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PROBLEM-BASED LEARNING-BASED CIVICS *E-MODULE* DEVELOPMENT TO INCREASE UNDERSTANDING OF PANCASILA VALUES MATERIALS GRADE V

Endang Suhartami[1*], Ani Nur Aeni[2], Dety Amelia Karlina[3]
[1,2,3]Universitas Pendidikan Indonesia
[1]endangshrtm05@upi.edu

Abstract

The lack of development of teaching materials in learning activities impacts student understanding because students cannot fully explore their knowledge. As a result, students feel bored because there are no other teaching materials that can be a source of student learning at school where the teacher cannot provide the teaching materials needed by students, so these conditions become a factor in conducting this research. This study uses the Research and Development methodology with the ADDIE product development model, which consists of five phases: analysis, design, development, implementation, and evaluation. Data collection methods include observation, interviews, and questionnaires. The data analysis method used in this research is descriptive qualitative and quantitative analysis. This study aimed to determine the feasibility of problem-based PPKn E-Module development on understanding Pancasila values and the effectiveness of problem-based PPKn E-Module implementation in increasing student understanding. Based on research conducted by researchers on the development of E-Modules, the results show that E-Modules are suitable for use in learning with a feasibility level obtained from media experts of 95%, material experts of 92.5%, individual student trials of 89.1%, small group trials of 83%, and field trials of 86.5%. Data analysis from the students' pre-test and post-test showed a difference in average results between the pre-test of 71.61% and the post-test of 83.39, so it can be said that problem-based learning-based PPKn E-Module is effectively used in learning.

Keywords: *E-Module; problem-based learning; Pancasila values*

Abstrak

Minimnya pengembangan bahan ajar dalam kegiatan pembelajaran memberikan dampak terhadap tingkat pemahaman siswa karena siswa tidak bisa menggali pengetahuannya dengan maksimal. Akibatnya siswa merasa bosan karena tidak adanya bahan ajar lain yang dapat menjadi sumber belajar siswa di sekolah yang mana guru tidak mampu menyediakan bahan ajar yang diperlukan siswa sehingga kondisi tersebut menjadi faktor dilakukannya penelitian ini. Penelitian ini menggunakan metodologi *Research and Development* dengan model pengembangan produk ADDIE, yang terdiri dari lima fase: analisis, desain, pengembangan, implementasi, dan evaluasi. Metode pengumpulan data meliputi observasi, wawancara, dan kuesioner. Metode analisis data yang digunakan dalam penelitian ini adalah analisis deskriptif kualitatif dan kuantitatif. Tujuan penelitian ini untuk mengetahui kelayakan pengembangan *E-Modul* PPKn berbasis *problem based learning* pada pemahaman nilai-nilai Pancasila dan untuk mengetahui efektivitas penerapan *E-Modul* PPKn berbasis *problem based learning* terhadap peningkatan pemahaman siswa. Berdasarkan penelitian yang dilakukan peneliti tentang pengembangan *E-Modul*, diperoleh hasil bahwa *E-Modul* layak digunakan dalam pembelajaran dengan tingkat kelayakan yang didapat dari ahli media sebesar 95%, ahli materi sebesar 92,5%, uji coba siswa perseorangan sebesar 89,1%, uji coba kelompok kecil sebesar 83%, dan uji lapangan sebesar 86,5%. Analisis data dari hasil *pre-test* dan *post-test* siswa menunjukkan bahwa terdapat perbedaan hasil rata-rata antara *pre-test* sebesar 71,61% dan *post-test* sebesar 83,39%, sehingga dapat dikatakan bahwa *E-Modul* PPKn berbasis *problem based learning* efektif digunakan dalam pembelajaran.

Kata Kunci: *E-Modul*; *problem based learning*; nilai-nilai Pancasila

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Jurnal Cakrawala Pendas Vol. 9, No. 1, January 2023, pp. 124-140

Introduction

Education today has a very important role in determining the nation's development. Education is an interactive process that encourages the learning process. Therefore, education is required to further improve the quality and quality of education in line with the development of science and technology in the era of globalization, which is increasingly advanced every day (Wirawan et al., 2017). Improving the quality and quality of education in elementary schools can be realized through the learning process. According to Sumatri (2015), learning activities provide student learning experiences that support mental and physical processes through interactions with other students, the environment, and other learning resources to achieve competency. Education that takes place today combines electronic technology with internet-based technology. The success of educational programs depends on the use of teaching materials where teachers must understand various types of teaching materials to make it easier for students to receive the knowledge conveyed. In this case, the educational activities carried out during the learning process cannot be separated from the use of teaching materials.

Teaching materials are a collection of materials that are specifically combined to achieve a competency that students will obtain following the applicable curriculum (Violadini& Mustika, 2021). To achieve this competency, students need to master the learning materials contained in the teaching materials. Teaching materials not only contain knowledge material but also contain skills and attitudes that students need to learn (Yuberti, 2014). Teaching materials have several forms, as described (Violadini & Mustika, 2021) states, that there are various forms of teaching materials, including textbooks, handouts, modules, pocketbooks, and interactive teaching materials. These various forms can attract student interest in learning because their use can vary. Teaching materials are also very important in the learning process because, with teaching materials, students can develop competence. The development of teaching materials is based on learning design based on competency or to achieve learning objectives (Yuberti, 2014).

In an interview conducted by researchers with the fifth-grade teacher of SDN Cakung Timur 04, it was said that in carrying out the learning program, each student's teaching materials are thematic, and there are no other teaching materials available. Thematic books are books that only contain a little material, and the material studied is combined with other material so that students' understanding of Pancasila values material is not maximized. According to the observations of students' thematic books, there are only a few parts of the material content presented and only in the form of reading texts that require students to memorize learning material. The lack of material development and evaluation can also affect students' understanding of Pancasila values. The results of the analysis conducted by researchers on teaching materials are the absence of hypothesis formulation and testing, even though both can stimulate student understanding by providing arguments for the material studied. In addition, teachers have not used electronic technology in the learning process, so students feel bored when they read monotonous teaching materials. Students are already good at operating electronic technology well, so students can combine electronic technology with internet-based technology to access online teaching materials. Therefore, teaching materials in the form of electronic modules are needed to help teachers in the learning process in the classroom.

Judging from the above problems, teachers need to use teaching materials that follow the needs of students in the industrial era 4.0, where learning uses technological assistance to improve understanding of Pancasila values material. The teaching material developed by

researchers is E-Modules. Electronic modules (E-Modules) are one of the types of teaching materials made with the help of technology so that their use can utilize electronic technology and internet-based technology that can be accessed via laptops, computers or smartphones. The material presented is also equipped with learning instructions, concept understanding, videos and images to provide learning experiences, motivation and attractiveness of student learning to improve understanding of the material of Pancasila values. This E-Module can also improve student understanding through a certain problem-solving process so that the application of this E-Module is combined with a problem-based learning (PBL) learning model. Problem-based learning allows students to solve problems using information they already know without revealing it (Martahayu & Yuanita, 2022). The application of the PBL model is usually made with a discussion method so that students can convey an idea to their friends and solve problems together. Using E-Modules in schools throughout Indonesia does not make students critical, active, and creative in their learning because the E-Modules used are not developed based on student needs, so that no hypothesis can stimulate students' thinking. Problem-based learning-based Civics E-Modules can be used as a teaching aid in encouraging students' level of understanding of Pancasila values material because it makes students more critical, active, and creative so they do not feel bored during the learning process.

This is proven by previous research completed by (Violadini & Mustika, 2021), who developed an E-Module based on the inquiry method in thematic learning in elementary schools. According to the study's authors, the E-Module in question is valid and feasible to use to be used as a tool for students in the learning process. The E- Module also received positive responses from teachers and students with a very interesting category. There are differences between previous and current research, including the research subject, research materials, research location, and research results at the end of the study.

There is further research conducted (Zhafirah et al., 2020) who developed an E-Module based on problem-based learning on hydrocarbon material. The study said that the E- Module was very valid to be applied in teaching and learning activities after receiving improvements and suggestions from material and media experts. The E-Module was also stated to be very practical in terms of ease of use, the efficiency of learning time and benefits. There are differences between previous and current research, including the research subject, research materials, research location, and research results at the end of the study.

Other research was also conducted (Pramana et al., 2020), who used problem-based learning-based E-Modules to improve the learning outcomes of class X biology. In this study, each validity test, both by experts and student trials, met the requirements for use in learning and significantly increased student motivation and learning outcomes. There are differences between previous and current research, including research subjects, research materials, research locations, and research results at the end of the study.

Another study conducted (Munandar & Ahmad, 2022) aims to develop a neared-based E- Module on the material of living in harmony in grade 2. Getting a very feasible category in the study based on material and media feasibility tests. The results of students' responses to understanding the material carried out in a limited and field manner show very good results, so it can be said that the neared-based E-Module is feasible and effective to use in learning activities. Previous studies and this research have differences in subject matter, material, model, location, and project outcomes.

Other research (Khodijah et al., 2022) involved the development of illustrated story-based E-Modules for grade 5 Civics material related to the events of filling independence. The research findings concluded that the E-Modules were highly valid and practical for classroom learning

using authentic language, design, and materials. In addition, it is said that this E-Module is used in practice based on user feedback identified by students. There are several differences between this research and previous research, including differences in research models, materials, locations, and research results at the end of the study.

Based on the background and literature review that has been studied, new and innovative research is needed for developing teaching materials, especially for developing problem-based learning-based Civics E-Modules. The development of teaching materials is necessary and cannot be separated from the educational process because teaching materials symbolize the success of the educational process. This study aims to determine the feasibility of developing problem-based learning-based Civics E-Modules on understanding Pancasila values and the effectiveness of the application of problem-based learning-based Civics E- Modules on increasing student understanding.

Research Methods

The methodology used in this research is called Research and Development (R&D). R&D is a method of analysis required when making a particular product and determining its effectiveness (Sugiyono, 2017). The product evaluation process used in this method uses the ADDIE model with five phases. According to Tegeh and Jampel (2017:79), there are five phases in the ADDIE paradigm: analysis, design, development, implementation, and evaluation. Each time the ADDIE model is used, it is systematized for easy understanding and use.

This research was conducted at SDN Cakung Timur 04 morning, Cakung District, East Jakarta City. The subjects in this study were grade V students. Data collection techniques used in this study include observation, interviews and questionnaires. The observation and interview instrument sheets were used to find the teachers' learning tools. To study the learning resources available to students and teachers, to observe classroom teaching, to understand how the media and models are used in classroom teaching, to study the obstacles faced by teachers when teaching, to find out the assessment system given by teachers during the activity, and to find out the level of understanding of the material in students.

Table 1. Observation and Interview Instrument Grids

No	Indicator	Number of Items	Item Number	Source
1	Development of learning scenarios	1	1	Class V Teacher
2	Use of teaching materials	2	2, 3	Class V Teacher
3	Learning constraints	2	4, 5	Class V Teacher
4	Learning Solution	3	6, 11, 12	Class V Teacher
5	Use of learning media	2	7, 8	Class V Teacher
6	Learning evaluation	1	9	Class V Teacher
7	Providing learning motivation	1	10	Class V Teacher

Table 2. Media Expert Grid

No	Aspect	Indicator	No. Item
1	E-Module Cover Design	a. Cover illustration depicts the content of the material	1
		b. Color selection	2
		c. proportion of font size	3
		d. Composition and positioning of images	4
2	E-Module Content Design	a. Compliance with learning objectives	5
		b. Appropriateness of font type and size	6
		c. Image suitability with the material	7

	d. Suitability of the video with the material	8
	e. Space size between lines	9
	d. Composition and layout (fonts, images, videos)	10
	Jumlah Butir	10

Table 3. Material Expert Grid

No	Aspect	Indicator	No. Item
1	Content Feasibility	a. Suitability of material with KD	1
		b. Suitability of the material with the objectives	2
		c. Presentation of material	3, 4
2	Linguistic Appropriateness	a. language use	5
		b. Sentence usage	6, 7
		c. Language conformity with rules	8
3	Presentation	a. Suitability of the test to the objective	9
		b. Suitability of references to the material	10
		Number of items	10

The data analysis techniques used in this study include descriptive qualitative and descriptive quantitative analysis. Data collection in sentence form through qualitative descriptive analysis to produce a conclusion (Agung, 2017). This method analyses data by evaluating all available media and materials, including comments and suggestions, to determine whether the developed E-Module is good or needs to be revised. Data is collected using numbers using quantitative descriptive analysis methods to provide specific results (Agung, 2017). The purpose of using this method is to interpret data from the validation test results of media experts and material experts, student trials, namely individual tests conducted on three fifth-grade students of SDN Cakung Timur 04 morning with high, medium and low academic abilities, small group trials conducted on five fifth grade students of SDN Cakung Timur 04 morning with high, medium and low academic abilities, field trials conducted on twenty-eight fifth grade students of SDN Cakung Timur 04 morning with high, medium and low academic abilities and testing student learning outcomes. Quantitative data was obtained from the results of media, material, and student validation surveys, as well as survey results related to the level of student understanding, both pre-test and post-test.

Table 4. Eligibility Level Criteria (Arikunto, 2006: 245)

Category	Level	Qualification	Equivalent
A (4)	80% - 100%	Valid	Worth
B (3)	60% - 79%	Valid enough	Decent enough
C (2)	50% - 59%	Less valid	Less feasible
D (1)	≤ 49%	Invalid	Not worth it

Table 5. Student Questionnaire Assessment Score

Alternative Answer	Weight Score (+)	Weight Score (-)
Strongly Agree	4	1
Agree	3	2
Disagree	2	3
Strongly Disagree	1	4

Table 6. Success Rate Criteria (Arikunto, 2006)

Category	Level	Qualification
A	80% - 100%	Effective
B	60% - 79%	Effective enough
C	50% - 59%	Less effective
D	≤ 49%	Ineffective

The purpose of using tests is to determine the level of achievement of student understanding after learning using problem-based learning-based Civics E-Modules. The learning assessment tool used in developing this E-Module is an objective test divided into 15 multiple-choice questions. If the number of achievement levels or student success is in categories A and B, then learning activities with the E-Module can be said to be effective

Results and Discussion

The development carried out in this study resulted in problem-based learning-based Civics E- Module teaching materials to improve understanding of Pancasila values material for grade V SDN Cakung Timur 04. To develop problem-based learning-based Civics E-Modules, researchers use the ADDIE model stages with five stages: analysis, design, development, implementation, and evaluation. The steps are as follows:

The first stage is analysis. The analysis is carried out to obtain information in developing E-Module teaching materials according to the needs of students in the learning process. Researchers analyzed the problems that arose during the learning process. Researchers found problems in the learning process: teaching materials used by teachers, only thematic books, and no other teaching materials that supported the student learning process. Teaching materials in thematic books only require students to memorize learning material, impacting their understanding of Pancasila values material. In terms of facilities, students already have adequate devices/facilities and the internet for learning. Based on the results of interviews with fifth-grade teachers at SDN Cakung Timur 04, it can be concluded that teachers have not developed teaching materials that can make students more critical, active, and creative. So it is necessary to develop electronic modules (E-Modules) teaching materials based on problem-based learning that can make students more critical, active, and creative and not feel bored during the learning process. Then the researcher analyzed the learning objectives. Learning objectives were analyzed from the teacher's book and student book theme 1, "animal and human movement organs", subtheme 2 ", humans and the environment" class V by referring to the basic competencies of the Civics lesson content to get an overview of the learning that will be developed in the form of a problem- based learning-based Civics E-Module. Furthermore, analyzing the learning material contained in the thematic book theme 1, "animal and human movement organs" subtheme 2 ", humans and the environment" grade V to obtain learning material to be developed in the problem-based learning-based Civics E-Module.

The next stage design. Design an E-Module. There are 11 steps to make it. (Violadini & Mustika, 2021). Researchers use the Canva application in this stage to develop E- Module teaching materials. At this stage, two stages must be designed: design and material. The 11 steps that need to be designed in the development of E-Modules are as follows:

Step 1. Creating a cover that contains an overview of the material.

Step 2. Creation of a preface that expresses gratitude for the completion of the E-Module.

Step 3. About the module, which contains instructions for using the E-Module.

Step 4. Core competencies that contain a copy of the core competencies obtained from the theme one teacher's book "animal and human movement organs" subtheme 2 "humans and the environment" class V.

Step 5.Table of contents which contains information on the list of E-Module pages.

Step 6. Basic competencies and learning objectives contain student target achievements after learning activities are carried out.

Step 7. Making learning materials that students will learn. This learning material is designed using the reference of the problem-based learning model, namely by giving a problem with the aim that students are more critical, active and creative in solving these problems. Prove the quick answer (hypothesis) given by students. It is necessary to prove the truth of the answers obtained from the data collection stage so that the answers found by students are clear from which source they obtained.

Step 8. Creating a quiz aims to stimulate students' thinking so that students are motivated to complete the formative test.

Step 9. The conclusion stage contains students' opinions about the material that has been learned.

Step 10. A summary contains notes to make it easier for students to understand the learning material.

Step 11. Formative tests and answer keys contain questions to measure the level of understanding of students in mastering the learning material, which then, on the next page, students can prove their answers where student honesty, in this case, is very necessary based on the implementation of the values of Pancasila, the first principle.

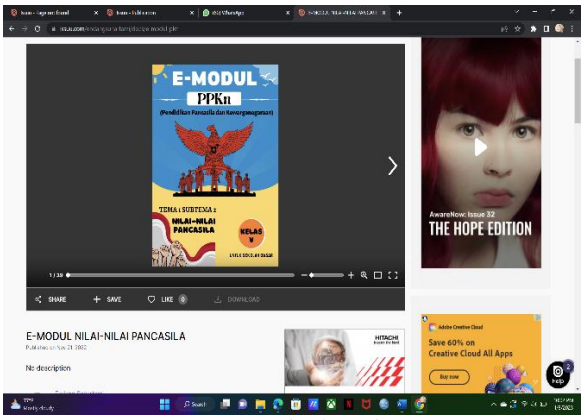
Jurnal Cakrawala Pendas Vol. 9, No. 1, January 2023, pp. 124-140

Figure 1. Display design of Civics E-Module based on problem-based learning

The next stage is development. After the above steps are carried out, the researcher exports the module in pdf form so that the writing in the module is not messy. Then the researcher converts the module into an electronic module (E-Module) with the help of the issue application, which can be accessed for free through the issuu.com website. Inputting files into

the issue only requires a module file in the form of a pdf and a video link that will be included in the E-Module. After the module input process in the issue application, students can access the E- Module with the link provided by the teacher via a smartphone with the help of internet technology, as shown below.

Display via smartphone



Display via computer

Figure 2. Presentation of Civics E-Modules based on problem-based learning

The final stage is implementation and evaluation. Researchers conducted E-Module validation tests for media and material experts at this stage. The data obtained in this study are as follows:

Table 7. Media Expert Validation Questionnaire Results

No	Indicator	Stage 1 Test	X	Xi	%
A	**E-MODULE SKIN DESIGN (COVER)**				
1	The cover illustration depicts teaching content/materials	4	4	4	100%
2	E-Module cover colour selection	4	4	4	100%
3	The proportion of letter size of the title, subtitle, and supporting text with E-Module design	4	4	4	100%
4	Composition and positioning of images	3	3	4	75%
B	**E-MODULE CONTENT DESIGN**				
5	Suitability of material with learning objectives	4	4	4	100%
6	The selection of font type and size is appropriate	4	4	4	100%
7	Image suitability with material	4	4	4	100%
8	Video suitability with material	4	4	4	100%
9	Space size between lines	3	3	4	75%
10	Composition and layout (fonts, images, videos)	4	4	4	100%
	TOTAL				95%

The results of the validation provided by media experts show that the design of the problem-based learning-based Civics E-Module has an achievement level of 95%, which means it is feasible to use in learning.

Table 8. Results of Material Expert Validation Questionnaire

No	Indicator	Stage 1 Test	Stage 2 Test	$\bar{X}$	Xi	%
A	**CONTENT FEASIBILITY**					
1	Suitability of material with KD	4	4	4	4	100%
2	Suitability of material content with learning	4	3	3,5	4	87,5%
3	The material presented is easy for students to understand	3	4	3,5	4	87,5%

4	The material presented can motivate student learning	3	3	3	4	75%
B	**LINGUISTIC FEASIBILITY**					
5	The language used is easy for students to understand	3	4	3,5	4	87,5%
6	The sentences used are coherent and easy for	3	4	3,5	4	87,5%
7	students to understand	4	4	4	4	100%
8	Sentences used do not cause double meanings	4	4	4	4	100%
C	**DISPLAY**					
9	Suitability of final test questions with learning	4	4	4	4	100%
10	Suitability of references with material content	4	4	4	4	100%
	TOTAL					92,5%

The results of the validation provided by the material expert show that the design of the problem-based learning-based Civics E-Module has an achievement level of 92.5%, which means it is feasible to use in learning.

After media experts and material experts carried out the validation test, then the audience/student trials were carried out, namely, individual tests conducted on three fifth-grade students of SDN Cakung Timur 04 morning with high, medium and low academic abilities, small group trials conducted on five fifth grade students of SDN Cakung Timur 04 morning with high, medium and low academic abilities, field trials conducted on twenty-eight fifth grade students of SDN Cakung Timur 04 morning with high, medium and low academic abilities. The data obtained in this study are as follows:

Table 9. Individual Student Questionnaire Results

No	Statement	Answer			∑X	Xi	%
		XI	X2	X3			
1	Feel happy learning Civics using the E-Module	4	4	3	11	12	92%
2	Feeling interested in learning Civics using the E-Module	4	4	4	12	12	100%
3	Feeling excited about learning Civics using the E-Module	4	4	4	12	12	100%
4	Feeling bored learning Civics using E-Modules	4	3	2	9	12	75%
5	Civics learning is difficult to understand using E-Modules	4	4	2	10	12	83%
6	E-modules can improve my understanding of Civics learning	4	4	4	12	12	100%
7	With E-Modules, I become active in Civics learning	4	3	3	10	12	83%
8	I do not pay attention to the teacher when Civics learning takes place using the E-Module	4	4	2	10	12	83%
9	I sincerely follow Civics learning using E-Modules	4	4	4	12	12	100%
10	I discuss with each other solving problems in Civics learning using E-Modules	3	4	2	9	12	75%
	TOTAL						89,1%

Table 10. Small Group Student Questionnaire Results

No	Statement	Answer				∑X	Xi	%
		SS	S	TS	STS			
1	Feel happy learning Civics using the E-Module	3	2	0	0	18	20	90%
2	Feeling interested in learning Civics using the E-Module	3	1	0	1	16	20	80%
3	Feeling excited about learning Civics using the E-Module	4	1	0	0	19	20	95%
4	Feeling bored learning Civics using E-Modules	0	1	2	2	16	20	80%
5	Civics learning is difficult to understand using E-Modules	0	1	1	3	17	20	85%

6	E-modules can improve my understanding of Civics learning	2	3	0	0	17	20	85%
7	With E-Modules, I become active in Civics learning	3	2	0	0	18	20	90%
8	I do not pay attention to the teacher when Civics learning takes place using the E-Module	1	1	1	2	14	20	70%
9	I sincerely follow Civics learning using E-Modules	3	1	1	0	17	20	85%
10	I discuss with each other solving problems in Civics learning using E-Modules	1	3	0	1	14	20	70%
	TOTAL							83%

Table 11. Field Test Student Questionnaire Results

No	**Statement**	**Answer**				**∑X**	**Xi**	**%**
		SS	**S**	**TS**	**STS**			
1	Feel happy learning Civics using the E-Module	19	9	0	0	103	112	92%
2	Feeling interested in learning Civics using the E-Module	19	9	0	0	103	112	92%
3	Feeling excited about learning Civics using the E-Module	20	6	2	0	102	112	91%
4	Feeling bored learning Civics using E-Modules	0	1	13	14	97	112	87%
5	Civics learning is difficult to understand using E-Modules	1	2	12	13	93	112	83%
6	E-modules can improve my understanding of Civics learning	15	12	0	1	97	112	87%
7	With E-Modules, I become active in Civics learning	14	14	0	0	98	112	87,5%
8	I do not pay attention to the teacher when Civics learning takes place using the E-Module	5	5	9	9	78	112	70%
9	I sincerely follow Civics learning using E-Modules	19	7	2	0	101	112	90%
10	I discuss with each other solving problems in Civics learning using E-Modules	16	9	2	1	96	112	86%
	TOTAL							86,5%

Based on audience/student trials obtained from individual test results of 89.1%, small group trials of 83%, and field trials of 86.5%. Then the average result of the audience/student trial is 86.2% which means it is feasible to use in learning.

After the audience/student trial, the level of student understanding obtained from the pre-test and post-test results was tested.

Table 12. Student Learning Outcomes

No	**Name**	**Score**	
		Pre-test	**Post-test**
1	Student 1	65	80
2	Student 2	80	85
3	Student 3	80	95
4	Student 4	75	85
5	Student 5	80	85
6	Student 6	60	80
7	Student 7	50	75
8	Student 8	75	85
9	Student 9	90	95
10	Student 10	70	75
11	Student 11	60	75
12	Student 12	75	95
13	Student 13	90	95
14	Student 14	70	80

Jurnal Cakrawala Pendas Vol. 9, No. 1, January 2023, pp. 124-140

15	Student 15	75	90
16	Student 16	50	85
17	Student 17	80	85
18	Student 18	65	75
19	Student 19	55	75
20	Student 20	90	95
21	Student 21	65	75
22	Student 22	65	80
23	Student 23	75	85
24	Student 24	65	70
25	Student 25	75	80
26	Student 26	65	80
27	Student 27	75	85
28	Student 28	85	90
TOTAL		2005	2335

Furthermore, to determine student understanding, researchers conducted a quantitative descriptive analysis. The data was analyzed using a t-test to determine student understanding through pre-test and post-test. The following are the average results of the pre-test and post-test.

Table 13. Average Results of Pre-test and Post-test

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test	71.61	28	11.060	2.090
	Post-test	83.39	28	7.335	1.386

Based on table 13 shows the results that there is an average difference between the pre-test and post-test after being given a problem-based learning-based Civics E-Module in learning, where the post-test average (83.39) is better than the pre-test average (71.61). This means there is an increase in students' understanding of the material of Pancasila values, so it can be said the problem-based learning-based Civics E-Module is effectively used in learning.

The use of teaching materials in the form of E-Modules in the learning process on the material of Pancasila values will make students more critical, active, and creative. E-Modules can support student activeness in every learning process so students will not feel bored during learning activities. Thus, problem-based learning-based Civics E-Modules can be used in grade V elementary school students so that the learning process becomes more critical, active, and creative. The help of problem-based learning-based Civics E-Modules can help teachers to improve student understanding. This is reinforced by research (Khodijah et al., 2022) that teaching materials in the form of E-Modules are practically used in Civics learning to improve student understanding. Previous research has been conducted by (Pramana et al., 2020) with the title E-Module based on problem-based learning to improve the learning outcomes of class X biology. This study's results show that E-Modules based on problem-based learning are feasible to use in learning because the combination of teaching materials and learning models can create innovative learning so that students are motivated to learn, and student learning outcomes increase significantly. Similarities of research conducted (Pramana et al., 2020) with researchers both develop E-Modules based on problem-based learning whose development results are feasible to use, as well as research conducted by researchers to see the feasibility level so that it can be used.

Conclusion

Based on the study results, it can be concluded that to determine the feasibility of developing problem-based learning-based Civics E-Modules on understanding Pancasila values. It is necessary to test the level of feasibility obtained from the results of validation tests conducted with media experts and material experts, individual trials of three students, small group trials of five students, and field tests of twenty-eight students. The results say that the problem-based learning-based Civics E-Module is suitable for learning. The percentage of media and material aspects with valid qualifications evidences this. This problem-based learning-based Civics E-Module can also improve student understanding. The difference can be seen in the average pre-test and post-test results. So the results can be concluded that based on the difference in the average results of the pre-test and post-test scores, the problem-based learning-based Civics E-Module is effectively used in the learning process because the post-test average is better than the pre-test average. Thus, it can be concluded that the Civics E-Module based on problem-based learning is a feasible and effective teaching material, especially if it is used on the material of Pancasila values in grade V.

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