

The Effect of Natural Resources Materials on Student Understanding About the Potential of The Region in Buton Central District

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Abstract

Lack of public understanding of natural resource management causes damage that runs relatively but the impact is cumulative so that it becomes difficult to overcome it. Through geography learning materials, especially material on natural resources, it is able to increase students' understanding of the geographical conditions of their area so that they are able to take advantage of the potential of the local area. The purpose of this study was to analyze the effect of learning geography on students' understanding of the potential of the area in Central Buton Regency. This study uses a descriptive method with a quantitative approach. The sample consisted of 116 students from 5 schools in Central Buton Regency.

Keywords

Learning geography; understanding; potential of the area



I. Introduction

Problems that usually occur in regions in Indonesia, one of which is the not yet optimal development of regional potential. Most people use natural resources as their daily livelihood, but the biggest challenge for the community is the degradation of natural resources and the environment. Understanding natural resources is very important for the community (students), the ability of students to understand natural resources will make students able to get various information (Conley, 2007). One of the factors that causes low quality human resources is education, education is a factor that can significantly improve the quality of human resources, therefore education development requires comprehensive planning involving economic indicators,

Learning is a conscious process that tends to change a person's behavior. In the learning process there is the provision of information which is then stored in the memory of students. Furthermore, the knowledge, understanding and skills are manifested in practice in the activeness of students in responding and reacting to events that occur in themselves or their environment (Thobroni and Arif, 2011). Learning is an organized combination that includes human elements, materials, facilities, equipment and procedures that interact to achieve a goal (Sanjaya, 2006). So it can be concluded that learning is a learning and teaching activity between teachers and students with various activities in planning. The learning is aimed at reconstructing students who are looking for information and finding out knowledge that is able to solve problems, cooperate, and tolerate diversity. If the desire is successful in a satisfying way, it will increase students' self-confidence as well as a high sense of responsibility and civilized humans who can identify themselves with stable, independent personalities and have emotional stability with intellectual knowledge. (Pradana, D. et al. 2020)

Learning materials are information, tools and texts needed for lesson planning and to assist in teaching and learning activities in the classroom. (Wiyani 2013) explains that, in language, the subject matter is material that is thought out, discussed, discussed, and tested in student learning activities. In terms, learning materials are a variety of knowledge, attitudes, and skills that are transformed by teachers to students to achieve predetermined competencies. Meanwhile, according to Hamzah B Uno (2011) learning material is everything that is discussed in order to achieve the goals that have been set. In the process of selecting learning materials, they must be able to provide skills in solving various environmental problems.

Learning material is the content of the curriculum, namely in the form of subjects or fields of study with topics / sub topics and details. (Darmadi, 2010) said that in compiling and selecting learning materials, there are several principles in compiling them, namely: (1) The principle of relevance or relevance, namely learning materials must be relevant or related to the achievement of competency standards and basic competencies, (2) The principle of consistency, namely the achievement of basic competencies and teaching materials must be the same, (3) the principle of adequacy, namely the material taught must be sufficient and assist students in mastering the basic competencies being taught. Meanwhile, according to Harjanto (2005) that several criteria for selecting learning materials to be developed in the learning system and which underlie the determination of learning strategies, namely:

Learning material is very important in the learning process because with the subject matter the learning process will run as expected. In geography learning the material is packaged according to the mental development of students and based on the potential of the students' area so that students can understand their environment and the importance of maintaining their environment. Teachers are also required to better understand the surrounding environment by utilizing regional potential in learning materials or resources.

Understanding is the ability that everyone has in receiving and expressing the knowledge he has acquired, both in written and oral form. Understanding is a person's ability to think and then find the meaning and meaning of something. Understanding is not a thought but the meaning of the thought must be understood and applied in life (Satria, 2017). This is in accordance with Bloom (2014) explaining that the term understanding includes goals, behavior or responses reflecting an understanding of written messages contained in one communication. Explanation and delivery that is right on target to students will increase their knowledge and understanding of learning. Natural resource management is one of the efforts to increase the understanding of the potential of students' areas.

Regional potential is defined by resources in the form of natural resources, human resources and fostered resources that exist in an area but have not been utilized by Sutikno (in Ningrum, 2014). Regional potential is a natural resource that is utilized and developed by humans by taking into account sustainable environmental management. Buton Island is a mining, fisheries, tourism and maritime area. Management of natural resources in the area is still not environmentally friendly, this has an impact on the environment so that it is very necessary to understand students as the next generation of the nation in understanding the management of potential areas that are environmentally friendly and sustainable.

Based on Permendiknas No.22 of 2006 concerning Standards of Content (SI), learning geography builds and develops students' understanding of variations and spatial organization of people, places and environments on the earth's surface, students are encouraged to understand the physical aspects and processes that make up the pattern of the earth's surface, ecological spatial characteristics and distribution on the earth's surface.

Vivi Utari et al (2012) stated that understanding the material is an essential factor in learning, because by understanding the concept a student will understand correctly about how to translate, interpret and conclude a subject matter with their abilities and not just rote studies.

Geography places more emphasis on the distribution and spread of a symptom by paying attention to the time dimension so that it involves spatial diffusion (Kamil Pasya, 2006). Based on this statement, it can be concluded that geography is a field of scientific study that examines all phenomena in space which include natural phenomena and social phenomena, both of which are interrelated in space on earth. In the learning process of geography, it is very necessary to instill in students an understanding of the potential of the region because geography itself explains about natural resources, the natural environment, and the social environment. So that in the learning process of geography the teacher has a very important role to increase the understanding of the potential of the region in students. So that they can understand how important it is to utilize natural resources that are environmentally sound and sustainable, besides that students can also apply them in their own environment. Based on the background of the problem above, it is expected that in the learning process of geography, especially on natural resource material, it can affect students' understanding of the potential of the region. Based on the description above, this research is focused on knowing the Effect of Geography Learning Materials on Students' Understanding of Regional Potential in Central Buton Regency.

II. Research Method

The research method used in this research is descriptive method. According to Sukmadinata (2017) descriptive research aims to systematically and accurately describe and describe facts and characteristics about existing phenomena or about certain fields. To describe the results of this study using a quantitative approach, (Creswell, 2014) said that the quantitative approach is an approach to testing objective theories by examining the relationship between variables. These variables can be measured, usually on an instrument, so that numbered data can be analyzed using statistical procedures. This research was conducted at SMA Negeri Buton Regency, each sub-district was represented by 1 school. The sampling technique is purposive sampling, totaling 116 students. This research instrument uses a questionnaire/questionnaire. Furthermore, the prerequisite test and simple regression test were carried out as a hypothesis test.

III. Result and Discussion

The learning materials in this study are material on natural resources consisting of classification and types of natural resources, potential and natural resources, namely agriculture, mining, marine and tourism in Indonesia, analysis of environmental impacts (AMDAL) in development and utilization. natural resources with sustainable principles. These materials can affect students' understanding of the potential of the local area. The lowest score was 15, and the highest score was 30 with a total of 2719 and an average score of 23.44. Scores are categorized into three categories, namely, low, medium, and high. Based on the measured parameters can be seen in the following table.

Table 1. Frequency Distribution of Geography Learning Materials

| Criteria | Frequency | Presentation (%) |
|-------------|-----------|------------------|
| Low (15-20) | 14 | 12.1% |

| | | |
|----------------|-----|-------|
| Medium (21-25) | 76 | 65.5% |
| Height (26-30) | 26 | 22.4% |
| Total | 116 | 100.0 |

Source: Data processing results, 2022

The table above shows that the number obtained by students on the indicators of learning material at SMA Negeri Kabupaten Buton Tengah is 14 (12.1%) in the low category, 76 (65.5%) in the medium category and 26 (22, 4%) fall into the high category. This shows that the natural resource material in geography learning can be said to be very good, this can be seen from the high and medium category scores so that it can be said that the learning material will be able to influence students' understanding of the potential of the local area.

The understanding of students in receiving and utilizing information is certainly different, according to the abilities possessed by students. From the geography learning materials taught to students, it is possible to see the extent to which students understand the potential of the local area. The data obtained to determine the level of understanding of students in this study was carried out using a questionnaire consisting of 30 statements. The statement items were measured using a Likert scale with a score on the positive statement items, namely 5 very understanding, 4 understanding, 3 understanding enough, 2 not understanding, and 1 not understanding very much. The following table shows the frequency distribution of students' understanding of the potential of the local area. The highest score for the variable understanding of students is 150.

Table 2. Percentage of Students' Understanding of Regional Potential

| No | Indiator | Score | Percentage |
|-------|-----------------------------|-------|------------|
| 1 | Interpreting (interpreting) | 1972 | 13% |
| 2 | Example (Exemplifying) | 2022 | 14% |
| 3 | Classify (Classification) | 1935 | 13% |
| 4 | Summarizing | 1522 | 10% |
| 5 | Inference (inferring) | 3957 | 27% |
| 6 | Comparing (comparing) | 491 | 3% |
| 7 | explain (explanation) | 2921 | 20% |
| Total | | 14820 | 100 |

Source: Data processing results, 2022

The table above shows the overall level of indicators of students' understanding of the potential of the area in the research area. Based on the percentage obtained, it shows that Interpreting is 13%, Exemplifying is 14%, Classifying is 13%, Summarizing is 10%, Inferring is 27%, Comparing (comparing) by 3%, and Explaining (explaining) by 20%. Furthermore, the scores are categorized into three categories, namely, low, medium, and high. Based on the measured parameters can be seen in the following table.

Table 3. Frequency Distribution of Students' Understanding of Regional Potential

| Category | Frequency | Percentage% |
|------------------|-----------|-------------|
| Low (83-105) | 15 | 12.9 |
| Medium (106-128) | 65 | 56.1 |
| Height (129-150) | 36 | 31.0 |
| Total | 116 | 100.0 |

Source: Data processing results, 2022

The understanding of each student will be different, this is due to many factors that influence it, both internal and external. The score scores that have been obtained from each student respondent are then calculated and presented as a percentage to determine the level of understanding achieved by the students. The table shows that of the total sample frequency of 116 students, 15 (12.9%) are in the low category, 65 (56.1%) are in the medium category and 36 (31%) are in the high category. shows that students' understanding of the potential of the region is very good.

Statistical tests include prerequisite tests and hypothesis testing. The prerequisite test is the normality test and the linearity test, which is to find out the description of the data before testing the hypothesis. Hypothesis testing was conducted to determine the effect of the geography learning component on students' understanding of the potential of the region in Central Buton Regency. Normality test to show the distribution of data. Based on the results of the calculation of the normality test using the one sample statistical test klmogorov Smirnov test, the significance value of the independent variable and the dependent variable is $0.200 > 0.05$, which means that the data is normally distributed. The linearity test uses the Deviation from linearity test, which is worth $0.243 > 0.05$, this proves that the variables analyzed include linear data.

The prerequisite test that has been carried out is then continued with the hypothesis. The hypothesis test is carried out with a simple linear regression test on SPSS 26 for windows. The results of data analysis regarding the influence of geography learning materials on students' understanding of regional potential will be described as follows:

The hypotheses that will be tested on learning materials are as follows:

- H0 : There is nothe spirit between learning materials and students' understanding of regional potential at SMA Buton Tengah Regency
- H1 : There is an influence between learning materials on students' understanding of the potential of the region in SMA Buton Tengah Regency

Table 4. Linear Regression Test of Learning Materials on Students' Understanding of Regional Potential

| ANOVAa | | | | | | |
|--------|------------|----------------|-----|-------------|--------|-------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 3077,774 | 1 | 3077,774 | 28,242 | .000b |
| | Residual | 12423.467 | 114 | 108.978 | | |
| | Total | 15501.241 | 115 | | | |

Based on table 4, the calculation results show that the Fcount value is greater than Ftable ($28.242 > 2.45$), meaning that H0 is rejected and H1 is accepted. While the significance value of the X variable to the Y variable is 0.000 so that the significance level is smaller than the probability value of 0.05, so it can be said that the geography learning material variable (X) has a significant effect on the variable understanding of students about the potential of the region (Y).

Table 5. Coefficient of Learning Material Indicators on Students' Understanding of Regional Potential

| Coefficients ^a | | | | | |
|---------------------------|-----------------------------|------------|---------------------------|--------|------|
| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| | B | Std. Error | Beta | | |
| 1 (Constant) | 86,400 | 7,843 | | 11.017 | .000 |
| Learning materials | 1,764 | .332 | .446 | 5.314 | .000 |

Based on the data table coefficients above, the linear regression equation for the components of learning materials on students' understanding is $= 86,400 + 1,764 X_1$ meaning that if each independent variable in geography learning material has an increase of 86,400 then the coefficient is positive, meaning that there is a positive relationship between the learning material and the level of understanding. , the higher the variable in the learning material, the higher the level of understanding of the participants. As shown in table 4 above, the value of tcount is 5.314 while the value of ttable is 1.980 so the conclusion is tcount 5.314 > ttable 1.980, with a probability value of 0.05 > sig 0.000. So it can be concluded that H0 is rejected, which means that the learning material has an influence on students' understanding of the potential of the region.

Table 5. Coefficient of Determination Test (R²)

| Model Summary | | | | |
|---------------|-------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .446a | .199 | .192 | 10.43924 |

Based on table 5 above, the correlation value of Rcount is 0.423, meaning that the effect of the independent variable (learning material) on the dependent variable (student understanding) regarding the potential of the region is 0.423, this indicates that there is a significant influence. In addition, the coefficient of determination R² (R square is 19.9 or 19.9%. This shows that the variation of the independent variable used (Learning material) has an influence on students' understanding of 19.9%, while the rest is 80.1 % is influenced by other factors not discussed in this study, in other words, students' understanding of the potential of the local area is not entirely influenced by the learning material.

The regression of learning materials on students' understanding of the potential of the region is 0.230 in the medium category. Learning materials must be mastered by the teacher and must be relevant to the life and environment around students in order to be able to improve students' understanding, so in the learning process the teacher must be able to master and develop learning materials by linking theory with environmental conditions where students live, such as by recognizing various potential sources. power in the area. The development of materials on the use of natural resources can be related to the potential of the students' areas in the fields of marine, agriculture, mining and tourism. The learning process that involves directly with the environment and the experience of students will directly increase students' understanding,

Geography learning materials, especially materials about natural resources, teachers should link the theories that are in the material with real examples that exist in the student's environment. In utilizing natural resources that are environmentally sound and sustainable, it is necessary to link them with geography learning materials regarding natural resources, and analysis of environmental impacts and sustainable development so that students are

able to understand the various potentials of the local area. So, it can be concluded that the understanding of students about natural resources in the process of learning geography plays an important role in giving birth to the next generation of the nation who utilizes natural resources wisely. However, in the delivery of learning material, it is not optimal because teacher teaching hours have been reduced due to the covid pandemic.

IV. Conclusion

The results of this study indicate that there is an influence of geography learning materials on students' understanding of the potential of the area in Central Buton Regency which is included in the low criteria, there is an influence of geography learning resources on students' understanding of the potential of the area in Central Buton Regency in the low criteria. There is no influence of geography learning media on students' understanding of regional potential in Central Buton Regency, there is an influence of geography learning method components on students' understanding of regional potential in Central Buton Regency in low criteria.

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