

The Application Of Discovery Learning Model Using Students Worksheet In Improving English Learning Outcomes : A Case Study of Twelfth Grade Student of SMK N 7 Semarang in The Academic Year 2023/2024

Farikhatul Islakhah^{1,*}, Faiza Hawa², Christina Dian Ekawati³

¹Bahasa Inggris, Pascasarjana, Universitas PGRI Semarang, Jl. Lingga No.4-10, Karangtempel, Kec. Semarang Tim., Kota Semarang, Jawa Tengah, 50232

²Bahasa Inggris, Pascasarjana, Universitas PGRI Semarang, Jl. Lingga No.4-10, Karangtempel, Kec. Semarang Tim., Kota Semarang, Jawa Tengah, 50232

³SMK N 7 Semarang, Jl. Simpang Lima No.1, RT.02/RW.01, Mugassari, Kec. Semarang Sel., Kota Semarang, Jawa Tengah, 50249

*farikhatulislakhah@gmail.com

ABSTRAK

Beberapa masalah yang mendorong studi kasus ini adalah rendahnya minat belajar siswa, perlunya lembar kerja siswa sebagai alat untuk pembelajaran bahasa Inggris, dan belum pernah menerapkan Model Discovery Learning dalam pembelajaran bahasa Inggris. Tujuan penelitian ini adalah untuk meningkatkan hasil Belajar Bahasa Inggris dengan memanfaatkan Model Pembelajaran Penemuan Berbantuan Lembar Kerja Siswa. Subjek penelitian ini adalah 36 siswa kelas XII KGS 2 SMK N 7 Semarang pada semester ganjil tahun ajaran 2023/2024. Langkah-langkah model Discovery Learning digunakan dalam penerapan proses pembelajaran, yaitu memberikan rangsangan, menyatakan/mengenal masalah, mengolah data, membuktikan dan menarik kesimpulan. Penelitian ini dibagi menjadi dua siklus, masing-masing dengan dua pertemuan. Setelah kegiatan siklus pertama, hasil belajar siswa meningkat sebesar 69%, yang meningkat sebesar 25 siswa, dan 31%, atau 11 siswa, tidak mencapai KKM. Hasil belajar siswa meningkat pada siklus tindakan kedua, dengan 86% atau 31 siswa mencapai KKM dan 14% atau 5 siswa tidak mencapai KKM. Penggunaan pendekatan pembelajaran penemuan terpantau berhasil karena pada siklus I hanya 69% aktivitas guru dan siswa yang dinilai Memuaskan, sedangkan pada siklus II 86% dinilai Sangat Baik.

Kata kunci: Discovery learning, LKPD, hasil belajar

ABSTRACT

Some of the issues driving this case study are students' low interest in learning, the necessity for students' worksheets as a tool for English language learning, and having never implemented the Discovery Learning Model in English language learning. The aim of this research is to improve the results of English Learning Outcomes by utilizing the Discovery Learning Model Assisted by Students' Worksheet. The subjects of this study were 36 students from class XII KGS 2 SMK N 7 Semarang in the odd semester of the 2023/2024 academic year. The steps of the Discovery Learning model are employed in the application of the learning process, namely giving stimuli, stating / recognizing problems, processing data, proving and drawing conclusions. The study was divided into two cycles, each with two meetings. Following the first cycle of activities, student learning outcomes improved by 69%, which increased by 25 students, and 31%, or 11 students, did not achieve KKM. Student learning outcomes improved in the second cycle of action, with 86% or 31 students achieving KKM and 14% or 5 students not achieving KKM. The use of the discovery learning approach was observed to be successful since in the first cycle, only 69% of teacher and student activities were rated Satisfactory, whereas in the second cycle, 86% were rated Very Good.

Keywords: Discovery learning, students' worksheet, learning outcomes

1. INTRODUCTION

The conception of education from Ki Hajar Dewantara is well known by the people of Indonesia. Tut Wuri Handayani means the teacher guides from behind and just reminds students that if it leads to a dangerous action. Ing Madya Mangun Karsa means that teachers continue to raise enthusiasm and provide motivation. Ing Ngarsa Sung Tulada means that the teacher is always an example in his behavior and speech. In line with the basic idea of developing the conception of Ki Hajar Dewantara, ideally education is not only oriented to the past and present, but must also be oriented to the future. Education should look ahead and consider the problems that students will face in the future.

Being an important thing and must be owned by every citizen does not mean that there are no problems in the field of education, especially in Indonesia. According to Afifah (2017), problems in the field of education are caused by three factors, including: 1) Learning methods; 2) Curriculum changes; 3) Teacher competence. One of these problems is the learning method. The fact in the field is that there are still some teachers who use learning models that are less attractive to students so as to make students less serious in following learning in class. The right method will motivate students to actively engage in the learning process, develop deep understanding, and improve their English skills. Discovery learning is one of the familiar learning models.

According to M. Hosnan, the discovery learning model wants to direct students to be more active both individually and in groups to learn, the character of students is prioritized so that skills can be built effectively. In the future, we will get a more qualified output because young Indonesian scientists will be born who are competitive. According to Nurgazali (2019), discovery learning is a learning process in which a concept is not presented in finished form (final), but

students are required to organize their own way of learning in finding concepts. Through this model, students are invited to discover for themselves what is learned and then construct that knowledge by understanding its meaning (Widiadnyana et al, 2014). According to Wicaksono et al (2015) discovery learning is useful in: 1) improving students' intellectuals; 2) the move from extrinsic to intrinsic rewarding, 3) holistic learning through the process of discovery; 4) Tools to train memory. Therefore, with discovery learning students are able to build knowledge, solve problems, and construct understanding in learning.

Teachers as a professional workforce, must be able to prepare optimally before starting the teaching and learning process in class. One of the preparations that must be prepared by teachers is learning tools. According to Radeswandri (2016: 102) Learning tools are one form of preparation carried out by teachers before carrying out the learning process. Preparation for teaching is one of the success of a teacher. With the existence of learning devices, it can make it easier for teachers to carry out the teaching and learning process and make it easier for students to carry out learning independently. These learning tools can be in the form of syllabus, RPP, LKPD, and so on. Teachers must be able to use learning tools with models, methods, strategies or ways that allow students to master English well.

Low student performance is caused by students who do not practice answering questions. Students have a tendency to ignore questions that are provided verbally. As a result, students lose concentration when hearing questions in a matter of seconds, and their answers deviate. The status of learning achievement necessitates improved learning. In this situation, students must practice solving problems that appear in the question by writing questions. Based on observations made by the researchers on English language learning in class, researchers are interested in using the discovery learning

model with LKPD (student worksheets) to tackle the problem of low performance in English learning. Teachers still use conventional models. In the learning process, teachers use self-designed LKPD as teaching materials. Because it still uses exercises and assignments are still guided in the textbook in providing exercises to students without using learning devices. In delivering the material, the teacher explains the textbook which makes learning less interesting. So that students are less interested and less enthusiastic in the learning process. Based on the observations, researchers want to develop Student Worksheets (LKPD) as a tool for English language learning, because developing LKPD can make it easier for teachers to carry out learning in the classroom and can make it easier for students to carry out learning independently.

LKPD is defined as a printed teaching material in the form of sheets of paper containing material, summaries, and instructions for implementing learning tasks that must be done by students with reference to the Basic Competencies (KD) that must be achieved (Andi Prastowo, 2012: 204). This is in accordance with the definition of LKPD according to Trianto (2010: 111) Learner Worksheet (LKPD) is a learner guide that is used to develop cognitive aspects as well as a guide for the development of all aspects of learning in the form of an investigation or problem solving activity guide according to the indicators of achievement of learning outcomes that must be achieved. According to Depdiknas (2008: 13), LKPD (student worksheet) are sheets containing tasks that must be done by students, usually in the form of instructions, steps to complete a task with reference to the Basic Competencies (KD) to be achieved.

Using the Discovery Learning Model Assisted by LKPD (students' worksheet), the research aims to improve the English Learning Outcomes. The reason researchers use the discovery learning model is that using this learning model will make students more able to

play an active role during the learning process. In addition, learning with the discovery learning model will train students' ability to be able to solve a problem and also be able to find solutions to these problems.

Susanto (2016: 5) states that the definition of learning outcomes is simply the ability obtained by children after going through learning activities. Meanwhile, Kunandar (2013: 62) states that learning outcomes are certain competencies or abilities, both cognitive, affective and psychomotor, that are achieved or mastered by students after participating in the teaching and learning process.

Based on some of the opinions of the experts above, it can be concluded that learning outcomes are an ability obtained by someone from the learning process that has been passed in the form of changes in cognitive, affective and psychomotor aspects.

Theoretically, this research is expected to be useful as a reference in enriching the theory in order to improve teacher competence. Furthermore, practically, this research is expected to be useful for students, teachers, and school managers. (1) For students, the results of this study can be used as an insight in improving English learning achievement through the application of the Discovery Learning model assisted by LKS. (2) For teachers, the results of this study can be used as an alternative strategy in carrying out learning in the classroom if applying the Discovery Learning learning model assisted by LKPD. (3) For school managers (principals and vice principals), the results of this study can be used as a reference in preparing teacher coaching programs related to the application of the Discovery Learning learning model assisted by LKPD in order to jointly improve the quality of learning and the quality of education.

TYPE OF ARTICLE

The type of research used is class action research (PTK) according to Arikunto (2008: 74) there are four stages

that are commonly passed, namely first planning, second implementation, third observation and fourth reflection. This Classroom Action Research (PTK) begins with a pre-cycle stage or initial data collection, then two cycles are carried out. Each cycle consists of 4 (four) steps, namely (1) planning, (2) acting, (3) observing, (4) and reflecting. . The study lasted for 2 cycles where each cycle had 2 meetings.

Before carrying out research actions, first look for learning problems that occur in the class and determine actions to solve these problems, then carry out research actions in accordance with a predetermined plan. This research procedure was carried out in two cycles. Each cycle consists of stages.

The performance indicators in this class action research are changes after the action is taken, there is an improvement in the learning process and student learning outcomes, the improvement in the learning process reaches a minimum limit of 75% in the improvement of learning and student learning outcomes at the end of the research increases to reach 75% of the number of students in the class. then the research can be said to be successful.

Based on the description above, the hypothesis in this study is: if the Discovery Learning Model is applied to English subjects, then the learning outcomes of students in class XII KGS 2 SMK N 7 Semarang can be improved.

2. IMPLEMENTATION METHOD

This research was conducted at SMK N 7 Semarang for the 2023/2024 academic year starting from July 2015 to October 2023. The school is located at Jalan Simpang Lima No.1, RT.02/RW.01, Mugassari, Kec. Semarang Sel., Semarang City, Central Java 50249.

The research conducted included classroom action research. The subjects of the study were class XII KGS 2 students in

the 1st semester totaling 36 students. The reason for taking the subject of this study is that in general students have low academic ability. The object of this research is to increase English learning achievement after applying the Discovery Learning learning model in the learning process. The study was conducted from July 2023 to September 2023. The study was conducted in two cycles.

On the cycle 1, the first stage is the planning stage. As a first step, namely formulating problems, making a syllabus, compiling a Learning Implementation Plan (Modul ajar) that will be implemented, making teacher observation instruments in teaching, and good student learning activity observation instruments, designing learning activity procedures using the student discovery learning method contained in the Student Worksheet (LKPD), preparing experimental tools and materials and making student final test questions.

The second stage is the implementation stage. Before starting learning, first ask for help from three observers to observe a series of discovery learning learning processes carried out in cycle I, who act as observers are peers. In accordance with lesson planning, the Learning Implementation Plan (RPP) is implemented in accordance with the learning method that has been planned and prepared previously with an allocation of 2 x 45 minutes, the implementation plan in cycle I discusses how the teacher guides students to analyze the job vacancy structure. The model emphasized in the implementation of this learning is the discovery learning model which is expected to improve mathematics learning outcomes by using the Discovery Learning model based on LKPD in class XII KGS 2 SMK N 7 Semarang.

Next is the observation stage. After the learning process in cycle I is carried out, then observations are made to find out whether the actions taken have a positive or negative impact, it can be done by discussing with the observer to make

observations on the implementation of discovery learning and making observations on student activities and learning outcomes.

The last stage is reflection is an effort to review or provide conclusions about the research that has been carried out in cycle I, reflection is carried out by analyzing the data and concluding what is obtained from the implementation of actions taken using the discovery learning method of students' abilities on the subject of job vacancy whether it has increased or decreased. The reflection stage includes analysis, interpretation, and evaluation. At this stage the observer and class teacher provide input and ideas to improve the implementation in learning cycle II.

Cycle II was conducted as an improvement from the implementation of cycle I. The stages of Cycle II are the same as those carried out in cycle I. If cycle II is as expected, then the research stops at cycle II. If cycle II is not as expected then the next cycle will be carried out.

The data collection of this study was carried out with learning achievement tests and observation sheets. The method used to analyze the data from this study is a descriptive method. The data obtained in this study are analyzed descriptively which aims to provide a description or picture of the phenomena investigated in learning activities. In this study, the data were analyzed descriptively, qualitatively and quantitatively. Quantitative data is data from observations of teacher teaching activities and student learning activities, quantitative data is data on student cognitive test results. Furthermore, the

results of data analysis obtained both qualitatively and quantitatively are used to identify the effectiveness and success of learning in cycle I and cycle II that have been implemented. In this study, the success rate each cycle is proposed as follows: in cycle I, student achievement averaged 78 scores with 69% of classical learning completeness, and in cycle II, it averaged 82 scores with 86% of classical learning completeness.

3. FINDING AND DISCUSSION

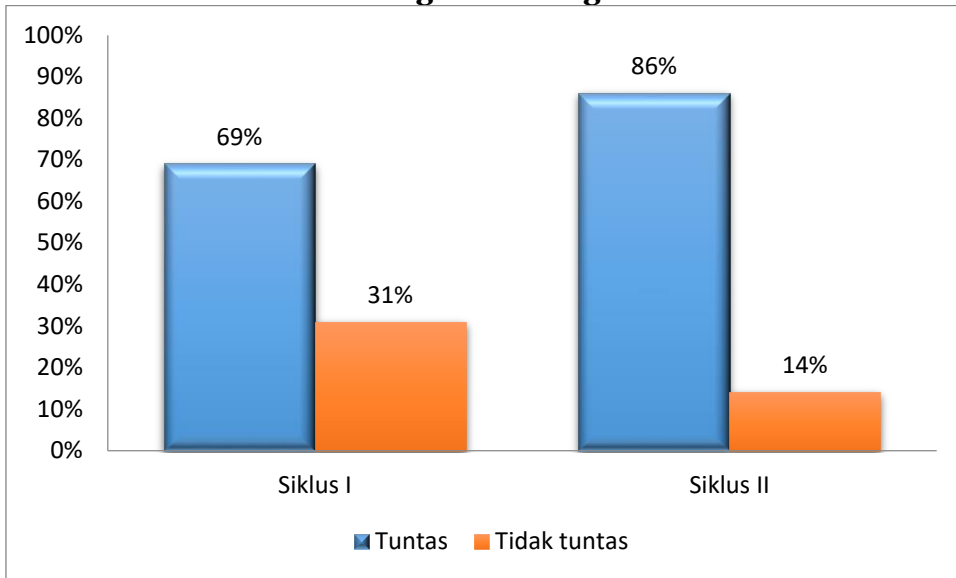
This Classroom Action Research (PTK) begins with the pre-cycle stage or initial data collection, then two cycles are carried out. In each cycle consists of 4 (four) steps, namely (1) planning, (2) acting, (3) observing, (4) and reflecting. In the pre-cycle stage, researchers conducted class observations, it can be concluded that the learning ability in learning English is varied, the lack of methods or strategies, teaching media used in the teaching and learning process, so that students feel bored and cause learning outcomes to be less than expected or still many do not reach KKM.

From the research that has been carried out consisting of two cycles, there is an increase in each successive learning process from the first cycle and the second cycle as seen in the presentation of the achievement of student learning outcomes. The average score of students as well as teacher and student observation scores between the first cycle and the second cycle, as shown in the following table:

Table 1. Percentage of Learning Completeness Average student scores Teacher and Student Observation Averages Between Cycle I and Cycle II

Cycle	Student's Average Score	Percentage of achievement	Observation Score			
			Teacher	Category	Student	Category
I	78	69%	72	Satisfactory	30	Satisfactory
II	82	86%	76	Satisfactory	40	Satisfactory

Picture 1. Percentage of Average student scores



The table 1 and picture 1 above show that there is an increase in the percentage of student achievement in learning the average student score successively from students from cycle I and cycle II, namely the percentage in student learning achievement in cycle I of 69% with an average score of 78. Increased in cycle II 86% with an average score of 82.

The increase in student learning outcomes with the average student is in line with the improvement of the learning process. Both teachers and students. From the first cycle, the teacher's activity obtained a score of 30 with a satisfactory category. While student activity obtained a score of 40 with a satisfactory category.

The picture 1 above explains that the average score of students in cycle II is more improved than in cycle I. Teaching and learning activities in cycle II show that there is an increase in student learning outcomes and teacher activities to achieve the ultimate goal. The ability of students to solve problems in learning, the ability of students in group work and the ability of students to master learning materials. Thus the researcher will not continue to the next stage.

Based on the comparison of data on student learning outcomes in the pre-cycle, cycle I and cycle II, it can be concluded that the use of the Discovery model can improve student learning outcomes in English subjects in class XII KGS 2 SMK N 7 Semarang.

With the increase in student learning outcomes in learning, the application of the Discovery Model is able to improve student learning outcomes, especially English subjects in class XII KGS 2 SMK N 7 Semarang.

Student learning outcomes can be seen from the final test given to students after learning. The increase in student learning outcomes is seen in each cycle, namely Cycle I and Cycle II. So that student achievement for learning English

in particular is seen in student creativity or student activity in the teaching and learning process and the results obtained by students are increasing.

Based on the results of the study, there are two prominent things that need to be discussed. (1) The application of the Discovery Learning model assisted by LKPD has a positive impact on students in participating in learning. (2) Increased student learning achievement can be improved both in terms of class average scores and in terms of classical learning completeness.

First, the application of the Discovery Learning model assisted by LKPD has a positive impact on students in participating in learning. This is certainly in accordance with the advantages if the Discovery Learning learning model is applied (in the Ministry of Education and Culture, 2013). (1) It creates a sense of pleasure in students, because of the growing sense of investigation and success. (2) This method allows students to develop quickly and at their own pace. (3) Helps students eliminate skepticism (doubt) because it leads to a final and certain or definite truth. (4) Encourage students to think intuitively and formulate their own hypotheses. (5) The learning process situation becomes more stimulated. (6) Increase the level of appreciation in students. (7) The possibility of students learning by utilizing various types of learning resources.

One of the learning resources is LKPD learning media. According to Santyasa (2007: 3), learning media is anything that can be used to channel messages (learning materials), so that it can stimulate students' attention, interest, thoughts, and feelings in learning activities to achieve learning goals. From this definition, learning media is one of the components that contribute to students achieving their learning goals.

Second, the increase in student learning achievement can be improved both in terms of class average scores and in terms of classical learning completeness. This is certainly in

accordance with the advantages if the Discovery Learning model is applied (in the Ministry of Education and Culture, 2013). (1) Helps students to repair and improve skills and cognitive processes. (2) This method can help students strengthen their self-concept, because they gain confidence in working together with others. (3) Students will understand basic concepts and ideas better. (4) Assist and develop memory and transfer to new learning situations.

4. CONCLUSION AND SUGGESTION

Based on the research results, it can be concluded that:

The teacher's activity in managing English subject learning with the application of the discovery learning method has been said to be successful, this is because the teacher's activity in cycle I is only 69% with the Satisfactory category and in cycle II it has increased to 86% with the excellent category.

Student activity in participating in English language learning with the application of the discovery learning method has been said to be successful, because student activity in cycle I is only 69% with a sufficient category and in cycle II it becomes 86% with a very good category.

The results of student learning tests classically in English subjects with the application of the discovery learning method have been said to be successful. This can be seen from the test results in cycle I have not reached classical completeness, because in this cycle the average student learning test results were only 69% and in cycle II it has reached classical completeness with an average value of 86%.

In order to make the learning process more effective and provide maximum results for students, the following suggestions can be made:

Learning by applying the discovery learning method can have a positive impact on the teacher's ability to manage learning and teacher teaching activities, it is hoped that teachers can apply the discovery learning method in other lessons in an effort to improve the quality of education, especially English language learning.

Teachers can apply other methods besides the discovery learning method that varies according to the material being taught.

It is recommended that future researchers conduct the same research on other materials or other lessons so that it can be used as a comparison material with the results of the next study.

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6. REFERENCES

- Afifah, N. 2017. Problematika Pendidikan Di Indonesia (Telaah Dari Aspek Pembelajaran). Elementary, 1 (1), 41–47.
- Anggraini Fitriiningtyas. 2017. Peningkatan Hasil Belajar IPA Melalui Discovery Learning Siswa Kelas IV SDN Gedanggadik 02, 1, 708–720.
- Andi Prastowo, Pengembangan Bahan Ajar Tematik Panduan Lengkap

- Aplikatif, DIVA Press, Jogjakarta, 2013, hlm. 70.
- Arikunto, Suharsimi. 2007. *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: PT Rineka Cipta
- Depdiknas. 2006. Departemen Pendidikan Nasional, 62 (1), 27–40.
- Hosnan, M. 2014. Pendekatan Saintifik Dan Konseptual Dalam Pembelajaran Abad 21. Bogor: Ghalia Indonesia
- Kunandar. 2013. *Penilaian autentik (penilaian hasil belajar peserta didik berdasarkan kurikulum 2013)*. Jakarta. Raja Grafindo persada.
- Kurniawan, Budi. 2017. “Studi Analisis Faktor-Faktor yang Mempengaruhi Hasil Belajar pada Mata Pelajaran Teknik Listrik Dasar Otomotif”. *Journal of Mechanical Engineering Education*, Volume 4, Nomor (2): 156-162.
- Kristin, F. 2016. Analisis Model Pembelajaran Discovery Learning Dalam Meningkatkan Hasil Belajar Siswa SD. *Jurnal Pendidikan Dasar Perkhasa*, 2(April), 90–98.
- M. Hosnan, Pendekatan Saintifik dan Kontekstual dalam Pembelajaran Abad 21; Kunci Sukses Implementasi Kurikulum 2013, (Bogor: Ghalia Indonesia, 2016) hlm. 284
- Nana Sudjana. 2009. *Penilaian hasil proses belajar mengajar*. Bandung. PT Remaja Rosdakarya.
- Purwanto, Nglim. 2004. *Psikologi Pendidikan*. Bandung: Remaja Rosdakarya.
- Rahmayanti, Vina. 2016. “Pengaruh Minat Belajar Siswa dan Persepsi Atas upaya Guru dalam Memotivasi Belajar Siswa Terhadap Prestasi Belajar Bahasa Indonesia Siswa SMP di Depok”. *SAP*, Volume 1, Nomor (2): 206-216.
- Santyasa, I Wayan. 2007. *Landasan Konseptual Media Pembelajaran. Makalah*. Singaraja: Fakultas MIPA Undiksha.
- Susanto. 2016. *Teori belajar dan pembelajaran*. Jakarta. Prenada media Group
- Susanto, Ahmad. 2016. *Teori belajar dan pembelajaran disekolah dasar*. Jakarta: Prenada Media Group.
- Tohirin, 2006. *Psikologi Pembelajaran- Pembelajaran Agama Islam*. Jakarta: PT. Raja Grafindo Parsada.
- Trianto. 2010. *Model pembelajaran terpadu*. Jakarta: Bumi Akasara
- Trianto, 2009. *Mendesain Model Pembelajaran Inovatif progresif*, edisi 4 Jakarta: Kencana Prenada Media Group.
- Permendiknas. 2006. *Standart Isi*. Jakarta: Permendikna