Implementation of Problem Solving Methods Assisted by *Dunia anak* Applications to Improve Elementary School Students' Early Reading Skills

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ABSTRACT

Literacy activities for choosing Problem Solving learning methods or problem solving are also supported by several learning theories, namely Vigotsky's theory (Meo et al., 2021) explaining that intellectual development in individuals can be formed when faced directly with new and challenging experiences when solving existing problems. then Dahar (Rusman, 2012) said that learning new knowledge in accordance with one's own capacity will produce better and more meaningful things, because solving problems independently is supported by the knowledge they have. Problems that are packed with reading will make students understand reading and develop reading literacy. The need to develop learning media that can provide reading materials, train reading habits and reading literacy, so that in this case students are not only proficient in reading but also proficient in capturing meaning (Bada & Olugsegun, 2015) This study uses a quantitative experimental method. Problem solving as defined is a way of thinking scientifically to find a solution to a problem. (Sutarmi & Suarjana, 2019). Meanwhile, according to Arus Sohimin problem solving is a learning process that focuses on teaching and problem-solving skills followed by strengthening skills. In this case the problem is defined as a non-routine problem and the solution is not yet known. Precisely problem solving is looking for or finding ways of solving (finding patterns, rules) (Sitorus, nd, 2020)
The research design used is the *One Group Pretest-Posttest Design.* This class will be treated by the teacher by applying the problem-solving method assisted by the application of the world of children in literacy activities. At the end of the learning process in the experimental class, it was measured using measuring instruments, namely interest questionnaires, responses and performance tests of students' early reading abilities, SPSS output results obtained through *the Independent Samples Test* in Table 4.6 above, it shows that the problem-solving method assisted by the child's world application is more than the average class student learning outcomes in demonstration learning. This is because the tcount obtained from *the t-test for Equality of Means,* which is 7,183, means that it exceeds the predetermined ttable, which is 1,669. In addition, the results from *Sig. (2-tailed)* is 0.001 meaning less than 5%, so the data concludes that reject H0 and accept Ha. This means that the average learning outcomes of students who were treated using the problem-solving method assisted by the children's world application were better than the average initial reading ability results that were given treatment with demonstration learning.

Keywords: Literacy, Problem Solving

INTRODUCTION

School literacy activities are one of the efforts being made by the Indonesian government at this time, in addition to changing the existing curriculum in schools. This school literacy movement strengthens the character movement as outlined in the ministerial regulation of

education and culture number 23 of 2015. One of the movement's programs is "15 minutes of reading non-classical books before class starts". This program was implemented to foster students' interest in reading and improve their skills.

Reading material on ethical values, in the form of local, national and global wisdom, will be delivered according to the student's educational level. The main target of the school literacy movement is in schools at the elementary school level. Students in elementary schools are still easy to develop at the age of 6-12 years. Therefore the school must hold a school literacy movement as an effort to increase students' interest in reading by developing the management of the school library and the development of other aspects both related to students and not directly related to students.

The implementation of this school literacy movement can be seen from the discipline of students, the school literacy movement in elementary schools is carried out in three stages, namely the habituation stage, the development stage, the learning stage. the implementation of the school literacy movement program in stage 1, namely the habituation stage aims to foster students' reading interest in reading and in reading activities. At this habituation stage the activities carried out are in accordance with the level of education, namely low-grade elementary schools with activities such as listening and reading reading books/enrichment. The 2 stages of development aim to maintain interest in reading and reading activities, as well as improve students' reading fluency and comprehension. Activities undertaken include listening, reading, speaking, writing and selecting information. The 3 stages of learning aim to maintain interest in reading and reading activities, as well as improve students' literacy skills through enrichment books and textbooks.

Literacy, namely the ability to listen, speak, read, write, and count (counting) is related to the analytical ability to calculate (calculate) perceiving information *(perceiving)*, communicating, and describing information based on personal understanding and drawing conclusions. Basic Literacy, namely reading ability, habituation of fun reading activities at school.

Literacy activities for choosing Problem Solving learning methods or problem solving are also supported by several learning theories, namely Vigotsky's theory (Meo et al., 2021) explaining that intellectual development in individuals can be formed when faced directly with new and challenging experiences when solving existing problems. then Dahar (Rusman, 2012) said that learning new knowledge in accordance with one's own capacity will produce better and more meaningful things, because solving problems independently is supported by the knowledge they have. Problems that are packed with reading will make students understand reading and develop reading literacy. The need to develop learning media that can provide reading materials, train reading habits and reading literacy, so that in this case students are not only proficient in reading but also proficient in capturing meaning (Bada & Olugsegun, 2015)

Interest in reading is not in itself owned by a student but must be formed. The formation of students' interest in reading occurs at the learning stage in the reading literacy movement. An effort is needed, especially from educators to grow a class that is rich in reading books and uses suitable methods to foster interest in reading as well as student-oriented learning and habits. Therefore, the use of supporting media in its implementation can greatly increase students' interest in reading the text given not just reading but using media that makes students active.

The application used is adapted to the characteristics of media students and can increase student creativity and is also expected to increase reading literacy (Fauziah & Hidayat, 2022) because it is said that elementary school students' reading

literacy is only carried out in the main textbooks used in school, so makes students less interested, so this topic is entitled "Implementation of the Problem Solving Method with the Assistance of Children's World Applications in Literacy Activities in an Effort to Increase Students' Beginning Interest and Reading Ability in Elementary Schools".

LITERATURE REVIEW
Literacy Reading
According to Utama et al (2019:2) the School Literacy Movement (GLS) has general goals and specific goals. The general goal of the School Literacy Movement (GLS) is to foster student character through cultivating the school literacy ecosystem which is manifested in the School Literacy Movement (GLS) so that they become lifelong learners, while the specific goal of the School Literacy Movement (GLS) is to develop a culture literacy in schools, increasing the capacity of residents and the school environment to be literate, making schools fun and child-friendly learning partners so that school members are able to manage knowledge, and maintaining the continuity of learning by presenting a variety of reading books and providing a place for various reading strategies. A literacy culture produces satisfying results and makes students more adaptive, fond of reading, and able to convey ideas from reading results through writing, apply reading results in the form of environmental processing products, communicate and be accountable for product results made in the form of presentations (Huda & Rohmiyati, 2019) In terms of the general goals and specific goals of the School Literacy Movement (GLS), it can be concluded that the School Literacy Movement (GLS) is to develop students' character through cultivating a school literacy ecosystem by presenting various reading books and accommodating various reading strategies. This is aimed at increasing students' interest in reading

books from the School Literacy Movement (GLS).

Problem solving method
In language problem solving comes from two words namely problem and solves. The language meaning of the problem is *"a think that is difficult to deal with or understand"* *(a* thing that is difficult to do or understand), can also be interpreted *"a question to be answered or solved"* (a question that needs an answer or a way out), while solve can be interpreted as "to find an answer toa problem" (looking for an answer to a problem). (Bua, 2021).

Problem solving as defined is a way of thinking scientifically to find a solution to a problem. (Sutarmi & Suarjana, 2019). Meanwhile, according to Arus Sohimin problem solving is a learning process that focuses on teaching and problem-solving skills followed by strengthening skills. In this case the problem is defined as a non-routine problem and the solution is not yet known. Precisely problem solving is looking for or finding ways of solving (finding patterns, rules) (Sitorus, nd, 2020)

The method is the method used to implement plans that have been prepared in real activities so that the goals that have been prepared in real activities so that the goals that have been prepared are optimally achieved. (Nisrina, 2019). This means that the method is used to realize the strategy that has been set. Thus, the method in a series of learning systems plays a very important role. The successful implementation of learning strategies is highly dependent on how the teacher uses learning methods, because a learning strategy can only be implemented through the use of learning methods. Then problem solving is a process of changing future goals when goals in the past are uncertain. Problem solving is a change process that requires improvement and is used when something cannot be resolved. (Md. Mehadi Rahman, 2019)

Problem solving is a way of presenting learning material by making the problem a

starting point for discussion to be analyzed and synthesized in an effort to find solutions/answers by students. Problem solving methods are often referred to as problem solving methods, reflective thinking methods, or scientific methods. This problem can be submitted or given by the teacher to students, from students with the teacher or from the students themselves, which then makes the discussion and looks for solutions to various student learning activities. (Hendriawan, 2019).

Beginning reading

The definition of early reading ability is the skill or ability of a child to recognize symbols and signs related to letters, these letters are consonants (b, d, k, l, m, p, s) and vowels (a , e, i, o, u) as a foundation to proceed to the advanced reading stage. The difference in children's reading ability will be clear according to their age and stages of achievement. According to Steinberg (in Akhmad Susanto, 2011: 90) says that the ability to read early childhood can be divided into four stages of development, namely: Reading this initial stage begins when children enter the first grade of elementary school, when they are around six years old. However, there are children who have done it in kindergarten and at the latest when the child is in the second grade of elementary school. At this stage, the child begins to learn vocabulary and at the same time the child learns to read and write the vocabulary.

MATERIALS & METHODS

This study used a *Quasi-Experimental Design (non-equivalent control group design).* In this design the experimental group and the control group were not randomly selected. In this design it compares the two experimental groups as well as the control group. Theoretical and empirical approaches in research are needed, the approach taken in this study uses quantitative research. The method used in this study using the experimental method. Experimental research is the only research method that can truly test the hypothesis of a causal relationship (Darmadi H, 2011: 175). According to Sanjaya (2013: 87) that the experimental research method is a research method used to determine the effect of an action or certain treatment that is intentionally carried out on a certain condition. Experimental research is generally carried out in laboratory situations, but with its development and to examine the symptoms certain behavioral symptoms in social life, many experimental methods are carried out in the field.

This study uses a quantitative experimental method. The research design used is the *One Group Pretest-Posttest Design.* This class will be treated by the teacher by applying the problem-solving method assisted by the application of the world of children in literacy activities. At the end of the learning process in the experimental class, it was measured using measuring instruments, namely interest questionnaires, responses and performance tests of students' early reading abilities, to find out whether the problem-solving method assisted by the Children's World application could affect students' interest and beginning reading ability. The following design will be used (Sugiono, 2013: 111)

Table. Research Design
Initial Treatment Test Group

End			
Experiment O1	X	O	
Control		O2	-

Description:

O1 = Initial test of the experimental group
O2 = Pre-test control group
O3 = Final test of the experimental group
O4 = Final test of the control group
X = Problem solving method assisted by the world of children application

RESULTS

The results and discussion in this study are to answer the three existing problem formulations, namely testing the effect of using the child's application-assisted problem solving method, testing the effect of using the child's application- assisted problem solving method and analyzing student responses after using the problem solving method assisted by the child's world application in public elementary schools Kalipancur 01 and SD Negeri Kalipancur 02 The following are the results and discussion of this study.

Table of Research Respondents

School	Control Class	Experiment Class
KP 01 Elementary School	30	30
KP 02 Elementary School	30	30
Total	60	60

The results of testing the effect of using problem solving methods assisted by the application of the world of children were carried out using control and experimental classes. In the experimental class, the test was carried out using the average completeness test and the average comparative test. Before carrying out the test, a prerequisite test was carried out, namely the normality and homogeneity tests. The following are the results of the prerequisite test and the results of research on the effect of the problem-solving method assisted by the application of the world of children on the initial reading ability of this study.

The minimum completeness achievement test aims to determine whether statistically, the results of the initial reading ability of the experimental class have reached the minimum completeness criterion of 70. The hypothesis formulation used is:

H0: μ ÿ 70 (the average result of reading ability using the problem-solving method assisted by the application of the world of children is less than or equal to 70)

H1: μ > 70 (the average result of reading ability using the problem-solving method assisted by the child's world application is more than 70)

The test criteria used are reject H0 if t ÿ t-1-ÿ and reject H0 in other cases.

In this test using ÿ = 5%. A summary of the test results can be seen in the following table.

Minimum Due Diligence Table

1	Test Values (KKM)	70
2	Testing	5%
3	T Count	3,256
4	T Table	1,698
5	.Sig	0.000

The table above shows that the results of the hypothesis test mean that the results of the ability to read using the problem-solving method assisted by the children's world application are more than 70. This is evidenced by the tcount obtained from the SPSS test using the one sample t-test which obtained a value of 3.256. Therefore, the value of tcount > ttable is 3.256 > 1.698, this means that the average reading ability results using the problem-solving method assisted by the child's world application is more than 70. In addition, the sig value obtained is 0.000 which means less than 5%. So it can be concluded that reject H0 and accept H_a

Then a comparative test of the average reading ability results using the problem-solving method assisted by the child's world application was carried out to statistically test which class had a higher average. The formulation of the hypothesis used is:

H_0: ÿ_1ÿÿ_2 (the average result of reading ability using the problem-solving method assisted by the child's world application is less than or equal to the average problem solving assisted by the child's world application for class students with demonstration learning);

H_1: ÿ_1>ÿ_2 (the average reading ability results using the problem-solving method assisted by the child's world application are more than the average class student learning outcomes in demonstration learning). For

this test criterion used significance level = 5%, then the test criteria are rejecting H_0 for tÿt_(1-ÿ) and accept H_0 for other prices (Sudjana, 2005: 248).
A summary of the test results can be seen in the following table.

Experiment Class

No	Type	Data acquisition
1	Test Values(KKM)	70
2	Testing	5%
3	T Count	7,183
4	T Table	1,669
5	.Sig	0.001

The table above results from the output of hypothesis testing comparing the average reading ability results using the problem-solving method assisted by the child's world application and in demonstration learning. From the SPSS output results obtained through *the Independent Samples Test* in Table 4.6 above, it shows that the problem-solving method assisted by the child's world application is more than the average class student learning outcomes in demonstration learning. This is because the tcount obtained from *the t-test for Equality of Means,* which is 7,183, means that it exceeds the predetermined table, which is 1,669. In addition, the results from *Sig. (2-tailed)* are 0.001 meaning less than 5%, so the data concludes that reject H0 and accept Ha. This means that the average learning outcomes of students who were treated using the problem-solving method assisted by the children's world application were better than the average initial reading ability results that were given treatment with demonstration learning.

DISCUSSION
The results of the study showed that the problem-solving method assisted by the application of the world of children which affected the average results of students' initial reading abilities exceeded the KKM and the average comparison with conventional classes was better. This is also reinforced by (Taseman, 2021) and Enny Zubaidah (2019) stating that the problem-

solving method assisted by the application of the world of children is an activity in beginning reading that still places more emphasis on recognizing and pronouncing symbols, sound symbols in the form of letters, words, and simple sentences. And the occurrence of the hypothesis in this study proves that the application of problem-solving methods assisted by children's world applications can improve students' beginning reading skills. In addition to aspects of language development in the literacy sphere, the application of children's world applications is also able to develop memory, increase vocabulary, increase activity, courage and interest in children in carrying out the learning process.
This is in accordance with Suoth's opinion (Salawati & Suoth, 2020) that audio-visual media such as world applications for children can read early, develop right-brain memory, train concentration and increase vocabulary and say that learning to read using media is more effective than memorizing. In addition to this, the use of *children's world applications* carried out in research has never been carried out in literacy or learning activities. So that students become more interested in new things. These things make the use of children's world application assistance increase students' reading skills and affect Indonesian learning outcomes. Furthermore, the use of technology in education can make students feel more comfortable and will not look bored. the reason is, the transmission of information through technology seems more diverse and modern. In terms of providing learning materials, teachers can also exert maximum creativity, one of which is by displaying material by showing animated videos. We don't need to have special skills, because in today's digital era, we can find out the steps for using the application by searching for it on Google or YouTube. So it can be concluded that the use of problem solving methods.

CONCLUSION

The use of problem-solving methods assisted by the application of the world of children has an influence on the ability to read in the beginning of grade II students. The average learning outcomes of the experimental class exceeded the KKM and comparison with the control class showed that student learning outcomes in problem solving assisted by the application of the world of children were better than the demonstration class. That the tcount value obtained is 3.256 > ttable = 1.669. So reject H0 and accept Ha. This means that the average initial reading results of students who are treated using problem solving assisted by the children's world application are better than the average learning outcomes that are treated with classical literacy activities, then the children's world application is used as a learning activity that can make it easier for students to accelerate the level of reading ability, especially in grade II, improves their initial reading ability. Gain experience, especially in the use of learning models and media that can be reconsidered in learning Indonesian.

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