Development of Inquiry Based Learning Module Theme 4 (Rights and Obligations) to Improve Student Learning Outcomes

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Abstract: This article aims to develop an inquiry-based learning module for theme 4 to improve the learning outcomes of class V students on valid and practical rights and obligations material. This type of research is Research and Development (development research). This inquiry-based theme 4 learning module was developed using 4-D. The research was conducted in the odd semester of the 2023/2024 academic year. Data collection was carried out by validating the developed inquiry-based module trials. The inquiry-based module design which had been designed according to the inquiry learning steps was validated by five experts and then tested in class V at SDN 02 Gunung Tuleh to determine the practicality of the inquiry-based module being developed. From the results of the research conducted, it is known that the inquiry-based learning module for theme 4 to improve the learning outcomes of class V students on rights and obligations material is in the very valid category with an average validity percentage of 88.55%. The modules that have been developed are categorized as very practical by teachers with an average practicality percentage of 91.67%, and are also categorized as very practical according to students with an average practicality percentage of 97.18%. Based on the validity and practicality test, the theme 4 inquiry-based learning module was declared very valid, indicating that the module developed can improve the learning outcomes of class V students.

Keywords: Inquiry; Learning Results; Practical; Valid

Introduction

Education is an important thing in human resource development, teaching staff in this case such as teachers are one of the elements that play an important role in it, because they have the responsibility to develop tasks and can overcome all problems that arise. The teacher is a very determining component in the implementation of the learning process in the classroom as a micro element of educational success (Montenegro-Rueda et al., 2023). In elementary schools, teachers are required to be able to master all subjects, one of which is the subject of Citizenship Education (Latifah, 2021). Civics learning in elementary schools should provide opportunities to foster students' natural curiosity (Leung, 2023). Citizenship Education (PKn) is one of the types of education that has been implemented since elementary school. Its function is to educate values and morals (Hidayah, 2023). This will help them develop the ability to ask questions and look for answers and develop scientific thinking skills.

The researcher conducted field observations at SDN 02 Gunung Tuleh on November 1 and 2 2022. The researcher saw that the class V teacher, Mrs. Yuwelpi Madewi, S.Pd, said that in the implementation of learning, it was still seen that teachers were more active in providing material in the learning process, resulting in students participating less and less active in learning, this is in contrast to the learning model and steps planned by the teacher in the Learning Implementation Plan (RPP) that he has written. Apart from that, in the learning process, students are noisy in the classroom, are

not focused on learning and the teaching materials used are only focused on worksheets, and many learning activities also take place in the classroom. There are no inquiry-based thematic learning modules at SDN 02 Gunung Tuleh, specifically in class V. Learning should be student-centered by emphasizing the ability to think critically, search for and process information and one's own knowledge (Sellars et al., 2018). This will help them develop their ability to ask questions and look for answers and develop their scientific thinking skills so that they get good learning outcomes.

Therefore, thematic learning in elementary schools should be directed at learning that meets the criteria outlined. One way is by implementing inquiry learning. Thematic learning is learning that uses themes to link several subjects so that it can provide meaningful experiences to students ((Mansurdin, 2023). According to (Wale & Bishaw, 2020) what is meant by inquiry learning is a learning process that is student-centered (Stundent Centered) by emphasizing the ability to think critically, analytically, search, find and process the students' own information and knowledge, which useful for solving problems faced in the learning process. So, inquiry-based learning places students as scientists who are trying to carry out a series of scientific steps to understand material or test an idea (Pedaste et al., 2015). To facilitate inquiry learning in elementary school, the implementation process is carried out under teacher guidance (Rahayu et al., 2022).

In this context, teachers do not dominate but facilitate and motivate students to be actively involved in learning activities so that learning outcomes are maximized, but these activities will be difficult to achieve if they are not supported by appropriate modules. Therefore, it is necessary to develop modules that are in accordance with the characteristics of thematic learning in elementary schools with an inquiry model. According to Yerimadesi et al. (2018) stated that a module can be interpreted as learning material that is prepared and presented in writing in such a way that the reader is expected to be able to absorb the contents of the module themselves. In other words, a module is a collection of subject matter that is arranged systematically to enable students to learn independently without teacher guidance or with teacher guidance.

Based on the researcher's interview with Mrs. Yuwelpi Madewi, S.Pd, "When children are learning, they look very lethargic and unenthusiastic about learning methods that give the impression of memorizing and being teacher-centred." The results of observations on November 1 and 2 2022 also show that students are not interested in thematic learning, this can be seen in the lack of student activity during learning. In line with this, the researcher heard an explanation about the learning system as implemented by Mrs. Yuwelpi Madewi, S.Pd. It turned out that it did not involve the active role of students, because it only gave the impression of memorizing the material, rather than understanding the lesson material. This results in students not getting meaningful learning experiences, because students listen more, take notes, ask questions, and result in less training in the development of thinking abilities and basic processing skills of students in elementary school (Almulla, 2020). In fact, process skills are basic skills that students must have to carry out a series of experimental activities.

Researchers also obtained data on the learning outcomes of class V students' mid-semester exams at PTS (mid-semester assessment), of the 38 students there were still many who had not reached Minimum Learning Completeness (KBM). The KBM set by the school is 76. In response to this, researchers are interested in conducting research with the title "Development of Inquiry-Based Learning Modules for Theme 4 (rights and obligations) to improve Class V Student Learning Outcomes"

Method

This research is research and development with a 4-D development model. This model consists of 4 development stages, namely: definition stage, design stage, development stage and desseminate stage.

Development Procedure

According to Muqdamien et al. (2021) stated that "the development of this model consists of 4 development stages, namely define (analyze), design (design), develop (development), and desseminate (deployment).

Research subject

Research sites; Research on the development of the Inquiry-based Theme 4 (rights and obligations) learning module was carried out at SDN 02 Gunung Tuleh. Research subject; Research subjects are sources that can provide information on the problems researched by the author. The subjects in this research were Class V students at SDN 02 Gunung Tuleh.

Define

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Design

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Develop

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Desseminate
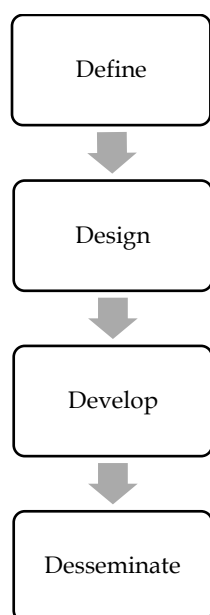
Figure 1. Flow cycle of research procedures

Research instrument

Validation Instrument; The module validation sheet contains assessment aspects according to the grid. The module validation sheet contains assessment aspects which include material (content), language and media. The sheet is validated directly by the module validator. Practicality Sheet (Questionnaire); The module practicality sheet filled in by the teacher contains didactic aspects, suitability of time, suitability of illustrations and language used. Teacher and student response questionnaires were used to obtain responses to the practicality of the learning modules being developed. This instrument is filled in by students after following the learning process and the teacher after carrying out the learning.

In this research, the questionnaire aims to determine the practicality of using the module that has been designed. Filling out the questionnaire uses a Likert scale using a checklist to determine the assessment given by teachers and students. The practicality questionnaire was filled out by teachers and students. Questionnaires are given to students after completing studying the module. The questionnaire contains statements about the ease of use of the module, the time required, the attractiveness of the module and the language. The practicality of teachers and students using the same questionnaire.

Data collection technique

Collection can be done in various settings, various sources, and various ways. The data collection techniques used in this research are; Interviews, Questionnaires and documentation.

Interview

An interview is a meeting of two people to exchange information and ideas through questions and answers, so that meaning can be constructed on a particular topic. Interviews were conducted by researchers to find out what media were used by Class V teachers at SDN 02 Gunung Tuleh.

Questionnaire

The data collection technique in this research is through questionnaires. A questionnaire is a data collection technique that is carried out by giving a set of written statements or questions to respondents to answer (Busetto et al., 2020). The questionnaire was used to determine the validator's assessment regarding the Inquiry-based theme 4 learning module, so that it was used as teaching material in Class V of SDN 02 Gunung Tuleh.

Documentation

In this research, documentation is needed so that the data that researchers obtain is stored properly so that when it is used or needed, researchers can easily open the document. The documentation in question is a photo taken at SDNi 02 Gunung Tuleh when the research was carried out.

Result and Discussion

Definition Stage (Define)

At this stage, curriculum analysis, needs analysis, student analysis and concept analysis are carried out. The activity steps carried out for the four analyzes are as follows.

Curriculum Analysis

At this stage, a study was carried out regarding the curriculum used, namely the 2013 Curriculum. This study was carried out by looking at the basic learning skills for Theme 4 class V semester I Theme 4 sub-theme 2, KD 1.2 respecting the obligations, rights and responsibilities as citizens of society and religious communities in everyday life. day, 2.2 shows an attitude of responsibility in fulfilling obligations and rights as a citizen in everyday life. At this stage the components looked at are core competencies, basic competencies and main material.

Needs Analysis

This needs analysis aims to look at the problems found during the observation, namely the researcher conducted field observations at SDN 02 Gunung Tuleh on November 1 and 2 2022. The researcher saw the class V teacher, Mrs. Yuwelpi Madewi, S.Pd, that in the implementation of learning the teacher still seemed to be

more Actively providing material in the learning process results in students participating less and being less active in learning, this is contrary to the learning model and steps planned by the teacher in the Learning Implementation Plan (LIP) that he has written. Apart from that, in the learning process, students are noisy in the classroom, are not focused on learning and the teaching materials used are only focused on worksheets, and many learning activities also take place in the classroom. There are no inquiry-based thematic learning modules at SDN 02 Gunung Tuleh, specifically in class V.

Student analysis

Analysis of student characteristics to make it easier to compile the language level in the module and the difficulty of the questions. The researcher conducted field observations at SDN 02 Gunung Tuleh on November 1 and 2 2022. The researcher saw that the class V teacher, Mrs. Yuwelpi Madewi, S.Pd, found that the learning process resulted in students lacking participation and being less active in learning, apart from that in the learning process of the participants. There are students who are noisy in class, not focused on learning and the teaching materials used only focus on worksheets, and many students' PTS results are still below the KBM. According to (Shi & Qu, 2022), student analysis is a study of student characteristics which includes abilities, background knowledge, and the level of student cognitive development. So, the results of this analysis will later be used as a frame of reference in compiling learning materials.

Concept Analysis

This concept analysis aims to determine the concepts of subject matter needed in module development. The lesson material was created based on the researcher's concentration, namely Social Sciences and Civics by identifying core competencies and basic competencies that are in accordance with the concept of Social Sciences and Civics (Dwivedi et al., 2023). Based on this, the researcher determined the material concept in accordance with theme 4 (rights and obligations).

Design Stage (Design)

At this stage the researcher designed an inquiry-based Theme 4 learning module for class V students at SD 02 Gunung Tuleh. Modules are needed to make it easier for students to absorb information in the learning process, through modules students are invited to study independently. Apart from that, learning to use modules will also make it easier for teachers to teach. The module developed refers to the Kd and learning indicators that have been previously formulated. The module is presented in the form of printed teaching materials,

processed using Microsoft Office 2013 with Comic sans MS and Calibri font type with size 14, and equipped with pictures from the everyday environment which can help students understand the material on rights and responsibilities. The following describes several parts of the designed module.

Module Front Cover

The front cover of the module contains the module identity which includes the title of the material based on KI and KD, the name of the author and pictures related to the contents of the module. The cover was made using the Microsoft Office Word 2013 application with Comic sans MS and Cambria fonts. For more details, see Figure 2.
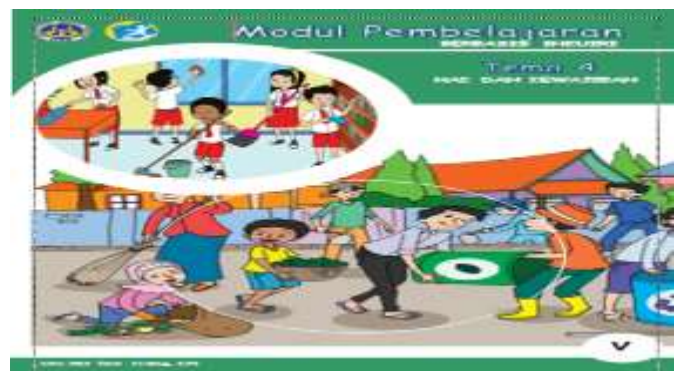

Figure 2. Module Front Cover.

KI-KD Page and Concept Map

This page contains core competencies (KI), basic competencies (KD) which are in accordance with the 2013 elementary school curriculum as well as learning indicators. The type of writing used is Comic Sans MS and Calibri uses size 14. For more details, see Figure 3.

Figure 3. KI-KD and Indicator Page Display

Module Usage Instructions

Instructions for using the module contain instructions for teachers and students in using the module developed. Instructions for using the module were created using the Microsoft Office Word 2010

application with Comic Sans MS font size 14. For more details, see Figure 4.

Figure 4. Instructions for Using the Module.

Learning Activities

Learning activities are the core part of the module being developed. The learning activity sheet contains the learning title and activities that invite students to discover concepts independently. These activities consist of asking questions, formulating hypotheses, collecting data, analyzing data, and making conclusions. For more details as follows:

Raise a Problem

The activity of asking questions contains directions that invite students to find their own concepts about the sub-topics being studied (Chin & Osborne, 2008). Inquiry activities begin when a question or problem is raised. To ensure that the question is clear, the question is written on the board, then students are asked to formulate a hypothesis (Stehle & Peters-Burton, 2019). For more details, see Figure 5.

Figure 5. Asking Questions

Formulate a Hypothesis

Temporary answers to questions or solutions to problems that can be tested with data. To facilitate this process, the teacher asks students for ideas about possible hypotheses. From all the existing ideas, one hypothesis is selected that is relevant to the problem given. and at the end of this activity students are invited to formulate their hypotheses about the topics studied. Apart from that, the sheet formulating this hypothesis was processed with Microsoft Office Word 2010 using Comic Sans MS font with size 14. For more details, see Figure 6.

Figure 6. Formulating a hypothesis

Collecting data

Collecting data, hypotheses are used to guide the data collection process. The resulting data can be in the form of tables, matrices, or graphs. This data collection sheet was processed with Microsoft Office Word 2010 using Comic Sans MS font with size 14. For more details, see Figure 7.

Figure 7. Collecting Data

Data analysis

Data analysis, students are responsible for testing the hypothesis that has been formulated by analyzing the data obtained. and present it in front of the class. This activity aims to improve students' memory of the concepts they have studied. For more details, see Figure 8.
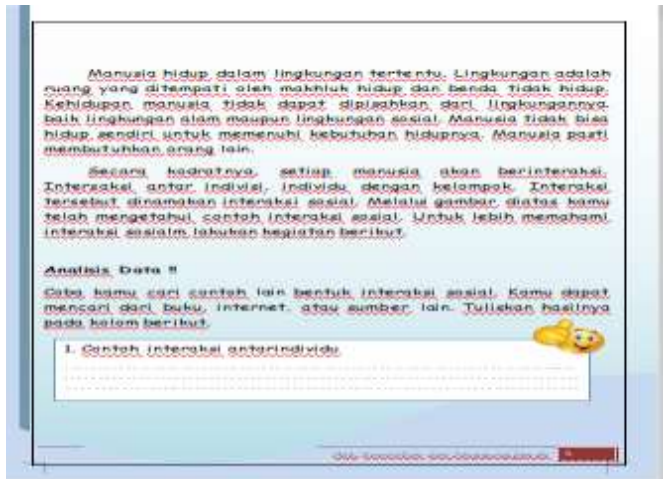

Figure 8. Data Analysis

Making Conclusions

Making conclusions, the closing step of inquiry learning is making temporary conclusions based on the data obtained by students. This activity aims to increase students' knowledge and improve students' memory about the concepts they have studied. For more details, see Figure 9.
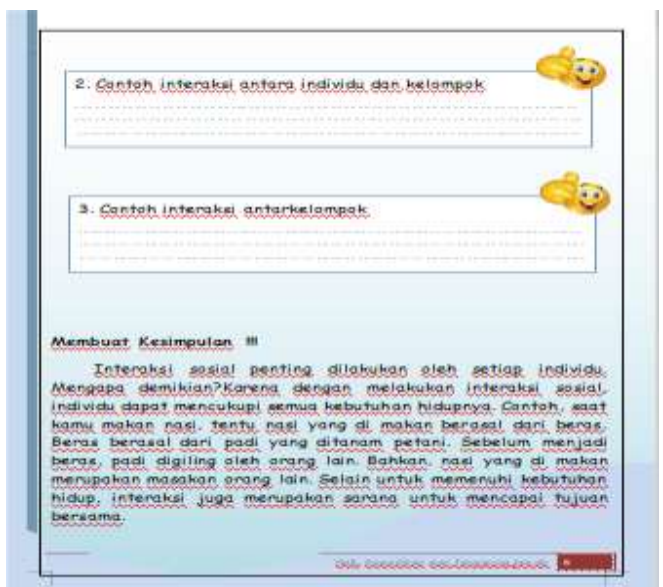

Figure 9. Making Conclusions

Module Back Cover

The back cover of the module was created with Microsoft Office 2013 and contains a short biography of the author, the author's name. The color design varies using green and white, as well as the type of font, namely using Cambria and Comic Sans MS. The appearance of the back cover can be seen in Figure 10.

Figure 10. Module Back Cover

Development Phase (Develop Phase)

The development stage includes validation of inquiry-based modules and trials to see the practicality and effectiveness of the modules being developed.

Module Validation

The module that has been designed is followed by validation activities by expert lecturers according to their field of study. Suggestions for improvement provided by the validator were used to revise the inquiry-based theme 4 learning module that was developed. Before being validated, the inquiry-based Theme 4 learning module that had been created underwent several revisions according to the validator's suggestions. Validator suggestions can be seen in table 1. After the module has been revised based on the validator's suggestions, it continues with the second stage of validation, until the module developed is suitable for testing. The following describes the results of the validity of the inquiry-based theme 4 learning module for class V students at SDN 02 Gunung Tuleh.

Table 1. Validator Suggestions for the Developed Inquiry-Based Theme 4 Learning Module.

Validator Name	Validator Suggestions
Dr. Yanti Fitria, M.Pd	Adjust the material again to the K13 curriculum.
	Use a letter shape and size that students can read.
	Use sentences that students understand.
	Cover repair
	The module layout should be more attractive to students.
	The appearance of the cover must be more attractive to students.
Dr. Yeni Erita, M.Pd	Use a type and size of letters that better support students' reading activities and interests. Upayakan in inquiry learning is more dominant.
	Inquiry learning is more modified.
	Make the module size A4
Feni Herlina, M.Pd	Adapt the material to the lesson plan
	Expand the pictures with concrete examples
Prof. Dr. Hermansyah, S.T., M.Pd	Fix the cover according to the theme
	Attract color to the module
	The symbol on the cover is reduced
Ir. Drs. Heldi, M.Si.,Ph.D	Adjust punctuation capitality
	Create attractive letter models
	Pay attention to the KBBI

Module Trial

The trial was carried out on 10 and 11 July 2023 for class V students at SDN 02 Gunung Tuleh. During the trial, the author obtained data from observing the implementation of the Inquiry-based theme 4 learning module that was developed. This is done to see the practical results of the module being developed.

Practicality Test

Practicality testing of the Inquiry-based theme 4 learning module on rights and obligations material was carried out on teachers and students. Practicality data by teachers was obtained using a practicality test questionnaire. Complete practicality test results can be seen in the attachment. Apart from teachers, practicality tests are also carried out on students. Practicality data was obtained using a practicality test questionnaire which is briefly presented in full in the attachment.

Desseminate stage (spreading)

The deployment stage is the final stage in this development research. This stage is carried out so that the media developed can be used by other people who need it. At this stage, learning media is distributed in the form of soft copy and hard copy so that it can be accessed freely and independently by users. Can be seen in Figure 11.

It is hoped that the inquiry-based learning module for theme 4 on rights and obligations can be an example for teachers and prospective teachers in creating inquiry-based learning modules. Apart from that, teachers and prospective teachers are expected to understand how to create good and correct inquiry-based Theme 4 learning modules so that students are active in learning so that they can improve student

learning outcomes by knowing the validity and practicality of the inquiry-based Theme 4 learning modules being developed.

Figure 11. Distribution of Learning Media

Validity of the Inquiry-Based Theme 4 Learning Module on Rights and Obligations Material by the Validator.

The validation carried out in this research emphasizes internal validity using the criteria contained in the product being developed. The internal validity used includes the validity of content suitability, language, presentation and graphic validity which can be seen in table 2.

The inquiry-based Theme 4 learning module is designed to be used by fifth grade students at SDN 02 Gunung Tuleh on rights and obligations material, and is expected to help students improve learning outcomes with teacher guidance without teacher guidance by placing children as researchers in theme 4 learning activities will improve student learning outcomes regarding subject matter using learning module media. According to (Isnawati et al., 2020), what is meant by inquiry learning is a learning process that is student-centered (Stundent Centered) by emphasizing the ability

to think critically, analytically, search, find and process students' own information and knowledge, which is useful for solving problems faced in the learning process.

Table 2. Data from Module Validation Results by Validator.

Knowledge field	Number of Validator Scores	Maximum Score	Validity Value	Criteria
Thematic	33	36	91.66	Very Valid
Thematic	30	36	83.33	
Thematic	34	36	94.44	
Language	18	20	90.00	Valid
Media	22	24	83.33	
Average			88.55	Very Valid

Based on the validation results from the validator, overal the inquiry-based Theme 4 learning module that has been developed is in the very valid category. This was obtained from the results of data analysis of the validity value given by the validator, namely 88.55% in the very valid category. This means that the contents of the module are in accordance with the learning material for Theme 4 of elementary school class V, and it can be said that the validity of the contents of the module can be justified because it has been assessed by experts which can be seen clearly in the attachment.

Practicality of Inquiry-Based Theme 4 Learning Module on Rights and Obligations Material by Teachers and Students.

The practicality of the module being developed can be known from the implementation of trials. Data on the practicality of the Theme 4 inquiry-based learning

module on rights and obligations material was obtained from the module practicality test questionnaire filled out by teachers and students.

Practicality of Teacher Inquiry-Based Learning Module for Theme 4

Data analysis of practicality test results by the fifth grade teacher at SDN 02 Gunung Tuleh shows that the inquiry-based Theme 4 Learning module on rights and obligations material that has been developed is very practical with a practicality percentage of 91.67%. This figure was obtained from the average practicality of the module assessed by teachers and students, namely aspects of ease of use, effectiveness of learning time, and aspects of benefits which can be seen in table 3.

Table 3. Practicality Test Results for Teacher Inquiry-Based Theme 4 Learning Modules.

| Assessment Aspects	Total Score	Practicality Percentage (%)	Maximum Total Score	Criteria
Ease of Use	20	100	20	Very Practical
Effectiveness of Learning Time	7	87.50	8	Practical
Benefit	21	87.50	24	Practical
Average		91.67		Very Practical

From the aspect of ease of use, the inquiry-based Theme 4 learning module on rights and obligations material that has been developed is stated to be very practical with a practicality percentage of 100%. This shows that the module that has been developed is easy to use, the material contained in the module is clear and simple, the language used in the module is easy to understand (Nuri et al., 2023). From the aspect of effectiveness of learning time, the inquiry-based Theme 4 learning module on rights and obligations material that has been developed is declared practical with a practicality percentage of 87.50%. This shows that the module that has been developed can make learning time more effective and students can learn according to their own way of learning (Asrial et al., 2020).

From the aspect of the benefits of the inquiry-based Theme 4 learning module on the rights and obligations material that has been developed, it is stated that it is very practical with a practicality percentage of 87.50%. This shows that the module that has been developed is beneficial for teachers, such as supporting the teacher's role as a facilitator, reducing the teacher's workload in explaining material repeatedly, helping students' learning activities, and helping students learn independently (Ventista & Brown, 2023). Andromeda et al. (2018), Practicality of Inquiry-Based Theme 4 Learning Module by Students.

Data analysis of practicality test results by class V students at SDN 02 Gunung Tuleh shows that the inquiry-based Theme 4 learning module on rights and obligations material that has been developed is very

practical with a practicality percentage of 97.18%. This figure is obtained from the average practicality of the modules assessed by students which can be seen in Figure 12.
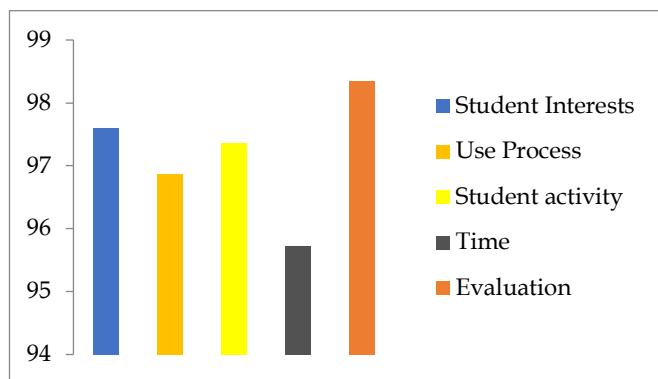
Figure 12. Practicality Test Results for Theme 4 Inquiry-Based Learning Module on Students' Rights and Obligations.

From the aspect of student interest, the inquiry-based Theme 4 learning module on rights and obligations material that has been developed is stated to be very practical with a practicality percentage of 97.61%. This shows that the module that has been developed can improve student learning outcomes in participating in learning (Hunaidah et al., 2022). From the aspect of the use process, the inquiry-based Theme 4 learning module on rights and obligations material that has been developed is stated to be very practical with a practicality percentage of 96.87% (Arisa et al., 2022). This shows that the module that has been developed is easy for students to use independently with teacher guidance. From the aspect of increasing student activity, the inquiry-based Theme 4 learning module on rights and obligations material that has been developed is stated to be very practical with a practicality percentage of 97.36%. This shows that the module that has been developed can increase student learning activities and make learning more meaningful (Auly et al., 2020).

From the aspect of available time, the inquiry-based Theme 4 learning module on rights and obligations material that has been developed is stated to be very practical with a practicality percentage of 95.72%. This shows that the study time provided to use the module is sufficient, and makes learning time effective (Kintu et al., 2017). From the evaluation aspect of the inquiry-based Theme 4 learning module on the rights and obligations material that has been developed, it is stated that it is very practical with a practicality percentage of 98.35% (Ananda & Usmeldi, 2023). This shows that the formative tests contained in the module can be a benchmark for students in understanding the material, and can help students to better understand the concepts.

Based on the data above, we can see the response results from 38 class V students of SDN 02 Gunung Tuleh to the inquiry-based Theme 4 learning module on rights, obligations and responsibilities with an average practicality of the module of 97.18% and the category is very practical and can improve learning outcomes. student.

Conclusion

Based on trial data for the development of inquiry-based learning modules for theme 4 to improve learning outcomes for class V students at SDN 02 Gunung Tuleh which have been carried out, it was concluded that the validity of the inquiry-based learning modules on rights and obligations for class V SDN 02 Gunung Tuleh that have been developed declared very valid with an average validity percentage of 88.55%. From validators in the thematic fields of science, three people, language and media. From the five validators, it can be seen that the highest percentage of validity was obtained from the thematic aspect, 94.44% with very valid criteria. The practicality of the inquiry-based learning module for theme 4 on rights and obligations material for class V of SDN 02 Gunung Tuleh which has been developed is stated to be very practical with an average practicality percentage of 91.67% by teachers, which can be seen from the aspect of ease of use with a practicality percentage of 100%, the effectiveness of learning time is 87.50%, and the benefits aspect is 87.50%. The module students stated that it was very practical with an average practicality of 97.18%, it can be seen from the aspect of student interest with a percentage of practicality of 97.61%, use process of 96.87%, increased student activity of 97.36%, available time of 95.72%, and evaluation 98.35%.

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