of the research is the researchers through observation, interviews with teachers and also documentation studies. The results showed that the literacy and numeracy skill development program in this private kindergarten was positive. Students learnt to read and write or recognize letters, words and numbers by playing cards, guessing pictures, guessing colors and sticking letters and numbers.

Keywords: developing, literacy, numeracy, kindergarten

## 1. INTRODUCTION

The development of literacy and numeracy in children is closely related to the ability to speak or communicate and count. This ability must start from an early age, namely from the family level, and kindergarten as a stepping stone to the elementary school level where literacy and numeracy are already complex. According to Harlock (1978, p.178) there are two important elements in communicating in early childhood. First, children must use forms of language that are meaningful to the people they are communicating with. In communicating, children must understand the language used by other people, so that the ability to speak affects the social and personal adjustment of the child.

Literacy skills or communication skills in children will affect their social, emotional and cognitive development (Harlock, 1978:178). If children are able to communicate with the surrounding environment, they will grow self-confidence and be able to socialize or be accepted in their environment. Harlock's statement above emphasizes that language skills affect a child's social and personal adjustment, of course, it will also affect his emotional and cognitive development. This ability is an ability that must be possessed by everyone. Children's numeracy skills accompany their literacy skills. Numerical literacy skills are skills on a set of knowledge and abilities in reading and arithmetic as basic mathematical abilities. Children who are proficient in literacy and numeracy from an early age at the kindergarten level tends to have the potential to be tough in solving problems.

The main key to teaching literacy and numeracy to kindergarten age children is how to get children interested in reading, writing, and counting activities so that these activities become fun activities. If you enjoy learning numeracy literacy, it will be easier to guide children to read, write and count from the simplest to the more complex levels. Habits that will become a hobby with the concept of numeracy literacy will be more appropriate if it has been instilled from an early age, namely at the kindergarten level which is also supported by habituation in the family environment, so that reading and writing and arithmetic activities are no longer a burden but a burden. the needs of the child.

ISBN 978-602-6258-29-8 265

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#### 2. THEORITICAL REVIEW

According to the National Literacy Forum (2014), there are four ways that must be done in building universal literacy, namely: improving language skills from an early age at home and in non-formal education, more effective learning that can foster reading and writing skills at school, access to reading and programs that make children feel happy doing literacy activities, creating collaboration between schools, the environment, family and work environment to be able to support a literacy culture.

Literacy comes from Latin, namely literatus which means marked by letters, literate or educated (Toharudin, 2011:1). So that literacy is very closely related to reading and writing. This ability begins with the child's ability to speak and communicate well. This child's literacy ability will gradually continue to develop, which was originally only able to express and then express by communicating. So literacy is a child's ability to speak, listen, understand, observe and draw.

According to Cordon (2003), the definition of literacy is a fun source of knowledge that can build their imagination to explore the world and knowledge. Based on the information, literacy ability is a very important ability in the development process of school children. This ability is the opening door for the learning process and is the key to success in school. The importance of literacy skills as the initial foundation for the mastery of science and technology in the modern era.

Rohde (2015) states that it is very important to ensure that children acquire the skills and early awareness they need to become successful readers and writers. This opinion shows that literacy learning is important and very appropriate if it is taught to early childhood. The development of literacy in preschool children is at the stage of basic literacy.

According to Neumann, Hood & Neumann (2009). Literacy is one of the literacy skills (reading and writing) that can use scaffolding facilities in the use of educational material design. According to Seefeldt & Wasik (2008), there are three important aspects that must be known about reading and writing, namely: 1. Reading and writing is the development of reading and writing skills as well as creative and analytical actions in producing and understanding text 2. The development of reading and writing has begins long before children begin formal instruction in reading 3. Learning to read and write is important for children's success in school. The best stimulation at the literacy stage is by reading stories, stories or fairy tales (Suyadi, 2010), besides playing, telling stories, and singing also play an important role in every activity, because various activities can be delivered in a fun and interesting way for children (Inten, 2010). Permatasari & Mulyani 2016). Stimulation through play can attract children's interest so that children do not find it difficult to focus, not easily bored and tired. Children do not need stimulation that is not perceived as learning but as playing in accordance with their developmental needs (Ruhaena, 2015). Experts in the field of childhood development believe that play is the best way for children to learn concepts which are then used to learn new things in the future (Puteh & Ali 2011).

### 3. METHODS

This study used qualitative research methods. Researchers conducted research by observing literacy development programs in early childhood in a private Kindergarten, Umbulrejo, Ponjong, Gunungkidul, Yogyakarta which were carried out in natural conditions or without treatment from researchers. In this case, the researchers focus on research by observing children's learning activities. The subjects in this study were principals, teachers and students at ABA Aisyiah Bustanul Atfal Kindergarten. Based on the form of a qualitative research approach, the data collection techniques used were observation, interviews and documentation studies.

### 4. RESULT AND DISCUSSION

From the research conducted, the researchers found that there have been literacy development activities for children, for example, it is carried out with activities introducing letters and numbers to children, as well as teaching children to write letters and also pronounce letters through words and mention numbers. After that, the next step is the teacher gives examples for children to read the books that have been provided. This

ISBN 978-602-6258-29-8

activity can stimulate children to understand letters and numbers. So the development of literacy through reading and writing has been carried out.

The introduction of numeracy begins when students enter the class. They line up and do counting activities starting from the first child entering the classroom until the last child enters the class. Then besides that when learning is over, the teacher will invite the children to count using objects in the classroom such as the chair the child is sitting on on the right, how many plus the chair on the left are how many then the children add up, besides that the teacher shows a finger to be counted, the child will answer with the help of his finger, after the child has finished answering the question, the new child is allowed to go home. If the child does not understand how to add up, the teacher will teach the child until the child understands and understands.

For digital literacy, children are introduced to digital media such as mobile phones, radio, television. The teachers have prepared various forms of learning media that will be used in developing children's literacy. The media are grains from nature, interesting pictures, letter and number cards.

Activities to introduce letters to children, for examples, children are introduced to numbers; children are invited to play with letter cards; children are invited to play with words and guess pictures; children are asked to write letters and numbers; and children are invited to sing while mentioning the letters.

Numerical literacy activities are done through various activities, for instance, children are asked to count from 1-10; children are invited to count using seeds; children are invited to count before entering class; children are invited to add and subtract every time they come home from school.

Digital Literacy is introduced through digital media such as television, radio, mobile phones. Children are taught the functions of digital media whereas media literacy is implemented by using grain media for counting activities, providing story books for children and the blocks. The teacher also provides media in the form of pictures of each theme discussed to be introduced to children.

#### 5. CONCLUSION

Overall, the school has carried out literacy development activities for early childhood. The development carried out is in the form of literacy, literacy, numeracy, media literacy, and digital literacy. So it can be concluded that AISyiah Bustanul Athfal Kindergarten has done quite well in developing numeracy literacy activities for children.

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ISBN 978-602-6258-29-8