



# The Effectiveness of Visual Picture Economics Textbook Based on Problem Based Learning in Improving Reading Literacy Skills

Fitri Andriani Setyowati<sup>1\*</sup>, Kristiani<sup>2</sup>, Tri Murwaningsih<sup>3</sup> 

<sup>1,2,3</sup>Departement of Economic Education, Universitas Sebelas Maret, Surakarta, Indonesia

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## ABSTRAK

Rendahnya literasi membaca siswa Indonesia masih menjadi masalah dalam dunia pendidikan di Indonesia. Tujuan penelitian ini adalah untuk meningkatkan literasi membaca dengan menguji kelayakan perangkat literasi membaca dan keefektifan buku ajar ekonomi gambar visual berbasis problem based learning. Jenis penelitian ini adalah eksperimen semu, dengan sampel sebanyak 62 siswa yang terbagi dalam kelas XI IPS1 dan XI IPS2. Sampel dalam penelitian ini menggunakan teknik cluster random sampling. Data yang diperoleh dari survei ini menggunakan berbagai teknik, antara lain (1) wawancara, (2) observasi, (3) kuesioner, dan (4) soal. Analisis data menggunakan beberapa teknik antara lain: (1) analisis deskriptif kuantitatif, (2) analisis statistik inferensial yang didahului oleh uji prasyarat yang terdiri dari uji normalitas, uji homogenitas, dan dilanjutkan dengan uji-t, dan (3) uji hipotesis. Hasil penelitian menunjukkan bahwa instrument literasi membaca dinyatakan layak dan valid, data penelitian berdistribusi normal dan homogen. Selain itu berdasarkan uji t diperoleh hasil bahwa  $H_0$  ditolak dan  $H_1$  diterima. Artinya ada perbedaan tingkat literasi membaca siswa antara menggunakan buku ajar ekonomi gambar visual berbasis problem based learning dengan buku ajar ekonomi konvensional. Pada kelas eksperimen nilai rata-rata tingkat literasi membaca sebesar 68,74 dan 60,52 pada kelas kontrol. Berdasarkan hasil tersebut, penggunaan buku ajar ekonomi dengan gambar visual berbasis problem based learning lebih efektif dalam meningkatkan literasi membaca dibandingkan dengan menggunakan buku ajar ekonomi konvensional. Implikasi dari penelitian ini adalah terjadi peningkatan kemampuan literasi membaca dengan memanfaatkan buku ajar ekonomi gambar visual berbasis problem based learning.

## ABSTRACT

The low reading literacy of Indonesian students is still a problem in the world of education in Indonesia. Testing the feasibility of reading literacy instruments and testing the effectiveness of visual picture economics textbook based on problem-based learning in improving reading literacy skills are the objectives of this study. This type of study is quasi-experimental, with a sample of 62 students divided into classes XI IPS1 and XI IPS2. The samples in this study used the cluster random sampling method. The data taken from this study used various techniques including (1) interviews, (2) observations, (3) questionnaires, and (4) questions. Data analysis uses several techniques including (1) quantitative descriptive analysis, (2) Inferential statistical analysis was preceded by a prerequisite test consisting of a normality test and a homogeneity test followed by a t-test, and (3) hypothesis testing. The results showed that the reading literacy instrument was declared feasible and valid, and the research data were normally distributed and homogeneous. In addition, based on the t-test, the results showed that  $H_0$  was rejected and  $H_1$  was accepted, which means that there is a difference in the level of students' reading literacy skills between using visual picture economics textbook based on problem-based learning and conventional economics textbooks. In the experimental class, the average reading literacy level was 68.74 and 60.52 in the control class. Based on these results, the use of an economic textbook with visual images based on problem-based learning is more effective in improving reading literacy compared to using conventional economics textbooks. This research implies increasing reading literacy skills by utilizing visual picture economics textbook based on problem-based learning.

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## 1. INTRODUCTION

Education is a series of processes to prepare students to become superior, creative, responsible and independent people. Various countries in the world always focus on improving the quality of education in their countries, including Indonesia, because education becomes the root that supports the progress of a nation which can be seen from the quality of its human resources and becomes the factor driving the growth of economic in a country (Kadi & Awwaliyah, 2017; Rando & Wali, 2018). Indonesia will enter the golden generation in 2045, the designation is motivated by the ideals that will be realized on the 100th anniversary of Indonesia's

independence. Therefore, various government policies are continuously focused on managing the quality of education as well as possible, to create quality human resource development (Darman, 2017; Syarifudin, 2020). Indonesia's education problem has never ended since the first various education policy reforms were implemented. One of the educational problems facing Indonesia is low literacy, as the problems that arise are so complex. Literacy of reading is the skills to understand the text and its content, evaluate its meaning and value, and express thoughts from the information gained through reading (Shaimardanova et al., 2020; Warsihna, 2016). Reading literacy is a skill associated with reading, thinking, and writing activities aimed at improving the ability to understand information critically and creatively (Gogahu & Prasetyo, 2020; Rusmono & Alghazali, 2019). From this, we can conclude that reading literacy is the ability to critically and creatively understand the text and its content to be able to express thoughts from the information gained through reading.

The poor reading comprehension of Indonesian students is evident in the results of a three-year international survey conducted under the OECD-coordinated Program for International Student Assessment (PISA) in 2018. The PISA program is a program to measure student achievement with a sample of students aged 15 years from three strata, namely school type (SMP/MTs/SMA/MA/SMK), school status (State/Private), and school performance (Good/Medium/ Underweight) from several countries in the world, including from Indonesia (Hasanah & Sholihah, 2017). PISA has three reading literacy benchmarks: reading literacy, maths literacy, and scientific literacy (Rintaningrum, 2019). The results of the 2018 International Student Assessment Program (PISA) show that Indonesia's average reading literacy score is 371 out of an international average of 500 points (Schleicher, 2019). Indonesia's average mathematical literacy score is 379 out of 500 international averages, and Indonesia's average scientific literacy score is 396 out of 500 international averages. Based on the results of PISA's three literacy benchmarks, the average Indonesian student is the lowest. These results ranked Indonesia 74th out of 79 countries participating in PISA. Based on these results, it can be seen that the implementation of education in Indonesia does not meet international standards.

One of the most important core skills to acquire is reading, as students need to master reading before students can master other skills (Saadati & Sadli, 2019; Shara et al., 2020). Therefore, the PISA international survey supports reading literacy to be developed and becomes the main focus of mathematical literacy and scientific literacy, because if students' reading literacy levels are low, students will have difficulty acquiring other skills. To be successful in science and mathematics, students must first have reading literacy skills (Ho & Lau, 2018; Koyuncu & Firat, 2020). Another impact of low reading literacy skills will result in the difficulty of students following the learning process in all subjects (Oktaviyanti et al., 2022). Therefore, it is very important to have literacy skills, as people can understand the information presented by reading. By reading literacy, one can improve the quality of life. Especially in an increasingly modern era marked by intense competition and fast movement. Individual competence is needed to survive well (Suciawati, 2018; Sukma et al., 2019). Based on this information, improving the reading literacy of Indonesian students is needed the effort to achieve this goal. The low level of reading literacy proves that the educational process has not developed the student's potential and interest in knowledge and has succeeded in solving literacy problems. Skills are a key factor in the success of Indonesian education (Schroter & Kochva, 2019).

Low reading literacy is caused by many factors, including attitudes and perceptions of parents about reading, parents' education level, family environment, availability of resources at school, students' interests and strategies in reading, student attitudes toward reading, learning atmosphere in the classroom, such as teachers who expect students to memorize concepts and theories only and are less able to use the concepts they have or it can be said that students' literacy skills have not been formed, the quality of teachers and schools (Harini, 2018; Ho & Lau, 2018; Koyuncu & Firat, 2020; Schroter & Kochva, 2019; Widiana et al., 2020). Other factors that can affect reading literacy include: the inability of students to understand a text, rapid technological developments that are more attractive to students than reading, and teacher-centered learning which results in the difficulty of developing student activity so that it results in the development of student literacy tends not to be optimal (Fayza et al., 2021; Fikriyah et al., 2020; Harahap et al., 2021). One of the factors that cause low reading literacy, which originates from students and is the focus of the researcher, is student interests and reading strategies. One of Blora Regency's public high schools, accredited by A and one of the most popular public high schools in Blora Regency but the school still have learning problems, especially the low of student's reading literacy. Results from debriefings with an economics teacher and a few students. Student's reading literacy in public high schools was still judged to be relatively low. The outcomes of the debriefing showed that students only read economics books if the teacher gave assignments to students and students looked for answer references in the book as well as reading economics books. The strategy applied by the teacher so that students get used to reading economics books is by giving 10 to 15 minutes at the beginning of learning.

The low literacy skills of students in reading are caused because the current economics textbooks are only in the form of theories in the form of reading texts, so students feel bored and are not interested in reading, students admit that they will be interested in reading economics books if there are elements of visual images in textbooks. This is to the outcomes of survey that in Indonesia they still rely on textual textbooks so that they

have not fully touched the souls of students, as a result, the learning process becomes boring (Dwi Lestari & Putu Parmiti, 2020; Fuadi et al., 2020; Pramana et al., 2020). Low reading interest has an impact on low reading literacy skills because students read, but cannot grasp the meaning of what they read (Saadati & Sadli, 2019; Wijayanti et al., 2020). To read the development of literacy, teachers need to know basic student skills such as motivation, academic background, and socio-economic background. Teachers' willingness to recognize student characteristics when reading literacy is a key asset in the provision of learning materials and an indicator of successful learning implementation (Aini et al., 2019; Alfin, 2019). Therefore, the first step that needs to be done is that the teacher needs to prepare other teaching materials in addition to teaching materials provided by the government these teaching materials can attract students to read because the willingness of teaching materials attract students to like reading is a determining factor in the success of achieving reading literacy and teachers need to improve the quality of education for learning activities to be effective and optimal (Heriwan & Taufina, 2020; Lubis, 2018; Suarni et al., 2019). Based on the above explanation, the correct solution to overcome poor literacy is to develop an economics textbook with visual image elements to stimulate students' interest in reading. This is expected to affect reading literacy skills.

However, there are differences among previous researchers regarding the relationship between textbooks and increasing reading literacy skills. Textbooks are only limited to influencing the satisfaction of using the book, therefore textbooks do not affect increasing reading literacy (Reichenberg, 2016). Problem-based learning textbooks can improve reading literacy (Dita et al., 2021). Further survey is needed to decide the effectiveness of the textbook on reading literacy skills based on the differences in the research results of the above researchers. The difference between the textbooks developed by the researcher is that the textbooks contain elements of the visual picture, so the researcher calls them visual picture economics textbook based on problem-based learning. From the economics textbooks that have been developed by the researcher, the goal of this survey is to test the feasibility of reading literacy instruments and test the effectiveness of visual picture economics textbook based on problem-based learning in improving reading literacy skills.

## 2. METHOD

This study makes use of an experimental study type. The studies turned into performed in one of the public high schools within the Blera Regency. The populace used turned into all college students of class XI IPS which amounted to one hundred thirty college students divided into four classes, however, the sample of this research turned into sixty-two students who had been divided into classes XI IPS 1 and XI IPS 2. The samples in this study used the cluster random sampling method. The selection of class XI IPS 1 and class XI IPS 2 as research samples because they have similarities/equality in two categories, the first category is the average level of economic value for the final semester exam, and both classes have the same average economic value. 82 both in class XI IPS 1 and XI IPS 2. The second category is the same number of students in one class, both in class XI IPS 1 and in class XI IPS 2, which is 31 students. The procedure in this study includes 3 ranges, specifically: (1) the validation stage of the research instrument, namely the reading literacy pre-test, (2) Instrument testing phase for students to test instrument effectiveness and reliability, and (3) the field-testing stage or experiment. In the testing process, there are several stages used, namely: (1) giving pre-tests to students in class XI IPS 1 and class XI IPS 2, (2) carrying out the learning process with treatment, namely using a visual picture economics textbook based on problem-based learning and using a problem-based learning model in the experimental class (XI IPS 2) while the learning process in the control class (XI IPS 1) was carried out without any treatment, namely without using a visual picture economics textbook based on problem-based learning. Therefore, learning control classes use the economics textbooks that teachers often use, and the learning process, the learning model that economics teachers often use in problem-based learning, and (3) carry out post-tests to both classes, namely class XI IPS 1 and XI IPS 2 to find out the final level of students' reading literacy skills. Further testing is carried out using a statistical process to see the difference between the two.

The data taken from this study used various techniques including (1) interviews, this interview is conducted by asking several questions to an economics teacher about the learning process of economics subjects, learning models, learning methods, teaching materials used, and obstacles experienced by teachers. Furthermore, interviews with students were conducted to obtain information on the economic learning process in the classroom and the obstacles experienced by students during the learning process, (2) observation, this observation was made during the learning process that took place in the classroom (3) questionnaire, the questionnaire was used to test the feasibility of the reading literacy pre-test instrument at the instrument validation stage. The grid for the validation sheet for the pre-test reading literacy instrument given to the research instrument experts consisted of the following aspects: material/content, construction, and language. (4) test questions, the test questions in this study used 12 questions in the form of essays. The indicators for the reading literacy test instrument used in this study are the indicators for the reading literacy assessment conducted

by PISA, namely the ability to re-express information, the ability to develop interpretations, the ability to reflect and evaluate the reading, and the ability to relate the contents of the book to the reader's experience.

Data analysis uses several techniques including (1) quantitative descriptive analysis, (2) Prior to inference statistical analysis, there was a preconditioning test consisting of a normality test and a homogeneity test, followed by a t-test, and (3) the hypothesis test. Quantitative descriptive analysis was used to test the feasibility of the reading literacy instruments, determine the results of the reading literacy test questions, and enable the level of reading literacy to be known. Inference statistical analysis is a statistical method for analyzing sample data, and the results are applied to the population (Sugiyono, 2015: 209). The normality test for the data in this study uses the Shapiro-Wilk test with the condition that if the significance value (Sig.) for all data is > 0.05. The data is then normally distributed. The homogeneity test of the data in this study used IBM SPSS 21, with the data criteria being said to be homogeneous if the significance value > 0.05, then the data was proven to be homogeneous.

The hypothesis test is a test aimed at determining the significant difference in reading literacy of students between the experimental class which was treated in the form of a visual picture economics textbook based on problem based learning and the control class that was not treated with visual picture economics textbook based on problem-based learning with problem-based learning models. The testing steps carried out were compiling research hypotheses, namely: (1) H0: there is no difference in the level of students' reading literacy skills between using visual picture economics textbook based on problem-based learning with conventional economics textbooks, (2) H1: there is the difference in the level of students' reading literacy skills between using visual picture economics textbook based on problem-based learning and conventional economics textbooks. The hypothesis test (t-test) for this study uses the T-test (Independent Samples T-Test) through IBM SPSS 21. However, if the significance level is less than 0.05, H0 is rejected, H1 is accepted, and there is a difference between the two samples.

### 3. RESULT AND DISCUSSION

#### Result

By reason of explained in the prior section, this survey decide to test the feasibility of reading literacy instruments and test the effectiveness of visual picture economics textbook based on problem-based learning in improving reading literacy skills. Efforts to test the feasibility of reading literacy instruments were carried out by asking for validation by research instrument experts, namely lecturers from the department of economics education at Universitas Sebelas Maret from January until February 2022, then the results were processed using quantitative descriptive analysis techniques. Expert Data Validation for the Reading Literacy Pre-Test Instrument is presented in Table 1.

**Table 1.** Expert Validation Data for Reading Literacy Pre-Test Instruments

Scala	Assessment Criteria	Assessment Component			Frequency	Score
		Material/Content	Construction	Language		
1	Very Less	0	0	0	0	0
2	Not Enough	1	0	0	1	2
3	Enough	0	1	0	1	3
4	Good	3	1	0	4	16
5	Very Good	0	1	2	3	15
<b>Total</b>					<b>9</b>	<b>36</b>
<b>The Average Score</b>						<b>4</b>

The assessment components in the process of validating the reading literacy pretest instrument consist of material/content aspects with 4 indicators, construction with 3 indicators, and language with 2 indicators, so there are 9 indicators in the reading literacy pretest instrument. Referring to the validation data that has been carried out by the expert validator of the reading literacy pretest instrument, the reading literacy pretest instrument gets a value of 4. This value is interpreted in the form of qualitative data and is included in the good category. The value is then the percentage generated is 80%, therefore it had proper criteria. The expert validator of the reading literacy pretest instrument provides suggestions for the good of the research tool. Suggestions developed in the form of repetition of a stimulus that does not work so it must be removed and the image still needs to be corrected so as not to cause multiple interpretations. The results of the Revised Reading Literacy Pre-Test Instrument are presented in Table 2.



**Table 2.** Results of Revision of Reading Literacy Pre-Test Instruments

No	Before Revision	After Revision
1	<p>Repetition of a stimulus that does not work, so it must be removed</p> <p>3. Berdasarkan berita di atas, pada kebijakan kedua yaitu menjaga keberlangsungan program perlindungan sosial bagi masyarakat kurang mampu dan rentan. Hal ini diwujudkan dalam pengeluaran pemerintah pusat berupa bantuan sosial yang lebih berkesinambungan yaitu berupa pemberian kartu Indonesia pintar (KIP) dan kartu Indonesia sehat (KIS). Apakah bentuk kebijakan tersebut masih relevan dengan kondisi masyarakat Indonesia saat ini? Berikan argumen saudara.</p>	<p>Berdasarkan berita di atas, pada kebijakan kedua diwujudkan dalam pengeluaran pemerintah pusat berupa bantuan sosial yang lebih berkesinambungan yaitu berupa pemberian kartu Indonesia pintar (KIP) dan kartu Indonesia sehat (KIS). Apakah bentuk kebijakan tersebut masih relevan dengan kondisi masyarakat Indonesia saat ini? Berikan argumen saudara.</p>
2	<p>The image still needs to be corrected so as not to cause multiple interpretations</p> 	

After running the instrument validation test, the next step is to test the instrument to test the effectiveness and reliability of the instrument performed in class XI IPA 3, totaling 30 students. Based on the validity test, from 12 reading literacy questions, 2 invalid questions were found, namely questions number 5 and 6, so the two invalid questions had to be deleted and not used in field testing. Based on the reliability test, the 10 questions were declared reliable. After the data is declared valid and reliable, then the pre-test of reading literacy can be tested in the experimental class and the control class when carrying out experimental research. Furthermore, testing is carried out using a statistical process to see the difference between the two. Based on the output of the tests of normality, it is known that the significance (Sig.) of all the data in the Shapiro-Wilk test is  $> 0.05$ , so it can conclude a normal distribution of the survey data. The selection of normality test using the Shapiro Wilk test because the sample used in the study was more than 30 respondents but not more than 50 respondents, so the normality test was more appropriate using the Shapiro Wilk test. In addition, a uniformity test was performed to determine if the variance (diversity) of the data from two or more groups was uniform (equal) or non-uniform (not equal). Based on the output of the test of homogeneity of variance, the significance (Sig.) We can conclude that the variances of the post-test experimental class data and the post-test control class data are homogenate or uniform, Based on the Mean of  $0.256 > 0.05$ . Thus, the requirements for conducting an independent sample t-test have been met. Then run an independent sample t-test to look if there may be a difference in the averages of the two unpaired samples.

The value of Sig. (2-tailed) was obtained based on the output of an independent sample t-test. It can be concluded that the equal assumed variance of  $0.018 < 0.05$ . It means  $H_0$  was rejected and  $H_1$  was accepted, this means that there is a difference in the reading literacy of the students between using visual picture economics textbook based on problem-based learning and conventional economics textbooks. Based on the output group statistics, the average value of the difference in reading literacy levels in the two samples at the mean is 68.74 in the experimental class and 60.52 in the control class. Based on these outcomes, it can draw conclusions that

using a visual picture economics textbook based on problem-based learning is more effective in improving reading literacy skills than using conventional economics textbooks.

## Discussion

This study focuses on testing the feasibility of reading literacy instruments and testing the effectiveness of economic textbooks that have been developed by the researcher, namely visual picture economics textbook based on problem-based learning. Visual picture economics textbook based on problem-based learning is a textbook development in which it is equipped with conceptual pictures that can explain economic material and the pictures contain various problems to be solved or solved by students and are supported by a collection of good questions of multiple-choice and essay. The purpose of the visual picture economics textbook based on problem-based learning is through the addition of existing conceptual pictures that are expected to attract students' interest in reading books, without waiting for teacher instructions to ask students to read books. Through increased student interest in reading, it is hoped that it will have implications for improving reading literacy skills. This is evidenced by the results of previous studies showing the essence of using textbooks as media or learning resources for students in the learning process, it's about making it easier for students to learn. A good textbook will help students increase their interest and motivation in learning (Pakpahan et al., 2021; Pertama et al., 2018; Weng et al., 2018). Some studies have shown that early students working on books are more interested in books and are more likely to become regular readers (Bennett et al., 2018; Jufrida et al., 2019). In addition, the fact shows that students have more time to interact with textbooks compared to teachers, with these facts, there are opportunities to train students to have literacy skills by optimizing the function of textbooks. However, of course, there is a need for textbooks to bridge students to have good literacy skills by enriching textbooks with research activities to determine student needs. Therefore, the content of textbooks for students should be the main consideration (Rokhmah et al., 2017; Zuraida & Ibrahim, 2018).

The difference between the textbooks that have been developed by the researcher, which were then carried out the research by way of trials in the control class and the experimental class to determine the feasibility of reading literacy instruments and the effectiveness of textbooks in improving reading literacy skills is the presence of visual picture elements based on the outcomes of previous research, the presence of pictures can improve reading literacy. The 2013 curriculum focuses on success in reading habits which are often referred to as reading literacy skills. The learning process at this time is increasingly converging on learning outcomes accompanied by an increase in reading literacy. Students are better at understanding reading texts that are accompanied by visuals (Pratiwiningsih et al., 2017; Rusmono & Alghazali, 2019). Visual reading books, such as picture books or videos, can help students build the knowledge needed to understand concepts and content. Reading books should be visual-based so that they can support students' understanding by showing the relevance of concepts in reading to attract students' reading interest (Lin et al., 2019; Lupo et al., 2020; Mifsud et al., 2021).

The visual picture makes it easier for students to understand the meaning. The use of visual pictures in combination with verbal text has proven to be effective in deepening the reader's understanding (Lai et al., 2019; Nisak & Rukmini, 2021). Textbooks with good design for some students are a solution to the demotivation of students caused by unattractive textbooks (Pertama et al., 2018; Wuryani & Yamtinah, 2018). Visual grammar analysis provides some information about how a picture can participate to assist teachers in deciphering meaning or material through visual knowledge to students. Thus, textbooks or textbooks can be the right helper for students in building interest and motivation to read. The results of other studies show similar results, and picture books are suitable for use in learning activities and effectively improve students' literacy skills (Nugraheni et al., 2019). Not only that, the use of visuals can develop students' ability to construct deeper knowledge from the text they read (Toh et al., 2017). Other evidence that shows that the presence of visual aids can improve reading literacy is from research results (Rifqiawati et al., 2020), the use of biomagazine can improve students' reading literacy. This can be seen from the reading literacy score which has increased after students read the biomagazine due to the addition of visuals.

However, the focus of this research is not on the process of compiling textbooks that the author has developed, but on the results of using these textbooks to achieve the research objective, namely reading literacy skills. Based on the feasibility test of reading literacy instruments conducted by research instrument experts, namely lecturers from the department of economics education at Universitas Sebelas Maret from January until February 2022, the average score was 4. This value when interpreted in the form of qualitative data is included in good criteria and is presented with 80% of the results having proper qualifications so that the research instrument in the form of reading literacy essay questions can be tested on students.

Reading literacy questions have 4 indicators, including the ability to reveal information, the ability to develop interpretations, the ability to reflect and evaluate the reading, and ability to relate book content to the reader's experience. The indicator for reading literacy questions selected by the researcher was based on the indicator guidelines for the reading literacy assessment conducted by PISA. This is to the results of the study, the

reading assessment carried out by PISA in terms of comprehension takes into account the following matters: accessing and retrieving information from the text, integrating and interpreting the reading content, reflecting and evaluating the text, and connecting the text content with the reader's experience (Amri & Rochmah, 2021). Based on test results of reading literacy instrument conducted outside the population and study samples, namely in class XI IPA 3. The result was that from 12 reading literacy essay questions given to students, 2 invalid questions were found, namely question number 5 and question number 6. So, 10 essay questions are said to be valid and reliable, so in the field trial process during experimental research, researchers only used 10 reading literacy pre-test questions that had been declared feasible and reliable. The research process with the experimental method was carried out for 5 weeks. The first week is used to test the validity and reliability of the instrument given to students in class XI IPA 3. From the second week to the fifth week conduct experimental research in class XI IPS 1 and class XI IPS 2. Class IPS 2 was an experimental class, while class XI IPS 1 was selected as the control class. The reading literacy pre-test was carried out in the second week. The pre-test questions are in the form of essay questions totalling 10 questions. Pre-tests aim to find out how good a student's reading literacy is before the experience process is performed.

In the third and fourth weeks, an experimental process is carried out, namely carrying out the learning process with treatment, namely using a visual picture economics textbook based on problem-based learning and using a problem-based learning model in the experimental class (XI IPS 2) while the learning process in the control class (XI IPS 1) was carried out without any treatment, namely without using a visual picture economics textbook based on problem-based learning. So, the learning control class uses economics textbooks commonly used by teachers and uses a learning model commonly applied by economics teachers in the learning process, namely problem-based learning.

In the implementation of the use of visual picture economics textbook based on problem-based learning in the experimental class, namely class XI IPS 2, it was found that during the learning process students were actively reading visual picture economics textbook based on problem-based learning because it is based on student assessment of the book, students claim to be more interested because many pictures can help understand the learning material, besides that visual picture economics textbook based on problem-based learning have other advantages, namely the material presented in the book is more complete because it is also equipped with real examples so that students can more easily apply the examples in the book into everyday life so that during a question-and-answer session between teachers and students, students are quick to respond questions given by the teacher accompanied by giving real examples in everyday life. This is different from the implementation that occurs in the control class. In class XI IPS 1 as the control class, there are several obstacles in the learning process. For example, when the teacher gives a case or problem that must be solved by students in groups, namely by applying a problem-based learning model, most students have difficulty solving the problem because the economics textbooks that students have are very few discussions and no examples in solving problems in books so that in the learning process in the control class, the teacher must assist by providing keywords which are the answers to solving cases or problems given by the teacher. In the fifth week, the post-test reading literacy was carried out. The post-test questions are in the form of 10 questions. The post-test function is to find out how big the level of reading literacy skills is possessed by students after the experimental process is carried out. Furthermore, the product effectiveness test was conducted by answering the hypothesis test which was preceded by the normality test, homogeneity test, and independent t-test.

The outcomes showed that the post-test scores in the experimental and control classes showed different levels of reading literacy. The average value of reading literacy level in the experimental class, namely class XI IPS 2 which in the learning process uses visual picture economics textbook based on problem-based learning, gets a higher score, namely 68.74, while the average value of reading literacy level in the control class is class XI IPS 1 is lower with an average literacy level of 60.52. In the control class, the learning process does not use a visual picture economics textbook based on problem-based learning but uses conventional economics textbooks or economics textbooks provided by economics subject teachers. The limitation in this study is that the implementation of the research only focuses on efforts to increase reading literacy for class XI students and research is also limited to 1 high school in Blora, this is due to the limited time that the researcher has, so this research still needs to be developed further. It is suggested that further research can be carried out in various high schools in Indonesia, and research not only focuses on increasing reading literacy in class XI but also on increasing reading literacy from class X to class XII. The expansion of research subjects is expected to have a greater positive impact on the world of education in Indonesia.

#### 4. CONCLUSION

This quasi-experimental research underwent three stages, namely the feasibility test of the reading literacy instrument, the validity and reliability test, and the field test or experiment. The implementation of these three stages has succeeded in producing appropriate and valid reading literacy questions to be used in research.

In addition, a visual picture economics textbook based on problem-based learning is effective in improving reading literacy. This research implies increasing reading literacy skills by utilizing visual picture economics textbook based on problem-based learning.

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