# Analysis of Student Learning Difficulties on Class VIII Plant Structure and Function Material at Mts Wahid Hasyim 02 Dau

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**ABSTRACT**

This study aims to determine the level of difficulty of student learning on the structure and function of plants and what factors cause it. The method used in this study is quantitative descriptive method. The data collection techniques used were observation, written tests and questionnaires. The results showed that the level of student learning difficulty in plant structure and function material was in the high category and the causative factor was from the school environment with a percentage of 33.4% (high). The factor causing students' learning difficulties in the structure and function of class VIII plants at MTs Wahid Hasyim 02 Dau is caused by school environmental factors with high influence categories.
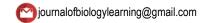
## 1. Introduction

Education is a conscious effort and aims to cultivate human quality as one of the activities that are aware of goals. Education is obtained through an official learning activity at school. The learning activity in question is the interaction between students and teachers through the provision of learning experiences so as to achieve the essence of learning. According to Muakhirin (2014), teaching and learning activities are declared successful if all learning objectives can be carried out properly and get maximum learning results. A learning activity does not always run as it should, causing learning difficulties in students.

Djamarah (2011) suggests that learning difficulties are a condition in the form of disorders or obstacles that result in the student learning process not running as such. Apriani (2019) states that competencies or achievements that are not achieved in accordance with predetermined standard criteria, namely attitudes, knowledge and skills are a form of learning difficulties. According to Budiman (2018) the use of the ability to listen, converse, read, write or reason is a learning difficulty which refers to a group of difficulties manifested in the form of real difficulties. The difficulty factor in learning can be seen through cognitive, motor, and affective aspects both in the process and the learning outcomes obtained.

Teachers in the process of teaching and learning activities at school must be able to understand the characteristics of diverse students. Haqiqi (2018) states that students can follow the learning process smoothly and obtain results without experiencing difficulties, but on the other hand many students experience various difficulties in learning. From each student to achieve learning goals has different abilities, there are students who achieve it with good results without experiencing difficulties and some have learning difficulties, causing problems for the development of learners. Therefore, the success of achieving educational goals depends on the learning process of students both in the school environment, community environment and family environment.

Nafisah (2011) stated that science is one of the fields of science that is studied to understand concepts and skills in learning experiences. According to Apriani (2019), science learning is a lesson that is considered difficult for students to understand because the learning uses a lot of scientific

language. Students consider science to be one of the subjects that is difficult to understand and can only be learned by memorizing (Ritonga , 2016). Teachers convey facts, principles and theories without trying to find, apply ideas and develop the minds of students, it makes students tend to be passive which causes students to lack understanding of the material they are learning and not jarag causing wrong concepts (Ritonga 2016).

Low student achievement is usually caused by learning difficulties where student learning activities do not always take place normally (Apriani 2019). School as a place that organizes teaching and learning activities that have the purpose of one of them is that students are able to absorb or master the subject matter delivered by educators. Every material taught has goals that must be achieved by students, one of which is science subjects. Nafisah (2011) stated that the difficulties in learning science consist of: 1) making observations, 2) classifying, 3) communicating, 4) manipulating and using numbers, 5) making predictions, 6) drawing conclusions, 7) controlling variables, 8) interpreting data, 9) formulating hypotheses, 10) conducting experiments.

Based on the results of interviews conducted with science teachers at MTs Wahid Hasyim 02 Dau on March 26, 2021, it is known that there are learning problems for students in science lessons, especially in plant structure and function materials. Students consider that science subjects, especially the structure and function of plants, are very sulit. Many students in learning it have difficulty because it requires students to master concepts, and memorize more. This causes the average score of students below the Minimum Completeness Criterion which is 60, while the KKM score is 73.

The learning difficulties analyzed in this study are learning difficulties in drawing conclusions. This is because students cannot master concepts and cannot memorize or remember learning material so that students cannot draw conclusions in the learning. From the above problems regarding learning difficulties, the author raised the title "Analysis of Student Learning Difficulties in Class VIII Plant Structure and Function Subjects at MTs Wahid Hasyim 02 Dau"

## 2. Method

The type of research conducted is quantitative descriptive research. In descriptive research, the author describes or explains the variables that have been studied through data taken from the study, then analyzed and drawn a conclusion as a result of the study. Descriptive research is generally carried out with the main objective, which is to systematically describe the facts and characteristics of the object or subject under study precisely. This research was conducted at MTs Wahid Hasyim 02 Dau, Jln.Raya Kucur Krajan No. 29 Dau-Malang, Malang Regency, East Java.

The population in this study is grade VIII MTs Wahid Hasyim 02 Dau students for the 2021/2022 academic year consisting of 105 students. The sample in this study was class VIII C with 34 students. Sampling in this study uses *purposive sampling* by taking subjects not based on starts, random, or regions but based on certain goals.

The observations that the author makes are open observations, that is, observations that are known by the subject, while the subjects voluntarily give the observer the opportunity to observe the events that occur in class, and they realize that there are people who observe what they do. The material test questions for plant structure and function are given in accordance with the 2013 curriculum. Test questions are made in the form of essays with 10 questions. The questionnaire in the study used was to find out what factors cause students to have difficulty learning science material structure and function of plants.

To determine the level of difficulty of student learning, the average score of students is calculated with the following formula:

$$m = \frac{total\ student\ grades}{total\ number\ of\ students}$$

Information:
m: Student grade point average

The categories of student learning difficulties can be seen in Table 1

**Table 1**. Student Learning Difficulties Category

| Range of Values | Categories Learning Difficulties |
|---|---|
| 39-40 | Very high |
| 41-55 | Tall |
| 56-65 | Keep |
| 66 -70 | Low |
| 73-100 | Very muted |

For data in the form of questionnaire answers given to 34 students were then analyzed to determine the factors that caused students to experience difficulties. In data processing, researchers use a category system created by Rensis Likert, the assessment of the questionnaire used is based on the Likert scale. Scoring is carried out with the following conditions: (a) Strongly agree to be given a score of 4, (b) Agree to be given a score of 3, (c) Disagree is given a score of 2, (d) Strongly disagree is given a score of 1. The score obtained from each indicator on the questionnaire will be analyzed into percentage values with the formula:

$$P = \frac{f}{n} X\ 100\%$$

Information:
P= Percentage number of questionnaire data
f= Number of scores obtained
n= number of respondents

The categories of factors causing student learning difficulties can be seen in Table 2.

**Table 2.** Categories of factors affecting student learning difficulties

| Influence Percentage | Category |
|---|---|
| 0%-20% | Very high |
| 21%-40% | High |
| 41%-60% | Medium |
| 61%–80% | Low |
| 81%-100% | Very Low |

## 3. Results and Discussion

The data obtained during the study were in the form of the results of giving written tests, questionnaires and observations with respondents which included students' responses or responses regarding science subjects material Structure and Function of Plant class VIII at MTs Wahid Hasyim 02 Dau.

Based on the data from the question test results, the category of student learning difficulties is in the high category, namely there are 16 students who obtained scores of 40-55. Based on the results of the questionnaire data analysis, it shows that internal factors are aspects of oneself (67%) with low influence categories. External factors include aspects of the family environment (83%) with a very low influence category, school environment aspects (33.4) with a high influence category, community environmental aspects (66%) with a low influence category.

From the results of the researcher's observation of grade VIII students at MTs Wahid Hasyim 02 Dau when they were participating in teaching and learning activities on plant structure and function material, there were many things found by researchers both in terms of student activities and in terms of classroom conditions or conditions, including: From student learning activities, many of these students did not participate in teaching and learning activities seriously and seriously. This is characterized by the lack of students in asking and answering questions. The condition of students who are less orderly in teaching and learning activities such as the rowdy atmosphere of students in carrying out group work.

*Learning Difficulty Level*

Based on research data, the level of student learning difficulty using essay tests , namely the level of student learning difficulty in plant structure and function material is in the high category with the number of students who obtained scores of 40-50 as many as 16 students. According to Utami (2020), students who can achieve learning goals can be said to be successful students, while students who do not achieve learning goals and experience obstacles in the learning process can be said that these students have difficulties in learning. Putri and Marpaung (2018) said that learning difficulties are a condition that causes obstacles in a person's learning process. The obstacle causes the person to experience failure or at least less success in achieving learning goals.

The student's score based on the results of objective test research is still below the Minimum Completeness Criterion of 50, while the KKM score that has been determined is 73. Haqiqi & Saadah (2018) suggest that if a student experiences failure or less success in learning outcomes, it means that there are difficulties encountered during learning. According to Ritonga (2016) in order for student learning outcomes to be achieved optimally, teacher skills in teaching that need to be improved are (1) planning learning to increase student learning concentration, (2) immediately finding good solutions in the implementation of learning for efforts to increase student concentration through variations in learning models, (3) conducting learning evaluations to increase Shiva concentration.

Ismail (2016) stated that learning difficulties are conditions where students cannot learn optimally due to obstacles, obstacles, or interference in their learning. When learning difficulties occur, of course, obstacles are present in learning activities, resulting in low learning outcomes. Learning activities are very influential by several factors that are interconnected with each other. According to Ismail (2016) to overcome learning difficulties, students need help, both in digesting teaching materials and in overcoming other obstacles. Student learning difficulties must be known and overcome as quickly as possible, so that learning objectives can be achieved properly. According to Ritonga (2016) An educator needs to pay attention to student attitudes in teaching and learning activities and needs to know the factors that cause low student learning outcomes.

*Factors Causing Student Learning Difficulties*

Ahmadi (2013) suggests that students' learning difficulties are caused by several factors, both internal factors originating from human self and external factors originating from outside human self. Based on the results of research, students have learning difficulties in understanding the structure and function of plants caused by internal factors and external factors. Internal factors in this study are aspects of oneself (67%) with low influence categories.on aspects of oneself include 4 indicators, namely interest, motivation, readiness, and attention.

According to Djmarah (2011), interest is a sedentary tendency to pay attention by reminiscing about some activities. Someone who is interested in an activity will pay attention to the activity consistently with pleasure. In this study, based on the results of the distribution of questionnaires, factors that affect learning difficulties in aspects of oneself have a low effect. This means that interest in the form of student interest and attitude is good so that it has a low influence on student learning difficulties in learning plant structure and function material. The low influence in question is that very few students do not have an interest in understanding the structure and function of plants compared to students who have an interest.

Nursyam (2017) stated that interest has a great influence on learning activities. Students who are interested in a lesson will study it seriously because there is an attraction for him so that the learning process will run smoothly when accompanied by interest. Emda (2017) suggests that motivation is a condition that exists in an individual where there is an urge to do something to achieve goals. The behavior or action shown by a person in an effort to achieve certain goals depends on the motivation he has (Emda 2017). In this study, motivation in the form of student effort and attention was good so that it had a low influence on student learning difficulties, namely very few students who did not have motivation in learning plant structure and function material compared to students who had motivation.

According to Slameto (2010), readiness to learn is the overall condition of a person who makes him ready to give a response or answer in a certain way to a situation. Idamayanti (2012) suggests that student readiness is very necessary in teaching and learning activities because in a ready condition students tend to be easier to follow learning. Student readiness in this study such as preparing materials and learning materials, always optimistic in doing assignments has a low influence, meaning that very few students do not have readiness in learning compared to students who have readiness.

According to Amu et al (2014) Attention is a process to take action on information that will be transformed in various ways. Attention has an important role in learning activities. Student attention in this study, such as paying attention to the teacher when teaching, has a low influence, meaning that very few students do not pay attention to the teacher when teaching compared to students who pay attention.

There are 3 external factors in this study, namely the family environment, school environment and community environment. In the aspect of the family environment has a percentage of influence of 83% with a very low category. Aspects of the family environment include 2 indicators, namely attention and support. According to Rofiqula (2016), the higher the attention of parents in the child's learning process, the easier it will be for children to achieve the expected learning achievements. In this study, based on the results of the distribution of questionnaires on aspects of the family environment, the percentage of influence is very low. This means that parents' attention to children's learning activities is very good.

Mahardhika et al (2018) said that parental support has a great psychological influence on children's learning activities. With the support of parents, children will be more active and more enthusiastic in learning. In this study, parental support has a very low influence, meaning that parental support for student learning success is very good. Parents always provide support and attention to their children in learning at home. Rambe (2019) states that family support is what students need in improving learning outcomes or achievement because family is an important factor in individuals. Family support is provided to get a sense of enthusiasm for students in the learning process with support from family can improve student achievement at school.

Aspects of the school environment based on the results of the study have a percentage of influence of 33.4% with a high category. Aspects of the school environment include indicators of facilities and markets. The aspect of the school environment in this study has a high influence on students' learning difficulties due to the lack of facilities and infrastructure in schools such as laboratories, lack of student interest in reading books in the library. According to Haqiqi (2018), facilities and infrastructure in schools greatly affect student achievement. If the facilities in the school are inadequate and the quantity of use of facilities is minimal, it is impossible to achieve the expected student learning achievement. Loviaswari (2015) suggests that whether or not teaching and learning activities that students participate in is influenced by environmental conditions created in teaching and learning activities.

Indriastuti et al (2017) stated that to achieve optimal student learning outcomes, teachers must design a fun learning method because fun learning no longer has limits in students. Teacher skills in delivering lessons can affect the level of student understanding of the learning and will affect student learning outcomes. In teaching and learning activities, if the facilities and infrastructure are inadequate and the implementation of learning is less than optimal, it can result in not achieving maximum learning outcomes. According to Alawiyah (2016), to be able to improve learning achievement, good use of learning media is needed. The use of learning media is the way teachers use teaching tools as intermediaries in the learning process so as to make it easier to achieve teaching goals.

The environmental aspect of the community based on the results of the study has a percentage of influence of 66% with a low category. Indicators on environmental aspects of the community in this study include the area of residence. Environmental aspects of the community in the form of living areas such as environmental conditions that are very supportive for learning activities have a low category. There are very few students whose environmental conditions are less supportive than students whose environmental conditions are supportive for learning activities. According to Susanti and

Anggraini (2020), the condition of the community environment that is less supportive in learning activities will affect student motivation.

## 4. Conclusion

Based on the results of research data analysis and the discussion above, it can be concluded that: The level of difficulty in learning the structure and function of class VIII plants in MTs Wahid Hasyim 02 Dau is in high theory. The factor causing students' learning difficulties in the structure and function of class VIII plants at MTs Wahid Hasyim 02 Dau is caused by school environmental factors with high influence categories.

It is expected for students to further increase concentration and motivation in the teaching and learning process because the material delivered by the teacher needs to be digested and understood and should always develop their motivation in learning plant structure and function material.

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