





Application of the Student Facilitator and Explaining Learning Model to Improve Student Learning Outcomes in the Basic Competencies of Identifying Occupational Health Covering Workspace Requirements and Occupational Diseases

Yelisman Zebua^{1*}

¹Prodi Pendidikan Teknik Bangunan, FKIP, Universitas Nias, Indonesia * Corresponding Author. E-mail: <u>yelyszeb@gmail.com</u>

Receive:27/08/2022	Accepted: 26/09/2022	Published: 01/10/2022
--------------------	----------------------	-----------------------

Abstrak

Permasalahan dalam penelitian ini adalah penerapan model pembelajaran *Student Facilitator and Explaining* belum optimal diterapkan sehingga hasil belajar siswa pada mata pelajaran Dasar Keselamatan Kerja Dan Kesehatan Lingkungan belum memenuhi Standar KKM yaitu 70. Tujuan penelitian ini untuk mendeskripsikan proses pembelajaran dan untuk mengetahui peningkatan hasil belajar siswa pada mata pelajaran Kerja Dan Kesehatan Lingkungan di SMK Negeri 1 Sogae'adu Tahun Pelajaran 2022/2023 melalui penerapan model Pembelajaran *Student Facilitator and Explaining*. Jenis penelitian ini adalah Penelitian Tindakan Kelas (PTK). Penelitian ini dilaksanakan di SMK Negeri 1 Sogae'adu dengan subjek penelitian siswa kelas XI Jurusan Bisnis Konstruksi dan Properti (BKP) semester Genap Tahun Pelajaran 2022/2023 dengan jumlah 12 orang. Instrumen Penelitian (1). Observasi, (2). Tes hasil belajar siswa, dan (3). Wawancara dan dokumentasi foto. Hasil penelitian adalah pada siklus I (pertama) rata-rata pengamatan proses pembelajaran (responden guru) yaitu 60,71% sedangkan siklus I (kedua) yaitu 67,85% dan masih belum mencapai target yang ditetapkan, pada siklus II (pertama) yaitu 85,71% sedangkan siklus I (kedua) yaitu 92,85% mencapai target yang ditetapkan, rata-rata hitung hasil belajar siswa adalah 82,13% tegolong kategori baik dan persentase ketuntasan belajar mencapai 100%, telah mencapai target yang ditetapkan yaitu 70. Dari temuan penelitian di atas dapat disimpulkan bahwa dengan menerapkan model pembelajaran *Student Facilitator and Explaining* Pada mata pelajaran Keselamatan Kerja Dan Kesehatan Lingkungan dengan Kompetensi Dasar Mengidentifikasi Kesehatan Kerja meliputi persyaratan Ruang Kerja dan Penyakit Akibat Kerja dapat meningkatkan hasil belajar siswa SMK N 1 Sogae'adu.

Kata Kunci: model pembelajaran, student facilitator and expalining, hasil belajar siswa

Abstract

The problem in this study is that the application of the Student Facilitator And Explaining learning model has not been optimally applied so that student learning outcomes in Basic Occupational Safety And Environmental Health subjects have not met the KKM Standard of 70. The purpose of this study was to describe the learning process and to determine the improvement of student learning outcomes in Occupational Safety And Environmental Health subjects at SMK Negeri 1 Sogae'adu in the 2022/2023 academic year through the application of the Student Facilitator And Explaining learning model. This type of research is Classroom Action Research (PTK). This research was conducted at SMK Negeri 1 Sogae'adu with the research subject being class XI students of the Construction and Property Business Department (BKP) even semester of the 2022/2023 academic year with a total of 12 people. Research instruments (1). Observation, (2). Student learning process (teacher respondents) was 60.71% while cycle I (second) was 67.85% and still did not reach the set target, in cycle II (first) was 85.71% while cycle II (second) was 92.85% reaching the set target, the average calculation of student learning model in Occupational Safety And Environmental Health Subjects with Basic Competencies Identifying Occupational Health Covering Workspace Requirements and Occupational Diseases Can Improve Student Learning Outcomes of SMK N 1 Sogae'adu.

Keywords: learning model, student facilitator and explaining, student learning outcomes

INTRODUCTION

Education plays an important role in preparing quality human resources. Education that is able to form quality human beings is expected not only to be useful for individual personalities but to be able to support national development. According to Supriadi (1998:4), and Istarani (2012), that "Teachers play a strategic role, especially in efforts to shape the character of the nation through the development of personality and desired values". Thus, the role of teachers in the teaching and learning process is very large even as the main role that affects the learning process.

The development of science and technology requires a change in the mindset of educators to become more modern (Dakhi et al., 2020). A modern mindset is needed to advance the quality of education in Indonesia. In response to this, education experts criticize it by revealing various educational theories to achieve educational goals. Education in Indonesia aims to create a person with quality and character to adapt to various environments. This is stated in the National Education System Law Number 20 of 2003 that the purpose of national education is to educate the nation's life and develop the whole Indonesian human being, namely a human being who is devoted to God Almighty and has noble character, has knowledge and skills, physical and spiritual steady and independent health, а personality, and is responsible for society and nationality.

Every Vocational High School (SMK) realizes the importance of producing an educated and skilled workforce (Fajra et al., 2020; Masril et al., 2020). Students are able to keep up with technological developments so that they have the competitiveness to enter and participate in the industrial world. Education is very important to determine the future, both the future of schools, students, and the industrial world. A student's future is determined by his or her learning experience.

One of the success factors for teachers in carrying out the teaching process in the classroom is the interaction and communication between teachers and students during the learning process. So if teacher uses appropriate models, а methods, strategies and approaches this can make students easier and more active, and reduce difficulties in understanding learning material. Every educator realizes or not how important variation is in the learning process. An active, effective, innovative and conducive learning process determines the success of students in achieving their goals.

Based on observations made by research at SMK Negeri 1 Sogae'adu, there are problems during the learning process. One of them is that learning is still centered on the subject teacher, students are less active in the learning process, students are less orderly during the learning process, the application of the Student Facilitator And Explaining learning model has not been optimally implemented (Khotimah & Triana, 2021). Students who are enthusiastic during the learning process are only students who sit in front, while students who sit in the back are less focused on the material presented and prefer to talk and joke with friends during the learning process. So that students become passive and do not want to know the subject matter delivered by the teacher. In addition, student interaction with the teacher is still lacking and some students are sleepy when learning takes place. This causes low student learning outcomes characterized by not meeting the KKM standard of 70.

Based on the results of interviews with subject teachers found that, students find it difficult to understand the material taught by the teacher during the learning process, lack of student interest in learning activities. lack of facilities and infrastructure as a supporting tool in learning activities, student learning outcomes on the basic competencies of Identifying Occupational Health Covering Workspace Requirements and Occupational Diseases are still relatively low while the Minimum Completeness Criteria (KKM) determined is 70. The results of interviews with several students that, the teacher's explanation of the material sometimes cannot be followed. students are reluctant to ask the teacher about their difficulties in teaching material, students are less interested in the learning methods carried out by teachers who are always monotonous.

In the description above, it is known that student learning outcomes are not complete when compared to the Minimum Completeness Criteria (KKM) determined by the school is 70. The lack of achievement of students' final grades is an indication that the learning process carried out is still ineffective, where students are not actively involved in the learning process due to the teacher's habit of using learning methods and not choosing the right model, strategy and approach in the teaching and learning process, generally the teacher only explains the material monotonously, lazily and even feels boring. If this situation is allowed to have an impact on the quality of education and needs to be resolved as soon as possible.

In order for the implementation of learning to be achieved in accordance with the learning objectives, a teacher must have preparation, creativity, in choosing models and media that can support the learning implementation process, one of which is by applying the Student Facilitator And Explaining learning model which is one type of learning that emphasizes a special structure designed to influence the interaction patterns of students and has the aim of increasing mastery of the material (Bau, Fayeldi & Suwanti, 2021; Fakhrizal, 2017; Fatimah, Panjaitan & Wahyuni, 2022; Mustikasari, Supandi & Damayani, 2019; Subair, Lukman & Shasliani, 2021). This learning model is suitable to be applied in SMK because using this learning model can increase enthusiasm, motivation, activeness and pleasure.

To overcome the problems found at SMK Negeri 1 Sogae'adu, one of the efforts that can be made is to improve the learning process by applying a new learning model. Through the application of the Student Facilitator And Explaining learning model will encourage students to master several skills including speaking, listening, and understanding of the material. Learning conditions using the Student Facilitator And Explaining model are also expected to improve the learning process.

According to Shoimin (2014:183), and Mualimah, Usmaedi, & Solihatulmilah (2022), Student Facilitator And Explaining is a type of cooperative learning that emphasizes a special structure designed to influence the interaction patterns of students and has the aim of improving material mastery. The reason researchers chose the Student Facilitator And Explaining learning model is that this model is one of the learning models that emphasizes learning to students.

METHOD

This research is a Classroom Action Research (PTK). This classroom action research aims to improve the classroom learning process. The objects of action in this study are: 1). The application of the Student Facilitator And Explaining learning model in the basic competencies of Identifying Occupational Health Covering Workspace Requirements and Occupational Diseases. and 2). Improvement of student learning outcomes in the basic competencies of Identifying Occupational Health Covering Workspace Requirements and Occupational Diseases.

The subjects of this study were all students of class XI (Eleven) odd semester totaling 12 people of Construction and Property Business Expertise Competency for the 2022/2023 academic year. In the implementation of this study, several research instruments were used, namely as follows: a). Observation, b). Photo Documentation, and c). Learning outcomes test.

RESULTS AND DISCUSSION Result a. Cycle I

In cycle I learning with occupational health material, it consists of several stages starting from the planning stage, namely preparing a lesson plan with the Student Facilitator And Explaining model, setting implementation time, preparing the observation sheets, preparing student learning outcomes test scripts. After the planning stage, the next stage is action where the entire process of teaching and learning activities by applying the Student Facilitator And Explaining model. The next stage is observation, the subject teacher acts as an observer and fills in the observation sheet that has been provided, and after that a reflection is carried out.

b. Observation Results (Cycle I)

Based on the results of observations at each meeting from meeting 1 to meeting 2 the results include:

1). Observation Results of the 1st Meeting

By carrying out the learning process in cycle I at the 1st meeting, the results of the researcher's observations are as follows:

- a) In the implementation of the first meeting, researchers found many students who were less active, this was because students still did not understand the Student Facilitator And Explaining Learning Model.
- b) There are many shortcomings and weaknesses, especially in carrying out the steps of the Student Facilitator And Explaining Learning Model.
- c) There are many students who do not complete their learning tools, and students who do not care about the lesson.
- d) Students are less brave and able to communicate with the teacher because there is still a sense of reluctance, reluctance because the researcher is still adapting to students.

e) The use of the steps of the Student Facilitator And Explaining Learning Model has not been maximally used.

So that the results of observations of the learning process of teacher respondents in cycle I of the 1st meeting reached an observation result of 60.71%, which is between the intervals Weak and Fair.

2) Observation Result of 2nd Meeting

Researchers have carried out learning in accordance with the steps of the Student Facilitator And Explaining learning model.

In the implementation of the learning process of cycle I at the 2nd meeting, the results of the researcher's observations are as follows:

- a) Students began to be motivated by the Student Facilitator And Explaining Learning Model and began to ask about the steps.
- b) At the second meeting the researcher began to find improvements from the previous meeting, but these weaknesses had not been fully corrected.
- c) Students began to be interested but still not fully active in following the Student Facilitator And Explaining Learning Model.
- d) There are still students who are less active in the learning process.
- e) The need for improvement in the implementation of the Student Facilitator And Explaining Learning Model.
- f) There are some students who are still reluctant to the teacher but they are increasingly trying to adapt.
- g) The need for improvement in the implementation of the steps of the Student Facilitator And Explaining Learning Model.

So that the results of observations of the learning process of teacher respondents in cycle I meeting 2 reached an observation result of 67.85%, which is between the weak and sufficient intervals.

3) End of Cycle I

Based on the average results of reflection on cycle I, the following data were obtained:

- a) In Cycle I (one) the results of observing the learning process of teacher respondents at the first meeting reached 60.71%, and at the second meeting increased to 67.85%. So it can be concluded that the percentage of observations in the learning process of teacher respondents in cycle I is so that the average teacher respondent is 64.41%, this is categorized as sufficient and strong intervals.
- b) In Cycle I (one) the average observation of students who are active in participating in learning at the first meeting of cycle I reaches 41.66% and the second meeting of Cycle I reaches 44.76% with an average percentage of 41.66% this value is categorized as weak and sufficient intervals.
- c) In Cycle I (one) the average observation of students who were not actively involved in participating in learning at the first meeting of cycle I reached 58.34% and the second meeting of Cycle I reached 55.24% with an average percentage of 56.79% and this percentage was determined that there were still many students who were less active, so it was necessary to continue cycle II.
- d) In Cycle I (one) the average student learning outcomes were: 64.41% and the presentation value of the completeness of student learning outcomes was 41.66% and did not reach the predetermined target of 70%, so the researchers continued in cycle II.
- e) Reflection Results. Based on the results of reflection on observations in the learning process (teacher respondents)

that have been carried out by researchers in cycle I, there are still some weaknesses in applying the Student Facilitator And Explaining learning model where in delivering the material is still lacking and in telling students to re-explain the material presented by the teacher and lack of time in carrying out the learning process, while in observing student activeness in learning activities, students are still not following the learning process where when the teacher (researcher) tells them to reexplain the material that has been delivered by the teacher they are still shy and tend to tell their own friends to explain in front.

4) Interview Results

From the results of the interview, it turned out that the learning activities they had just participated in for two meetings with the subject teacher, in this case the researcher, were much different from the previous ones, this was because the learning model used by the teacher (researcher) was new to them so they were enthusiastic in taking learning seriously. Furthermore, students added that the subject teacher in the learning process so far only explained the material without involving students in the learning process, because the subject but teacher (researcher) interacted directly with students during the learning process and explained any weaknesses encountered by students during the learning process students became more active and motivated in the learning process activities with the Student Facilitator And Explaining model applied by researchers, because with the Student Facilitator And Explaining learning model students are required to be able to explain, answer questions, respond, and teach friends.

5) Conclusion of Cycle I Implementation

Based on the average learning test results, it was obtained 64.41% and did not reach the predetermined target (70%), and the results of the interview stated that there were still shortcomings in the learning process and student learning outcomes had not reached the target, so this research was continued in cycle II.

c. Cycle II

In cycle II learning, several stages were carried out starting from the planning stage, namely preparing a lesson plan using the Student Facilitator And Explaining learning model, determining the time of implementation, preparing observation student sheets, preparing learning outcomes test scripts. After the planning stage, the next stage is action where the entire process of teaching and learning activities using the Student Facilitator And Explaining learning model. The next stage is observation, where during the learning process the subject teacher acts as an observer and fills in the observation sheets that have been provided, and after that a reflection is carried out.

d. Observation Results (Cycle II)

From the observations made at each meeting from meeting 1 and meeting 2 the results include:

1) Observation Results of the 1st Meeting

By carrying out the learning process in cycle II at meeting 1 the results of the researcher's observations are as follows:

- a) Researchers already know the weaknesses in the implementation of cycle I.
- b) Researchers have improved the weaknesses of cycle I and have improved.
- c) Researchers have implemented learning by using the steps of the Student Facilitator And Explaining Learning Model.

- d) Students have a good sense of cooperation with friends, and are able to communicate with teachers and other students.
- e) Students are active and creative in class, and are interested in new ways of learning.
- f) Students began to be able and brave in conveying their questions, ideas and opinions both to friends and to the teacher.

So that the results of observations of the learning process of teacher respondents in cycle II, meeting 1, reached a result of 85.71%, the results of this processing are between the intervals of sufficient and strong.

2) Observation Result of 2nd Meeting

In the observation of the learning process in implementing the Student Facilitator And Explaining Learning Model, it was found that almost all students were active in learning so that student activities had led to the Student Facilitator And Explaining Learning Model process. This be seen from the results of can observations of the learning process of teacher respondents in cycle II meeting 2 achieving an observation result of 92.85%, which is between the strong and very strong intervals. While the number of observations for students is 82.13%, which is in the strong and very strong interval.

- 3) End of Cycle II
- a) The results of observing the learning process of teacher respondents at the first meeting reached 85.71%, and at the second meeting increased to 92.85% with an average of 82.13%, meeting the target.
- b) The average observation of students who are actively participating in learning at the first meeting of cycle II reaches 91.66% and the second meeting of cycle II reaches 92.70% with an average

percentage of 92.18% so that the percentage of student completeness has reached the target set.

- c) The average observation of students who were not actively involved in participating in learning at the first meeting of cycle II reached 8.34% and the second meeting of Cycle II reached 7.3% with an average percentage of 7.82% and the researchers had successfully implemented the learning model.
- d) The average student learning outcomes were 82.13% with a good category and the percentage of student learning completeness reached 100%. Where this reaches the target set at 70%.
- e) Reflection Results. Based on the results of reflection on observations in the learning process (teacher respondents), researchers have improved the weaknesses in cycle I, so that in cycle II researchers successfully applied the Student Facilitator And Explaining learning model, while in observing student activeness in learning activities, students as a whole are active and able to follow the Student Facilitator And Explaining learning process.

4) Interview Results

The results of interviews conducted by researchers after carrying out the teaching and learning process from several students stated that the learning process could be followed well, and felt happy because it opened up insights to think and actively express opinions. The language used is also easy to understand and the material presented is always connected to the environment and daily life so that the learning material is easily digested.

5) Cycle II Implementation Conclusion

Based on the average learning test results, 82.13% was obtained, reaching the predetermined target (70%), and the

results of the interview stated that the learning process with the application of the Student Facilitator And Explaining learning model on the basic competencies of Identifying Occupational Health Covering Workspace Requirements and Occupational Diseases can foster student motivation and confidence in learning, so that they dare to be more active during the learning process until they are able to produce learning outcomes according to predetermined targets so that the problem has been solved.

- e. Analysis of Data Processing at the Research Site in Cycle I
- a. Processing of Observation Results in Cycle I

Based on the results of observations in cycle 1 (meetings 1 and 2), the implementation of the learning process by applying the Student Facilitator And Explaining learning model has been carried out with the results at the first meeting 41.66%, and the second meeting 44.76%. Based on these results, student observations in the first cycle still have weaknesses. Furthermore, the results of observations of student activities during the learning process still require improvement in the next cycle.

b. Student Learning Outcomes Cycle I

Through giving learning outcome tests to research subjects, data was obtained and processed as research results. Based on the results of the study, the percentage of completeness was determined. The calculation of the percentage of completeness obtained was 41.66%, while the percentage of incompleteness reached 58.34%. This still does not meet the target set at 70%.

c. Cycle I Mean Count

Based on data processing analysis, the average count of learning outcomes is 64.41% with a sufficient category.

f. Results of Research Instrument Validation in Cycle I

There are two logical validity results, namely data in column 1 and data in column 2. The data in column 1 is processed using a Guttman scale. Thus it can be concluded that the level of reproducibility of each test item is acceptable. While the data in column 2 is processed using the validity level. Thus, it can be concluded that each test item is valid based on the results of logical validity.

g. Analysis of Research Results Processing in Cycle II

a). Processing of Observation Results in Cycle II

Based on the results of observations in cycle II, the implementation of the learning process with the Student Facilitator And Explaining learning model is getting better, where some of the shortcomings in cycle I can be resolved. These results show that the implementation of the learning process has reached the expected target, with the results at the first meeting amounting to 91.66%, the second meeting 92.70%. Furthermore, the observation sheet for student activities in the learning process is described in the form of a percent of 90.33%.

b. Cycle II Learning Outcomes

Through the administration of learning outcomes tests to research subjects, data were obtained and processed as research results. Based on the results of the calculation, the percentage of completeness is determined. Calculation of the percentage of completeness obtained a percentage of completeness of 100%.

Where this has reached the predetermined target of 70%.

c. Cycle II Mean Count

Based on data processing analysis, the average count of student learning outcomes is 82.13% with good criteria.

Discussion

The discussion of research results is intended to discuss the research findings as stated in the previous section. The discussion of research findings is based on research objectives, literature review, previous findings, and research limitations. In order to be more directed, the order of the discussion is to re-disclose the main problems, provide research general answers to the main problems, analyze the interpretation of findings, compare findings with theory, and limitations of analysis and interpretation of findings.

1. Principal Problems

As stated in chapter I, the main problem in this study is that students' learning outcomes do not meet the KKM due to several factors:

- a. The Student Facilitator And Explaining learning model has not been applied optimally.
- b. Student learning outcomes on the basic competencies of Identifying Occupational Health Including Workspace Requirements and Occupational Diseases do not meet the KKM standard of 70.

From these problems, researchers conducted a study to improve the learning process by applying the Student Facilitator And Explaining learning model in the learning process. The formulation of the problem is: "Can the application of the Student Facilitator And Explaining learning model in the basic competencies of Identifying Occupational Health Including Workspace Requirements and Occupational Diseases improve the

learning outcomes of students of SMK Negeri 1 Sogae'adu?"

2. General Answer to the Main Research Problem

The Student Facilitator And Explaining learning model is a presentation of teaching material that begins with an open explanation, gives students the opportunity to explain back to their peers and ends with the delivery of all material to all students. The use of the Student Facilitator And Explaining learning model is effective for training students to speak to convey their own ideas or opinions. the general goal is to train students to convey their ideas and improve their speaking skills.

To find out the improvement of the learning process and the improvement of student learning outcomes, researchers conducted research using the Student Facilitator And Explaining learning model. Where during the learning process, observations were made by observers to find out how the learning process took place.

After the learning activities are completed, tests are given to students to determine student learning outcomes. The test results are processed until it can be seen that the increase in student learning outcomes using the Student Facilitator And Explaining learning model. Based on the tests given to students, it turns out that the percentage of student learning outcomes in cycle 1 is 64.41% which still does not reach the set target of 70, because this form of learning has never been experienced before and the learning carried out by researchers still has many weaknesses. However, after improvements were made by researchers in cycle 2, it turned out that the percentage of student learning outcomes increased to 82.13% and the learning process met the expected requirements, so the general answer to the

main problem is that by applying the Student Facilitator And Explaining learning model in Occupational Safety And Environmental Health subjects can improve student learning outcomes at SMK Negeri 1 Sogae'adu.

3. Analysis and Interpretation of Research Findings

This section reviews the analysis and interpretation of research findings. Based on the teacher respondent's learning process observation sheet in cycle 1, it is known that the average percentage of observations of the implementation of the teacher respondent's learning process by applying the Student Facilitator And Explaining learning model at meeting 1 was 60.71% and meeting 2 was 67.85% with a sufficient category. In cycle 1, it is known that the average student learning outcomes are 64.41 with a sufficient category, and the percentage of student completeness learning outcomes is 41.66%, still not reaching the predetermined target of 70. This is due to several factors, namely because students are still not used to learning conditions using the Student Facilitator And Explaining learning model, researchers do not motivate students in the learning process, and there are still students who are less active in learning.

Furthermore, in cycle 2, the learning process was carried out by improving the weaknesses in cycle 1. Based on the observation sheet in the learning process of the teacher respondent in cycle 2, it is known that the implementation of the learning process has gotten better where some of the shortcomings in cycle 1 can be resolved. This can be seen in the increase in the percentage of observations of the implementation of the learning process of teacher respondents which continues to increase. At meeting 1 it was 85.71% in the good category and at meeting 2 it was 92.85% in the very good category. In cycle 2 student learning outcomes amounted to 82.13% with a good category and the percentage of student learning outcomes completeness was 100%, this has reached the predetermined target. Based on the results obtained, it shows that there is an improvement in the learning process and student learning outcomes both by applying the Student Facilitator And Explaining learning model in the learning process.

4. Limitations of Analysis and Interpretation of Findings

The validity of the findings of this research is essentially not absolute, this is due to a number of limitations. For this reason, the limitations of this research need to be disclosed, especially in the aspect of analyzing and interpreting the research findings. Based on this, the following research limitations are revealed so that readers have the same view as researchers. Some of the limitations encountered are:

- a) The Student Facilitator And Explaining learning model can improve student learning outcomes, not all teachers implement the Student Facilitator And Explaining learning model in improving student learning outcomes.
- b) The Student Facilitator And Explaining learning model used in this study still has weaknesses.
- c) If there are other learning methods used, there may be different results.
- d) The average value of the learning outcomes test is likely to be different if other learning methods are used.
- e) The percentage value of student learning outcomes completeness is likely to be different if other learning methods are used.

CONCLUSION

Based on the results of the research that has been carried out on the application of the Student Facilitator And Explaining learning model in the learning process of Occupational Safety And Environmental Health in class XI-BKP, SMK Negeri 1 Sogae'adu can be concluded as follows:

- 1. The learning process on the Basic Competencies of Identifying Occupational Health Includes Workspace Requirements and Occupational Diseases by using the Student Facilitator And Explaining learning model:
 - a. The results of observing the learning process of teacher respondents in cycle I reached an average of 64.28%, while in cycle II it increased to an average of 89.28%.
 - b. The results of observations of students who were active in the learning process in cycle I reached an average of 43.21%, while in cycle II it increased to an average of 92.18%.
 - c. The results of observations of students who were not active in the learning process in cycle I reached an average of 58.34%, while in cycle II it decreased to an average of 0%.
- 2. Average learning outcomes both by applying the Student Facilitator And Explaining learning model. In cycle I, the average student learning outcomes were 64.41% and the percentage of completeness was 41.66%, while in cycle II the average student learning outcomes reached 82.13% with a good category and the percentage of completeness of student learning outcomes was 100% and had reached the predetermined target.
- 3. From the results of the study, it can be concluded that applying the student facilitator and explaining learning model can improve student learning outcomes in occupational safety and

environmental health subjects at SMK Negeri 1 Sogae'adu in the 2022/2023 academic year.

REFERENCES

- Bau, F., Fayeldi, T., & Suwanti, V. (2021).
 Penerapan Model Pembelajaran
 Student Facilitator and Explaining
 Terhadap Peningkatan Prestasi
 Belajar Kelas XI. Jurnal Terapan Sains
 & Teknologi, 3(1), 26-33.
- Dakhi, O., Jama, J., Irfan, D., Ambiyar, & Ishak. (2020). Blended Learning: A 21st Century Learning Model At College. International Journal of Multi Science, 1(7), 17–23.
- Fajra, M., Ambiyar, A., Rizal, F., & Dakhi, O.
 (2020). Pengembangan Model
 Evaluasi Kualitas Output
 Pembelajaran Teknik Komputer dan
 Jaringan di SMK Kota Padang.
 Cakrawala: Jurnal Pendidikan, 14(1),
 1-9.

https://doi.org/10.24905/cakrawala. v14i1.1480

- Fakhrizal. (2017). *Tujuan Student Fasilitator* And Explaining. Yogyakarta: Pustaka Pelajar.
- Fatimah, S., Panjaitan, R. G. P., & Wahyuni,
 E. S. (2022). Penerapan Model
 Student Facilitator and Explaining
 Untuk Meningkatkan Hasil Belajar
 dan Respon Siswa Kelas XI SMA. JIPI
 (Jurnal IPA dan Pembelajaran IPA),
 6(3), 300-309.
- Istarani, (2012). 58 Model Pembelajaran Inovatif. Medan : Media Persada.
- Khotimah, K., & Triana, L. (2021). Student Facilitator And Explaining Untuk Pembelajaran Tik Bahasa Indonesia. Jurnal Pendidikan Bahasa Indonesia, 9(1), 13-20.
- Masril, M., Jalinus, N., Jama, J., & Dakhi, O. (2020). Implementasi Pembelajaran

Berbasis Masalah Pada Kurikulum 2013 Di SMK Negeri 2 Padang. *Konstruktivisme: Jurnal Pendidikan Dan Pembelajaran, 12*(1), 12-25.

Usmaedi, Ε., Mualimah, U.. & Solihatulmilah, E. (2022). Model Pembelajaran Student Facilitator And Explaining Pada Keterampilan Berbicara Siswa Mts Pakuncen. Jurnal Pendidikan Dasar Setiabudhi, 5(2), 77-83. Retrieved from https://stkipsetiabudhi.e-

journal.id/jpds/article/view/128

Mustikasari, I., Supandi, S., & Damayani, A. T. (2019). Pengaruh Model Student Facilitator And Explaining (SFAE) Terhadap Kemampuan Berpikir Kritis. Jurnal Ilmiah Sekolah Dasar, 3(3), 303–309. https://doi.org/10.23887/jisd.v3i3.19

455

- Shoimin, A. (2014). *68 Model Pembelajaran Inofasi Dalam Kurikulum*. Yoyakarta: Ar-Ruzz Media.
- Subair, A., Lukman, L., & Shasliani, S. (2021). Penerapan Model Pembelajaran Student Facilitator and Explaining (Sfae) dalam Meningkatkan Hasil Belajar Siswa di Kelas V UPTD SDN 145 Barru. Seminar Nasional Hasil Penelitian 2021 "Penguatan Riset, Inovasi, dan Kreativitas Peneliti di Era Pandemi Covid-19". 1497-1508.
- Supriadi, S. (1998). *Teori Penelitian dan Pembelajaran*. Jakarta : Bumi Aksara