



Application of the Discovery Learning Model to Improve Student Learning

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Abstrak

Sebuah upaya perbaikan pada proses pembelajaran melalui penerapan metode Discovery Learning Rumusan masalah pada penelitian ini adalah apakah penggunaan metode Discovery Learning dapat meningkatkan hasil belajar mata pelajaran Biologi bagi siswa kelas X MAS Al Wasliyah Kisaran Tahun Pelajaran 2022/2023? Tujuannya penelitian ini adalah untuk mengetahui peningkatan hasil belajar dengan menggunakan metode Discovery Learning Tujuan penelitian ini adalah untuk meningkatkan proses pembelajaran Biologi siswa kelas X Mas Alwasliyah Kisaran Tahun Pelajaran 2022/2023. Penelitian menggunakan model PTK dengan penerapan metode Discovery Learning dalam meningkatkan hasil belajar mata pelajaran Biologi bagi siswa kelas X Mas Alwasliyah Kisaran Tahun Pelajaran 2022/2023. Pengumpulan data dilakukan dengan melakukan observasi terhadap kegiatan siswa dan lembar kerja untuk mengetahui peningkatan hasil belajar siswa. Dari hasil analisis yang telah dilakukan diketahui bahwa dengan metode pembelajaran Discovery Learning dapat meningkatkan hasil belajar siswa mata pelajaran Biologi di MAS Al Wasliyah Kisaran hal ini dapat dilihat dari presentase hasil Lembar kerja tersebut terjadi peningkatan 25% dari siklus I dengan hasil 70% dan siklus II 95%. Maka dapat disimpulkan bahwa dengan menggunakan Discovery Learning dapat meningkatkan hasil belajar pada proses pembelajaran Biologi siswa kelas X MAS Alwasliyah Kisaran Tahun Pelajaran 2022/2023.

Kata Kunci: *Discovery, Hasil Belajar, Siswa*

Abstract

An effort to improve the learning process through the application of the Discovery Learning method. The formulation of the problem in this study is whether the use of the Discovery Learning method can improve learning outcomes for Biology subjects for class X MAS Al Wasliyah students in the 2022/2023 academic year range? learning by using the Discovery Learning method. The purpose of this research is to improve the Biology learning process for the tenth-grade students of Mas Alwasliyah Range in the 2022/2023 academic year. This research uses the CAR model with the application of the Discovery Learning method in improving the learning outcomes of Biology subjects for class X Mas Alwasliyah students in

the 2022/2023 academic year range. The data was collected by observing student activities and worksheets to find out the improvement in student learning outcomes. From the results of the analysis that has been carried out, it is known that the Discovery Learning learning method can improve student learning outcomes for Biology subjects at MAS Al Wasliyah. 95%. So it can be concluded that using Discovery Learning can improve learning outcomes in the Biology learning process for class X MAS Alwasliyah students in the 2022/2023 academic year range.

Keywords: *Discovery, Learning Outcomes, Students*

Introduction

Based on results observation and interviews with eye lesson biology done at Mas Alwashliyah Private Range showing that at school they already To do learning with various methods however still less than optimal in results learn, because about 50% more student get score under kkm, which is 75 on the material pollution environment. This thing cause impact to enhancement results study students who don't go up every year, known that method learning used in the classroom use method lectures and use of worksheets in every activity study teach. LKS used in school the still belong to LKS that have already available from publisher so that make it easy student for follow activity learning, will but the worksheets that have been there is not enough interesting student for more active study so that student not enough interest study.

Impact from not yet achievement results study student in realm learning, can seen from character attitude student for example not enough interest follow the learning process, less draw it the method used by the teacher, so that take effect to the average value already determined i.e. 75. Because of it's teacher as mentor must more creative again in the learning process so that the results study student increase. This thing proven from score students, where there is 1 class that gains the average value of the test still under KKM or no finished.

Anticipating problem that, in the learning process must an appropriate learning model is used so that the results

study student could increase. Strategy expected learning researcher is the use of a capable learning model help student Becomes active, creative, and with easy learn a concept. one method with applying the discovery learning model in the discovery learning process which is a teaching strategy applied by the teacher so that teaching could in progress more effective, and efficient in it there is the steps taken by the teacher in the structured learning process neat and logical so that destination applied learning could achieved.

Study is something effort made somebody for get something change Act in demand as results the experience alone in interaction with environment (Slameto, 2010). Study have a destination certain because is part from education. Destination from education that is change a child in Thing think, feel, act and change behavior. (Nasution, 2011).

The discovery learning method is theory-defined learning as a learning process that occurs if lesson no served with lesson in form final, but expected student could find problem alone. Besides related with study discovery, learning with discovery can also increase ability think creative.

Use of learning media will be very helpful student-centered learning. One of the media that can used is a Worksheet Students (LKS). The use of worksheets in the learning process teach could give chance full to student for develop thought processes.

one possible alternative increase results study student is with using the

Discovery Learning (DL) learning model. Discovery Learning learning model is one of the learning strategies active involving the liveliness student for look for know and learn Theory new one that will taught, so student no passive in look for draft but active in find concept. In the Discovery Learning learning model, the material that will be be delivered no be delivered in final form but participant educate pushed for identify what do you want known next with look for information alone then organize or form (constructively) what they are know and they understand in something form end.

Based on the above conditions , then the Worksheet Students (LKS) and Instruments Question is one alternative source proper learning for students. worksheets help participant educate for add information about the concepts learned through activity study by systematic. Besides that in its use, worksheets can be customized with needs students in class so that make it easy student in understand medium material studied.

Based on the definition on could concluded that discovery learning is a model for develop method study student active with find alone, and investigating alone, then the result will be obtained will always be remembered by students. With study discovery, children can too study think analyze and try solve own problem at hand.

Based on background back on top, push researcher for doing research entitled " The Application of the Discovery Learning Model for Improving Learning Outcomes at MAS Alwashliyah Private range ".

Method

Study this has held at Madrasah Alwashliyah Private Range, Class X, majoring in science, in the subject of biology. Study this held in range 4 days, i.e. on the day Monday, Thursday 2022 in particular learning in even semesters year the 2022/2023 school. Subject in study about application of the Discovery Learning

model to increase results study students. Use sheet work (LK) this is participant educate class X MAS Al-Washliyah school Private Range Science Department.

Type of research conducted is Classroom Action Research. Classroom Action Research this follow syntax from Kemmis and Taggart includes 4 stages mutual basis related and sustainable, namely : 1) planning, 2) acting, 3) *observing* and 4) *reflecting* Research action class this conducted with follow syntax *Discovery Learning* study action class according to Stephen Kemmis & Robin Mc Taggart (Wibawa, 2004: 15)

Result And Discussion

Completeness study students on the implementation of the pretest obtained amount the value of 1580 with an average of 5, the value of highest 75 and lowest 40, with level completeness 12.50%. From result measurement beginning student could is known that the average student of course still not yet knowing or dominate Theory lessons taught by the teacher. After student know the learning process During one cycle with 2 meetings, complete student worksheets with the number of 2106, with an average of 75 values highest 85 and value lowest 55, with level 70% completeness. In Thing this results study student already show existence enhancement completeness study student after given action with using the *Discovery Learning* model.

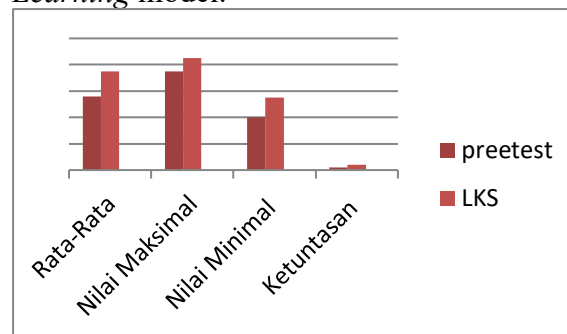


Figure 1. Learning Outcomes Student Cycle 1 Reflection

From result observation learning in the first cycle, the reflection obtained Among other :

1. A number of participant educate not enough active in discussion with the group.
2. There is a number of participant students who are still not yet give opinion and not want to work same in discussion.
3. still available a number of participant less educated optimizing accuracy and efficiency available time to assignments given by the teacher.
4. Activities carried out by several participant educate someone is chatting with friend.

Cycle 2

Completeness study students on the implementation of the posttest obtained amount the value of 2146 with an average of 76, the value of highest 90 and lowest 60 with level completeness 66%. From result measurement beginning student could is known that the average student of course still not yet knowing or dominate Theory lessons taught by the teacher. After student know the learning process During one cycle with 2 meetings, complete student worksheets with total 2450, with an average of 87 values highest 85 and value Lowest 65, with level 95% completeness. In Thing this results study student already show existence enhancement completeness study student after given action with using the *Discovery Learning* model.

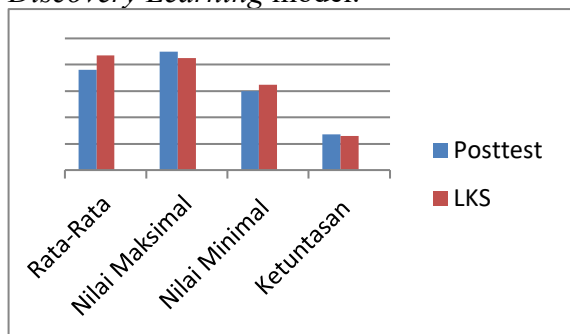


Figure 2. Learning Outcomes Student Cycle 2

Result of study cycle II can is known that the use of the *Discovery*

Learning model can increase results study student enough good compared with cycle I.

Conclusion Learning Outcomes Cycle I and II

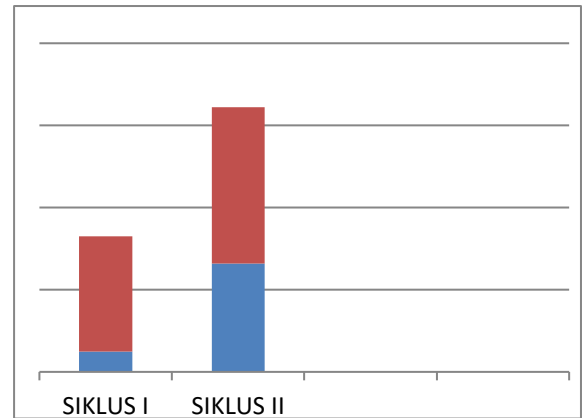


Figure 3. Learning Outcomes Student Cycle 1 and 2

From result research, signify existence enhancement results study students on the eyes lesson Biology Theory pollution environment. Even though basically discovery learning method isn't it the only one method that can use on eyes lesson Biology will but at the time researcher To do research in class X MAS Alwashliyah Range could help student in understand eye lesson Biology specifically Theory Pollution Environment. However Thing it is also necessary supported with existence will from the students for learn Biology with more active again.

Based on explanation above, can overcome what is in the formula problems, such as low results study students on the eyes lesson Biology. All that seen from existence enhancement completeness study student from cycle I to cycle II. Enhancement the because both the teacher and student understand how the learning carried out, namely Method-oriented learning Biology. In this Discovery Learning Method could increase ability students, because give clear and operational understanding to student about linkages Among Pollution environment with life everyday and about utility Biology in general to human, which one before This discovery learning method, students often

experience difficulty in understand questions, students are also lacking understand about connection learning Biology with problem socialization in life everyday. Besides that, student individually yet can complete problem contextual with method they alone.

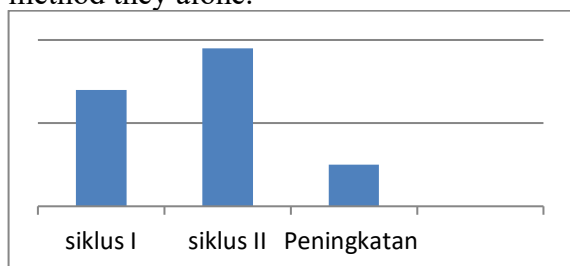


Figure 4. Complete Learning Outcomes

Discussion

Analysis of Observation Results Activity Learning with Discovery Learning Method Cycle I and II

Before held learning Biology with Discovery Learning Method for students class X MAS Alwashliyah range, students consider lesson Biology boring, because student no involved in the learning process. This thing result in still a lot students who haven't understand Theory so that understanding student not yet reach desired criteria.

In the first cycle the researcher already use steps Discovery Learning and learning methods more focused for increase results study students.

In the first cycle, it can be seen that percentage completeness pretest score only reached 12.5% while in the posttest it became 70%. On participants learn 1 experience enhancement from 50 on the pretest to 80 on the posttest, that caused participant educate the 1 truly notice when researcher explain material. However there is a number of students who haven't finished in pretest and posttest activities as in participants Educate 16 who got a score of 50 on the pretest and a score of 60 on the posttest hal this caused because participant educate 16 motivation less study as well as not enough notice moment researcher explain material.

In cycle II, the researcher has also use steps Discovery Learning method in learning and more focused for increase results study students.

In cycle II seen that percentage completeness pretest score only reached 66% while in the posttest it became 95%. Participant learn 21 experience enhancement score from 50 on the pretest to 90 on the posttest, that caused he truly notice when researcher explain material. However there is a number of students who haven't finished in one of the pretest and posttest activities participant Educate 16 who got a score of 50 on the pretest and a score of 60 on the posttest hal this caused because participant 16 cool play alone as well as not enough notice moment researcher explain material.

Conclusion

Based on results study action classes and discussions that have been displayed, then could concluded that learning use Discovery Learning method as following :

Learning use Discovery Learning method can increase results learn Indonesian students class X MAS Al Wasliyah The range of the 2022/2023 academic year The conclusion supported by several fact results study that : The Discovery Learning method has impact positive in increase results study tagged student with percentage completeness study increasing students. Occur improvement in completeness results study Biology 70% of the results observation learning in the first cycle of reflection obtained Among other :

- 1) A number of participant educate not enough active in discussion with the group.
- 2) There is a number of participant students who are still not yet give opinion and not want to work same in discussion.
- 3) still available a number of participant less educated optimizing accuracy and efficiency available time to assignments given by the teacher.

whereas complete cycle II study students on the implementation of the posttest obtained amount the value of 2146 with an average of 76, the value of highest 90 and lowest 60 with level completeness 66%. From result measurement beginning student could is known that the average student of course still not yet knowing or dominate Theory lessons taught by the teacher. After student know the learning process During one cycle with 2 meetings, complete student worksheets with total 2450, with an average of 87 values highest 85 and value lowest 65, with level 95% completeness. In Thing this results study student already show existence enhancement completeness study student after given action with using the Discovery Learning model.

Result of study cycle II can is known that the use of the Discovery Learning model can increase results study student enough good compared with cycle I Activities carried out by several participant educate someone is chatting with friend. This thing show that method learning Discovery Learning can increase results study eye lesson biology.

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