GeoScienceEd *5(4) (2024)*

Jurnal Pendidikan, Sains, Geologi, dan Geofisika

http://jpfis.unram.ac.id/index.php/GeoScienceEdu/index

# Analysis The Response of Junior High School Students In Makassar City to The Science Teaching Module

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DOI: https://doi.org/10.29303/geoscienceed.v5i4.596

**Article Info**

Received: 14 November 2024

Revised: 19 November 2024

Accepted: 28 November 2024

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**Abstract:** The objectives of this study are describing to 1) Students of SMP IT Mutiara response to the use of Science Teaching Module, 2) Students of SMP Muhammadiyah Makassar response to the use of Science Teaching Module, 3) All Students response to the Science Teaching Module. This research used a quantitative approach using a descriptive methodology. The population are students of SMP IT Mutiara IT and SMP Muhammadiyah Makassar registered in the 2022–2025 academic year who use scientific teaching modules provided by the Ministry of Education and Culture are the research population. This research used random sampling techniques. The data was collected by questionnaire. The results of this study showed that 1) The response of students at SMP IT Mutiara to the science teaching module are 20% in very good category, 61% in good category, 16% in moderate category 2) The response of students at Muhammadiyah Makassar to the science teaching module are 34% in very good category, 37% in good category, 7% in moderate category and 12% in bad category 3) The response of All students in both school in this research are 27% in very good category, 49% in good category, 17% in moderate category, and 8% in bad category.

**Keywords:** Students, Science teaching module and Ministry of Education and Culture

**Citation:** Arif, R. N. H., Arif, R, M., Samputri, S., & Nurhalisa, S. (2024). Analysis The Response of Junior High School Students In Makassar City to The Science Teaching Module. *Jurnal Pendidikan, Sains, Geologi dan Geofisika (GeoScienceEd Journal)*. 5(4), 1022-1029. Doi: https://doi.org/10.29303/geoscienceed.v5i4.596

## Introduction

Studying natural sciences (IPA) at the junior high school level is very important to foster students' curiosity and understanding of natural events. The support that educators provide to students to help them learn new things, develop their abilities and character, and create attitudes and beliefs is known as the learning process. (Hamza, 2019). The use of modules is one of the most efficient teaching strategies. Individual potential, including intelligence and talent, varies, and this is recognized by module-based learning. Modules are considered a type of individual learning because they are printed teaching materials intended for students to learn on their own. A module consists of learning activities that are arranged systematically, operationally, and directionally. In addition, this module is equipped with instructions for use for teachers and students. Students have the flexibility to adjust their learning pace according to their individual abilities (Rumansyah, 2016).

The success of the learning process is highly dependent on the quality of the teaching modules. The Ministry of Education and Culture (Kemendikbud) has made efforts to develop a science teaching module as a guideline for teachers in designing effective learning programs.

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Teaching materials such as tools, or texts are systematically arranged to describe the skills that students must acquire during the learning process, both for planning and review of implementation (Khiorudin, 2019). Printed teaching materials in the form of modules are a type of teaching material. The module has a complete structure that includes learning experiences planned to help achieve the set learning objectives. Modules are considered good if they have characteristics such as self-instruction, independence, adaptability, and ease of use. Important components of the learning module include instructions for teachers, student activity sheets, avoidant learning, and curriculum outlines. (Mubarok et al., 2020; Oktarisma et al., 2021).

In addition, the teaching module serves as a methodical and aesthetic educational tool or medium. With the Pancasila Student Profile as the final goal, this module implements the Learning Objectives Flow based on Learning Outcomes. Modules are prepared taking into account the long-term learning objectives and the stage of student growth. To make the learning process more interesting and significant, it is very important for educators to understand the idea of teaching modules. (Module Training, 2022).

However, the implementation of the use of teaching modules in the field—especially in Makassar City—requires further evaluation. Several studies show that there are obstacles in the implementation of teaching modules such as lack of active participation of students, difficulties in understanding the subject matter, and the irrelevance of the material to the local context.

This study aims to analyze the response of junior high school students in Makassar City to the science teaching module of the Ministry of Education and Culture. The Merdeka Learning platform is intended to help students become more proficient in recognizing problems and solving them through practical applications in science subjects. (Ministry of Education and Culture, 2022). Students benefit from a science education because it allows them to understand many aspects of nature and its phenomena, which makes the knowledge they gain fully connected. Along with actively seeking information, students are required to research and develop ideas in daily life. (Kalemben et al., 2018).

By understanding students' perceptions and experiences of the teaching module, it is hoped that an overview of its effectiveness in the context of learning in Makassar City can be obtained. In addition, the results of this study also aim to provide constructive input for policy makers and teachers to improve the quality of science education.

## Method

This study aims to analyze the response of junior high school students in Makassar City to the use of the Science Teaching Module released by the Ministry of Education and Culture. This study applies a quantitative method with a descriptive approach. The descriptive approach was chosen because the focus of this research is to describe and explain the phenomenon that occurs, namely how students respond to science teaching modules in the learning process in the classroom.

The descriptive method is an effort to find facts through accurate interpretation. Finding facts through proper interpretation is the goal of the descriptive method. Descriptive research examines a variety of social issues and dominant norms, including specific circumstances, interactions of actions, attitudes, and opinions, as well as ongoing processes and their effects. This approach aims to characterize the items or topics studied based on real circumstances (Samsu, 2017). According to Sugiono, among the types of research with quantitative methods there are experimental and survey research methods, while qualitative methods include a naturalistic approach (Sugiono, 2013).

Based on the data that has been collected, this study uses a quantitative descriptive approach to describe the current condition. Descriptive research functions to present the results of the research in the form of an overview. As the name implies, descriptive research seeks to explain, characterize, and validate the phenomena being studied (Ramdhan, 2021). In quantitative research, questionnaires are the most commonly used data collection method. Through a sequence of questions created specifically to measure the variables of the study, the questionnaire serves as a tool to collect data (Sekaran & Bougie, 2016). This type of research focuses more on measurement and calculation to obtain clearer information about

students' responses to science teaching modules from the Ministry of Education and Culture. The data obtained will be analyzed to describe students' acceptance of science teaching modules in terms of satisfaction, understanding, and impact on their learning outcomes.

The population studied in this study includes all junior high school students in Makassar City who utilize science teaching modules from the Ministry of Education and Culture during the 2023/2024 school year. The sample was obtained through a purposive sampling technique from junior high schools that have fully implemented the module in the science learning process. This study involved 32 students from two schools, namely SMP IT Mutiara and SMP Muhammadiyah, with the focus of respondents coming from grades VII, VIII, and IX.

Research instruments are a crucial element in both qualitative and quantitative studies. To help the data collection process, qualitative research uses interview guidelines, observation checklists, and case study guidelines (Merriam, 2009). On the other hand, standard observation checklists, questionnaires, and measurement tools are used in quantitative research to collect measurable data and conduct statistical analysis based on such data (Sekaran & Bougie, 2016).

In this study, the main instrument is a questionnaire which is divided into several parts to evaluate various aspects of students' responses to the science teaching module. This questionnaire uses a four-point Likert scale (Very Good, Good, moderate, and bad), to assess how the level of students' approval of the statements contained in the questionnaire is. This method provides a clearer and easier assessment of students' responses to science teaching modules (Slamet & Wahyuningsih, 2022).

Data collection is carried out with a GoogleForm that has been filled with several questions that will be distributed to students who have used the science teaching module in the learning process. Each student is asked to fill out a questionnaire independently in class within a predetermined time.

## Result and Discussion

The study aims to analyze the reaction of junior high school students in Makassar City to the science teaching module from the Ministry of Education and Culture, focusing on its relevance, attractiveness, and effectiveness in supporting the understanding of science concepts. This research is expected to provide useful information for educators, educational institutions, and policymakers in improving the quality of science teaching.

The Likert Scale is used to assess students' attitudes and opinions regarding the implementation of the Ministry of Education and Culture's science teaching module. Available options include (1) Very Good (SB), (2) Good (B), (3) moderate (TB), and (4) Very moderate (STB). The population used as the subject of the study is junior high school students in Makassar City from grades VII, VIII, and IX who use the Ministry of Education and Culture's science teaching module during the 2023/2024 school year.

Table 1. Statement of Questionnaire of Students in Junior High Schools in Makassar

| No. | Statements | Very Good | Good | Moderate | Bad |
|---|---|---|---|---|---|
| 1 | Learning with modules makes me enthusiastic in learning. | 60% | 20% | 20% | 0% |
| 2 | The science learning activities that have been implemented help me more easily understand problems when learning science. | 40% | 40% | 0% | 20% |
| 3 | The learning activities that have been carried out require me to link science problems with realistic situations. | 20% | 60% | 20% | 0% |

| | | | | | |
|---|---|---|---|---|---|
| 4 | I am sure I can understand the entire content of this module well. | 40% | 40% | 20% | 0% |
| 5 | I use the experience I gained to work on the questions in the module. | 20% | 60% | 20% | 0% |
| 6 | This learning makes me happy to discuss with group members to solve problems by exchanging answers. | 60% | 20% | 0% | 20% |
| 7 | I always check my work again. | 20% | 60% | 20% | 0% |
| 8 | With this learning, I often model problems using pictures or sketches. using pictures or sketches. | 20% | 60% | 0% | 20% |
| 9 | The student activities and exercises in the module help me to develop my science skills. | 60% | 40% | 0% | 0% |
| 10 | From each activity in this module, I can conclude and take important ideas about the material, can conclude and take important ideas about quadrilateral material. | 40% | 40% | 20% | 0% |
| 11 | From each activity in this module, I was able to conclude and can conclude and take important ideas about science material | 20% | 40% | 20% | 20% |
| 12 | I always try to solve problems in my own my own way. | 20% | 40% | 40% | 0% |
| 13 | I can relate the content of this module to things I have seen, done or thought about in my daily life, think about in everyday life think about in everyday life. | 40% | 40% | 20% | 0% |
| 14 | I can relate the content of this module to things I have seen, done or thought about in everyday life. | 20% | 60% | 20% | 0% |
| 15 | I really enjoy learning science, especially the science material by using this module. | 20% | 60% | 0% | 20% |
| 16 | This learning makes me express my ideas or opinion about a given problem. | 60% | 0% | 40% | 0% |
| 17 | With this learning I find it easier to working on complex problems that require manipulation of science forms. | 0% | 60% | 0% | 40% |
| 18 | With this learning I find it easy to draw conclusions from a problem solving. | 40% | 0% | 40% | 20% |
| 19 | After learning science material using this module, I believe that I will succeed in the test. | 0% | 60% | 0% | 40% |
| 20 | After following this learning, my understanding of the material material has improved. | 40% | 0% | 0% | 60% |

| | | | | | |
|---|---|---|---|---|---|
| 21 | I can gain new knowledge by following a series of activities in the module. | 80% | 0% | 20% | 0% |
| 22 | The presentation style of this module is enjoyable | 60% | 20% | 0% | 20% |
| 23 | This module presents some problems that challenge me to solve them. | 20% | 60% | 0% | 20% |
| 24 | There are no words or sentences that I do not understand in the module. | 60% | 20% | 20% | 0% |
| 25 | The tasks or exercises in this module are moderate easy. | 40% | 60% | 0% | 0% |
| 26 | There is no material in this module that I dont understand. | 20% | 20% | 40% | 20% |
| 27 | The content of this module is very useful for me. | 60% | 20% | 0% | 20% |
| | **Average** | **27%** | **49%** | **17%** | **8%** |

Based on the results of the questionnaire taken from the two schools, the data shows that 27% of students gave a "Very Good" rating, while 49% chose "Good". This shows that the majority of students from both schools feel positive about the teaching modules, with the material presented quite clear, easy to understand, and supports their understanding of the topics taught. However, there were 17% of students who gave an assessment of "moderate", and 8% chose "Very moderate", which indicates that there is a group of students who feel difficult or dissatisfied with the module. This result indicates that although most students feel positive, there are still some areas that need to be improved to meet the learning needs of all students in both schools

Table 2. Average percentage of data from questionnaires

| **SMP IT Makassar** | **Gender** | **Persentase** | | | |
|---|---|---|---|---|---|
| | | **Very Good** | **Good** | **moderate** | **bad** |
| | **Male** | 18% | 57% | 21% | 5% |
| | **Female** | 21% | 64% | 10% | 2% |
| | **Average** | **20%** | **61%** | **16%** | **4%** |
| **SMP Muhammadiyah** | **Gender** | **Persentase** | | | |
| | | **Very Good** | **Good** | **moderate** | **bad** |
| | **Male** | 32% | 36% | 0% | 10% |
| | **Female** | 36% | 37% | 14% | 13% |
| | **Average** | **34%** | **37%** | **7%** | **12%** |

Based on data on the percentage of male students at SMP IT Mutiara, although most of them give a positive assessment of the Ministry of Education and Culture's science teaching modules, there are indications that there is still potential for improvement. About 75% of male students rated this module as good or very good, but about 26% found it difficult or dissatisfied with the material presented.

Based on data from female students at SMP IT Mutiara, 85% of them gave a positive assessment of the Ministry of Education and Culture's science teaching module, which shows the effectiveness and benefits of

the module in science learning. This module is felt to meet their needs through the presentation of clear material and an easy-to-understand structure. However, there were 12% of female students who gave negative assessments, indicating difficulties that may be caused by some material that is considered complex or not in accordance with their learning style. The learning style itself is an individual's habit in processing information and learning experiences; Everyone has a different way of learning from every other individual. Although the majority of female students responded positively, there is still room to improve the effectiveness of the module to make it more beneficial for all students.

In Muhammadiyah Junior High School, the majority of male students also gave a positive assessment of the science teaching module of the Ministry of Education and Culture, with 68% choosing the categories "Very Good" (32%) and "Good" (36%). This shows that the module is effective in supporting the understanding of science material. However, 10% of students gave a negative rating, where 10% felt that the module was "Very moderate" and no one chose the "moderate" category. This indicates that there is a group of students who are experiencing difficulties and may need additional support or a more appropriate learning approach.

Overall, 73% of students at Muhammadiyah Junior High School gave a positive assessment of the science teaching module from the Ministry of Education and Culture. Among them, 36% rated the module as "Very Good" and 37% as "Good". This shows that most of the students feel that this module is effective and easy to understand. However, there were 27% of female students who gave a negative assessment, of which 14% stated "moderate" and 13% chose "Very moderate". This assessment indicates that there is a group of students who experience difficulties or dissatisfaction with the module, perhaps due to material that is considered too difficult or not suitable for their learning needs.

Based on related research (Adelina: 2024), out of a total of 22 questionnaire respondents, as many as 19 people stated that they prefer to use science books and modules published by the Ministry of Education and Culture. The books have been adapted to the applicable curriculum and teaching materials that have been provided on the platform for use by science teachers in the learning process.

## Conclusion

The results of this study showed that 1) The response of students at SMP IT Mutiara to the science teaching module are 20% in very good category, 61% in good category, 16% in moderate category 2) The response of students at Muhammadiyah Makassar to the science teaching module are 34% in very good category, 37% in good category, 7% in moderate category and 12% in bad category 3) The response of All students in both school in this research are 27% in very good category, 49% in good category, 17% in moderate category, and 8% in bad category.

The Science Teaching Module developed by the Ministry of Education and Culture received a positive response from junior high school students in Makassar. Students mostly find this module helps them understand the basic concepts of natural sciences and helps them learn in the classroom. Although this module is considered good, further development is needed to make this teaching material more engaging, easier to understand, and more relevant to students' learning needs. This is expected to improve the quality of science learning in junior high schools.

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