Basic Dimensions of Early Reading Skills of Elementary School Students in Bandung

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This study aims to get a picture of the early reading skills of elementary school students in Bandung. The results of this study can be used as a guide for education practitioners, policymakers, and related institutions. Through a descriptive and analytical method, the findings are 98% of students can identify letters in words, to analyze words, to determine the direction of letters, and to arrange letters into words. 96% of students are able to strip words into syllables, to sort syllables in words, to identify words with the same forms, to identify words with the same meanings, to replace words with logical words, to insert words in incomplete sentences, and to identify abstract words. The students seem to have difficulties in identifying similar consonant sounds, in identifying similarities in vowel and schwa sounds, in determining sounds that are similar in sentences, and in identifying reversed sounds. Only 57% of students do not encounter obstacles. 90% of students can make sentences from random words, making sentences from words that are not sequential, correcting sentences that have wrong words, identifying simple sentences in paragraphs, and understanding simple sentences. 70% of students can recognize shapes, sizes, locations, and colors. This study has implications for the need for an integrated remedial program that can be used by both teachers and parents, especially for students who have difficulties with sound identification abilities.

Penelitian ini dilakukan dengan tujuan mendapatkan gambaran kemampuan membaca permulaan siswa sekolah dasar di Kota Bandung. Hasil penelitian ini dapat dijadikan pedoman para praktisi pendidikan, para penyusun dan penentu kebijakan, serta lembaga-lembaga terkait. Melalui metode deskriptif analisis, hasil penelitian ini menunjukkan bahwa sebanyak 98% siswa telah memiliki kemampuan pengidentifikasihas huruf dalam kata, penganalisisan kata, pengidentifikasihas arah huruf, dan penyusunan huruf menjadi kata. Sebanyak 96% siswa telah memiliki kemampuan pengidentifikasihas kata yang sama bentuk, pengidentifikasihas kata yang sama makna, penggantian kata dengan kata yang logis, penyisipan kata pada kalimat tak lengkap, dan pengidentifikasihas kata abstrak. Siswa tampaknya memiliki kesulitan dalam pengidentifikasihas kemiripan bunyi konsonan, pengidentifikasihas kemiripan bunyi vokal dan schwa, pengidentifikasihas bunyi yang mirip dalam kalimat, dan pengidentifikasihas bunyi yang dibalikkan. Hanya 57% siswa yang tidak menemui hambatan. Sebanyak 90% siswa mampu dalam pembuatan kalimat dari kata-kata acak, pembuatan kalimat dari kata-kata yang tidak berurutan, perbaikan kalimat yang memiliki kata yang salah, pengidentifikasihas kalimat sederhana dalam paragraf, dan pemahaman wacana sederhana. Sebanyak 70% siswa telah memiliki kemampuan pemahaman bentuk, pemahaman ukuran, pemahaman letak, dan pemahaman warna. Penelitian ini berimplikasi pada perlunya program remedial terintegrasi yang bisa digunakan baik oleh guru maupun orang tua terutama untuk siswa yang mengalami kesulitan pada kemampuan pengidentifikasihas bunyi.

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I. Introduction

Reading is one of the language skills, which is very important to support one's education process. According to (Rohde, 2015), learning to read has been declared as the process needed to get success in school and life. (Moore & Sudduth, 2015), in their report, states that "Reading skills are perhaps one of the most critical aspects of early learning." In the world of education, reading is the most important skill to take in every level of education to go through. If someone does not have adequate reading skills since childhood, then they will experience difficulties in the learning process (Harpine, 2016). Therefore, both teachers and parents have an essential role in the process of teaching reading for children's life in the future (Gunarsa, 2010).

A child needs to be prepared for his/her mental and physical development to carry out reading activities (Oakhill & Cain, 2012). Several things can be considered from the maturity of children to learn to read, namely the ability to see, the ability to hear, the ability to understand, and the ability to focus (Abidin, 2013). The ability to see becomes the dominant factor in the reading process. Then, (Sanoe et al., 2019) state that the ability to hear functions to distinguish the sound of letters that want to be read by children. The ability to understand follows-up the ability to see and to hear which of both these abilities can be seen that they can understand the letter or sound symbols that they already know. After they know the symbols, they can understand and to accept that the symbols must be received and understood so that the symbols can be stored in their brain memory. Next, the ability to focus on the material represents children's ability to distinguish between one sound with another sound. They can compose words from letters that they know so that this becomes a significant component in the reading process.

Reading skills are one of the gates of children's success in the learning process (Hartwell, 2008). Hence, by reading, children acquire various knowledge and understand it according to their interpretations. The most important thing that is a factor in children's success in learning reading is understanding. Understanding of the reading process is required, so the children can accept and to understand the information from the text.

This is in line with the explanation of (Shanahan & Shanahan, 2008) that early reading skills are the basis for mastering various fields of study. If children at an early age cannot immediately read, then they will have difficulties in learning multiple fields of study in the next grades. Thus, they must learn to read from an early age to be able to read to learn.

The learning process of early reading is introduced to elementary school students when they are in grade 1, 2, and 3 (Bond et al., 1967; Callinan & van der Zee, 2010). At this stage, they have been introduced to the concept of understanding, understanding of words, words sequence, and a sentence. (Sistem Pedidikan Nasional, 2003) explains the purpose of early reading in grade 1 of SD/MI (Elementary School) that they can: (1) familiarize themselves and behave correctly in reading single picture, picture series, and images in books; (2) read aloud syllables, words, labels, Arabic numbers, simple sentences; (3) read aloud (fluently) simple sentences consisting of 3-5 words; and (4) read story fragments with correct pronunciation and intonation.

The level of reading skills in this study is the most fundamental factor. The ability of the study subjects to achieve the parameter targets in the basic dimensions of early reading is a benchmark of this study. The aspect of early reading skills conveyed by (Burns et al., 1984) covers the ability to identify letters, words, sounds, to understand sentences and visual discrimination. More specifically, this study is based on the dimension of early reading skills on the theory presented by (Sénéchal et al., 2001). According to them, there are four essential components in measuring early reading skills, namely: (a) concepts and functions of literacy, (b) writing and composing, (c) knowledge of letters and words, and (d) listening comprehension and understanding of words concepts and function of literacy is more on the perception of literacy. Meanwhile, the writing component focuses on arranging the words in sentences. Knowledge of letters and words includes the knowledge of the alphabet and phonological awareness, including letter-sound connection. Finally, listening comprehension and understanding of words relate to language, especially narrative knowledge, and vocabulary.

This study is based on the facts in the field where elementary school-aged children fre-
sequently have difficulties in reading. In some cases, these are not handled properly because the problems are not detected early. Efforts to create students who are proficient at reading are not easy. In line with the opinion of (Shaywitz, 2003) that reading is an extraordinary ability that is not obtained naturally but by a unique process. Based on this, the authors are interested in conducting descriptive research related to the early reading skills of elementary school students to determine the level of their reading abilities, including their difficulties encountered when learning to read. The obtained data covers the level of the students reading skills that demonstrate challenges faced by students so that both teachers and parents can get information to intervene if necessary.

II. Method

The study aims to describe the profile data on early reading skills of elementary school students in Bandung using the parameters of the essential dimensions of early reading. It is descriptive and analytical research. The data analysis was carried out inductively by calculating the average percentage of the score of early reading skills for each dimension (Sugiyono, 2008).

The steps taken in this study were (1) determining research questions, (2) developing research instruments through expert appraisal, (3) collecting data, (4) classifying data, and (5) analyzing data.

This study was conducted on 100 elementary school students from five elementary schools in Bandung, 20 students per school. Those elementary schools are SDN 1 Sukarasa, SDN 2 Kamulyan, SDN Cipedes 5, SDN Pakar 1, and SDN Cidadap 1. Besides, seven experts were asked to assess the instruments with different background of expertise, namely (1) Elementary school learning experts, (2) psychologists, and (3) senior teachers in elementary schools. The experts have Doctor and Magister degrees in education, especially in primary education.

The instrument preparation phase was carried out by setting the test parameters based on the basic dimensions of the early reading skills. The test parameters used to test early reading skills are shown in Table 1.

| Basic Dimension Aspects of Early Reading Ability | Early Reading Ability Indicators |
|------------------------------------------------|----------------------------------|
| Identifying Letters in Words                     | Identifying letters in words     |
|                                                | Analyzing words                  |
|                                                | Identifying the direction of the letters |
| Word Identification                              | Arranging letters into words     |
|                                                | Stripping words into syllables   |
|                                                | Sorting syllables into words     |
|                                                | Identifying words with the same forms|
|                                                | Identifying similar meaning words|
|                                                | Replacing words with logical words|
|                                                | Inserting words in incomplete sentences|
|                                                | Identifying abstract words       |
| Sound Identification                             | Identifying similar consonant sounds|
|                                                | Identifying similar vowels and schwa sounds|
|                                                | Identifying similar sounds in sentences|
|                                                | Identifying exchanged sounds in a word|
| Sentence Understanding                           | Making sentences from random words|
|                                                | Making sentences from words that are not sequential|
|                                                | Correcting sentences that have the wrong words|
|                                                | Identifying simple sentences in paragraphs|
|                                                | Understanding simple text         |
| Visual Discrimination                            | Understanding various one-dimensional shapes|
|                                                | Understanding various two-dimensional shapes|
|                                                | Understanding sizes               |
|                                                | Understanding locations           |
|                                                | Understanding colors              |

III. Results and Discussion

The data collection on the early reading skills was carried out using several categories: (1) identifying of letters in words, analyzing words, identifying the direction of letters, arranging letters into words; (2) stripping words into syllables, sorting syllables in words, identifying words with the same forms, iden-
identifying words with the same meanings, replacing words with logical words, inserting words in incomplete sentences, and identifying abstract words; (3) identifying similar consonant sounds, identifying similar vowel and schwa sounds, identifying similar sounds in sentences, and identifying reversed sounds; (4) making sentences from random words, making sentences from words that are not sequential, correcting sentences that have wrong words, identifying simple sentences in paragraphs, and understanding simple text; and (5) understanding shapes, understanding sizes, understanding locations, and understanding colors.

The results of the data analysis related to early reading skills are presented in Table 2.

Table 2. Data Analysis Results of Early Reading Skills of Elementary School Students in Bandung

| No. | Ability                                      | Average Percentage (%) | Description                                                                 |
|-----|---------------------------------------------|------------------------|-----------------------------------------------------------------------------|
| 1.  | Identification of letters in words          | 95                     | The ability to identify the letters in words can be seen from the ability to fill in the missing letters, filling in vowels in words, and filing in consonants in words. Of these three aspects, approximately 20% of students still have difficulties in filling in the vowels in words. However, overall, students have been able to identify letters in words. |
| 2   | Letter direction identification              | 100                    | All students have been able to identify the direction of the letters.        |
| 3   | Arrangement of letters into words           | 100                    | All students have been able to arrange letters into words.                  |
| 4   | Stripping words into syllables              | 97                     | Most students already have the ability to strip words into syllables; only 3% of them still have difficulties, especially in stripping closed-words and affixed-words, such as the word sa-yap, ka-tak, mem-ba-ca, men-cu-ci. |
| 6   | Sorting syllables in words                  | 93                     | Most students have been able to sort syllables in words. Only 7% of them still have difficulties in sorting syllables, such as duga - dagu, dada – dagu. |
| 7   | Identification of words with the same forms  | 99                     | Most students already have the ability to identify words with the same forms. Only one student is wrong to identify a word, for example muka – nuka. |
| 8   | Identification of words with same meanings   | 100                    | All students already have the ability to identify words that are synonymous (same meaning) |
| 9   | Replacement of words with logical words     | 95                     | Most students already have the ability to replace words with logical words. Only about 5% of them still have difficulties in choosing coherent words in a sentence. |
| 10  | Insertion of words in incomplete sentences   | 96                     | Most students already have the ability to insert words in incomplete sentences. Only about 4% of students still have difficulties in adding words in an incomplete sentence. |
| 11  | Identification of abstract words            | 92                     | Most students already have the ability to identify abstract words. Only about 8% of them still have difficulties in identifying abstract words. In fact, there is one student who only answers one question correctly. |
| 12  | Identification of similar consonant sounds  | 35                     | Only 35% of students have the ability to identify similar sounds of consonants. Most students (65%) have difficulties in identifying identical consonant sounds, such as baku – paku. |
| 13  | Identification of similar vowels and schwa sounds | 66                   | Approximately 34% of students still have difficulties in identifying vocal and schwa sounds. |
| 14  | Identification of similar sounds in sentences | 96                   | Most students (96%) already have the ability to identify sounds that are similar in sentences. Only 4% of students are still not able to identify similar sounds in sentences. |
| 15  | Identification of reversed sounds            | 32                     | Most students (68%) have difficulty in identifying the reversed sounds. They are not able to answer all the questions given. |
| 16  | Making sentences from random words          | 94                     | Most students (94%) already have the ability to construct sentences from random words. Only a few students (6%) have difficulties in making sentences from random words. |
| 17  | Making sentences from words that are not sequential | 100                  | All students already have the ability to form sentences from words that are not sequential. |
| 18  | Correcting sentences that have the wrong words | 100                  | All students already have the ability to correct the wrong words in sentences. |

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Some findings resulted from the analysis of the basic dimensions of the early reading skills of elementary school students in Bandung are described in the following discussion.

The students get almost perfect scores for the dimension of Identifying letters in words. It shows that students can recognize the language symbols presented. It means that they have been able to achieve one of the reading goals stated by (USAID, 2014) that the purpose of early reading learning is that they can recognize writing as symbols of language. This ability is included in Early Reading frameworks, which is critical to contribute to students' future reading skills (Lonigan et al., 2008; Piasta et al., 2018).

However, some interesting findings can be analyzed deeper. The test results of this study showed that some students face difficulties in identifying the vowels, not the consonants. The findings of a study conducted by (Lee et al., 2002) show that the ability to distinguish consonants and vowels does not depend on orthographic appearance but rather on phonological recognition or the ability to sound both. The study states that the sound processing of consonants is faster than vowels. Furthermore, the research carried out by (Blomert, 2011; Cole et al., 1996) proves that in terms of reading aloud, it is more difficult to sound words that have vowels than to sound words that have consonants. It also shows that students can quickly identify the direction of letters, especially consonants. They can read aloud the letters in the reversed direction, for example, b-p-d letter. The study of (Massengill et al., 2006) proves that the ability to identify letter reversals is essential. The reason is students who make mistakes on letter reversals show poor visual-motor skills and show a tendency for visual perception that blocks their development in reading.

In the Stripping words into syllables, sorting syllables in words, identifying words with the same forms, identifying words with the same meaning, replacing words with logical words, inserting words in incomplete sentences, and identifying abstract words category, students' ability to analyze syllables is quite good. Thus, it is in line with (Hoffman & Schallert, 2004) that states students are considered to be able to read when they are able to analyze words completely through sounding.

The identifying similar consonant sounds, identifying similar vowel and schwa sounds, identifying similar sounds in sentences, and identifying reversed sounds category obtains the lowest percentage. Thus, students still encounter difficulties in reading. The ability to distinguish the same sounds is needed in learning to read one word with another word that is identified by similar sounds. In reading learning, phonetic representations of words that have identical letters become very important, for example, in the word bak and pak. Students must be able to distinguish similar sounds (for example, [b] vs. [p]). Thus, early reading learning is considered to be successful if students can read aloud words that have thin acoustic-phonetic differences (Pajak et al., 2016). Other studies also reveal that building necessary literacy skills requires the power of interventions focusing on spelling (Hofslundsengen et al., 2016; Sénéchal et al., 2012).

Making sentences from random words, making sentences from words that are not in order, correcting sentences that have wrong
words, identifying simple sentences in paragraphs, and understanding simple text category show that students can construct words into sentences. The ability to build words becomes vital for the next level of reading ability. Conversely, underdeveloped word recognition skills will weaken learning activities, especially for students who have learning difficulties (Toste et al., 2017). In addition, (Clemens et al., 2016) suggest that children’s vocabulary knowledge can be a benchmark of children’s reading skills.

The ability of visual perception, including understanding shapes, understanding sizes, understanding locations, and understanding colors category, acquires a pretty good percentage. However, the remaining percentage of students who are unable to identify this section can be categorized as students who have difficulties in reading. This is in line with (Damaianti, 2018) explains that students who have problems in reading are usually less able to identify the same forms and to identify object locations. Poor visual perception will hamper their development in reading and academic performance (Decker et al., 2011). Furthermore, (Erhardt & Duckman, 2005; Mandich & Cronin, 2005) prove that a good introduction of letters and numbers develops in a linear process when the students’ visual perception develops. (Çayir, 2017) also show that students with good visual perception have the speed and the ability to understand reading material as well. It confirms that the ability of visual perception becomes the basis for reading skills at later stages. Thus, it would be reasonable to assume that as this linear visual perception develops, students can integrate letter and number recognition skills well in tasks such as reading and writing (Hannahford, 2005). In addition, (Franceschini et al., 2012) suggest that the spatial ability must indeed be detected early to be able to recognize the difficulties or obstacles that arise when the reading process is conducted. It will reduce the increasing number of students who have difficulties in reading.

IV. Conclusion

Based on the description in the previous chapter, several conclusions can be drawn related to the profile of elementary school students’ early reading skills in Bandung as follows.

98% of students already can identify letters in words, analyzing words, determining the direction of letters, and arranging letters into words.

Students’ early reading skills based on stripping words into syllables, sorting syllables in words, identifying words with the same forms, identifying words with the same meanings, replacing words with logical words, inserting words in incomplete sentences, and identifying abstract words show satisfying results as well. Approximately 96% of students have no problems identifying syllables and words.

Students seem to have difficulties in identifying similar consonant sounds, identifying the same vowel and schwa sounds, identifying similar sounds in sentences, and identifying reversed sounds. It shows only approximately 57% of students do not have obstacles in identifying sounds.

Students’ reading skills based on making sentences from random words, making sentences from words that are not sequential, correcting sentences that have wrong words, identifying simple sentences in paragraphs, and understanding simple text category acquire satisfying results. Most students (90%) can construct words into sentences.

Students’ reading skills based on shape understanding, size understanding, location understanding, and color understanding are good enough. Approximately 70% of students have been able to understand the shapes, the sizes, the locations, and the colors in simple texts.

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