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E-Module Using a Problem Based Learning Approach in Social and Science Learning of Fourth Grade Elementary Schools

Mohammad Hendra Firdaus[1]*, I Made Tegeh[2]

[1,2]Teknologi Pendidikan, Jurusan Pendidikan Psikologi dan Bimbingan, Universitas Pendidikan Ganesha, Singaraja, Indonesia

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ABSTRAK

Kurangnya bahan ajar berbasis digital membuat siswa merasa bosan dalam pembelajaran. Hal ini menyebabkan hasil belajar siswa menjadi rendah. Penelitian ini bertujuan untuk membuktikan efektivitas E-modul berpendekatan Problem Based Learning pada muatan pelajaran IPAS kelas IV. Subjek efektivitas media yakni siswa kelas IV sebanyak 28 siswa. Model pengembangan yang digunakan yakni ADDIE (analyze, design, development, implementation and evaluation). Metode dan instrumen pengumpulan data yang digunakan dalam penelitian ini yaitu metode kuesioner dan tes objektif berupa pilihan ganda. Teknik analisis data yang digunakan yakni analysis deskriptif kuantitatif dan inferensial. Hasil kelayakan dan kepraktisan media oleh ahli dan responden mendapatkan kualifikasi sangat baik dan layak digunakan. Hasil uji efektivitas menyatakan bahwa H1 diterima dan H0 ditolak maka dapat disimpulkan bahwa pengembangan E-modul berpendekatan Problem Based Learning yang dikembangkan efektif dan layak digunakan bagi siswa kelas IV. Implikasi penelitian ini yakni diharapkan mampu memberikan referensi bagi guru dalam mengembangkan bahan ajar yang inovatif.

ABSTRACT

The lack of digital-based teaching materials makes students feel bored in learning. This causes student learning outcomes to be low. This research aims to analyze the effectiveness of E-modules using a Problem Based Learning approach in class IV science course content. The subjects of media effectiveness were 28 class IV students. The development model used is ADDIE (analyze, design, development, implementation and evaluation). The data collection methods and instruments used in this research are questionnaire methods and objective tests in the form of multiple choices. The data analysis techniques used are quantitative descriptive and inferential analysis. The results of the feasibility and practicality of the media by experts and respondents received very good qualifications and were suitable for use. The results of the effectiveness test state that H1 is accepted and H0 is rejected, so it can be concluded that the development of the E-module using the Problem Based Learning approach that was developed is effective and suitable for use by class IV students. The implication of this research is that it is hoped that it will be able to provide a reference for teachers in developing innovative teaching materials.

1. INTRODUCTION

Teaching materials are seen as something that is very important in the learning process, namely aiming to improve learning. Teaching materials are learning tools that are used with the help of tools to facilitate the delivery of material during the learning process at school (Fariani, 2014; Ramadhina & Pranata, 2022). This will make it easier for teachers when carrying out teaching activities at school and be a solution to make students enthusiastic when learning (Arifin et al., 2023; Rahma & Ernawati, 2024). But in reality, teaching materials that are in accordance with student characteristics are still rarely used. Most teachers more often deliver materials through lecture methods, questions and answers, discussions and rely on printed textbooks so that the learning process seems monotonous and causes students to feel bored quickly in learning activities. Based on the results of observations and interviews conducted, it was stated that the learning that occurred in SD Negeri 1 Penarukan class IV B was when the learning that took place only utilized aids in the form of a blackboard, printed textbooks. Based on the results of interviews

Corresponding author
*E-mail addresses: hendra.firdaus@undiksha.ac.id (Mohammad Hendra Firdaus)

by conducting observations and by distributing questionnaires to students, data was obtained that it was true that teachers only used blackboards and textbooks during learning. Teachers also used lecture methods, questions and answers and discussions during learning. SD N 1 Penarukan also had 5 projectors, 6 laptops and 18 chrome books available. While the teaching materials used were printed textbooks loaned by the library, but the number of available textbooks was very limited.

Printed textbooks are generally thick, heavy, and usually the content is too detailed, so it seems monotonous, and not all students are able to understand the content of the material. The printed teaching materials cause students to become bored in learning and are considered less practical. This affects students' interest and enthusiasm for learning. Lack of mapping of science and science materials, media or teaching materials used are less effective because teachers only rely on teaching materials using textbooks, so students feel monotonous, get bored quickly in digesting learning. In the process of learning activities, teachers and students at SDN 1 Penarukan actually need fun, effective and practical teaching media by students to support the continuity of teaching and learning in the classroom and at home. The same problem also occurred in previous studies which stated that conventional teaching materials are still widely used. Teachers are less innovative in presenting creative teaching materials for students (Anggreni & Agustika, 2022; Fauziyah et al., 2022).

So, the right strategy is to use flexible teaching materials that can be learned by being explained by the teacher and can be learned at home practically independently. Teaching materials are said to be flexible if the teaching materials can be used anywhere and anytime, not limited by place and time each time the teaching materials are used. One of the flexible teaching materials is E-module (Afifah et al., 2019; Antari et al., 2023). E-module is a module with an electronic format that is run by a computer. E-module can display text, images, animations, and videos through electronic devices such as computers. Technological advances have also made it possible for E-modules to be displayed via smartphones (Antari et al., 2023; Kristina et al., 2022). E-module is a form of independent learning media that is arranged in digital form where this aims to be an effort to realize the learning competencies that are desired to be achieved, besides that, it also makes students more interactive by using the application (Pazlina & Usmeldi, 2020; Ramadanti et al., 2021). The use of E-modules is not limited by place and time, because it depends on the student's ability to use E-modules. Thus, E-modules can be used anytime and anywhere using smartphones that most students already have in this technological era (Kaniyah et al., 2022; Kimianti & Prasetyo, 2019).

The researcher also conducted observations, interviews and distributed questionnaires to students of Class IV B. The results obtained from 28 students, as many as 18 students have their own cellphones, 9 students use their parents' cellphones and 1 student uses a sibling's cellphone. Even some students at home have been accustomed to studying with the help of cellphones, in the use of cellphones are also still under parental supervision. Along with the rapid development of technology, all students are no longer unfamiliar with cellphones, computers, laptops and other electronic media. With this E-module, students can access directly via cellphone, computer or laptop. So that students can learn anywhere, and anytime through the E-module provided by the teacher. The researcher also conducted observations on the learning styles of students of class IV SD N 1 Penarukan, by giving a learning style questionnaire to the rest of Class IV B SD N 1 Penarukan. From the results of the learning style questionnaire, it shows that out of 28 students in class IV B, there are 20 students who have a visual learning style, 5 students have an auditory learning style and 3 students have a kinesthetics learning style. The majority of students in class IV B have a visual learning style.

In addition to E-module teaching materials, one of the learning methods that can support the use of E-modules and the teaching and learning process is by using the Problem Based Learning approach. Problem Based Learning is a learning concept that helps teachers relate the material they teach to real-world situations of students and encourages students to make connections between the knowledge they have and its application in life (Hakim et al., 2023; Nia et al., 2022). Problem Based Learning (PBL) is a learning model in which students are faced with a real problem that has been experienced by the students (Hotimah, 2020; Kaniyah et al., 2022).

The problem-based learning model, also known as Problem Based Learning, is a teaching and learning process that presents contextual problems so that students are stimulated to learn (Malina et al., 2021; Rohmatulloh et al., 2023). Problems are presented before the learning process takes place so that it can trigger students to research, describe and find solutions to the problem. Problem-based learning is a learning approach process that is related to real-world problems as a context for thinking so that students have the skills and can think critically in solving a problem to obtain knowledge and concepts related to the subject matter being discussed (Imaningtyas et al., 2016; Nurhandayani et al., 2022). The advantages of E-modules include being practical to carry anywhere, cheaper production costs compared to printed modules, using resources in the form of electricity, computers, laptops or mobile phones to operate them,

not easily damaged/torn. Manuscripts can be arranged linearly or non-linearly, and can be equipped with audio and video in one presentation package.

This study offers innovation by exploring the integration between E-Modules and the Problem Based Learning (PBL) approach in learning the content of science subjects at the Elementary School (SD) level, especially in grade IV of SD Negeri 1 Penarukan. By considering the students' learning styles which vary in visual, auditory, and kinesthetics. This study provides deeper insight into how these variations can affect the effectiveness of E-Modules as learning aids. In addition, this study also introduces a more interactive and interesting method for students, which not only increases their involvement in the learning process but also helps them relate the subject matter to real-world situations, which is the core of the PBL approach. Thus, this study is expected to be an important reference for teachers in presenting more innovative and meaningful teaching materials, while overcoming the challenges that exist in conventional learning. Based on the background above, the purpose of this study is to analyze the effectiveness of E-modules with a Problem Based Learning approach in the content of science subjects for grade IV of SD Negeri 1 Penarukan. It is hoped that this study can be a reference for teachers in presenting innovative teaching materials as an effort to present meaningful learning for students.

2. METHOD

This research is a type of research and development or Research and Development (R&D). The development model used in this research is the ADDIE model. ADDIE stands for Analysis, Design, Development, Implementation, and Evaluation. This model is used by researchers because this model is considered suitable for the research to be carried out. With research using this model, it is also more systematic and simpler so that it can produce more effective products. Product trials in this development research consist of: (1) Trial Design, (2) Trial Subjects, (3) Types of Data, (4) Data Collection Methods and Instruments, and (5) Data Analysis Methods and Techniques.

The subjects of this small group trial were 9 students from grade V of SD N 1 Penarukan. The individual trial involved 3 students from grade V of SD N 1 Penarukan. The subjects of the effectiveness test were 28 students from grade IV. The data collection methods or techniques used in this development research were questionnaires and test methods. The data collection instrument used was a questionnaire sheet. Before the research instrument can be used, the instrument grid must first be arranged to match the predetermined indicators. The research instrument grid can be seen in Table 1, Table 2, Table 3, Table 4, and Table 5.

Table 1. The Trial Instrument Grid for Learning Content Experts

Aspect	Component
Curriculum	1. Clarity of subject or subject identity
	2. Clarity of learning outcomes
	3. Suitability of learning E-modules with learning objectives
	4. Conformity of learning objectives with learning outcomes
	5. The learning objectives are in accordance with the ABCD format
Material	1. The material is provided regularly
	2. Suitability of materials to learning objectives
	3. The material is free from conceptual errors
	4. Clarity in presentation of material
	5. The material presented is easy to understand
	6. Compliance of material with image
	7. Suitability of material to video
Language	1. Use clear and accurate sentences
	2. Appropriateness of language use in communication with students
Evaluation	1. Relevance of questions to learning objectives
	2. The evaluation questions presented improve the ability to remember and analyze.
	3. Practice questions can be studied repeatedly and according to the user's wishes.

Table 2. The Trial Instrument Grid for Learning Design Experts

Aspect	Indicator
Objective	1. Clarity of learning objectives
	2. Alignment between learning objectives and materials

Aspect	Indicator
	3. Learning objectives are aligned with the material and evaluation
Strategy	1. Delivery of material according to learning steps
	2. Can motivate students
	3. Delivery of material according to the learning flow
	4. Provide students with opportunities for independent learning
	5. E-modules can motivate students to learn
Evaluation	1. Provide evaluation questions to test students' understanding
	2. The questions presented are in accordance with learning objectives

Table 3. The Trial Instrument Grid for Learning Media Experts

Aspect	Component
Text Message Design	1. Appropriateness of type, colour, spacing and font size
	2. Text readability level
	3. Accuracy in text presentation
	4. Correct use of symbols and punctuation
	5. Accuracy in word choice
	6. The correctness of the text colour to the background colour
Image Message Design	1. Conformity of image to material
	2. Availability of image captions
	3. Easy to understand images
	4. Image layout accuracy
Video Message Design	1. Video conformity to material
	2. Easy to understand video
	3. Clarity of information
Organizing E-modul	1. Easy to use e-module
	2. Clarity of instructions for use
	3. Navigation consistency

Table 4. The Individual and Small Group Test Instrument Grid

Aspect	Indicator
Appearance	1. The attractiveness of the appearance and content of the E-module
	2. Clarity of text and presentation of material in the E-module
	3. Clarity of sound on E-module
Material	1. Clarity of the material presented in the E-module
	2. Completeness of materials in E-module
	3. Discussion of the material in the E-module is accompanied by appropriate images and videos.
	4. The material presented in the E-module is easy to understand.
	5. The accuracy of the examples to clarify the material
	6. The language in the E-module is easy to understand
	7. Availability of assignments and evaluations in E-modules
	8. Suitability of evaluation questions with learning objectives
Operation	1. E-modules are easy for students to use
	2. The instructions used in the E-module are clear and precise for students to use.
Benefit	1. This e-module facilitates me in learning
	2. The existence of this E-module makes me enthusiastic about learning

Table 5. The Test Instrument Grid

Learning Outcomes	Learning objectives
Students are expected to be able to relate it to the traditions of the surrounding community and the role of local government, understand what norms and	Students can identify the definition of norms. Students can identify the definition of customs. Students can identify norms or customs that apply around them.

Learning Outcomes	Learning objectives
customs are, know the difference between written and unwritten regulations, norms that apply in society, and the consequences of violating them.	Students can compare written and unwritten rules. Students can analyze the need to comply with regulations Students can analyze the impact of violating written and unwritten rules. Students can analyze the benefits of obeying regulations Students can determine examples of norms in a place. Students can analyze norms from various regions. Students can analyze customs. Students can diagnose violations of norms in a place.

The trial of questions using (Pre-test and Post-test) was carried out to determine the fluency (validity) and reliability of the questions that had been developed. The stages of this trial in its implementation include validity tests, test reliability, level of difficulty of questions, and test discrimination. The methods and techniques of data analysis used were quantitative descriptive analysis and inferential statistics. Quantitative descriptive analysis was used to process data obtained through questionnaires in the form of scores. This inferential statistical analysis was used to determine the effectiveness of the product on the learning outcomes of grade IV students of SD N 1 Penarukan seen from before and after using the E-module with the Problem Based Learning approach. The data from the effectiveness test were analyzed using the correlated t-test. The results of the trial compared to the t-table with a significance level (5%) were used to determine the effectiveness of the E-module with the Problem Based Learning approach on the content of the science subjects. However, previously a prerequisite test was carried out including normality and homogeneity tests.

3. RESULT AND DISCUSSION

Result

This research was conducted in grade IV at SD Negeri 1 Penarukan, the subjects in this study were 28 grade IV students. The development of the E-module with a Problem Based Learning Approach on the IPAS content was carried out using the ADDIE model, namely the analysis stage (Analysis), design stage (Design), development stage (Development), implementation stage (Implementation) and evaluation stage (Evaluation). The activities that have been carried out by researchers in each stage of the research are.

The first stage is analysis, the activities carried out are analyzing learning activities, analyzing student characteristics, analyzing supporting facilities. Based on the results of the analysis, it was found that teachers more often use printed textbooks in the learning process. Therefore, this causes students to feel bored and tired of learning. Based on the analysis through giving questionnaires to students, it was found that student characteristics are easier to understand a lesson if they use visual teaching materials. Based on this, teaching materials are needed that can attract students' attention in learning. Facilities to support the learning process owned by the school, namely chrome books, computers, Wi-Fi, and projectors. So, it can be concluded that the facilities owned by SD Negeri 1 Penarukan can support the use of E-modules in the learning process. The second stage is design, at this stage, the things that need to be done are compiling flowcharts and storyboards related to the product in the form of E-modules that will be developed.

The third stage is the development stage. At this stage is the production stage in developing a product. At this stage the E-module teaching material is developed to become a product that is ready and suitable for use by all students. The appearance of the E-module that has been developed can be seen in Figure 1.

After obtaining the presentation from the expert test of learning content, then converted with a conversion table of achievement level scale 5, then the percentage obtained is 98.8% in the range of 90-100% with very good qualifications. The design expert test gave a score with a percentage of 92% in the range of 90-100% with very good qualifications. The media expert test with a percentage of 95% is in the range of 90-100% with very good qualifications. Based on the results of the calculation of the overall percentage of objects, the results of individual trials were obtained with a percentage of 96.8%. Then converted with a conversion table of achievement level scale 5, then the percentage obtained is 96.8% in the range of 90-100% with very good qualifications. Then for the small group test, the percentage obtained is 96.56% in the range of 90-100% with very good qualifications. Based on the five trial subjects, that the percentage of the validity results of the Problem Based Learning approach E-module

Development, it can be concluded that this Problem Based Learning approach E-module is suitable for use by users or students during the learning process.

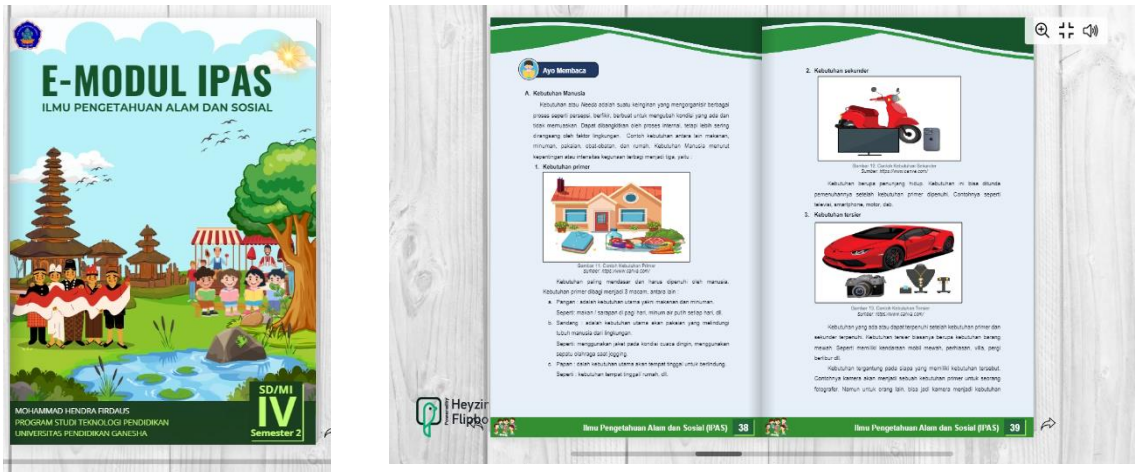

Figure 1. E-Module Media Display

After going through the three stages, starting from the analysis, design, to development stages, the next stage is the implementation stage. At this stage, the E-module that has been developed will be applied directly to the learning process. So that it can be directly known whether or not this E-module product is feasible when used and to find out students' responses whether this E-module product is interesting to use. The effectiveness of this product development is carried out using a multiple-choice test method. Multiple-choice test questions are used to collect data on student learning outcomes, both before and after using the Problem Based Learning approach E-module on the IPA subject matter. The purpose of collecting this value data is so that developers can find out how effective the use of the Problem Based Learning approach E-module on the IPA subject matter is on improving student learning outcomes which is carried out using the T-Test for correlated samples. Before conducting the development effectiveness test, the product developer first conducted a trial of the learning outcome test instrument and prerequisite test. The following is an explanation of the trial of the learning outcome test instrument and prerequisite test. the calculation result of the normality test using SPSS is if the significant value> 0.05 then the data is normally distributed, while if the significant value <0.05 then the data is not normally distributed. From the results of the pre-test and post-test that have been obtained, namely 0.110 and 0.120> 0.05 then the data is normally distributed. the calculation result of the homogeneity test using SPSS is if the significant value> 0.05 then the data is homogeneously distributed, if the significant value <0.05 then the data is not homogeneously distributed. From the results that have been obtained, namely 0.060> 0.05 then the data is declared homogeneously distributed.

Based on the results of the normality and homogeneity tests, the data obtained are normally distributed and the data are homogeneously distributed. Based on these results, after the normality test and homogeneity test were carried out, the next step was to conduct a hypothesis test. Based on the results of the t-test analysis that had been carried out, the t_{count} = 16.891 was obtained. Furthermore, compared with the t-table at a significance level of 5% with db = n1 + n2 - 2 = 28 + 28 - 2 = 54 is 2.005. So it can be concluded that the $t_{count} > t_{table}$, so H_0 is rejected and H_1 is accepted, which means that there is a significant difference between before and after using the E-module with a Problem Based Learning approach on the learning outcomes of the Science subject matter of Class IV of SD Negeri 1 Penarukan in the 2023/2024 Academic Year. Then in Table 4.19 it is stated that the significance result (2-tailed) is 0.000. The results show that the significance level is <0.05 so that H_0 is rejected and H_1 is accepted so that it can be concluded that there is a significant difference between before and after using the E-module with the Problem Based Learning approach on the learning outcomes of the science subject matter of Class IV of SD Negeri 1 Penarukan in the 2023/2024 Academic Year. This shows that the E-module with the Problem Based Learning approach is effective in use on the science subject matter of Class IV of SD Negeri 1 Penarukan in the 2023/2024 Academic Year.

The final stage of the ADDIE model development is the evaluation stage. At this evaluation stage, the E-module product that has been developed will be assessed to validate the product that has been developed. The test carried out is a validation test on the product which aims to test the level of feasibility of the product that has been developed. The evaluation used at this stage is a formative evaluation.

Formative evaluation is carried out to determine the results of the assessment of the product that has been developed in order to determine the quality of the E-module with the Problem Based Learning approach is good and feasible to be applied in the learning process.

Discussion

Learning is a process of interaction between students and educators as well as a source of learning in a learning environment (Afifah et al., 2019; Rostikawati, 2020). The E-module teaching material for the science learning content is made using the Heyzine Flipbook application which can make it easier for students to receive the material to be delivered. Because the E-module that is made can be used anytime and anywhere, and can be opened via mobile phones, computers, laptops and so on. The development of this Problem Based Learning Approach E-module is oriented as a means in the form of teaching materials that can improve the quality of education in classroom learning, especially the science content of Class IV SD N 1 Penarukan. The development of this E-module is packaged to form students who can learn independently, creatively and innovatively. Creativity and innovation are shown in assignments in the form of group assignments that are expected that each student or group can understand both the material and the results of their discussions related to the subject matter being studied. While independent learning is shown from the way each student presents their opinions through filling out independent student assignments (Kristina et al., 2022; Palumpun et al., 2022).

The advantages of E-modules are that they provide interactive questions and quizzes so that they can measure the level of mastery of the material at the end of the learning activity. E-modules facilitate students to learn independently. Students can access E-modules anytime and anywhere using a smartphone. The images presented in the module are all coloured with high resolution so that it is easy for students to interpret the contents of the material (Humairah & Wahyuni, 2024; Rohmatulloh et al., 2023). E-modules provide interactive questions and quizzes so that they can measure the level of mastery of the material at the end of the learning activity. The presentation of coherent material will be more interesting and easier for students to understand. The use of E-modules as a learning medium will make it easier for students to access and obtain information related to electronic-based teaching materials (Arifin et al., 2023; Rahma & Ernawati, 2024). Through three things as a benchmark for students' perceptions of electronic modules (E-modules) as learning media, namely: clarity and suitability of text, images, animations and videos in E-modules, presentation of materials in E-modules, usefulness of E-modules. The suitability of materials with images or videos in E-modules can encourage students to learn and make abstract concepts easier to become more concrete and easier to understand. This is in line with the E-module containing an explanation of the material, also equipped with videos and practice questions that are designed interactively, making it easier for students to understand the material. To make it easier for students to go to the desired page, the E-module also provides a clickable table of contents so that the display can immediately change to the desired page.

Some researchers also agree regarding the use of E-modules in learning. Previous research stated that in learning activities at school, especially using this mathematics E-module, students are more interested in carrying out learning independently because it contains things that are different from conventional books such as learning videos that make it easier for students to understand how to work on a problem (Anggreni & Agustika, 2022). The development of E-modules assisted by Live worksheets provides convenience. The use of Live worksheets allows for the creation of interactive online worksheets with students being able to work on them directly and then send them to the teacher (Ajri & Diyana, 2023; Roskaputri et al., 2021). Another study stated that the E-module based on flipbook maker, with the results of the calculation of the feasibility of the flipbook-based E-module teaching material based on the aspects of content, language, and appearance by validator 1 obtained a very good percentage. From the results of the N-gain analysis of the pre-test and post-test, the average N-gain value was in the medium criteria (Humairah & Wahyuni, 2024; Ramadhina & Pranata, 2022). This shows that the flipbook-based E-module teaching material is effective in improving student learning outcomes. It can be said to be feasible and valid for use in teaching and learning activities and student learning outcomes have increased after using the e-module (Jayanti & Pertiwi, 2023; Kristina et al., 2022).

The use of this E-module is considered innovative because it can display complete, interesting teaching materials and has good cognitive functions (Arta et al., 2020; Styowati & Utami, 2022). Some of the feasibility of the resulting product can be achieved, including, because of the clarity of identity, the suitability of learning objectives, and the suitability of the material with the learning objectives that have been set. Clarity of learning design, learning instructions, learning strategies and the accuracy of examples in clarifying a material and also the availability of assessments in the E-module which are used to measure the extent to which students understand the material in the E-module. Learning strategies are tools or media, and learning strategies are said to be appropriate if they are in accordance with the tendency of

competence as the totality of learning outcomes that will be developed. From this opinion, it can be concluded that with learning strategies collaborated with a problem-based approach, namely Problem Based Learning, the learning process can be improved from being monotonous to learning that attracts students' interest and activity. Problem Based Learning (PBL) is a learning method that is triggered by problems, which encourages students to learn and work cooperatively in groups to get solutions, think critically and analytically, be able to determine and use appropriate learning resources (Kautsari et al., 2023; Nia et al., 2022). Problem Based Learning is a learning process that begins with the submission of a problem by an educator or teacher, this is an effort to accustom oneself to critical thinking and working together in solving a problem (Endaryati et al., 2021; Musaad & Suparman, 2023). The implementation of PBL can create students who are active and enthusiastic in the learning process because they themselves seek and collect information related to the problems given (Jayanti & Pertiwi, 2023; Mayanty et al., 2020).

The implication of this research is that educators or teachers are encouraged to be able to utilize existing facilities at school, namely by creating teaching materials such as E-modules via Chromebooks/computers, so that these activities can improve teachers' performance and skills in using technology supported by several software that can display more interesting and varied materials. E-modules with a Problem Based Learning approach can be used as a collection of teaching materials in science learning for Class IV of SD Negeri 1 Penarukan in the 2023/2024 academic year.

Although this research has been successfully conducted, this research has several limitations. These limitations occur due to the lack of time and ability of the researcher. These limitations are, the development of this E-module was developed based on the characteristics of grade IV students at SD N 1 Penarukan. So that the product of the development is only intended for students at SD N 1 Penarukan, and also other students in other schools who have the same characteristics. The material to be developed in this E-module is limited to learning of Science for Grade IV Elementary Schools. Based on these limitations, it is expected that other researchers who will develop the same product can develop media with a wider range of materials and a deeper needs analysis.

4. CONCLUSION

Based on the results of the research that has been conducted, it can be concluded that there is a significant difference between before and after using the E-module with a Problem Based Learning approach on the learning outcomes of the Social Sciences subject matter of Class IV of SD Negeri 1 Penarukan in the 2023/2024 Academic Year. This shows that the E-module with a Problem Based Learning approach is effective for use in the Social Sciences subject matter of Class IV of SD Negeri 1 Penarukan in the 2023/2024 Academic Year. The availability of this E-module can increase students' interest in learning, increase students' motivation in learning by being designed as attractively as possible, equipped with materials, explanatory images and learning videos so that it is easier for students to understand the learning material.

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