Using Pabami Media to Improve Early Reading of Cerebral Palsy Students in the 1st Class of the Elementary School for Children with Special Needs

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Abstract: The ability to read is the most basic competency to master competencies in other subjects. Learning to read which was carried out at Elementary School for Children with Special Needs (SDLB) YPAC Malang City found that one out of three (1/3) students of Cerebral Palsy in 1st class had problems with early reading. One of the causes of not optimal students' reading ability is because teachers tend to only use printed books. Appropriate and interesting media is needed so that students can have reading skills as expected. The purpose of this study is to describe the use of pabami media to improve early reading skills in students of Cerebral Palsy in the 1st class at SDLB YPAC Malang. This research is a classroom action research designed in 2 cycles, each cycle consists of 3 meetings. The learning media used is pabami which is equipped with cards of letter, syllable, and word. Data were collected by observation and test techniques. Pabami media is declared effective if the posttest results in the second cycle are higher than the posttest scores in the first cycle, with learning mastery indicators reaching a value of 75 or more. The results of the study concluded that pabami media was effective for improving early reading skills of students with cerebral palsy.

Keywords: early reading; cerebral palsy; pabami media

INTRODUCTION

Education for students with special needs requires a separate service pattern, especially for students with disabilities according to their level of physical and intellectual ability. Students with intellectual disabilities have limited thinking, specifically in abstract (Yuniarti & Subasno, 2020). Students with Cerebral Palsy are included in the quadriplegic group caused by disorders of the nervous system. Cerebral Palsy is characterized by abnormalities in movement, attitude or body shape, coordination and sensory disturbances caused by damage during brain development (Atmaja, 2018). The physical and/or intellectual specificity of students with disabilities requires special education services in accordance with the Law of the Republic of Indonesia concerning the National Education System number 20 of 2003 in article 32 paragraph (2), which states that "Special Education is education for students who have difficulty levels. in participating in the learning process due to physical, emotional, social and/or potential abnormalities of intelligence and special talents. Included in this group are those who have physical disabilities or are physically disabled. They also experience difficulty in reading words, reading comprehension, written expression, and mathematics which represents spectrum disorders of approximately 5% to 15% of the school-age population (Grigorenko et al., 2020; Subasno et al., 2021).

Related to education, reading is one of the most important elements in education. Reading is one aspect of teaching Indonesian that plays an important role. Reading is the key to student success in school. The ability to read fluently is the basic capital for student success in various subjects at school. Students who have a high reading interest will excel in school, on the other hand students who have low reading skills will have low learning achievements (Marlina,

2019). Therefore, it is important for teachers to apply various methods or strategies that can be used to support reading skills for students with special needs (Nikolaraizi et al., 2012). At this initial reading stage, it is oriented towards basic level reading skills, namely students can change written symbols into meaningful sound pronunciations (Fauzia & Kustiawan, 2017).

In learning to read, which was carried out in 1st class at YPAC elementary school for children with special need (SDLB) in Malang City, it was found that out of all 3 students in 1st class, totaling 3 students with cerebral palsy, only 1 student was able to read while the other 2 students had difficulty reading. Thus, it can be seen that 2 out of 3 students with cerebral palsy experience difficulties in reading. In other words, 2/3 students (67%) have problems with reading. Seeing the results of learning to read, according to the researcher, it is not optimal or does not meet the requirements in mastering reading competence. The students' reading ability that has not been optimal is because teachers have only used printed books in learning to read or have not used appropriate and unattractive media and paid less attention to students in learning to read.

Based on the above problems, a media is needed to overcome the inability or obstacles in learning to read. Teacher and researcher should use varied media for teaching reading to children with special need, especially media that involves senses (Subasno et al., 2021). Azhar, (2015) defines media as a tool that conveys or describes teaching messages. In the teaching and learning process, the recipient of the message is the student. The messenger (media) integrates with students through their senses. Students are stimulated by the media to use their senses to receive information. The media that the researcher uses to overcome the problems of early reading in grade I cerebral palsy students is the Baba Mini Board Media, hereinafter referred to as pabami. Pabami is a media development from Sarana BABA. The form of the BABA Facility is a facility for learning to read quickly, in the form of a BABA alphabet box and a BABA alphabet cupboard. During the implementation of reading learning, the BABA alphabet box is held by students and the BABA alphabet cupboard is placed in front of the class which can be used by teachers or students (Ribudini, 2002).

The mini baba board media or pabami developed by the researcher is a rectangular board with a length of 25 cm and a width of 40 cm. The board is made of plywood whose edges are angled or a list of aluminum. On the board there is a row consisting of five sap or rows as a place or pedestal to put picture cards, syllable cards and word cards.

The use of pabami media (mini reading boards) in learning to read is supported by the SAS (Synthetic Structural Analytical) method. The SAS method according to Abdurrahman, (2012) is a learning method that begins with reading the picture followed by reading the sentence under the picture. The next stage is reading the sentence without the help of pictures (Structural process) and the sentence is analyzed into words, syllables and letters (analytic process). The synthetic process is recombining letters into syllables, syllables into words and words into sentences. The implementation of the SAS method learning is carried out using pabami media.

Based on this background, the researchers felt interested in conducting classroom action research as a solution to the problems of early reading faced by cerebral palsy students in the 1st class of SDLB YPAC Malang City.

METHOD

This research is classroom action research which is understood as an action research (action research) conducted by the teacher as well as a researcher in the class together with other people (collaborators) by designing, implementing and reflecting on collaborative and participatory actions that aim to improve or improve the quality (quality) of the learning process in the classroom through a certain action (treatment) in a cycle" (Arikunto et al.,

2006). Based on this understanding, the researcher modified the steps of classroom action research which included pre-cycle, cycle 1 and cycle 2.

Pre-cycle is a learning activity where cerebral palsy students have difficulty learning with the previous learning media. In this pre-cycle, a test is used which is used as initial data (Pre-Test). Cycle 1 is an action consisting of planning, including the determination of learning materials (early reading with pabami media) and determining the time allocation for its implementation. Actions, covering the entire process of teaching and learning to read vowels, syllables and simple words with the media pabami. Observation carried out simultaneously with the learning process includes the implementation of teacher actions, student activity in learning and student learning outcomes. Reflection, including the analysis of learning outcomes and at the same time compiling a plan for improvement in the next cycle. Cycle 1 was held three times and the third meeting was used as a Post Test. Cycle 2 is the same activity as cycle 1 with the addition of repetition of material and addition of syllable reading vocabulary. Cycle 2 was held in 3 meetings; the last meeting as a Post Test.
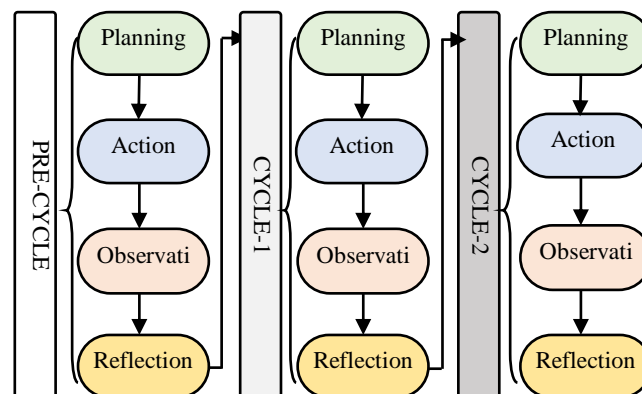
Figure 1: Classroom action research cycle

Data collection techniques used in this study consisted of observations and field notes, interviews, and document studies. Observation techniques and field notes are used to assess the learning process and increase students' creativity. The observation technique is also used to observe the symptoms that appear in the learning process about the seriousness of students when participating in learning, the ability of students to ask questions. The results of observations from each cycle will be calculated, the results of which will be analyzed to see the increase in the ability to add up in this classroom action research. Observations in this study used 3 kinds of instruments, namely instruments to examine teacher activities, instruments to assess student activity and instruments to assess students' ability in summing up. The three types of instruments have 4 options with scoring 3 for option A (Very Good), 2 for option B (Good), 1 for option C (Enough), and 0 for option D (Not Enough).

With the scoring for each item on the observation instrument, it is possible to obtain maximum results or ideal conditions, both in teacher activities and student activities. The maximum result is meant if the overall item has a research result of A with a score of 3. However, the maximum or ideal result will not be easily achieved. Therefore, the researcher limits the achievement of the student's summing ability if the total score with the scoring shown by the results of observations on teacher and student activities reaches at least 65% of the ideal conditions.

Interview technique was used to determine student responses to the learning process. The final test was used to collect data about student learning outcomes. Data processing is done by using percentage calculations. For this reason, the formula used is F Percent ($P = F/N \times 100\%$) where P is the percentage, F is the total number of assessment frequencies of observation

items multiplied by scoring, and N is the total number of ideal observation items (Sudjana, 2002).

The data analysis in this research is descriptive qualitative based on the results of observations on achievement motivation and learning outcomes, with the following steps: (1) doing reduction, namely checking and re-recording the data that has been collected; (2) interpreting, namely concluding whether in this learning there is an increase in creativity and learning outcomes or not (based on observations); (3) perform inference, i.e. conclude whether in this learning there is an increase in creativity and learning outcomes or not (based on the results of observations); (4) formulating steps for improvement for the next cycle or in the field implementation after the cycle ends based on predetermined inferences; (5) conclusions are drawn based on the analysis of the results of observations that are adjusted to the research objectives and then poured in the form of interpretation, namely in the form of a statement (Sugiyono, 2019).

RESULT AND DISCUSSION
Result(s)

In the initial condition, the initial reading learning for 1st class students at SDLB YPAC Malang City was still not successful because some students still could not. Based on the pre-test results on pre-reading before using pabami media, the following data were obtained: CPR students scored 60 and SYA students scored 55. Both students have different characteristics of physical and mental abilities, even though they are factually classified as Spastic Cerebral Palsy. The student with the initial's CPR is a female student identified with Spastic Cerebral Palsy. He is a serious person and always pays attention when the teacher explains learning in class, so he is quick to respond to learning activities even though sometimes his attention is easily divided on a new object. In addition, he is very communicative and willing to ask questions or ask for help if he encounters difficulties in learning. This student is easy to get tired when he is active for too long due to his physical condition. The student with the initials SYA is a female student who is very cheerful and loves to sing. In addition to their physical condition, which is experiencing obstacles, these students also experience problems in pronunciation, so that when they are invited to communicate, they are not very fluent and do not respond to learning. So, what is said when learning takes place, especially when asking questions, the speech is less fluent and less active.

Based on the learning outcomes and student conditions above, it is necessary to improve the quality of learning. Therefore, this study tries to use pabami media in early reading learning as an alternative to the problems faced, with the aim of increasing the initial reading ability of 1st class elementary school students at YPAC SLB Malang City.

In the first cycle, based on the results of observations of the teacher's actions in the learning process, 86.7% were carried out, which means that the teacher's actions in delivering the material were good, but the teacher still dominated the class and always gave guidance to students when using pabami media. Teachers in using pabami media during demonstrations did not involve students. Assessment of student activities during the learning process obtained the results of 86.7% for CPR students and 83.3% for SYA students, which means that the attention, enthusiasm and attention of students is good. However, on the observation sheet it is known that students still have difficulty reading with natural media. Based on the results of observations during the learning process, the percentage value was 86.7% for CPR students and 80% for SYA students, which means that students have shown an increase in their reading skills with pabami media but are still not so skilled. For the results of the oral reading test scores obtained by CPR students it reached 70 and for SYA students it reached a score of 65 so that it did not meet the specified indicators of success, namely the criteria for learning completeness scores of 75 or more. Therefore, the researcher will continue in cycle 2. In other

words, in the first cycle, an increase of 10 points has been achieved, which is the difference between pre-test and post-test (60-70 for CPR and 55-65 for SYA).

In the second cycle, based on the results of observations, the teacher's actions in the learning process were carried out 100%, which means that the teacher's actions reached the maximum conditions to create an ideal and conducive learning atmosphere. Assessment of student activities during the learning process obtained results of 100% for CPR students and 100% for SYA students, which means enthusiastic and good interest, and students are skilled and appropriate in using pabami media in the learning process of early reading. Besides, students can complete the tasks given by the teacher properly and correctly. Based on the observation results of the assessment of the student learning process with the pabami media, the results were 100% implemented, this indicates an ideal situation, which is reflected in the whole process, where students can follow it well; This is another important thing that is shown by students is the mastery of pabami media in the process of learning early reading. The results of the oral reading test scores using the Pabami media obtained a score of 85 for CPR and 80 for SYA. In other words, in the second cycle, an increase of 15 points was achieved, which is the difference between the test in the first cycle and the test in the second cycle (70-85 for CPR and 80-65 for SYA).

The increase in students' ability or achievement in initial reading after being given action or treatment using learning media in the form of pabami can be shown in the following tables 1.

Table 2. Comparison of the results of observing student learning

Rated Aspect	CPR		SYA	
	Cycle 1	Cycle 2	Cycle 1	Cycle 2
Enthusiasm in the learning process	A	A	A	A
Pabami media generate interest and attention of students in learning of early reading	A	A	A	A
Active in asking or asking things that are not understood	B	A	B	A
Answer the teacher's questions	A	A	A	A
Students can follow the steps in using pabami media for the learning process of early reading	A	A	A	A
Skills in using pabami media	B	A	B	A
Accuracy in using pabami media	B	A	B	A
Be serious about doing the job	A	A	A	A
Responsibilities for assigned tasks	A	A	B	A
Completing assignments on time	B	A	B	A
Percentage of activity items	86.7%	100.0%	83.3%	100.0%

Table 3. Comparison of the results of the student assessment process assessment

Rated Aspect	CPR		SYA	
	Cycle 1	Cycle 2	Cycle 1	Cycle 2
Imitate the teacher reading letter cards, syllables and words on pabami	A	A	A	A
Arrange letter cards, syllables and words on pabami as requested by the teacher	A	A	A	A
Read the card letters and syllables that have been compiled	A	A	B	A
Arrange your own card letters and syllables into simple words on pabami	B	A	B	A
Reading the word cards that he had compiled on papami	B	A	B	A
Reading Test in Pre-Cycle		60		55
Reading Test in Cycle 1		70		85
Reading Test in Cycle 2		85		80
Percentage of activity items	86.7%	100.0%	80.0%	100.0%

Discussion(s)

The early reading ability of cerebral palsy students who are still weak, requires a proper response by a teacher, in accordance with their duties and responsibilities. The use of pabami media in early reading learning is an alternative problem solving in this study. Pabami equipped with word cards is a tool and media for learning to read that is very useful for students with cerebral palsy. It is very useful to refer to the results of classroom action research in this study; where each research subject experienced an increase in reading ability at the basic level of changing written symbols (word cards) into meaningful sound pronunciations, as stated by Fauzia & Kustiawan, (2017).

This mini-sized baba board can be placed directly within reach of children with cerebral palsy who have limited movement in their physics, especially in the hands. Pabami can also be used by teachers and students at the same time (Ribudini, 2002), and becomes a learning medium that is in accordance with the characteristics of students with cerebral palsy. This is also in line with what was conveyed by Nikolaraizi et al., (2012), that various methods or strategies can be used by teachers to support reading skills in students with special needs.

CONCLUSSION

Based on the data and studies that have been carried out, it can be concluded as follows: 1) pabami media is one of the learning media used for early reading learning in 1st grade students of SDLB YPAC Malang; 2) with pabami media it is proven to be able to improve early reading ability in 1st grade students at SDLB YPAC Malang; 3) the increase in early reading learning is indicated by an increase in the achievement of test scores students: CPR- from a score of 60 points in the pre-cycle, increasing to 70 points in cycle 1, and further increasing again to 85 points in cycle 2; meanwhile SYA- from a score of 55 points there was in pre-cycle, increased to 65 points in cycle 1, and further increased by 80 points in cycle 2.

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