The Influence Of Practical Learning Methods And Learning Motivation On Student Learning Outcomes At SMKN 2 Tulungagung

Lathifurrohman¹⁾, Rico Andhika Putra²⁾, Anggara Sukma Ardiyanta³⁾

- 1. Vocational Automotive Technology Education, Science And Technology, Bhineka PGRI University, Indonesia Email address: <u>Lathifurrohman92@gmail.com</u>
- 2. Vocational Automotive Technology Education, Science And Technology, Bhineka PGRI University, Indonesia Email address: ricoandhikaputra@ubhi.ac.id
- 3. Vocational Automotive Technology Education, Science And Technology, Bhineka PGRI University, Indonesia Email address: anggaraardiyanta@gmail.com

Abstract— This study aims to determine the effect of practical learning methods and learning motivation on the learning outcomes of class XI students at SMKN 2 Tulungagung. This study uses a quantitative approach with the type of ex post facto research. The study population amounted to 141 students, with a sample of 104 students selected using the Slovin formula at a precision level of 5%. Data were collected through a questionnaire that had been tested for validity and reliability (Cronbach's Alpha> 0.60). The results of the classical assumption test showed that the data were normally distributed, linear, no multicollinearity, and no heteroscedasticity. Simple linear regression analysis showed that practical learning had a significant effect on learning outcomes (t = -13.878; p < 0.05), while learning motivation had no significant effect partially (t = 1.695; p > 0.05). However, simultaneously, practical learning methods and learning motivation have a significant effect on student learning outcomes (F = 127.487; p < 0.05). This study shows that the application of effective practical methods, supported by good learning motivation, can optimally improve student learning outcomes.

Keywords— practical learning methods, learning motivation, learning outcomes, SMKN 2 Tulungagung

I. INTRODUCTION

Education is a deep process of influencing students so that they can adapt as well as possible about the environment and thus can cause changes in themselves to function properly in community life[1]

There are many learning methods, one of which is the practical and lecture method. The practical method is an effective method. While the lecture method is more boring. A teaching method designed to convey knowledge or information or an overview of a topic or problem orally[1]

The teaching model is the way the teacher uses in relation to students during teaching lessons, the role of the teaching model as a tool for designing the teaching and learning process. Learning model means a way or tool used to complete a topic to be discussed[2]. The practical method is expected to make it easier for students to understand the theory that has been learned.

Learning cannot be separated from learning motivation, because the two things are interrelated. According to[3] learning motivation is something that moves students to learn

or master the material they are following. Without motivation, students are not interested and truly involved in following the learning. Conversely, if students are highly motivated, they are interested and actively involved and even proactively involved in the learning process.

Practical learning method is a learning method where students carry out practical activities in order to have higher assertiveness or skills[4] This method is generally implemented in vocational education, professional education, and education and training.

The practical learning method is a learning method in which students learn independently to prove the theory that has been learned directly[5]

Learning motivation plays an important role in providing passion or enthusiasm in learning. Learning motivation is not only a driving force to achieve optimal learning results but also contains efforts to achieve learning goals[6]

Motivation is an absolute requirement in learning a student who learns without motivation (or lack of motivation) will not succeed optimally[7]

According to Hamalik[8] Learning outcomes are evidence that someone has learned, which can be seen from changes in behavior in that person from not knowing to knowing and not understanding to understanding.

II. RESEARCH METHOD

The research conducted is included in the type of ex post facto research, which is a non-experimental approach used to examine events that have occurred, then trace the possible cause-and-effect relationship between the observed variables. ex post facto research is research conducted to examine events that have occurred and then trace back to find out the factors that cause these events[9]

This study aims to determine the effect of practical learning and learning motivation on the learning interest of class XI students at SMKN 2 Tulungagung. The approach used in this research is quantitative, where the symptoms studied are measured by numbers, and the data obtained are analyzed using inferential statistical analysis techniques, so as to test the hypothesis and determine the magnitude of the influence between variables.

Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics set by researchers. The population in this study is Class XI of SMKN 2 Tulungagung.

Tabel 2.1 Total Research Population

No	Kelas	Jumlah
1.	XI TKR 1	34
2.	XI TKR 2	35
3.	XI TKR 3	37
4.	XI TOT 2	35
	Total	141

Determination of the number of samples can be done by means of statistical calculations, namely by using the Slovin Formula. The formula is used to determine the sample size of a known population of 141 people. The level of precision set in determining the sample is 5% and is calculated using the following Slovin Formula:

$$n = \frac{N}{N \cdot d^2 + 1}$$

After the population is calculated using the slovin formula, a total of 104 students are obtained. So the sample of the study was 104 students of class XI SMKN 2 Tulungagung.

The data collection technique used is a questionnaire. Questionnaires are used to obtain data on the effect of practical learning and learning motivation on student learning interest. Implementation by distributing questionnaires to class XI at SMKN 2 Tulungagung.

Questionnaire instruments are used because they can reveal the opinions, perceptions, attitudes and responses of respondents regarding a problem. The variables to be measured are translated into indicators which are then translated into measurable components. These components are used as a starting point for compiling instrument items in the form of statements.

In this study, the measurement scale used is the Likert scale type, thus the type of data obtained is interval or ratio data.

The answer to each instrument item that uses the Likert scale has gradations from very positive to very negative. For example from very high, high, low to very low, from always, often, sometimes. to never and so on. The form of giving answers with a check mark ($\sqrt{}$) on the questions or statements provided. For data analysis purposes, the answers must have standardized assessment standards. Thus it will be easy to draw conclusions and interpret.

Tabel 2.2 Practical Learning Indicators

Variabel	Indikator	Nomor Butir
	Melakukan tugas praktik sesuai instruksi	1,2,3,4,5
Pembelajaran	Siswa menggunakan alat dan bahan dengan tepat dan aman	6,7,8,9,10
Praktik	Berpartisipasi aktif dalam diskusi dan kolaborasi.	11,12,13,14

Menganalisis	dan	15,16,17,18,19
menyimpulkan hasil p	raktik	

Tabel 2.3 Learning Motivation Indicator

Variabel	Indikator	Nomor butir
	Hasrat dan keinginan untuk berhasil	20,21,22,23,24
Motivasi Belajar	Dorongan dan kebutuhan dalam belajar	25,26,27,28
	Berusaha mengerjakan sendiri	29,30,31,32,33
	Siap menerima tantangan	34,35,36,37,38
	39,40,41,42,43	

The variables to be measured are translated into variable indicators, then the indicators that have been made are used as a starting point for compiling instrument items which can be in the form of statements or questions. The answer to each instrument item on this scale has gradations from very positive to very negative. Researchers use a Likert scale by giving a score of 1 to 4 on each statement or question and there are 4 answer choices so that respondents expressly state their answers. Alternative answers are Strongly Agree (SS), Agree (S). Disagree (TS) and Strongly Disagree (STS) Can be seen in the following table.

Tabel 2.4 Explanation of the Likert Scale Model Questionnaire Answer Score

Alternatif Jawaban	Skor Untuk Pernyataan
Sangat Setuju	4
Setuju	3
Tidak Setuju	2
Sangat Tidak Setuju	1

Before research instruments are used to collect data obtained from respondents, it is important to ensure that the instruments are valid and reliable. Therefore, the accuracy of the data determines the quality of the research results. The accuracy of the data is highly dependent on the quality of the data collection instrument. A good instrument must meet two main requirements, namely validity and reliability[10].

The validity test is used to measure how carefully a test (measuring instrument) performs its measuring function. So that to be said to be valid, the test must measure something and do it carefully, but a test can be said to be valid if it meets the criteria If the sig value. <0.05 then the instrument is declared valid and if the sig value. >0.05 then the instrument is declared invalid.[11]

An instrument can be said to be reliable if it can be used to collect data. This is indicated by the relatively same measurement results every time it is carried out on the same subject, as long as the aspects measured do not change.[11]

The reliability test basically measures the level of consistency of the answers given by respondents. This test is carried out by comparing the reliability coefficient value using Cronbach's Alpha with the criteria If the Cronbach's Alpha value> 0.60 then the instrument is declared reliable and

if the Cronbach's Alpha value < 0.60 then the instrument is declared unreliable.

Reliability testing shows that a data collection tool (instrument) is considered good if the instrument can be trusted. The standard used to assess the level of reliability is the Cronbach Alpha value. If the Cronbach Alpha value is below 0.600, it is categorized as less reliable. By using the SPSS for Windows version 22 application, the results of testing Practical Learning and Learning Motivation can be obtained as follows, namely:

Tabel 2.5 Reliability Test

Variabel	Cronbach alpha	N	Reliabilitas
Pembelajaran Praktik	.933	19	Reliabel
Motivasi Belajar	.927	24	Reliabel

III. RESEARCH RESULTS AND DISCUSSION

Testing to assess data normality, researchers utilize the one sample Kolmogorov-Smirnov method using SPSS version 22 to determine whether the data is normally distributed or not, by referring to the value at Asymp. Significant (2 tailed). The results of the data analysis are shown below:

Tabel 3.1 Normality Test

Variabel	Signifikasi	Alpa	Kondisi	Kesimpulan
Pembelajaran Praktik	.200	0,05	S>A	Normal
Motivasi Belajar	.200	0,05	S>A	Normal

The results of the test show that the Asymp. Sig. (2-tailed) is 0. 200. Since this number is higher than the significance level of 0.05, we can conclude that the impact of practical learning (X1) and learning motivation (X2) on student learning outcomes (Y) shows that the residual data is normally distributed.

The linearity test is used to assess whether there is a linear relationship between the independent variable and the dependent variable. The decision is made by considering the significance value of the linearity test. If the significance value of the deviation exceeds 0.05, then the relationship between the variables is declared as linear. The results of the linearity test in this study can be seen in the table below.

Tabel 3.2 Linearity Test

No	Variabel	Sig. Deviation from Linearity	Kesimpulan
1.	X ₁ Terhadap Y	0,663	Linier
2.	X ₂ Terhadap Y	0,730	Linier

The table above shows that each deviation significance value is more than 0.05, so it can be concluded that the relationship between the independent variable and the dependent variable in this study is linear.

The Multicolonerity test aims to determine whether there is a correlation between the independent variables. An effective regression model should not show any relationship between independent variables. The basis for making decisions regarding the multicollinearity test can be seen from the tolerance and VIF values using the help of SPSS version 22 as follows:

- a. If the Tolerance value is greater than 0.10, it means that there is no multicollinearity in the regression model.
- b. If the Tolerance value is smaller than 0.10, it means that there is multicollinearity in the regression model.
- c. If the VIF value is < 10.00, it means that there is no multicollinearity in the regression model.
- d. If the VIF value> 10.00, it means that there is multicollinearity in the regression model.

Tabel 3.3 Multicollinearity Test

No	Variabel Bebas	Tolerance	VIF	Keterangan
1.	Pembelajaran	.974	1.027	Tidak terjadi
	Praktik			multikolinearitas
2.	Minat Belajar	.974	1.027	Tidak terjadi
	-			multikolinearitas

Based on the table above, the practical learning and learning motivation variables show a tolerance value of .974 which is greater than 0.10 and a VIF value of 1.027 which is smaller than 10. This means that the independent variables used in this study are not interrelated.

Heteroscedasticity test is performed using Spearman correlation. The guideline to determine whether heteroscedasticity occurs or not, namely if the significance is <5% (0.05) then there is heteroscedasticity, otherwise if the significance is >5% (0.05) then there is no heteroscedasticity and the research can be continued.

Tabel 3.4 Heteroscedasticity test

No	Variabel Bebas	Signifikan	Keterangan
1.	Pembelajaran	0,869	Tidak terjadi
	Praktik		heteroskedastisitas
2.	Motivasi Belajar	0,757	Tidak terjadi
	·		heteroskedastisitas

From the table above, it can be concluded that the practical learning variable shows a significant value of 0.869 which is greater than 0.05, and learning motivation has a significant value of 0.757 which is also greater than 0.05. Thus, the data does not experience heteroscedasticity, which means the data is safe to continue.

Simple linear regression test is used to understand how much influence each independent variable separately has on the dependent variable. In this study, the independent variables consist of Practical Learning (X1) and Learning Motivation (X2), while the dependent variable is Learning Outcomes (Y). The analysis was conducted with the help of SPSS version 22 software. The results of data processing are presented in the following table, namely:

Tabel 3.5 Simple Linear Regression Test

No	Variabel Bebas	Thitung	Ttabel	Signifikan

1.	Pembelajaran Praktik	-13.878	1.986	0,00	_	No	Variabel Bebas	Fhitung	Ftabel	Signifikan
2.	Motivasi Belajar	1.695	1.986	0,093	_	1.	Pembelajaran Praktik	127.487	3,09	0,000
						2.	Motivasi Belaiar	127.487	3.09	0.000

a. Effect of Practical Learning (X1) on Learning Outcomes (Y)

The negative sign on the t-count indicates an opposite relationship. This means that when the value of the independent variable increases, the dependent variable tends to decrease. However, if the significance value (p-value) is below 0.05, then the impact is still considered significant [12].

The results of the above analysis show that the Learning Practices variable (X1) produces a calculated t value of -13.878, which in absolute value is higher than the t table which reaches 1.986, and has a significance value of 0.000 < 0.05. Based on the test criteria, it is concluded that the Practical Learning variable has a partially significant effect on Student Learning Outcomes (Y).

Thus, the null hypothesis (Ho) which states that there is no significant effect of the application of practical learning methods on student learning outcomes is rejected, and the alternative hypothesis (H1) which states that there is a significant effect of the application of practical learning methods on student learning outcomes is accepted.

b. The Effect of Learning Motivation (X2) on Student Learning Outcomes (Y)

In the Learning Motivation variable (X2), the calculated t value is 1.695, which is lower than the t table value which reaches 1.986, with a significance of 0.093 which is greater than 0.05. Thus, it can be concluded that Learning Motivation does not have a significant effect on Student Learning Outcomes when tested separately through simple regression.

Although not statistically significant at the 5% significance level, a significance value close to 0.05 suggests that learning motivation has the potential to influence achievement if tested in more complex models, such as multiple regression or other structural models.

Thus, the null hypothesis (Ho) which states that there is no significant effect of the application of learning motivation on student learning outcomes is accepted, and the alternative hypothesis (H2) which states that there is a significant effect of the application of learning motivation on student learning outcomes is rejected.

Multiple linear regression test is conducted to determine the extent to which two independent variables simultaneously affect the dependent variable. In this study, the independent variables consist of Practical Learning (X1) and Learning Motivation (X2), while the dependent variable is Learning Outcomes (Y). The multiple regression results are displayed in the following table, namely:

Tabel 3.6 Multiple Linear Regression Test

Table 3.6 shows the results of the multiple linear regression test conducted to evaluate the joint effect of the independent variables, namely Practical Learning (X1) and Learning Motivation (X2), on the dependent variable, namely Student Learning Outcomes (Y). The results of the analysis show a calculated F value of 127.487, while the F table value at the 5% significance level is 3.09. The F calculated value which is much higher than the F table indicates that the regression model created has statistical significance. This means that, together, the Practical Learning and Learning Motivation variables have a significant influence on Student Learning Outcomes.

In addition, the significance value (Sig.) obtained is 0.000. This figure is far below the significance value of 0.05, which further strengthens the argument that there is a significant influence between the two independent variables on the dependent variable.

Thus, the null hypothesis (Ho) which states that there is no significant influence between practical learning and learning motivation on student learning outcomes is rejected, and the alternative hypothesis (H3) which states that there is a significant influence between practical learning and learning motivation on student learning outcomes is accepted.

This discussion presents an analysis of the results of research that focuses on the impact of practical learning methods and motivation to learn on the learning outcomes of class XI students at SMKN 2 Tulungagung. This discussion is prepared based on statistical analysis that has been carried out and connected with the theory and results of relevant previous studies.

a. The Effect of Practical Learning Methods on Learning Outcomes

Based on simple linear regression analysis, the t value is -13.878 with a significance level of 0.000 (<0.05),). This shows that there is a significant influence between learning through practice on student learning outcomes. Therefore, the first hypothesis (H1) is accepted.

Although the calculated t-values are negative, this does not mean that practical learning has a negative impact. The negative direction indicates a statistically contradictory relationship, which could be influenced by various implementation factors in the field.

To deepen this understanding, it can be said that the success of practical learning methods is highly dependent on the implementation design and readiness of supporting facilities. [4] stated that the implementation of effective practical learning can improve students' vocational and social skills. In

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addition, [13] found that practical experience combined with critical thinking significantly improved learning outcomes in SMK.

b. The Effect of Learning Motivation on Student Learning Outcomes

The results of the simple linear regression analysis on the learning motivation variable show a t value of 1.695 and a significance level of 0.093 which is greater than 0.05. Thus, the second hypothesis (H2) is not accepted. This means that separately, learning motivation has no significant effect on student learning outcomes.

However, although statistically insignificant, the significance value close to 0.05 indicates that motivation still has the potential to be an important factor if supported by an appropriate learning approach. This is confirmed [14] who stated that motivation will be optimal if supported by a conducive learning environment and effective learning strategies.

[15] also added that motivation is the main driver in the educational process, but success in learning is also determined by various other things such as teaching techniques, access to teaching materials, and active participation in the learning process.

c. The Effect of Practical Learning Methods and Learning Motivation on Learning Outcomes (Simultaneously)

The results of the multiple linear regression analysis indicate that practice-based learning and learning motivation simultaneously have a significant impact on student learning achievement. Evidence of this is seen in the calculated F value of 127.487, which exceeds the F table value of 3.09, and the significance value of 0.000 (<0.05). Therefore, the third hypothesis (H3) is accepted.

This finding shows that although the learning motivation variable does not have an independent effect, in the multiple regression analysis learning motivation still plays a role in increasing the impact of practical learning on learning outcomes. In other words, the combination of effective practical methods and inner motivation will result in better academic achievement.

This is in accordance with the opinion expressed [4]that effectively implemented practical learning can improve students' vocational and social skills. On the other hand, strong motivation in learning, as described [14], encourages students to be more active, explorative, and enthusiastic in the learning process.

IV. CONCLUSION

According to the results of research that has been conducted on the effect of practical learning methods and learning motivation on the learning outcomes of class XI students at SMKN 2 Tulungagung, several conclusions can be drawn, namely:

 There is a significant influence between practical learning methods on student learning outcomes.

The results of the simple linear regression analysis show that practical learning methods have a significant effect on student learning outcomes with a significance value of 0.000. This indicates that the better the way practical learning methods are implemented, the higher the learning outcomes achieved by students.

However, the negative regression coefficient indicates that if the implementation of practice is not carried out optimally, for example due to lack of facilities, minimal teacher guidance, or low active student participation, this can result in low achievement of learning outcomes. Therefore, the effectiveness of the practical method is highly dependent on the quality of implementation, facility support, and teacher and student readiness.

2. Learning motivation partially has no significant effect on student learning outcomes.

From the statistical analysis, a significance value of $0.093 \ (> 0.05)$ was obtained, which indicates that learning motivation individually has not had a significant impact on student learning outcomes. This shows that although students have the enthusiasm and desire to learn, it has not been fully reflected in a clear improvement in learning outcomes.

This situation may be caused by other external factors, such as unvaried teaching methods, a boring learning environment, or a lack of support from the surroundings. Thus, learning motivation needs to be accompanied by the right pedagogical approach so that the energy of students can be channeled effectively.

3. Practical learning methods and learning motivation simultaneously have a significant effect on student learning outcomes.

Multiple regression analysis shows that these two independent variables combined together have a significant impact on student learning achievement, with a significance value of 0.000 and F count reaching 127.487 (> F table 3.09). These results indicate that when efficient practical learning methods are combined with good student motivation conditions, a synergy is formed that can encourage optimal learning outcomes. Therefore, the relationship between practical learning methods and students' psychological elements is key in improving the quality of education, especially in the context of vocational education such as in SMK.

In general, this research emphasizes the significance of using context-relevant, practice-oriented learning methods, and also highlights the need to enhance students' learning motivation in a holistic way. Student learning outcomes are influenced by more than one factor, but are the result of the interplay of various pedagogical and psychological elements.

V. ADVICE

Based on the results of the research discussion and conclusions, the researcher can provide the following suggestions:

1. For Students

Students are expected to participate more and have responsibility in following practical learning and encourage self-motivation. In addition, students should take advantage of every learning opportunity to improve skills and deepen understanding both individually and together.

2. For Teachers and Schools

Teachers and schools are expected to establish a strong synergy in designing, implementing and evaluating practice-based learning processes in a structured and sustainable manner. Schools need to ensure the availability of adequate practical facilities and infrastructure in accordance with industry standards, and support the professional development of teachers through training, workshops or collaboration between educators.

Teachers, as the people responsible for the learning process, should apply relevant, interesting and challenging learning methods for students, and actively create a learning atmosphere that can increase their motivation and participation. In addition, teachers and school authorities need to collaborate in designing an assessment system that does not only focus on cognitive aspects, but also covers affective and psychomotor aspects as a whole, with the aim of creating meaningful learning experiences that are oriented towards the development of complete vocational competencies.

3. For Future Researchers

This study still faces a number of limitations, especially with regard to the scope and number of participants who only came from one educational institution. Therefore, it is recommended for future research to expand the scope of the study and consider other factors that may have an impact on learning outcomes, such as learning methods, family background and the use of technology-based

learning tools. In addition, the application of a qualitative approach or a combination of methods (mixed methods) can be used to further explore the psychological and pedagogical aspects that influence student learning outcomes, especially in the context of vocational education.

REFERENCES

- [1] Y. D. Hapsari, S. A. Rahmawati, F. A. Sani, A. P. Baskoro, R. Lestari, and S. Nadia, "Pengaruh Metode Pembelajaran Praktek dan Ceramah pada Pembelajaran Seni Kelas III SD 6 BulungKulon," *Jurnal Ilmiah Profesi Guru (JIPG)*, vol. 4, no. 2, pp. 137–145, Aug. 2023, doi: 10.30738/jipg.vol4.no2.a15396.
- [2] N. M. Sueni, "Metode, Model dan Bentuk Model Pembelajaran.Wacana Saraswati, 19(2), 1-16," 2019. Accessed: Jan. 21, 2025. [Online]. Available: https://ojs.ikip-saraswati.ac.id/index.php/wacanasaraswati/article/view/35
- [3] T. Syahrowiyah, "PENGARUH METODE PEMBELAJARAN PRAKTIK TERHADAP MOTIVASI DAN HASIL BELAJAR PENDIDIKAN AGAMA ISLAM SISWA KELAS IV SEKOLAH DASAR. Studia Didkatika, 10(2), 1-18," 2016.
- [4] G. Wiguna, W. Munawar, and S. H. Untung, "METODE PRAKTIK PADA PEMBELAJARAN VOKASIONAL OTOMOTIF BAGI PESERTA DIDIK DIFABEL," 2014.
- [5] Darmayanti, N. W. S., Wisnu, I. K., Wijaya, B., & Sanjayanti, N. P. A. H. (2020). Kepraktisan Panduan Praktikum Ipa Sederhana Sekolah Dasar (Sd) Berorientasikan Lingkungan Sekitar, ORBITA: Jurnal Kajian, Inovasi Dan Aplikasi Pendidikan Fisika, 6(2), 310. 6(2). https://doi.org/10.31764/orbita.v6i2.3365
- [6] D. B. Puspitasari, "HUBUNGAN ANTARA PERSEPSI TERHADAP IKLIM KELAS DENGAN MOTIVASI BELAJAR SISWA SMP NEGERI 1 BANCAK. EMPHATY JURNAL FAKULTAS PSIKOLOGI, 1(1), 60-67,"
- [7] Y. Supriani, Ulfah, and O. Arifudin, "UPAYA MENINGKATKAN MOTIVASI PESERTA DIDIK DALAM PEMBELAJARAN," 2020. Accessed: Jan. 23, 2025. [Online]. Available: https://jbasic.org/index.php/basicedu/article/view/6469/3120
- [8] Purwaningsih, "PENINGKATAN HASIL BELAJAR MELALUI MODEL PEMBELAJARAN PENEMUAN PADA PESERTA DIDIK KELAS VIII SMP NEGERI 8 CIKARANG UTARA KABUPATEN BEKASI. EDUCATOR: Jurnal Inovasi Tenaga Pendidik dan Kependidikan, 2(4), 422-427," 2022.
- [9] Sugiyono. 2017. Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.
- [10] Priadana, S., & Sunarsi, D. (2021). Metode Penelitian Kuantitatif.
- [11] Setyawan, D. A. (2021). Hipotesis Dan Variabel Penelitian. In Tahta Media Group.
- [12] Ghozali, I. (2018). Aplikasi Analisis Multivariate dengan Program IBM SPSS 25. Semarang: Badan Penerbit Universitas Diponegoro.
- [13] Pradany, M.H., & Harimurti, R. (2023). Pengaruh Pengalaman Pembelajaran Praktik dan Kemampuan Berpikir Kritis Terhadap Hasil Belajar Siswa SMK.
- [14] Hafizhah, I. N., Rizqia Amalia, A., & Uswatun Azwar, D. (2023). Upaya Peningkatan Motivasi Belajar Siswa Pada Pembelajaran Tematik Melalui Media Jumping On Worms Game Di Sekolah Dasar.
- [15] Puspitasari, D. B. (2013). Hubungan Antara Persepsi Terhadap Iklim Kelas Dengan Motivasi Belajar Siswa Smp Negeri 1 Bancak. Emphaty Jurnal Fakultas Psikologi, 1(1), 60-67.