Students’ reading skills related to science learning using big book media

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Abstract. Reading skill is an active receptive language skill to get a message from the writer in the written variety. This research is based on the phenomenon reading skill of students in Madrasah Ibtidaiyah Bongas IV Cilikin related to science including low category. This study aims to determine the enhancing reading skills of a student after applying Big Book media in science learning. The research method used is a pre-experiment design with one group pretest-posttest design. The subjects of this study are the third-grade students of Madrasah Ibtidaiyah Bongas IV Cilikin selected by purposive sampling technique amounted to 22 people. Student reading skill is measured through multiple choice test and supporting instrument in the form of an observation sheet to know student and teacher activity in using Big Book media. The results showed that there was enhancing reading skill of student with normalized gain <g> including high category. Based on the paired sample t-test, using Big Book media in science learning can improve the reading skills of the student. The average results of observation sheet analysis in the book Big Book to improve reading skills of the student at every meeting good category. It can be concluded that the use of Big Book in science learning can be an alternative to enhancing reading skills of the student. Thus, Big Book media can motivate students to have a high read culture.

1. Introduction
Reading is one language skill that is receptively active. Reading is a process activity carried out by the reader to get the author's message in a variety of writings. The main purpose of reading is to find and obtain information, including content, understanding the meaning of reading [1]. The main purpose of teaching reading is to get students to read and have a high reading culture. If students are skilled in reading, they will more easily understand the contents of reading, obtain information, knowledge, experience, and have a number of vocabularies contained in the reading. The more readings students read the richer knowledge they have. In addition, students are expected to have a fairly high reading culture, so reading is a necessity every day, even the slogan "no day without reading" will be well achieved [2]. Many factors influence the ability to read, both early reading and advanced reading (reading comprehension). The factors that influence the early reading skills according to Lamb and Arnold (1976) are physiological, intellectual, environmental, and psychological factors [3].
The use of Big Book in early reading learning has several objectives, namely providing reading experience, helping students understand books, introducing various types of reading material to students, giving opportunities for teachers to give examples of good reading, actively involving students in learning, providing examples of text good for student use and information gathering. Big Book as a large book that is categorized in children's books that is used to develop the ability to begin reading and writing [4]. The big book media is a teaching tool of the form of a book filled with colourful images, which are used by teachers in sharing a reading that is generally intended for children that can create a safe and relaxed atmosphere in the classroom and attract students' attention to the teaching and learning process [5, 6]. Curtain and Dahlberg, state that Big Book allows students to learn to read by remembering and repeating reading [7].

The results of previous studies show that the use of big book media can improve reading skills [8]. Media big book can improve the initial reading skills student's [9, 10]. The application of big media books can improve students' reading comprehension [11, 12]. The use of big book media can improve students' reading literacy skills [13, 14]. The use of big book media to improve students' reading skills related to science becomes a novelty of this research. Students will be motivated in reading various natural phenomena that can be observed in daily life. Students who from the beginning read something with the theme of science will foster a caring attitude to safeguard the surrounding environment. Here, the purpose of this study was to determine the effect of using big book media for improving student reading skills related to science learning.

2. Methods

The research method used was pre-experiment with one group pretest-posttest research design. The subjects of this study were third-grade students of a MI Bongas IV Cililin, West Bandung Regency. Class III students numbered 22 people consisting of 13 males and 9 females.

The instrument used in this study is the multiple choice reading ability test and the observation sheet of student and teacher activities during the implementation of the big book media. Indicators of reading ability in this study consisted of pronunciation, intonation, fluency, and loudness. Student and teacher activities in using the big book are adapted from using big books and predictable books put forward by Lynch [15]. Lynch divides the learning steps into five sessions, namely (1) The teacher arranges students to sit around them so that they are comfortable and relaxed in listening to the story of the big book. (2) The teacher reads the story for the second time by pointing out the words. (3) The teacher reads the story again followed by students so they can remember every word he said. (4) The teacher and students read the story together again so that students can remember every sentence they read, then the teacher tests how many words students can remember. (5) The teacher and students read the story again so that students understand the content of reading and reading smoothly, and the teacher makes a closed test of the reading.

Analysis of the students 'reading ability test instrument begins with 1) determining the scoring of reading ability test scores, 2) calculating the improvement of students' reading ability by using normalized gain according to Hake criteria <g> < 0.3 in the low category, 0.3 ≤ <g> ≥ 0.7 is in the middle category, and <g> > 0.7 is in the high category [16]. Analysis of student and teacher observation sheets by 1) determining the number of activities of students and teachers carried out, 2) calculating the percentage of activity of students and teachers carried out, 3) interpreting scores into five categories namely very good category (score 86-100), good (score 76-85), enough (score 60-75), less (55-59), and very less (score ≤ 54) based framework Purwanto [17]. Hypothesis testing is carried out using parametric statistics, namely the paired sample t-test because after the second normality test the data is normally distributed. Before testing the hypothesis, normality is tested first using the one-simple Kolmogorov smirnov test.
3. Results and discussion
The results of the study of increasing students' reading skills using the big book media were shown by comparing the average results of the pretest, posttest and normalized gain. Improved student reading skills are shown in Table 1.

| Table 1. The average score of pretest, posttest, and normalized gain <g>. |
| --- | --- | --- | --- |
| Score | Pretest | Posttest | <g> | Interpretation |
| Average | 28.69 | 79.75 | 0.72 | High |

The improvement of students' reading skills through the use of big book media related to science learning is included in the high category with an average <g> of 0.71. The average pretest score of students' reading skills was 28.69 while the average posttest score was 79.72. Therefore, there is an increase in students' reading skills after using the big book media. Big Book not only pressed on reading skill and writing of the students but also developed a good behavior and character of the students [18].

The results of the normality test using one-simple Kolmogorov Smirnov showed that both pretest and posttest data were normally distributed. The significance values of both data are 0.241 and 0.136. Parametric statistical test results using a paired sample t-test at α = 0.05 shows a significance value (2-tailed) of 0.000. Thus, the use of big book media can significantly improve student reading skills related to science learning. The use of the big book media can improve the experience of reading skills of everyone not only children but also adults [19, 20].

The improvement of each indicator of student reading skills related to science learning after using the big book media is shown in Table 2.

| Table 2. Increasing each indicator of student reading skills. |
| --- | --- | --- | --- |
| Indicator | Pretest | Posttest | <g> |
| Pronunciation | 29.5 | 80.25 | 0.72 |
| Loudness | 30.75 | 82.75 | 0.75 |
| Broadcast | 28.25 | 79.25 | 0.71 |
| Intonation | 26.25 | 76.75 | 0.68 |

Each indicator of student reading skills has increased by three indicators including the high category and one indicator including the medium category. The average increase in students' reading skills are included in the high category.

The highest improvement in student reading skill indicators occurs in the loudness indicator. Students can read aloud because the writing on the big book media is clear and interesting. Reading is an important skill that must be taught by the teacher because through reading, students are expected to be able to get more certain knowledge, information and pleasure [21].

The intonation indicator has the lowest increase in students' reading skill compared to other indicators. Students have been able to read in a loud voice, but still find it difficult to emphasize certain words in the sentence. Reading with a loud voice usually uses the look and say technique which aims to be able to pronounce words, phrases, and sentences correctly. In addition to pronunciation, teachers also need to practice correct sentences pressure and intonation [22].

Increased activity of teachers and students during the use of the big media book in improving students' reading skills related to science learning is shown in Table 3.
Table 3. Increased activity of students and teachers in using big book media for each lesson.

| Observation results | Lesson to- | I   | II  | III | IV  | Average |
|---------------------|------------|-----|-----|-----|-----|---------|
| Teacher activity    |            | 78.78 | 82.82 | 85.57 | 89.13 | 84.08   |
| Student Activity    |            | 76.71 | 79.92 | 83.31 | 86.16 | 81.53   |

The results of the observation sheet analysis show that there is an increase in teacher and student activity at each lesson. The average teacher and student activity are in good category. The learning process that has been carried out at school must be able to develop student communication skills including reading skills [23]. Reading skills that are part of students' communication skills can develop in schools through face-to-face learning in classes and activities in the laboratory [24].

The main purpose of teaching reading is to get students to read and have a high reading culture. The activity of reading stories with this big book does not require tools such as puppets, because the big book itself is full of pictures and is a really good tool for this kind of activity. Students can read the big book together or the group imitates the teacher, even for individual reading activities according to students' interests. The big book is an excellent media to help develop children's social-emotional and train children to express feelings [25].

4. Conclusion

We have successfully carried out research on the use of big book media in improving students' reading skills related to science learning. The improving students' reading skills are included in the high category. The activity of teachers and students during learning related to science using the big book media has increased every meeting with good categories. Thus, the use of big book media can be used to improve students' reading skills related to other lessons.

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