

## Stimulation Literacy Children Preschool: Problem and Solution

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**Abstract.** To realize productivity and wellbeing in digital era that full of information currently, literacy as the ability to read and write, include skills to access knowledge through technology and ability to assess complex. Literacy learning was increasing outside of formal settings before preschool and this uncontrolled, potentially critical reading still need more stimulation. Although early stimulation have been there, so many problems that need solution. This paper aims to issue stimulation literacy to preschool children and how the solution. Identify problem from empirical data and mapping as conceptual understanding system and holistical stimulation literacy children preschool. I wish this stimulation can be achieved to bring children to civilization based on literacy culture

**Keyword:** Literacy, stimulation, problem, solution.

### Introduction

Until recently digital technology recent work has challenged people and make a daily activities. Digital technology can make a information proses very fast and to expanding science easier connection from other place. This situation support high productivity and society welfare. However, literacy is a requirement accepted in digital community. Skill literacy the result of literate literacy process began from childhood then determine stimulation processed from the parents at home and teachers at school environment.

Skill literacy very important in develop school age proses. Especially in modern era, literacy becomes a very important skill. (Bjorklund, 2011). Skill Literacy can alert stabile school performance, behavior problems, and drop out rate. (Burke, Hagan-Burke, Zou, &Kwok, 2010) . Thus literacy is further asset potential children development.

To establish growing mind literacy for Indonesian children start from early stimulation skill. Research on the literacy showed that early literacy children, easier children learning to reading and then increase the level of children's success in formal school? (Senechal & Le Fevre, 2002). Children with early literacy stimulates from family has a higher skill literacy (Mullis, Martin, Kennedy, & Foy, 2007). Results of other research literacy rate showed that introduction of skill literacy children preschool very important to achieved skill literacy at school age 9-10 years (Ko & Chan, 2009). Thus skill literacy of children preschool predict further skills literacy in grade fourth of elementary school.

Generally, stimulation efforts to provide early literacy not effective and find a problem absolutely need solution. This paper will presented a critical review stimulation process skills literacy children preschool which is problem identification and suggest solution. From concept level to practice level closely process stimulation skill literacy for preschool. Level Conceptual for basis understanding and practice level important to apply practice stimulation. It can mapping problem, give problem solving, then further recommendation to make a treatment.

## Conceptual Problem and Solution

In conceptual problem, we can find a base problem according to early literacy that make controversial between different of view. This controversial impact to application conceptual literacy make a ambig In the conceptual level, the underlying issues related to early literacy skills is the opposition of a different view, causing controversy. This controversy led to application of the concepts of literacy development is still strongly felt contradictory and confusing society, especially educators. Thus it takes an assessment of the source of controversy for the difference could be mapped and understood the flow of thinking. It is intended to produce a precise conceptual grounding in the underlying application early literacy development by

The controversy is still common, especially in terms of literacy development perspective, the definition of literacy and how to develop it. There are two different perspectives of looking at literacy development of preschool children are learning readiness (reading readiness) and emergent literacy perspective. When these two perspectives above it could be concluded assessed as shown in Table I.

Reading readiness perspective emphasizes the importance of biological maturity before children learn to read and write. This means that the development of literacy is more determined by the role of the child's biological factors (nature) and did not consider that an important role of the environment (nurture). Actually, in terms of the nature of development, factors that affect not only the child but also biological environment takes place interactively. Thus the biological maturity can be grown in the presence of stimulation from the environment. Less environmental stimulation, create risk of delays or difficulties in learning to read and write. Emergent literacy perspective more in line with the principle of development, that develops early literacy and sustainable nature. Sustainable development makes early literacy skills improved to the literacy skills actually due fostered by social interaction. It is therefore important stimulation done early in ways that are tailored to the characteristics and the developmental age of the child. This is done from the family environment, given the family literacy (family literacy) is currently a rapidly growing field of study (Anderson, Anderson, Friedrich, & Kim, 2010)

The debate within the definition of the concept occurred because literacy is seen as an individual cognitive activities while there are different views that see it as an interactive social activities collaboratively. Literacy can be viewed as individual cognitive abilities, which considers reading as a psycholinguistic processes in the head involving the development and organization of neural groove. Social view considers the reading skills give access to a wide range of power and knowledge. but can also be seen as an important activity that is interactive, which is done in a collaborative social goals even though the action itself is individualized reading. Whitmore, Martens, Goodman, and Owocki (2004), distinguishes literacy approach to literacy into individual and social. Individual literacy emphasis on the achievement of literacy as an individual process that evolved simultaneously into a reader, writer, and creator of the meaning of birth. Social literacy emphasis on the achievement of the literacy skills acquired by the role of social environment and interactions such as playing. In understanding the achievement of early literacy skills, both of these approaches is important for the referenced so that understanding is becoming more extensive and comprehensive. Integration of the two approaches need to be done to make the definition of early literacy skills. Therefore, early literacy is defined as the activity of reading, writing, speaking, listening, thinking, seeing that involve the individual's cognitive and stimulated by the social environment.

In a way to teach literacy are two different ways that is oriented holistic or so-called top-down approach / big book / whole language / contemporer and how both oriented components or often referred to as bottom-up approach / code base approach / phonics / traditional / skill. The first view taught to read and write naturally made in the context of social and cultural activities are meaningful. In its application, the parent or teacher who holistic view will show behavioral support, facilitating the, and gives examples of how to read and write in the context of daily activities that aim and meaningful. Thus the child is more geared to talk, discuss, read out a story book. The second view is more emphasis on teaching that produce certain skills that helped children with these skills in literacy. Parents or teachers who think a more traditional exhibit behaviors focus on teaching the word introducing itself through teaching the alphabet,

words, sentences and stories chronologically. In this case the child needs exercise books and examples of how to read (Lynch, Anderson, Anderson, & Shapiro, 2006).

In the next, more experts consider different ways of introducing literacy as a complementary area to achieve effectiveness and optimization of the development potential of children's literacy. More important that a holistic approach and components referred to and applied in a balanced manner in order to provide an optimal contribution in achieving early literacy skills

<b>Over view</b>	<b>Reading readiness (Traditional)</b>	<b>Emergent literacy (konstruktivist)</b>
Basic concepts	To learn to read and write the child must have the readiness / maturity physically and neurologically. Once cooked slowly underlying child acquires the ability to be able to read and write. Teaching before the child matured would only harm or burden.	Literacy / literacy develops early, long before the child is taught to read and write in school. It is evident from the behavior of pretending or imitating reading and writing although they can not. It is therefore important to provide early literacy experiences that helped him master the actual literacy as adults.
Age to start learning	Mature age to start learning to read and write is after reaching 6 years.	Early age children can be conditioned, was introduced on the related activity read write.
Ability precondition	Before learning to read and write, children are taught first the ability to distinguish shapes, distinguish auditory stimulus	Kids are given a lot of experience and related exploration read and discuss the article
Learning process	Be gradual and sequential: first fluent, just learning to read, after learning to read just learning to write	Performed in parallel for language skills, reading and writing is a skill that overlap and develop related.
Learning methods	Oriented on skills-based that children are taught special keterampilan such as knowledge of the alphabet, spelling, know the word	Oriented to get children to engage in literacy activities holistic-based
Teacher	Direct instruction about specific skills that must be mastered (centered on the teacher)	Acts as a facilitator, mentor gave examples, and provide support for children's literacy activities (child-centered)
Character	<ul style="list-style-type: none"> <li>- textual; teach literacy skills to read text / article.</li> <li>- Components; learn to read and write components emphasize reading and writing skills.</li> <li>- Boring; requires children to focus and concentrate on thinking activities, learning behind the counter</li> </ul>	<ul style="list-style-type: none"> <li>- ontexual; literacy applied in the context of meaningful and purposeful activities.</li> <li>- Holistic; reading and writing are taught with emphasis on social interaction behaviors such as talking, discussing and reading a book</li> <li>- Fun; doing activities that make children happy, excited and interested.</li> </ul>
Basic theory	Theory of behavior are more looking at children as individuals are passive so that the process of learning to read should be didactic (taught directly)	Cognitive-constructivist theory (Piagert) assume children have cognitive ability to construct knowledge, thought. Social constructivist theory (Vygotsky) saw children construct knowledge, thinking with the directives of others who are more capable.

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Facing two different views on the above, Snow (2008) considers that there is no view which is entirely right or entirely wrong. He considers that from a holistic view and components can be obtained insight that can be used as a guide to create an optimal environment that stimulates children's literacy development. Research Brand (2006) which has been integrating components and a holistic approach to teaching early literacy prove that this integration effective. Both components or holistic contribute complementary so that both of them need to be applied (Helland, Tjus, Hovden, ofte, and Heimann, 2011). Review of Neuman (2010) states that early literacy learning should be simultaneous in emphasizing the encoding process and understand the content / meaning of the article.

The author considers that both a holistic view and components each have contributed to improving child literacy. Therefore, both views should be combined, in order to achieve integration are complementary to create an increase in literacy of children more effectively, namely by: a) the introduction of literacy begins by engaging children in activities literacy everyday significance (holistic) and stimulate the skills to know letters, words (as a component) b) activity literacy is seen as a process by individuals but got motivation / encouragement from others (social environment), c) the stimulation of literacy is natural that important contextual done at home and learning of literacy in schools, both formal structured d) stimulation extramural immense benefit to support the process of literacy in schools, e) stimulation of literacy can be done early on to stimulate and optimize the development of brain cells, so that the function of 100 million Nuron possessed from birth may develop bolsters the brain's capacity children and do not die.

### **Problem Practice and Solution**

At the practical level, namely the practice of stimulating the literacy skills of preschool children, the problem is identified from the findings of empirical research that has been done. As these issues include problems related to the interests of children, how to stimulation, literacy activities and the use of media literacy.

According to explorative study of the 84 parents who have children aged 5-6 years in the district of Sukoharjo, Surakarta (Ruhaena, 2011a), it is found a problem that children lack the interest and reading habits. It ditunjukkan by the data of children's books who owned less than 10 books with the average child reads less than 15 minutes per day. Children are also less likely to be invited to recognize letters, words, and reading. Though theoretically, ranging in age from 3 years old children have an interest to undertake activities related to writing letters and reading a story book. As a solution, the introduction of literacy should be done as early as possible in the form of a holistic approach to get children involved in the daily literacy activities that parents do (read the names of stores, directions / road, catalogs, recipes, newspaper). It is important to give children experience literacy activities in the context of meaningful and natural in real life. Habituation is going to stimulate the child's curiosity about writing, books, and reading so interested to learn. This interest can then be developed into an interest that make children love to read and write.

In subsequent exploratory study of the 92 parents who have children aged 3-5 years in the municipality of Surakarta (Ruhaena, 2012), found a problem that in stimulating early literacy skills, parents are more oriented textual learning and cognitive-directive not play the contextual and interactive-affective. Parents are more often used way to teach literacy skills, provide books and stationery, rather than invite a child to read books, newspapers and playing cards / pictures and buy books in a bookstore. Only a minority of parents who encourage children to read in their spare time. To solve this problem, it is essential that parents be given the intervention so that they better understand the stimulation technique used to play while learning the basic theory of constructivist (Piaget, Vigotsky).

With this intervention of parents, especially mothers who have more opportunities to interact more with children, get enrichment to act as a facilitator or mentor who can direct the child to actively construct their own knowledge of literacy. Mother expected more skilled in creating a varied literacy experiences and using media literacy also varies contained in the environment around the child. Media learned not only use textbooks, but using a more varied media as a tool of educational games, posters, catalogs, leaflets, labels, nameplate, story books and even gadget or multimedia technologies such as mobile phones, tablets, and computers.

Research (Ruhaena, Kumara, Adiyanti, Helmi, 2014) concluded that literacy activities parents and children can not be a predictor of the literacy skills of preschool children. These results differ from the results of previous studies conducted in Western countries. The meta-analysis (Ruhaena, 2011b) on 20 previous studies on the relationship of literacy activities with early literacy skills showed that the literacy activity correlated significantly with children's early literacy skills. This difference occurs because the literacy activities carried out in Indonesia, more teaching text through memorizing letters and spell the word. In this way too textual cognitive approach that requires concentration and less enjoyable for children. In terms of literacy activities at home, how to teach directly (direct teaching) is more dominant than the performed activities related to the book and play. This shows developed early literacy skills of parents textual and cognitive-academic nature, less affective-interactive nature that encourages interest and habit of reading and writing.

This is in contrast with the literacy activities carried out in developed countries like US, UK, and Australia more contextual and applicable in day-to-day activities as natural as reading story books and play literacy that make children more interested and motivated. Thus the problem is the individual approach to early literacy stimulation is higher than the social approach. To overcome this problem, the literacy activities in the home should be utilizing to play and read the book as a context. The involvement of parents in the play and read books will create parent child relationships are full of affective and interactive, fun for the children. Affective interaction plays a major role to foster a child's interest in books and literacy-related activities.

Parents stimulate and expand opportunities for children to see and manipulate literacy in various forms such as books, toys literacy, and posters or writing. Furthermore, children are invited to pay attention to the surrounding objects literacy and questions were raised about what was observed to enable the scheme of thinking and curiosity. Furthermore, parents have a dialogue, interaction, and gives examples

of literacy activities. Many parents engage children in literacy activities daily to achieve a goal for the benefit of children. For example, children are invited to see the price of groceries, read the banners or signs, recognize the logo, read brochures or catalogs, read a children's story books, magazines, newspapers. To write may be invited to write the child's name on the goods or books for children, writing a grocery list, write orders menu, write a little note or short message. The use of multimedia technology also needs to be optimized to use to support the child knows the literacy and interest in learning literacy. Therefore, children need guidance and monitoring multimedia parents to become more effective and has been used only for entertainment purposes such as playing games.

Further studies reveal the problem to the gap in terms of early literacy stimulation. According to reviews of theoretical stimulation of early literacy in preschool children is done in a fun way by playing and active participation. In fact, the empirical findings indicate that the development of literacy teaching preschoolers emphasize textual and less make children actively involved (Ruhaena, 2015). Therefore prepared as a solution model of multisensory stimulation method to optimize the sensory child playing with a good visual, auditory, or kinesthetic so that children feel happy in the process of mastering early literacy. This multisensory models provide literacy activity pack and train mothers to use literacy packages appropriately. This model has been implemented and has proven its effectiveness (Ruhaena, Rahmatika, Hapsari, Moordiningsih, 2015). Training and providing effective package increases the activity of literacy and literacy skills of preschool children. Further dissemination model of multisensory needs to be done to overcome the problem of lack of early literacy stimulation in accordance with the needs and characteristics of preschoolers elsewhere.

In addition through informal education at home, early literacy stimulation is also done through formal education in schools kindergarten. Stimulation of early literacy in schools is necessary in order to get more children interested renewal and got diverse literacy experiences. Multisensory method is also one solution for the stimulation of early literacy in schools (Ruhaena, 2008). One method that has been applied to the multisensory stimulation of early literacy in English-language school is Jolly Phonics method. Meode has also been implemented at some schools that teach English since preschool (in Japan, Malaysia, France, Iran, Nigeria) and proven effective to increase the interest and literacy skills in English ([www.jollylearning.co.uk](http://www.jollylearning.co.uk)). That requires further research stages to implement and test the effectiveness of multisensory Jolly Phonics method in the development of early literacy in schools in Indonesia.

## Recommendation

After understanding the problem and the solution it needed a follow-up which is a collaboration of various authorities. As a follow-up recommended are:

1. Develop literacy within the family (*family literacy*). The family is seen as an asset / capital potential to stimulate children's early literacy skills. It is therefore important pursued the implementation of a national program of early literacy development of children by parents in the home as well as a program of Early Head Start and Head Start in the United States, *Home Instruction for Parents of preschool youngsters* (HIPPY) in Israel, Nury program in Malaysia.
2. Build a study center (research center). To ensure the development of early literacy has the empirical basis and has a scientific conceptual basis. In this case the need for cooperation between universities, government, educators and parents and teachers. Conducting research universities to build a stimulation program, the government sets policy on the education of preschool children, and educators stimulation. Third parties are coordinated to ensure the stimulation program can be effective.
3. Formulate guide the process of Early Childhood Education. The Government has made early childhood education (ECD) as a strategic issue in 2010 through 2014. Furthermore, necessary to formulate a more operational guidance on materials, methods, and media that are active, constructive, and multisensoris to process in early childhood education. This guide will help teachers to achieve the

specified quality standards. Furthermore, teachers are also trained and educated to be able to implement these guidelines.

## References

- Anderson, J., Anderson, A., Friedrich, N., & Kim, J. E. (2010). Taking stock of family literacy: Some contemporary perspectives. *Journal of Early Childhood Literacy*, 10(1), 33-53.
- Bjorklund, D. F. (2011). *Children's thinking: Cognitive development and individual differences*: Wadsworth Publishing Company.
- Burke, M. D., Hagan-Burke, S., Zou, Y., & Kwok, O. (2010). A Structural Equation Model Using Fluency-Based Early Literacy Measures to Predict Emerging Reading Ability in Kindergarten. *Remedial and Special Education*, 31(5), 385-399.
- Brand, S. T. (2006). Facilitating emergent literacy skills: a literature-based, multiple intelligence approach. *Journal of Research in Childhood Education*. diakses dari <http://www.highbeam.com/doc/1G1-157946213.html>
- Helland, T., Tjus, T., Hovden, M., Ofte, S., & Heimann, M. (2011). Effects of Bottom-Up and Top-Down Intervention Principles in Emergent Literacy in Children at Risk of developmental dyslexia: a longitudinal study. *Journal of Learning Disabilities*, 44(2) 105–122. doi: 10.1177/0022219410391188
- Ko, H. W., & Chan, Y. L. (2009). Family factors and primary students' reading attainment, a chinese community perspective. *Chinese Education and Society*, 42(3), 33-48. doi: 10.2753/CED1061-1932420302.242
- Lynch, J., Anderson, J., Anderson, A., & Shapiro, J. (2006). Parents' beliefs about young children's literacy development and parents' literacy behaviors. *Reading Psychology*, 27(1), 1-20.
- Mullis, I., Martin, M., Kennedy, A., & Foy, P. (2007). Progress in international reading literacy study. Pirls 2006 report: Lynch School of Education, Boston College, Chestnut Hill, MA: TIMMS & PIRLS International Study Centre. International Association for the Evaluation of Educational Achievement (IEA).
- Neuman, S. B. (2010). Lesson from my mother: reflection on the national early literacy panel report. *Educational researcher*, 39 (4), 301-304. doi: 10.3102/0013189X10370475
- Sénéchal, M., & LeFevre, J.-A. (2002). Parental Involvement in the Development of Children's Reading Skill: A Five-Year Longitudinal Study. *Child Development*, 73(2), 445-460. doi: 10.1111/1467-8624.00417
- Ruhaena, L. (2008). Pengaruh metode pembelajaran Jolly Phonics terhadap kemampuan baca tulis permulaan bahasa Indonesia dan bahasa Inggris pada anak prasekolah. *Jurnal Penelitian Humaniora*, 9(2), 192-206.
- Ruhaena, L. (2011). Profile Minat Literasi Orang tua dan Anak Prasekolah. *Laporan penelitian*. Yogyakarta: UGM
- Ruhaena, L. (2011) A Meta Analytic Review in Home Literacy Activities and Early Literacy. Proceeding Internasional Conference on Recent Development in the integration of Islam and Knowledge Social Science and Technology, UMS Solo
- Ruhaena, L. (2012). Model stimulasi dini kemampuan baca tulis anak prasekolah di rumah. *Laporan penelitian*. Surakarta: UMS.
- Ruhaena, L., Kumara, A., Adiyanti, M.G., Helmi, A.F. (2014). *Home literacy activities and early literacy skills achievement in indonesian family context*. Paper presented at the Asian Association of Indigenous and Cultural Psychology Conference on Stress, Health, Well Being: Indigenous, Social and Cultural Perspective, Surakarta, Indonesia.
- Ruhaena, L., (2015). Model Multisensori: Solusi Stimulasi Literasi Anak Prasekolah. *Jurnal Psikologi*, 42(1), 47-60.
- Ruhaena, L., Hapsari, Rahmatika, Moordiningsih. (2016). Efektivitas Model Multisensori dalam Stimulasi Kemampuan Literasi Anak Prasekolah. *Laporan Penelitian*. Surakarta: UMS

- Snow, C. S. (2008). What counts as literacy in early childhood?. Dalam McCartney, K. & Philips, D. (Eds). *Handbook of early childhood development*. (274-316). Singapore: C.O.S Printers Pte. Ltd.
- Whitmore, K. F., Martens, P., Goodman, Y. M., & Owocki, G. (2004). Critical lessons from the transactional perspective on early literacy research. *Journal of Early Childhood Literacy*, 4(3), 291-325. doi: 10.1177/1468798404047291