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# Limited Offline Learning Methods For Mathematics With Collected Materials In Junior High School Students

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*Abstract: This study describes the learning that has been applied in MTs students to the set material during the New Normal Covid-19 period. The learning method used is the Discovery learning method which is expected to improve the reciprocal relationship between students and teachers. In addition, the learning used was limited offline which paid attention to health protocols such as wearing masks, spraying hand sanitizers, and spraying disinfectants before students entered the school area and checking body temperature. Limited offline learning is different from learning before the Covid-19 pandemic existed, offline learning is limited to face-to-face learning between teachers and students but reduces face-to-face hours, namely 08.00-10.00 WIB. This limited offline learning is implemented because students do not allow learning to be carried out online because of the many obstacles faced by students, teachers, and parents of students. The results of the study indicate that there are differences in the conditions of students when this limited offline learning is implemented. In this case, limited offline learning has positive and negative effects for both teachers and students*

*Keyword: Discovery Learning, Limited Online, Set*

## INTRODUCTION

Education in Indonesia has a very important role for the Indonesian people, with education Indonesian citizens can change the order and progress of the nation. One of them is the creation of generations who are talented, virtuous, and have good morals, as well as generations who have the ability in the fields of science, technology and informatics. With the existence of generations who excel with education, Indonesia can compete in all fields with other countries, especially with the rapid development of information technology, making education a priority to make a prosperous, peaceful and prosperous country. However, Indonesia is currently experiencing a period where it has to fight against the Covid-19 virus, which makes it a very tense problem, especially in terms of economy and education. With the COVID-19 pandemic, education in Indonesia is slightly hampered. Learning today is very different from learning before the COVID-19 pandemic existed, there are many changes that have occurred, especially in the Indonesian education system. The government implements various efforts so that learning continues and runs according to the objectives and success in the teaching and learning process. The development of technology and information requires teachers to make the best use of technology by taking advantage of useful accesses for the advancement of education in Indonesia. Teachers take advantage of online learning in order to carry out the teaching and learning process. Online learning is virtual or online learning carried out by teachers and students without face to face (Farhana, 2020). This online learning was carried out due to the COVID-19 pandemic. The government seeks online learning that must be applied in all aspects of education to avoid the spread of the covid-19 virus more and to decide the spread of the Covid-19 virus.

The existence of online learning has a positive and negative impact on both teachers, students, and parents. The negative impact of online learning is that many parents complain because children use cellphones not to study but to play, besides that with online learning there are many areas that are not reached with a good internet connection, as a result there are a lot of students. who missed online learning. Therefore, online learning is no longer used but using limited offline. According to Farhana "Limited offline learning is face-to-face learning carried out by teachers and students by limiting meeting hours". Offline learning is limited between 08.00-10.00 WIB by complying with all health protocols such as wearing masks, spraying hand sanitizers, and spraying disinfectants before entering the school area.

In this limited offline learning, the researcher uses the discovery learning method. The discovery learning method is a learning that involves students in solving mathematical problems (Yuliana. 2018). According to Sinambela, 2017 the steps for implementing discovery learning are: providing stimulation, problem identification, data collection, data processing, and the last one is proof. The advantages of Discovery Learning are: students are active in learning activities, students understand the subject matter properly, students who gain knowledge with the discovery method will be more self-satisfied, and this method trains students to learn more on their own. In addition to the advantages, there are also disadvantages in Discovery Learning, namely: this method is not efficient if teaching a large number of students, is more suitable for developing understanding, and does not provide opportunities for thinking that will be found by students because they have been selected in advance by the teacher. Riadi, 2017).

Several studies in limited offline learning show students' enthusiasm in the learning process in the classroom. Students are more enthusiastic and happy in conducting limited offline learning. It is proven that students are active in participating in the learning process in class. Students are very happy to meet their friends who add enthusiasm to study at school.

**METHOD**

This study uses descriptive qualitative methods and tends to use analysis and the objects of this research are limited in number with the aim of explaining as deeply as possible by means of data collection or the importance of the details of the data that have been studied. The data used include the type of research, time and place of research, targets/targets, research subjects, procedures, instruments, data collection techniques, and data analysis techniques, as well as other matters related to the research method. This data collection was from previous researchers who used the discovery learning model, learning outcomes, and the learning process. The collected data will be analyzed using qualitative descriptive analysis to measure the influence of the use of discovery learning models in the ongoing learning process.

**RESULT AND DISCUSSION**

The results obtained from this study are the application of Discovery Learning in which there is a reciprocal relationship between teachers and students in schools with limited offline learning conditions after several months of students studying at home or online. The results of student learning carried out offline are limited as follows:
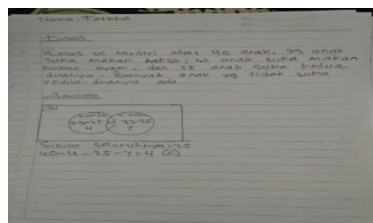


**Figure 1 Student Work 1**

From the results of student work 1, it shows that students on behalf of Fatkhul can work on the questions mentioned above properly and correctly, thus the success in the teaching and learning process and the interaction between teachers and students is classified as good. The success of students in working on the questions can not be separated from the role of teachers, students, and parents of students.

The teacher plays a very important role in determining the success of a student in shaping and educating and providing a good understanding so that students can develop all their potential.Students act as objects who must be willing to accept all input and all the knowledge conveyed by the teacher during the teaching and learning process.Parents of students act as good teachers when the student returns home or after school activities take place.
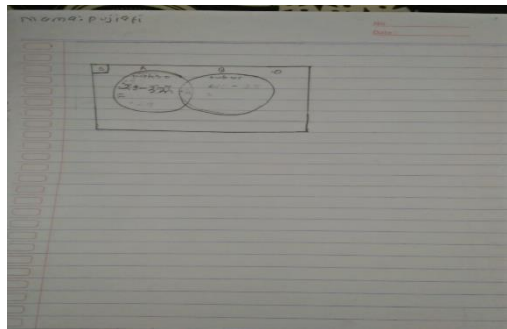


**Figure 2 Student Work 2**

From the work of student 2, on behalf of Pujiati, it shows that understanding of the material related to relations is still said to be low because when given a question the student has not been able to answer it properly and correctly. From the results of monitoring during the teaching and learning process, the student is less active, this can result in students' understanding of what they do not understand, the teacher cannot explain again until the student can really understand it. Therefore, the role of a teacher is very important to provide input and understanding to these students so that when the KBM takes place if the student still does not understand the material being taught, the student must ask the teacher again so that it can be explained again until the student understands it well. The role of parents in educating children is a big responsibility, therefore parents are obliged to provide encouragement and motivation, be it love, moral responsibility, social responsibility both physically and mentally, especially in spurring the child to stay active in learning both at school. as well as at home.
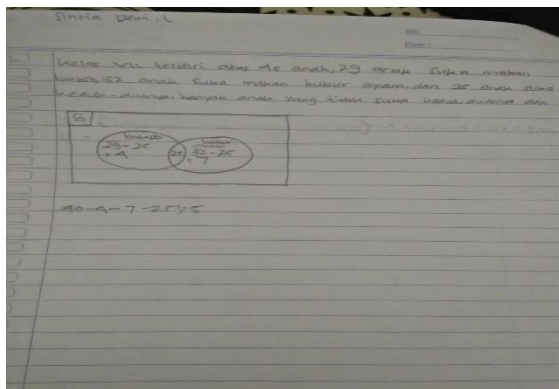.



**Figure 3 Student Work 3**

From the work of student 3, on behalf of Sintia Dewi L. It seems that she did not write down the answer completely. Conceptually, the student already understands the

item in relation to the material of a relationship, but the student does not consider the importance of each step in solving the problem, because he feels he already knows the student feels he does not have to write down the known elements and this causes the student to do something wrong. procedural error. Therefore. The teacher must be obliged to provide input and solutions to students so that further work must be based on the correct procedures and ways of working on the questions so that they can get the results of the questions correctly and appropriately
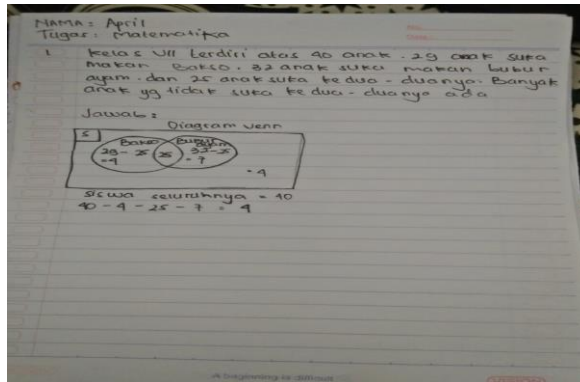


**Figure 4 Student Work 4**

From the results of student work 4 shows that students on behalf of April can work on the questions mentioned above properly and correctly, thus the success in the teaching and learning process and the interaction between teachers and students is classified as good. The success of students in working on the questions can not be separated from the role of teachers, students, and parents of students. The teacher plays a very important role in determining the success of a student in shaping and educating as well as providing a good understanding so that students can develop all their potential. Students act as objects who must be willing to accept all input and all knowledge conveyed by the teacher during the teaching and learning process. . Parents of students act as good teachers when the student returns home or after school activities take place. The success of students in learning is a matter of pride for teachers, students, and parents and students who feel that they have succeeded in educating and directing these students.
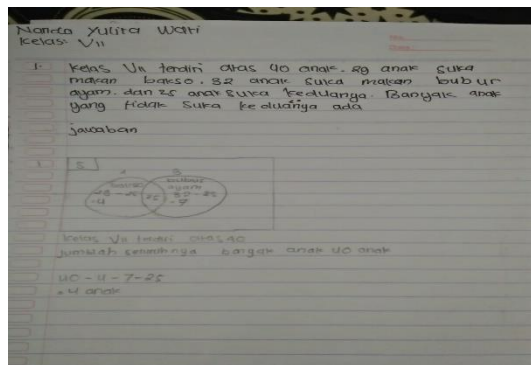


**Figure 5 Student Work 5**

Student success in learning is a matter of pride for teachers, students, and parents and students because they feel they have succeeded in educating and directing these students. From the results of student work 5 shows that students on behalf of Nanda Yulita wati can do the questions mentioned above properly and correctly.

The success of students in working on the questions can not be separated from the role of teachers, students, and parents of students.

1. The teacher plays a very important role in determining the success of a student in shaping and educating as well as providing a good understanding so that students can develop all their potential.
2. Students act as objects who must be willing to accept all input and all the knowledge conveyed by the teacher during the teaching and learning process.
3. Parents of students act as good teachers when the student returns home or after school activities take place. The role of parents in educating children is a big responsibility, therefore parents are obliged to provide encouragement and motivation, be it love, moral responsibility, social responsibility both physically and mentally, especially in spurring the child to stay active in learning both at school. as well as at home.

From the results of student work carried out offline using the Discovery Learning learning model and from the analysis of student work, there are children who are less able to understand in the learning process with this set of materials. Student 2 has difficulty working on the questions that have been given, as evidenced by the lack of compatibility between the questions and the answers. But there are students who can take part in this learning activity with great enthusiasm and enthusiasm to understand the material with this Discovery Learning model which is to liven up the classroom atmosphere after online learning that was carried out a few months ago.

**CONCLUSION**

The conclusions obtained from this study indicate that offline student learning readiness is limited, which is known from the results of student learning carried out in class and the enthusiasm for learning that is shown enthusiastically when students are willing to pay attention and are active in class. From the results of the research that has been done, there are students who are still unable to accept the material given by the teacher, and there are also students who are able to receive the material and do the practice questions correctly and appropriately. from the results of the analysis of students about 3 out of 12 children who have not been able to follow the lesson well.

**ACKNOWLEDGMENTS**

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