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A Teacher's Perception of Print and Digital Literacy in Early Childhood

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***Abstract*—This paper describes the implementation of literacy used by early childhood teachers in language learning in schools. With the background of the modern era and globalization, the purpose of this study was whether print literacy is still necessary and important to be used in early childhood language learning and whether teachers should use digital literacy to keep up with the development of the industrial revolution 4.0 era. This research attempts to explain the teacher's perceptions of literacy learning. This was a mix method qualitative descriptive research. Researchers conducted a survey method for head masters and early childhood teachers in Bengkulu City. Data collection shows that most principals and teachers believe that digital literacy needs to be done in addition to print literacy but some preparations were needed such as the readiness of principals and teachers in learning technology, school needs in the application of digital literacy, and the availability of ICT facilities such as computers, tablets and internet networks. Literacy and language learning is provided through print literacy, such as literary books, story books, posters, letter/words cards, and puppets. Unlike the expectations of experts, the use of digital literacy is still very rarely used. In some schools, teachers also conduct literacy and learn languages by displaying stories through computers or TV, but only once at the top of the theme.**

Keywords—literacy; language; learning; teacher's perception; early childhood

I. INTRODUCTION

Literacy is the ability to read and write. In a broader sense, literacy involves reading, writing, listening, and speaking [1]. Literacy activities have been synonymous with reading and writing activities. Alphabet knowledge is a hallmark of early literacy and facilitating its development has become a primary objective of preschool instruction and intervention [2]. This begins at birth and continues in the home environment, in social situations, and in preschool classrooms as children interact with caring adults. Children learn about language through every day experiences. Songs, chatter during diapering, at mealtimes or while riding in the car; conversations with adults, and listening and imagining during story time all contribute to literacy development [3]. Research on literacy and language shows that the environment greatly influences the development of children's literacy and language early on. Provision of educational materials, engagement with books, focus on print, implicit language opportunities, focus on other pre-academic skills, social interactions with books, influence on schools, influences of adults, parents' reading interest/abilities, children's reading interest, parents' commitment to child's success and family stressors are factors that influence mastery of literacy in children [4]. To develop children's literacy in reading and writing skills, it is necessary to stimulate interesting and liked by children, both in literacy and digital literacy. Schools play an important role in offering a literate environment for students. Schools may foster reading motivation and reading for pleasure in many ways. However, schools do not have sole responsibility [5].

The rapid development of technology has affected all aspects of human life, including in the aspect of education. Information technology is an ability that must be mastered by humans in the millennium [6]. Currently early childhood education discusses technology in education that can help educators/teachers in the learning process, especially to overcome problems that require media/teaching aids. Electronic books are one example or a rapidly developing alternative to conventional books even for very young children [7]. Effective interactive learning techniques for early childhood such as using educational games that are interactive, interesting, and fun that can be done by playing while learning [8]. This shows that literacy and language learning can utilize audio visual media that use technology. Many studies also proven the effectiveness of digital learning, such as the study of Wozney et al. [6] and Roskos et al. [7]. In addition, the multisensory approach creates an atmosphere of learning while playing by optimizing all the sensory senses that a child has (audio, visual, and kinesthetic) [9]. Early childhood teachers should recognize the benefits and understand how to maximize the potential of computer as an educational tool. Clements found that language activity among preschoolers is reported to be almost twice as high at the computer as in any other classroom activities [10]. Garbe et al. Added that several indicators are needed in growing the literacy environment; namely creating a literate environment in schools, improving the quality of teaching, and increasing participation, inclusion and equality [5]. For this reason, researchers are interested in knowing teacher perceptions of digital literacy.

II. METHOD

This was a mix method qualitative descriptive research. A descriptive research seeks to describe and interpret conditions or relationships that exist, opinions that grow, processes that are in progress, consequences or effects that occur or trends that are developing [11]. In this study, the researcher tried to describe and interpret the teacher's perceptions that were ongoing or developing in relation to literacy learning. This research was conducted in September - November 2018 in early childhood education in the city of Bengkulu with various characteristics of the school, both Integrated Islamic schools, public and private schools. The subjects of this study were 41 school principals and teachers from 11 early childhood education in the city of Bengkulu. Data sources in this study were principals and teachers.

Data collection techniques were carried out through questionnaires, interviews, and observations. Questionnaires are arranged in the form of a list of questions submitted to respondents. The questionnaire indicators used in this study are (a) creating a literacy environment in schools, (b) improving the quality of teaching, (c) increasing participation, inclusion and equality [5] and also multisensory approaches [9]. Interviews were conducted to obtain more in-depth data about literacy learning used in schools. Whereas observations are carried out directly during literacy learning in class.

Data analysis techniques carried out in this study used data analysis techniques as proposed by Hubermen in Sugiyono that in analyzing the data there are three main components that must be done, namely [12]; (a) Data reduction, means all data that has been obtained from research activities in early childhood education are selected and focused on data that have to do with research problems, while things that are not appropriate are removed. (b) Presentation of Data, that the data obtained in this study are presented in descriptive form in the form of tables and numbers along with their descriptions and documentation data. (c) Conclusion Verification and Withdrawal, all data obtained during the study, then draw conclusions regarding teacher perception of print and digital literacy used in learning. The conclusions obtained are in the form of general conclusions that represent the entire series of activities carried out during the research process [12].

III. RESULTS AND DISCUSSION

Based on the results of the questionnaire, it can be seen that print literacy is more widely used in literacy and language learning in early childhood in school than digital literacy. On previous study of Ruhaena [9], learning methods that are active and stimulate all sensory devices (multisensory) are more effective for preschoolers because they are in accordance with the needs and psychological characteristics of children.

The results of the study show that on Indicator 1, the school has created an environment that supports literacy with the media used: computers, videos, books, posters, multimedia. Interest in attitudes and abilities of individuals using digital technology and communication tools to access, manage, integrate, analyze, and evaluate information and communicate knowledge. Literacy learning is done every day but only at a glance like reading a picture word card. While literacy and language learning is specifically given 3 times a week. In accordance with the concept of the theory of Vygotsky which emphasizes the sociocultural nature of the learning process [13]. Intelligence in children grows along with their interactions with the environment. The influence of the environment in the form of giving the right stimulation is literacy stimulation [14]. Creating a more literate environment will help stimulate a culture of reading, i.e. where reading for pleasure is seen as the norm for all children and adults. Because they read more, they read better, and because they read better they read more: a virtuous circle which benefits individuals, families and society as a whole [5]. Figure 3.1 shows that most of the teachers in 11 schools in the City of Bengkulu have tried to create a literacy environment in schools. The surrounding environment also provides writing that can be used to improve literacy skills of preschoolers [9]. In line with the strategy and the example described in the study of Neumann et al. that parent-child interactions and the environment provide attractive opportunities for literacy learning in the home and school environment in the context of early education [15].

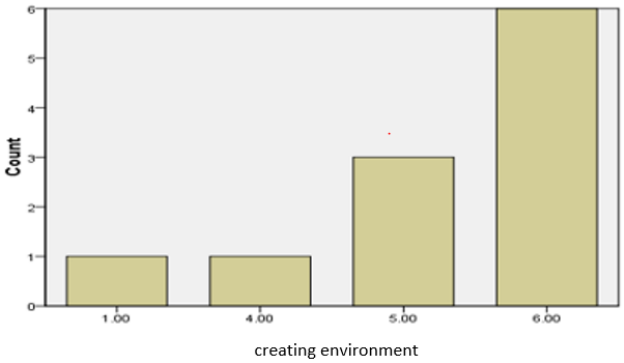

Fig. 1. Creating a literacy environment in schools (indicator 1).

Figure 1 (Indicator 2) shows that teachers who teach in 11 schools have tried to improve the quality of learning by applying various types of learning methods to students that is by doing multimedia and video learning. Innovations that have been done are learning by using a cellphone/gadget to show a word or story and using animated videos. The schools support by providing various learning facilities both digital literacy and print literacy. In order to face the industrial revolution era 4.0, schools/teachers have implemented digital literacy by using audio visual media, tourism activities to the PT Telkom information center. Innovations that have been done are making daily learning program plan (RPPH) in the form of files, making educational game tool (APE) and computer-based media. Through playing activities related to writing, such as playing letters, words and reading children are introduced to writing knowledge and reading procedures. Various forms of activities and interactions are strategies that can be adapted to the conditions and unique needs of each child [16].

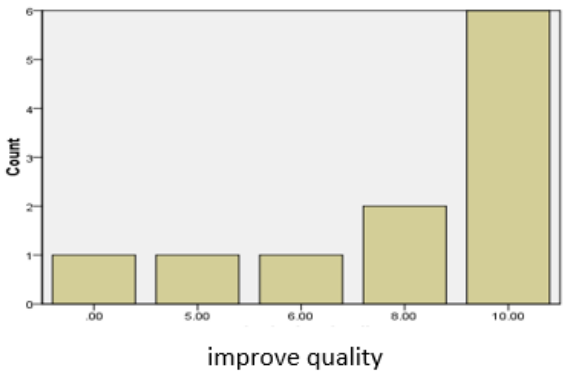

Fig. 2. Improving the quality of teaching (indicator 2).

On indicator 3, most teachers think that digital literacy can make students more active. This is in line with the results of a study by Levy, et al., which states that active literacy experiences will be predictors of the ability to read and write [17]. In line with Moody's study that when compared to media, children display higher levels of persistence as long as adult-led electronic storybooks are compared to the conditions of traditional, adult-led storybooks [18]. Most teachers think that digital literacy can be used by anyone because of various variations using digital media. By focusing on high-quality basic education for all, Finland has succeeded in fostering the individual potential of almost every child. There are hardly any private schools and no gifted programmes thus the general education can be said to offer equal opportunity to every child [5].

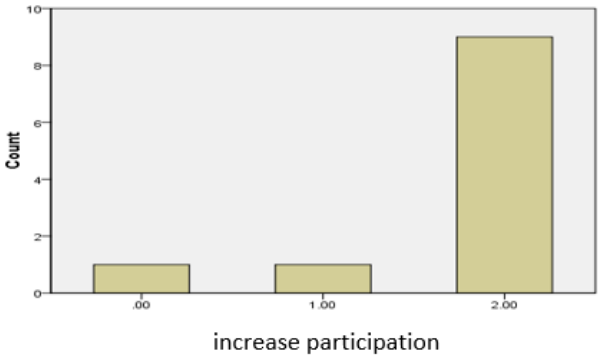

Fig. 3. Increasing participation, inclusion and equality (indicator 3).

Young children explore their world through manipulatives, playing with 'technology' that may or may not be digital [19]. Digital literacy activates sensory modalities (indicator 4) by utilizing digital literacy capable of stimulating children to use all senses, such as seeing, hearing, and repeating and saying. Literacy through audio visual media that is able to improve the ability of children's senses and is supported by original/concrete learning media [16]. Learning methods that are active and stimulate all sensory devices (multisensory) are more effective for preschoolers because they are in accordance with the needs and psychological characteristics of the child. The multisensory approach creates an atmosphere of learning while playing by optimizing all the sensory senses that a child has (audio, visual and kinesthetic) [9]. This is in accordance with Scrase's research using a computer-based multi-sensory system to teach literacy skills [20].

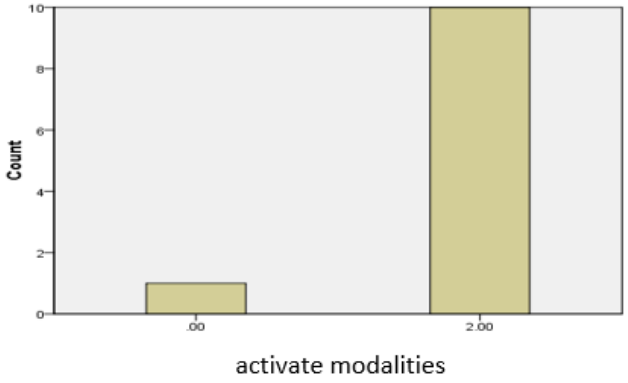

Fig. 4. Multisensory approaches (indicator 4).

Early childhood teachers should recognize the benefits and understand how to maximize the potential of computer as an educational tool. Computers should be considered among the many materials and centers that support teaching and learning in early childhood settings [3]. Clements found that language activity among preschoolers is reported to be almost twice as high at the computer as in any other classroom activities [10].

IV. Conclusion and Suggestion

A. Conclusion

Literacy print is still widely used in literacy and language learning in schools. Print literacy that is used includes literacy books, story books, posters, game media such as puppets, letter cards of various sizes and shapes. Whereas digital literacy facilities such as televisions, computers and Wi-Fi are still rarely used. Television is only used at the top of the theme by watching movies according to the theme. Computer and Wi-Fi are only used for administration and to look for material for classroom learning.

B. Suggestion

Utilization of technology facilitation in schools, the use of online applications is available as a learning resource, human resource skills improvement training such as training in making multimedia-based learning media, and reform curriculum with learning outcomes and content.

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