

# DEVELOPING CHILDREN LITERACY THROUGH RAINBOW TEXT AND RAINBOW CARD

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## **Abstract**

Introducing literacy is a part of the children language learning. This activity can be done in various ways, including through the rainbow text "Teks Pelangi" and rainbow card "Kartu Pelangi". The introduction of text-based literacy and colors are done in ways that fit their needs, through play and non-formal way. "Teks Pelangi" made with regard to component form, color, composition, and genre, and is made on the level of shape-color, shape-noncolor, and shape-stirring. The level is made in accordance with the children's literacy development. Based on the genre, rainbow text is in form of descriptions and simple explanations. The text uses few action words and explores the characters or a specific entity. The content of the text is value-dimensional characters with factual knowledge. Meanwhile, the "Kartu Pelangi" is made by considering the components and the composition patterns of groups of letters. The game "Kartu Pelangi" is played in stages, namely random shape, same-shape, and the shape-up. The text and the rainbow card are made in Indonesian language and they aim at raising children literacy through literacy interest, literacy games, and literacy stage.

Keywords: children literacy, rainbow text, rainbow card

## **Introduction**

Nowadays, language learning problems of children in Indonesia, especially written language in children still remains a problem, especially on the methods and the teacher. Learning written language is still focusing on spelling skills, instead of growing interest in reading. The existing methods seem to be forced to be learnt by children since they are still in the age "playing while learning".

Written language is inseparable from the spoken language. It is not yet recognized by all the teachers and early childhood educators. Some teachers assume that speaking, reading, and writing are skills that are in sequence. This paradigm makes "literacy training" blooming and it is focused on memorizing, creating, and re-encoding the symbols of written language. Educators have not used spoken language as a continuation of written language.

According to Sulzby & Teale (1991) the behavior of reading and writing occur before the children develop the skills to conventional literacy. In this regard, in Indonesia, the introduction of a variety of methods in reading and writing that is more appropriate for early childhood education has been introduced by the Directorate of PAUD under the name Beyond Center and Circle Time (BCCT) (PAUD Directorate, 2006). After the year of 2009, because the usage permission is over, BCCT was adapted using several names, including "senling" or "sentra lingkaran". Nevertheless, this method is more familiar in non-formal PAUD and lesser-known in kindergarten. The fact is that, there are many teachers who face some problems on how to introduce the right literacy for children, what is the suitable model, and what methods and techniques that are safe for the children's development.

Those problems inspired the birth of the method of text-based literacy games, patterns, spatial, and motor. Rainbow text and rainbow cards, are two of the four games that were

created to fulfill the needs of the introduction of literacy children through playing. This game is based on color, pattern, and shape. All those three (color, pattern, and shape) are made and in three levels. This game has been tested namely the desk evaluation and field tests.

## **Discussion**

### **Literacy as Written Language**

Literacy as a written language means functioning letters as a tool to communicate in written form. In this regard, the main goal of language learning is to be able to communicate, both verbal and written. Therefore, the letter as written language still refers to that goal. It means that introducing literacy in children must refer to communicative competence, namely communicative competence which consists of five sub-competencies, namely, discourse competence (discourse competence), which is supported by the socio-cultural competence (socio-cultural), linguistic competence (linguistic competence) competence, speech acts (Actional competence), which in its use needs to be based on the strategic sub-competency (strategic competence) (Celce Murcia et al., 1995),

The above paragraph implies that introducing written language is not just introducing the symbols and structures, but also introducing the foundation of competence discourse, socio-cultural competence, linguistic competence, speech act competence, and strategic competence. Nevertheless, the competencies can be achieved in stages in accordance with the development and needs of children, not in the form of duty-test but in the form of stimulation.

Receptively, written language is related to the process of analyzing code, identifying and interpreting the words, knowing the functions of grammatical units, finding the proposition, and understanding the overall messages. Written language receptively also implies understanding the text from the author's perspective, understanding the text from the discourse perspective and finding the communication strategies that are needed. Therefore, a writer must know (1) what competencies they need, (2) any assignment in accordance with the needs of the children, (3) any learning experience that meets the learning needs of children.

Literacy as a written language is considered as a continuation of the spoken language, a natural extension of language acquisition. Literacy develops because of the intake or facilities in their surroundings (Sulzby and Teale, 1991). It shows convergent perspective that the natural provision needs to get the support from the environment, and learning always starts from the children's provision and it is done based on the children's ability. Nevertheless, the enriched environment was also be a prerequisite for the development of children's literacy naturally.

### **Literacy Games**

Stimulation, whatever it is, is best given in childhood is through playing, because playing is a source of development and form the zone of proximal development (ZPD) (Vygotsky, 1967). In playing, there is a process of symbolic representation, exploration, experimentation, mastery, invention, artistic expression, rewarding and appropriate to interact with others (Bronson, 1999). Children literacy stimulation is also best given through and games.

Literacy game is an game activity that functions to underlie, stimulate, and develop literacy skills in a fun, informal, and challenging way. Literacy games stimulate literacy skills.

Literacy game is not the same with phonemic awareness practice, because the fact shows that systematic instruction in phonemic awareness tasks during the preschool years does not lift the literacy skill nor raise literacy skills in elementary school at the time of formal literacy instruction begins (Yaden et al., 1999 ).

The game can be attributed to the emergence of literacy and this following factors. (1) Story Book. Research over the past three decades shows that books is the strongest predictor of reading success as phonemic awareness (Pellegrini et al, 1995). An illustrated text, with the striking font is also interesting and raises discussion for children (Yaden, 1993). (2) Dramatic Game. Dramatic game is an area to develop general skill which is full of implementation of the various domains, including reading and writing (Pellegrini & Galda, 1993). These games provide opportunities for children to develop important cognitive and linguistic skills needed. (3) The acquisition metalanguage forms (such as letters, words, stories) is as well as the awareness of written language through reading books events (Goodman, 2005). Metalinguistic awareness about spoken language and written language emerge developmentally, from tacit awareness about the text that focuses on the elements of meanings to the reflections that are more explicitly related to book conventions and aspects of the letter and the word itself. (4) Learning literacy informally achieves better results in phonemic awareness during the learning of reading (Richgels, 1995). Children learn from unconventional literacy to conventional literacy. Children also construct their own knowledge of literacy, and the emergence of the literacy occurs in informal settings (Teale, 1978).

If literacy is included in the acquisition, literacy has the subconsciousness characteristics process and occurs without formal teaching. Thus, the preferred children books (because there are stories in the book), is a favorite of children. Children books have a strong influence on what children see as the written form of language (Scollon and Scollon, 1981). When the book is read, the children will learn to distinguish between prosody and intonation patterns of the story (oral) and also the oral form stories in the book. In other words, children learn patterns of written language through story books. This means that the written language is essentially a pattern

The materials of literacy games for children must fulfill the requirements, namely the materials must be attractive for children, according to children's physical capacity, according to the child's mental and social development of children, suitable to be used individually or in groups, well constructed, durable, and safe for children (Bronson, 1995).

## **Rainbow Text “Teks Pelangi” as Literacy Game**

The game rainbow text "Teks Pelangi" is a game that has a main tool in the form of text that contains the pictures, reading game materials, and game instructions. "Teks Pelangi" aimed at emerging children literacy through interest in literacy, literacy games, and literacy stage. Rainbow text created in large size and the main font size is 24 (or the range 20 to 32). It is equipped with simple pictures or thematic pictures. The text contains words, some of which are repeated to give an effect of sound patterns and provide reinforcement identification symbol (Musfiroh, 2010). The level is made based on the children literacy development. Based on the genre, rainbow text is in form of descriptions and simple explanations. The Text uses a few action words and explore the characters or a specific entity. The content of the text is value-dimensional characters with factual knowledge. (Musfiroh, 2012)

Rainbow text can be used as material for the introduction of written language because actually the children has acquired the previous provision namely rhymes. Goswani and

Bryant (1990) show that children I the age of 3-5 years who have awareness of rhyme, initial grapheme, grapheme sound, name the letters that make up words have read better progress than those without. Thus, rainbow text starts from the children provision and trained through lingual units that form words and sentences

As a method of literacy, rainbow text (which has elements of the game as the tools and methods) trains communicative competence through the following ways. First, introducing the features of oral language through reading texts by the educators, including reading written instructions. Second, laying the foundations of speech act through dialogues created in real communication, questions and answers that are used to construct knowledge about the contents of the text. Third introducing cultural context through the contents of the text that is read. Fourth, elaborate linguistic competence in form of symbol recognition and structural patterns of the most basic symbols, the oral sentence patterns, and punctuation as a spelling system that were exposed (not taught).

The stages of rainbow text is based on (1)the stage of development in order to achieve competency requirement, namely reading children literacy stage, (2) the tasks they need to accomplish the needs of competence, ie, the tasks in the game to reach the stage of the higher literacy and (3) a learning experience, which provides the experience of playing while learning so that the child can tread to the next stage of development.

In the first stage, the children are given the opportunity to listen the descriptions of teachers based on an existing picture. After the teacher give the story, children are involved in the process of question and answer. Elaboration of the existing picture in the book is intended to stimulate the interest in reading literacy as well as the next underlying task. This refers to the basic findings of Jalongo and his colleagues, that the books are full of pictures with little writing effective precisely to encourage children to love reading (Jalongo, et al. 2002).

In the second stage, after the children have the knowledge of the content of picture and text reading features provision of the children should be able to identify the shape of the symbol with the help of the same colors. Tasks that are packed in this game is called "Hunt Trace". This ability grows naturally through playing and repetitions. This is in line with the opinion of Marie Clay (via Brewer, 1995), that literacy emerged and strengthened through the principle of repetition.

The principle of repetition does not considered as a task to repeat and repeat the task. This principle is defined as the diversity of invariant input (in the text) that causes the effects "seen repeatedly, repeatedly observed and analyzed over and over". In sub stages "to see repeated," color feature will be dominant, but once the children observe and analyze, they will find different forms. Graphemic awareness will appear and color features serve as a tool for categorization for children.

In the third stage, the children should be able to find the same lingual unit without the tools at all. This task does not just appear, but it has been formed through the second phase of the task. The concept of form and sequence starts to be paid attention by the children. Some minimal pairs, similar shape, opposite form may appear in the text, such as {kata} and {kota}, <i> and <l>, <b> and <d>. This stage assigns the children to find words, syllables, and same letters. Accuracy start to be required. Children no longer hunt (quickly and directly shoot) but they should look for the provision of these features and found the lingual unit symbol. This task is relatively difficult for children who do not have provision "Hunting

Trail" but it is relatively easy for children to succeed in "Chasing Traces". The second task is called "Searching for Traces".

The fourth stage is finding the same lingual unit in the context of a different color. Colors in this stage serve as a distractor as well as a tester whether the children's concept of lingual unit is strong enough. In linguistics, the third stage is called "pemorakan" technique, namely distracting subject to obtain the subject concept for the sake of getting the strength so that it can be destroyed. This stage is also formulated in the form of the game and the game is called "Detective Script". This stage requires precision and a more robust concept of isolated symbol and other lingual unit.

The fifth stage is the stage of reading the text. This stage can be done after the children pass the fourth stage. The texts that are read are all the text on the stage of "Memburu Jejak," "Mencari Jejak" and "Detektif Aksara". Stop for a moment, mistakenly read, haltingly read, and read without tone, will appear at this stage. The fifth stage is aligned with the stage of transitional spelling in the children literacy stage version of Marie Clay Literacy (via Brewer, 1995).

Thus, the "Teks Pelangi" is a literacy game developed by several dimensions. The dimensions are described in these types of games (the second, third, and fourth), as well as a focused unit lingual. Here are the intended dimensions.

Matrix 1. Dimensions and Indicators of Rainbow Text "Teks Pelangi" Games

<b>Dimension</b>	<b>Game Indicators</b>
Color	Finding the word, syllable, letters that are in the same colors
Same color shape	Finding letters, syllables, words
Letters and words	Finding the same letter, different color and mentioning the name of the letter
Syllable and word	Finding the same syllable, different color and reading it
Word and sentence	Finding the same word, different color and reading it
Syntax	Reading the sentences

(Musfiroh, 2012)

The game "Teks Pelangi" can be done with a variety of attachments, ie, with binoculars or localization of objects directly from the eye to the object, through a magnifying glass, and through the light. Focusing "Rainbow Text" is a game using small-sized-magnifying glass tool. The objects are letters, syllables, or words that are printed in the book. The book contains pictures both single picture and thematic picture. There are texts under the pictures. Focusing with the light is focusing game in a dark room with a flashlight or lamp that highlights the book or media on the wall. LCD can also be used as a light. Nonetheless, the LCD requires a program that contains words that are attractive, causing the children's interest.

The advantage of text-based literacy games are this game attracts children's curiosity, focuses children's attention based on the children's reading development, and aims to prepare to read the text. This text also serves as a charger of literat environment. Environment influences the development of literacy. Children who live in a deficit of literacy need to gain exposure to adult literacy activities such as reading and get to play the role of supporting materials such as phone books, catalogs, magazines, and newspapers. All of them will develop an interest in reading children (Curtis, 1998:61).

## **Rainbow Card “Kartu Pelangi” as a Literacy Game**

Game rainbow card “Kartu Pelangi” is a game made with regard to color components in the composition of letters and patterns. The game "Kartu Pelangi" is played in stages, ie any form, same-shape, and the shape-up. "Kartu Pelangi" aims at raising literacy or interests of children through literacy, literacy games, and stage literacy

Rainbow card is a letter card (preferably made from thick material or MDF 3 mm), which has a certain basic color based on group of the letter. In the previous research, the color is called "letter color standard", which is based on the use of font color. Rainbow card is small in size, it is recommended 4.5 X 5 cm. This card is made according to the number of letters, the number of cards for each letter is around 2, 3, 5, and 10, using 9 colors, namely red, green, blue, purple, and 5 bright colors namely white, yellow, light blue, light green , and pink (Musfiroh, 2011).

Rainbow card is made based on the need analysis that Play group and kindergarten children need games that stimulate the ability to create patterns of literacy, which involves visual senses, sensory-motor, sensory touch, and minimize cases of writing upside down. Playing literacy is essentially playing the patterns, but the pattern was set before. Therefore, before enter into the symbol, the pattern should be given first. Pattern based on color will stimulate the children to notice the form of letters that have certain colors.

Rainbow card game is developed into several stages. The first is a single-letter stage. At this stage the children play with all the letters, elaborate them, and begin to show the letter in some color with the letter card shown by the teacher. The early stages of the child may be confused with other letters in same color, but during the process of playing, children will identify letters. The introduction of a single letter at this stage is done in 5 groups of letters, namely a group of young color letters (a, i, u, e, o), the red letters (b, d, k, l, m, n, s), groups of green letters (g, j, h, p, r, t), the purple or brown letters (c, f, w, y), and the blue letters (q, v, x, z).

The second stage is the stage of syllables. In the second stage children begin to recognize patterns in color, the color of old letters (consonants) paired with light color font (vowels). This pattern was initially focused on the colors, but in line with the children-teacher interactions during the play of the letter, children will learn to identify that there is sub-pattern in the pattern the patterns, from color children will turn into the shape. This stage is the stage of elaboration of syllables, both open and closed syllables.

The third stage is the stage of word patterns. At this stage children begin to recognize words. At first, the children are still grounded in color pattern, but eventually the children will stand on the letter pattern. After mastering the patterns of letters, children will begin to be able to read slowly and may still be affected by the pronunciation of the letter.

The fourth stage is early syntax stage. At this stage, children are able to create their own word with the rainbow cards, and learn to pair the words with words so that it can be phrases and sentences. Children and teacher will add a word to each other so that it can be larger series. If the children put the word "aku", the teacher put the word "punya", then the children close the word "mobil", and read "aku punya mobil".

The fifth stage is the stage of independent syntax. At this stage, children can create their own sentences with rainbow card without assistance. Spelling mistakes and spelling focus may

still occur. This stage is parallel to the transition phase and generally children can read on their own sentence even without tone. Thus, literacy rainbow card game (also called syllable pattern) was based on six indicators as shown in the following matrix.

Matrix 2. Dimension and indicators of Syllable Pattern Game

<b>DIMENSION</b>	<b>INDICATOR</b>
Color	Forming pattern of same color
Shape – Color	Forming pattern of opened/closed part in the same color
Shape – Syllable	Forming pattern of opened/closed part by spelling
Shape – Word	Making words with the cards and reading them
Syntax – Collaborative	Making phrases or collaborative sentences with the cards and reading them
Independent syntax	Making sentences individually and reading them

(Musfiroh, 2012)

Thus, the introduction of the game's levels starts from the biggest pattern, ie, words, syllables, then letters. Once children recognize shapes, children are introduced with letters, syllables, words, phrases, and sentences. It means that "rainbow card" stimulate literacy development of children through the introduction of color, color pattern, shape pattern, and composition. Kindergarten children who use these games achieve relatively rapid development of literacy than children who learn to spell directly. The consequences of this game is the children must be accompanied by a teacher or adult (Musfiroh, 2012).

The meaning of literacy in a card game can be seen on the symbol substitution, which in the process occurs written dialogue between children and teachers. When the children show a particular word, the teacher completes and so on. Messages plays a role in forming the larger lingual unit. The game contains verbal interaction between children and teachers as well as demonstrates the important of scaffold role of the teacher in achieving the growth of children potential area. This interaction is very important because, according to Cooper (1997) children learn literacy includes all elements of the communication process, ie reading, writing, speaking, listening, looking, and thinking. In short, children develop the ability to create meaning through sharing (including books) with adults and peers, and by writing in a meaningful situation for them.

## **Conclusion**

Rainbow text “Teks Pelangi” and rainbow card “Kartu Pelangi” are literacy games made in Indonesian language and aims at raising interest in children through literacy, literacy games, and literacy stage. Both are grounded in color, shape, pattern, and composition.

"Teks Pelangi" and "Kartu Pelangi" are two of the four games literacy grounded in basic colors, shapes, and patterns. The game is made in stages, and it is equipped with playing tools and detection of literacy development. When children get enough mentoring, literacy development of children will be quickly achieved through literacy games, as well as through interest in reading.

"Teks Pelangi" can be played by children who have shown interest in the object's name, are able to show the difference in color, and are interested in the book. Meanwhile, the "rainbow card" can be given to children who are able to distinguish colors, happy about pattern, and

interested in writing. The age of the children can be different, they are between 3-6 years. In children under 3 years of age, both games still remain in long time at the stage of color.

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