

The Implementation of Moodle Assistant Discovery Learning Model to Improve Writing Skills at SMK N 1 Ponjong

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Abstract

This study aims to improve students' application letter writing skills which are guided by the application of the Moodle-assisted Discovery Learning model. This research is a Classroom Action Research (CAR) with the object of research being the students of class XII TKR A SMK Negeri 1 Ponjong. The research was carried out in 2 cycles, starting from planning, implementing, observing, reflecting, and revising. The results showed that learning with the application of the Moodle-assisted Discovery Learning model worked better. This is evidenced by the increase in English Application Letter writing skills, seen from the percentage of students' writing skills completeness that continually increases from the initial recorded value data of 57%. In the first cycle, it reached 79% and in the second cycle, it reached 94%. This means that there is a significant increase in the initial student achievement, to the first cycle, from the first cycle to the second cycle. so that the research was declared successful as shown by the increase in student achievement.

Keywords: *Discovery Learning, Moodle, writing skills*

1. Introduction

Writing is one of the skills that must be mastered in English lessons. Writing is a tool to convey messages, thoughts and feelings that require skills. Writing skills are determined by a person's ability to express ideas or ideas. According to Barus, (2018), writing is an activity to express ideas, thoughts, and experiences, as well as feelings in the form of graphic or written symbols clearly and systematically so that the reader can understand the message conveyed. Meanwhile, according to Cahyani (2017), writing is a productive activity. Generating language expresses ideas through language and writing skills require a process to write well. The habit of writing begins with regular practices and more practices in order to be able to produce good writing.

Application letter writing skills are significant for students because this letter gives the applicant's first impression of the company. Writing an application

letter is difficult because it has criteria for using specific languages, such as grammar (words and sentences), vocabulary (including terms), spelling and meaning. Therefore, students must learn application letter writing skills for students, including class XII TKR at SMK N 1 Ponjong, so they are skilled in writing application letters with language and structures that readers easily understand. Writing skills are also influenced by students' learning styles. According to Rahmawati (2018), each learner has a different way of learning, which does not rule out the possibility that one person's learning differs from another.

Everyone has different writing skills because of different students' interests in writing. In accordance with Susanti (2019), interest is a feeling of curiosity and connection to a thing or activity without anyone asking. Writing interest is a feeling of preference and interest in a thing or activity.

Interest in writing significantly influences learning because if the subject matter the students learn is not in accordance with their interests, they will not learn to write as well as possible. Writing is an acceptance of a relationship between oneself and something outside oneself. Several factors can influence the lack of students' interest in writing.

Meanwhile, in Wardini's study (2019), two factors affect students' writing skills, namely internal and external factors. Internal factors from within students include interests, talents and motivation to write (Wardini, 2019). Some students cannot put their ideas into a proper, orderly, and complete language in a written form. Students are lazy to write, lazy to express the ideas in their minds, and less sensitive to the skills needed to write an application letter (job application letter). External factors from outside the surrounding environment and school students (Wardini, 2019) make students feel difficult to express ideas in writing application letters (job application letters) with excellent and correct language rules.

Another effect is that students prefer to avoid English lessons because English as a foreign language is difficult to understand and learn. Thus, students are less serious about learning English writing skills because the English learning system tasks are done online, making students less serious about learning English. This causes many students to be late in entering the virtual classroom, hence students will lose much time to study due to the limited time to declare students present, permission, or late within the virtual classroom. Limited face-to-face learning makes students less enthusiastic in learning English. because English is difficult to understand for students. The decrease in students' enthusiasm for learning is caused by educators being less precise in choosing the learning model used in online English learning. The habits that often occur in learning English are that students are less active, less participating, and have no initiative. Students are less responsive to the materials presented by the teacher. Sometimes the teacher consciously or unconsciously applies to learn, focusing on conveying knowledge in one direction, considering students as recipients, note-takers and reminders. This impacts students' writing skills in learning

English. Some students have already paid attention to English lessons and got high scores. However, more students have not shown concerns for English writing skills and got very high scores on English writing skills. This situation concerns teachers, so teachers must use various methods to solve these problems. One of the models that can be applied to solve these problems is a learning model that can place students as the main subject of learning, making every student active and creative. As a result, students will be motivated to learn English and improve their writing skills.

This situation concerns teachers, so teachers must use various methods to solve these problems. One of the models that can be applied to solve these problems is a learning model that can place students as the main subject of learning, making every student active and creative. As a result, students will be motivated to learn English and improve their writing skills.

The learning model used by the teacher to solve the problem of writing skills in learning English in this study was a Moodle-assisted discovery learning model. Discovery learning is defined as a learning process that occurs when learning material is not presented in its final form, but students are expected to organize themselves. Moodle is a web technology-based learning/learning management system or course that can be used by individual instructors, universities, school communities, and even Moodle is an application of the concepts and mechanisms of electronic learning or e-learning. In applying Moodle, learning support is needed including, (a) material module, (b) assignment module, (c) chat module, (d) forum module, (e) choice module, (f) quiz module, (g) journal module, (h) training materials module, (i) survey module, (j) workshop module. Research by Sari (2018) showed that the discovery learning model is very suitable to be applied in learning to write official letters. Students find formal letter learning materials with friends in their groups during the learning process. With student-centered learning, the involvement and activeness of students in the teaching and learning process will be more dominant. The more dominant the activeness of students, the teaching and learning process will be conducive and students

will become motivated to learn. In the end, students' writing skills will get better. This is because the discovery learning model is discovery-based. Here, students are required to find a learning concept. The learning process directed by the teacher will assist students in finding a learning concept. So, with the Moodle-assisted discovery learning model, students can still learn with focus, enthusiasm, creativity and innovation to improve their English writing skills and the quality of education at SMK N 1 Ponjong. Research by Rahmawati (2018) stated that Moodle e-learning has the advantage that it can be used as a learning medium in fulfilling four aspects of language skills. During the reading-learning process, students can read the material that has been provided in Moodle. Furthermore, in applying writing skills, the teacher can also ask students to work on the writing practice questions provided on Moodle in the form of an evaluation of writing skills where students directly provide feedback or feedback on writing assignments that the teacher has assigned. Furthermore, in learning to speak, students can upload the results of speaking exercises in Moodle E-Learning. In learning listening, students must download the listening materials provided in Moodle e-learning.

2. Method

This study data sources were students of class XII TKR A SMK Negeri 1 Ponjong Gunungkidul in the 2021/2022 academic year, totaling 34 students. The data used in this study were 1) Qualitative data (obtained from lesson plan prepared by the teacher, teacher's observation sheets for the learning process and student learning activities observations used by observers, and 2) Quantitative data obtained from the results of the students' writing skills test scores. The data collection procedure is used to collect classroom action research data. The data collection tool is an instrument used when collecting classroom action research data. The procedures and data collection tools used in this study were test instruments. Questionnaire instruments or questions are a series of structured questions according to what is observed/discussed and complete with a grid of instruments about writing skills. While the design of this study using Classroom Action Research (CAR) is intended to overcome a problem in schools.

Classroom Action Research (CAR) was carried out systematically with planning, implementation, observation and reflection to improve learning conditions and the quality of education or teaching (Suyitno, 2018), with the model (1) planning (planning), (2) action (acting), (3) observing (observing), (4) reflection (reflecting). In this study, the researcher took action with 2 cycles, each conducted 2 times. In summary, researchers did 4 times face-to-face in 2 cycles. In this study, the researcher used a pretest at the beginning of the meeting to determine the students' initial abilities. At the end of each cycle, a post-test was conducted to determine the level of success of students' writing skills. Thus, if there are deficiencies at the beginning, the planning and implementation action can still be improved at the next stage until the desired target is achieved.

Next, the action plan begins with planning to prepare learning materials and uploading materials in Moodle E-learning. Then the implementation of the action in this action does not appear to be any merging of the two steps into one. Nonetheless, in practice, the action process is always accompanied by observation. At this stage, the researcher, as an English teacher for Class XII TKRA, uses the Moodle-assisted discovery learning model. The researcher observes and documents things during the action process to obtain more valid data. In this session, the researcher conducted post-test actions to write job applications to students to find students' writing skills data at each face-to-face meeting in the action cycle. So that the post-test data can be used to determine the success rate of students' writing skills.

Then the observation is carried out by the observer in the class. Observation means monitoring learning and recording every event that occurs during the learning process by observer. The observation was conducted from the activities of researchers during the learning process and students' activities in following the learning process. This needs to be observed and recorded by observers to provide input to researchers for learning activities in the next cycle to make the learning process better to help improve students' writing skills. Reflection is a step for researchers in conducting self-introspection,

which is used as the basis for preparing an action plan in the next cycle in the hope that the results will be better.

The quantitative data were analyzed with descriptive statistics by comparing the average pretest writing skill scores and the average post-test writing skill scores. The qualitative data were coded to facilitate the process of recording data and reducing/grouping the required data from observational data carried out by observers. From the observational data, the positive influence of the use of Moodle-assisted discovery learning models on learning English during the pretest can be revealed and the positive effect of using the Moodle-assisted discovery learning model on learning English during the post-test can be identified, the researcher determined the indicators of success in accordance with the KKM applied at SMK Negeri 1 Ponjong, namely 75. Learning was regarded as successful if students' writing skills obtained a percentage of 70% obtaining a score of 75 and above.

3. Findings and discussion

The initial writing skill scores of students were still very low. Many students have not achieved the score of 75 because researchers/teachers have not implemented an attractive English learning model, which involves students playing an active and creative role, thus making students less enthusiastic about learning English. Another thing seen in class XII TKRA SMK N 1 Ponjong is that students think English writing skills were unimportant because they were not used in daily written communication. This situation makes students experience difficulties in English writing skills which affects the students' writing skills scores, so students' writing skills tend to be low. The percentage of students who got writing skills scores in the complete category was also still low.

For this reason, a special strategy that is more effective is needed so that writing skills in English can be understood by students easily. It has a positive effect on increasing students' writing skills in English lessons. Therefore, through this Classroom Action Research (CAR), researchers/teachers applied the Moodle-assisted discovery learning model to improve English writing skills for class XII TKR A at SMK Negeri 1 Ponjong.

Obtained data from student observations from learning to write an application letter material in cycle I show that students' understanding at the time of face-to-face learning was limited and they did not appear to be learning with focus and seriousness. So many students during the discussion were still not serious and seemed to chat with friends.

During the writing skills test at the Moodle LMS, many students still submitted their assignments beyond the time limit the teacher/researcher gave. Thus, the teacher/researcher must often remind students and repeatedly open the Moodle portal at the first and second meetings of cycle I. The results of student observations from learning the application letter material in cycle II show that students' understanding during limited face-to-face learning appeared to learn with focus and seriousness. So that students during the discussion were serious.

During the writing skills test at Moodle LMS, students have done their assignments according to the time limit given by the teacher/researcher. Then, the teacher/researcher can see students' writing skills result on the moodle portal. In discussing basic competence material on the action process, the researcher carried out the first action cycle with two meetings and the second with two meetings. 3.28 write an application letter by applying the Moodle-assisted discovery learning model. Student learning outcomes mastery is measured from the initial data on the value of students' writing skills and learning outcomes after the learning process actions are carried out in cycles I and II.

Observation of the learning process begins with an assessment of the lesson plan used by the researcher/teacher when carrying out actions at the first and second meetings in cycle II. Lesson plan assessment results stated that the lesson plan was in accordance with the Moodle-assisted discovery learning model. Further, the observer recommends that the lesson plan is used by researchers/teachers in carrying out their research. Furthermore, the teacher/researcher in the first activity conditioned the class cleanly and opened the class with greetings. Then for the learning process, the teacher/researcher started by delivering the material, the learning model used was discovery learning and the purpose of studying the material and conveying it was using

Moodle media for language learning. English in virtual classes on application letter material as well, so students can take advantage of moodle media to complete English assignments and clarify material independently.

Furthermore, the teacher/researcher in stimulation activities of students is given a copy of the application letter material so that it fosters question and answer activities, then proceeds to provide direction for the task so that the desire arises to investigate on their own to understand the material received. In the stimulation activities, students already understand the material to be delivered, so the question-and-answer activity related to the application letter can run well. The teacher only pushes questions once the students are moved to answer and ask questions again to the teacher and other friends. They were followed by student discussion activities directed at the stages of problem statements, data collection and data processing in groups discussion activities in the class group in discussion activities in class. It is carried out by implementing health protocols and is limited in time, not to exceed 10 minutes.

In this discussion activity, students collected and processed information by equating perceptions of each other's understanding of application letters and how to write application letters properly and correctly. Then, each student returned to their respective desks to complete assignments and wrote application letters. The discussion activities went well because the students used the time when discussing. After all, the researcher/teacher and the observer jointly controlled the discussion situation by visiting each discussion group to help with the difficulties encountered and to control concentration in the discussion. It was carried out by implementing health protocols.

In the verification activity, the students seemed very enthusiastic. This was shown by the students scrambling for presentations. In the generalization activity with the teacher/researcher and students at the end of the lesson, concluding the material obtained and the benefits obtained from learning writing application letter skills in English lessons. In generalization/conclusion activities, students can properly conclude material related to the application letter.

In reflecting on the learning process, observers and researchers discussed and identified the positive impacts, constraints, and problems that arise during the English learning process. From the constraints and problems that arose, alternative new actions were sought, while actions with positive impact were maintained. Students already understood the application letter material during the stimulation session. Therefore, the question-and-answer activities related to the application letter went well and the students were very responsive. The researcher/teacher gave one question and the students responded well to what the researchers/teachers conveyed.

The discussion activities went well because the students spent time well. After all, the researcher/teacher and the observer jointly controlled the discussion by visiting the discussion group to help with the difficulties encountered and control the concentration in the discussion. In the presentation session, students were enthusiastic about presenting the group discussion results in front of the class. This is because the researcher/teacher gave a reward. Students who presented the results of the discussion in front of the class well and correctly were given minimum scores without a quiz on application letter writing material. The learning process with the Moodle-assisted discovery learning model can run according to the expectations of the English researcher/teacher. This is shown by the student's absorption of 94% of writing skills, which is more than 75% of the minimum limit the researcher/teacher set. Thus, it can be declared that the research was successful.

Reflection on learning outcomes, on writing skills students participated in learning with enthusiasm. The enthusiastic students show this by participating in the English learning process of writing application letter skills. Students actively asked if they encountered difficulties in writing application letters either in limited face-to-face class meetings or in discussion forums through the Moodle LMS, as well as utilizing peer tutors to understand material and complete English assignments. This reflection activity will be recorded by the observer and conveyed to the researcher as material for joint discussion between

the researcher and the observer regarding the good and bad things that were encountered during the process of implementing English learning. which will be used as a basis for policy makers in the next process of learning English.

Although there are still some students who need to be reminded to complete their assignments when limited face-to-face learning takes place in class. Students with guidance from researchers/teachers and observers are given writing application letter practices in limited face-to-face meetings. Researchers/teachers also open individual guidance services through personal messages/chats to students who have difficulty completing application letter assignments using WhatsApp. In addition, providing opportunities to have peer tutors who already understand the technique of writing application letters can help guide their friends step by step about writing application letter skills by learning through peer tutors. These will make students more comfortable asking questions, comfortable learning, this process can improve the writing skills of learners.

The improvement was shown by the increase in students' writing skills and more students who received complete grades. This was also shown in the percentage of students' complete skill scores as suggested by the observer in the previous cycle. A reward value of knowledge on application letter material were given to students who can present the

results of discussions in front of the class properly and correctly. The reward was one of the efforts to make students became more enthusiastic in learning English and enhanced students' writing skills.

Students' initial writing skills still need improving. After the action was carried out in two cycles, the students' writing skills were increasing. This is evidenced by the obtained learning process achievement shown from the writing skills with the initial percentage of 57%. In cycle I, it reached 79% and in cycle II, reaching 94%. This means an increase in the percentage of 22% from the initial value to cycle 1. There is an increasing percentage of 15% from cycle 1 to cycle II. So that this Class Action Research was carried out only up to cycle II because students obtained a percentage of more than 80%, getting a score of 75 and above from the minimum success limit set in this classroom action research.

In discussing the action process here, the researcher carried out the actions of cycle I with two meetings and cycle II with two meetings on KD 3.28. The material consists of writing a job application letter using the Moodle-assisted discovery learning model. The completeness of student learning outcomes from initial data scores students' writing skills and learning outcomes after carrying out the learning process actions in cycle I and II. The improvement of students' writing skills is presented as follows.

Table 1

Completeness of students' writing skills

Number	Description	Initial value	Cycle I	Cycle II
1.	Number of test participants	30	34	34
2.	Many students have completed	17	27	32
3.	Many students have not finished	13	7	2
4.	Class average	74,45	78	78
5.	Percentage of students who completed %	57%	79%	94%
6.	Percentage of students who have not completed %	43%	21%	6%

Based on the table above, the average learning outcome from students' initial writing skills is 74.45, with a class completeness percentage of 57%, where students who got a complete score were 17 people. The action in the first cycle obtained an average

of 78 with a percentage of class completeness of 79%, where 27 students got a complete score. Then the follow-up action was carried out in the second cycle, and the value of writing skills was obtained with the percentage of completeness increasing to

94% with an average class of 78 where 32 students got a complete score. So this action research was declared successful. This shows that the data on the value of students' initial writing skills was taken from learning outcomes data on the application letter material in the even semester of 2020/2021. Then the action is carried out in cycles, cycles I and II, by implementing a Moodle-assisted discovery learning model. Students turned out to be able to improve their English writing skills in application letter materials.

In line with the notion of learning in Setyawan's research (2019), learning outcomes are a process of activities carried out by someone that produces a new change in behavior as a result of interaction with the environment. Students can improve their skills. Research conducted by Hayati (2020) writing is an activity to convey messages (ideas, feelings, or information) in writing to other parties. So it can be concluded that the improvement of students' writing skills is the result obtained by students after participating in the learning process.

Observation Results during the initial conditions showed that students' writing skill scores were still very low. Many students had not received a complete score of 75 because the researchers/teachers had not implemented an interesting English learning model, which involved students playing an active and creative role, thus making students less enthusiastic about learning English. Another thing that can be seen in class XII TKRA SMK N 1 Ponjong, students think that English is not so important because it is not used in everyday communication, both orally and in writing. This situation makes students experience difficulties in understanding English writing material which has an impact on students' writing skills and internal factors of students who rarely use English in daily oral and written communication. So, students tend to be passive and uncommunicative in learning English, which will affect their writing skills which tend to be low.

Reflection Results showed that students' initial writing skills were still very low. After the action was carried out with two cycles, there was progress in increasing the students' writing skills. This is evidenced by the achievement of the learning

process which is shown from the writing skills of students obtaining an initial percentage of 57%, in cycle I reaching 79% and in cycle II reaching 94%, this means that there is an increase in percentage of 22% from the initial value to cycle 1, and there is an increase percentage of 15% from cycle 1 to cycle II. So that this Class Action Research was carried out only up to cycle II, because students obtained a percentage of more than 80% getting a score of 75 and above from the minimum success limit set in this classroom action research.

There is an increase in writing skills mastery after the first and second cycle actions conducted in class XII TKR A. It means that CAR only up to the second cycle. and the researcher stated that his research was successful. It can be seen from the results of the students' writing achievement which increased from the initial state before the research was carried out, then there was an increase in students' writing achievement in the first cycle and an increase in students' writing achievement in the second cycle.

Writing an application letter using the Moodle-assisted discovery learning model has provided tangible results. It can be felt directly by both students and researchers/teachers in improving students' writing/writing skills and making the English learning process easier. Active, creative and fun. Based on the research done to improve students' writing skills, it is necessary to provide lots of questions and answers, discussions, assignments, peer tutoring and rewards as awards to students who excel. So that the application of Moodle-assisted discovery learning models can be used in English subjects. Students will always be enthusiastic and active in the learning process by using the Moodle-assisted discovery learning model and are active in discussion forums at limited face-to-face meetings and on the Moodle LMS portal. Furthermore, the Moodle-assisted discovery learning model is a learning model that can increase the activity and creativity of students in the learning process so that it can improve students' writing skills.

4. Conclusion

In this conclusion, there are two problems raised in the formulation of the problems in this study will be explained. The first is how to apply the Moodle-assisted discovery learning model to improve skills in writing application letters. The second is how

big is the increase in the Moodle-assisted discovery learning model to improve application letter writing skills.

The Moodle assisted discovery learning model was applied with the following actions: firstly, providing stimulation/stimulation to students where the teacher/researcher in Stimulation activities students were given a copy of the application letter material so that it causes question and answer activities. In stimulation activity, students have understood the application letter material. Thus, the question-and-answer activity related to the application letter went well and the students were very responsive, the researcher/teacher only provoked one question, the students had responded to what was conveyed by the researcher/teacher with good. After discussion, students directed to the stage of the problem statement, data collection (data collection) and data processing (data processing) in groups in discussion activities in class. For verification activities, students carry out careful examinations. Students and teachers generally summarise the material they have learned together. The application of Moodle-assisted discovery learning models makes students more active and creative in learning English.

The result is that applying the Moodle-assisted discovery learning model can improve the writing skills of the XII TKRA class XII students at SMK N 1 Ponjong. This is indicated by the value of students' writing skills during the English learning process. There is an increase in students' writing skills from each cycle of action. The percentage of students' writing skills completeness increases from the initial recorded value data of 57%. The first cycle reached 79% and the second cycle reached 94%, this means there is an increase in the percentage from cycle I to cycle II, which shows that the research conducted by researchers/teachers is successful.

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