



Effectiveness of Teacher Performance in Maximizing Student's Expressive Writing in Science Learning at Sebatik Vocational School

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Abstract: Adolescence is an important phase in individual development where massive changes occur, both physically and psychologically. Research shows that teenagers often have difficulty managing and expressing their emotions appropriately, which can impact their emotional and social well-being. This research aims to test the effectiveness of teacher performance in improving students' expressive writing skills in science learning at Sebatik Vocational School. The research method used is quantitative experimental research with a one group pretest-posttest design. Eight students who experienced difficulties in expressive writing skills were included in this study. Data was obtained through pretest and posttest conducted after providing teacher performance services. The results of the analysis using the Wilcoxon Signed Ranks test showed that there was a significant increase in students' expressive writing abilities after being provided with teacher performance services. The calculated z value was $-2.521 > z$ table (1.96) at a significance level of $\alpha = 0.05$. Asymp probability value. Sig. (2-tailed) is $0.012 < \alpha = 0.05$, so the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted. Thus, the teacher's service performance in providing students' expressive writing skills at Sebatik Vocational School has proven to be effective in improving students' expressive writing abilities in science learning.

Keywords: Effectiveness; Expressive writing; Science learning; Teacher performance

Introduction

Adolescence is an important period in an individual's life, where massive changes occur both physically and psychologically. Usually occurs between the ages of 16 to 18 years (Rohmadani, 2017). During this time, individuals experience changes in various aspects, including physical, emotional, social, attitude and moral (Safithry et al., 2020). They begin to interact with adult society and feel like they want to learn many things, but are still looking for their identity (Nafisah et al., 2023). One important focus is the fulfillment of emotional development tasks (Hibatulloh et al., 2023).

According to Setiawati et al. (2022) adolescent behavior is influenced by various kinds of emotions, both positive and negative. Positive emotions make individuals feel comfortable, while negative emotions make them feel uncomfortable (Pakaya et al., 2023). According to Fatmawati et al. (2023) identify different types of emotions, including anger, hostility, sadness, and feelings of enjoyment in life. According to Gassmann et al. (2023) emotional aspects include emotion regulation strategies, participating in targeted behavior, controlling emotional responses, and accepting emotional responses. One of the tasks of adolescent development, according to Hurlock (1990), is

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to achieve emotional independence, where they must be able to manage emotions appropriately (Hiqmah et al., 2023). The inability to manage emotions can result in uncontrollable reactions and emotional imbalance, which play an important role in individual behavior (Aulia et al., 2023). Uncontrolled emotional reactions during adolescence can have an impact on personal and social life (Dewi et al., 2022). Meanwhile, the ability to manage emotions helps teenagers overcome stress and depression (Aiman et al., 2023). Previous research shows that teenagers often have difficulty managing emotions, which can lead to difficult-to-control anger and other emotional problems (Arrohmah et al., 2023). This is often caused by a conflict between the need for independence and parental expectations, creating tension that affects the teenager's emotional well-being (Betan et al., 2023). The teacher's role is very important in facilitating students to optimize their ability to express their emotions through written expression (Maria et al., 2024).

Teachers can create a supportive learning environment, where students feel comfortable expressing their emotions through writing (Nurita et al., 2024). By building a strong and trusting relationship between teachers and students, teachers can become effective facilitators in guiding students in expressing their emotions positively through writing (Herfien et al., 2024). Teachers can also teach students effective expressive writing techniques, such as using appropriate and creative language to convey their feelings (Amaliah et al., 2023). Through a variety of structured writing activities and exercises, teachers can help students develop their ability to express emotions clearly and persuasively in their writing (Rezeqi et al., 2024). Additionally, teachers can also provide constructive feedback to students to help them improve the quality of their writing and further develop their self-expression skills (Meşe et al., 2019).

Through support and guidance from teachers, it is hoped that students can develop their abilities in managing and expressing their emotions through writing more effectively (Nurita et al., 2024). This will not only help them in dealing with stress and emotional conflict, but also enrich their learning experience and improve their overall communication skills (Widiyatmoko et al., 2024). Therefore, the role of teachers in facilitating students in optimizing the ability to express emotions through writing is very important and should not be ignored (Onwuegbuzie et al., 2007).

Problems that occur in the field on teachers' performance in maximizing students' expressive writing abilities at Sebatik Vocational School, it should be noted that students at Sebatik Vocational School also face challenges in learning science. These challenges can include understanding complex scientific concepts as well as difficulty expressing their thoughts expressively

through writing (Betan et al., 2023). Thus, the teacher's role is not only in facilitating students in expressing their emotions through writing, but also in helping them overcome the special obstacles they face in learning science. By providing an inclusive and supportive learning environment, teachers can help students at Sebatik Vocational School to develop their expressive writing skills while overcoming the challenges of understanding and communicating science concepts effectively. Therefore, the teacher's role in managing learning that facilitates students' expressive writing skills at Sebatik Vocational School has a significant impact in improving students' overall communication skills and scientific understanding.

Teacher performance in maximizing students' expressive writing abilities, teachers can act as the main director in managing the learning process which encourages students to express their emotions through writing (Anggarawati et al., 2021). Through important emotional development tasks for adolescents, teachers need to recognize the importance of facilitating students in expressing their emotions in a healthy and productive manner (Kristanto et al., 2019). Effective teachers are able to create a safe and supportive learning environment, where students feel valued and encouraged to develop their expressive writing skills (Rezeqi et al., 2024). Apart from that, teachers can also use innovative and varied teaching approaches to teach expressive writing techniques to students (Maria, 2024).

By providing a variety of resources and support, such as good writing samples and relevant writing exercises, teachers can help students to develop their ability to express their emotions through writing more effectively (Bonney, 2015) by providing targeted and constructive feedback, teachers can guide students to continue improving their expressive writing skills. Based on the problems found in the field, researchers will try to determine the effectiveness of teacher performance in maximizing students' expressive writing abilities in science learning at Sebatik Vocational School.

Method

This research uses quantitative experimental research. According to Sugiyono (2019) Experimental research is a research method carried out by experiment and used to determine the effect of an independent variable on a dependent variable under controlled conditions. The research design used was one group pre test-post test. In the design, the test will be carried out twice, namely before being given treatment (pre-test) and after being given treatment (post-test). This design was chosen by researchers because it can compare students' behavior before and after being given treatment.

Result and Discussion

Results of the research "Effectiveness of Teacher Performance in Maximizing Students' Expressive Writing Ability in Science Learning at Sebatik Vocational School. This research was carried out in January 2024. The results of the research obtained were to determine whether there were changes before and after being given an expressive writing learning model to students.

Carrying out research on the effectiveness of teacher performance in maximizing students' expressive writing abilities in science learning at Sebatik Vocational School, which was carried out in January 2024. The research was carried out in 5 meetings with the aim of producing accurate data conclusions related to the problems in the research (Irwandi et al., 2024). Each meeting lasts 45 minutes. Before carrying out the research, the researcher first conducted a pre-research survey which aimed to determine the research sample, namely by conducting interviews with teachers who taught Natural Sciences (Science) subjects at Sebatik Vocational School, as well as class students who were involved in science learning at that school.

After conducting interviews with subject teachers, it was discovered that there were several students who had problems regarding low science learning, namely in class XB. To strengthen the research results, the researcher conducted a pretest in class XB. Before the scale is used for the Pretest, the scale used has been tested in the XA class to produce valid or relevant data. So that the data that has been tested can be used to carry out a pretest in the experimental class.

After conducting interviews with science learning teachers, it was discovered that there were several students who had problems regarding low science learning, namely in class XB. To strengthen the research results, the researcher conducted a pretest in class XB. Before the scale is used for the Pretest, the scale used has been tested in the XA class to produce valid or relevant data. So that the data that has been tested can be used to carry out a pretest in the experimental class.

In the first stage, the researcher conducted a pretest by giving a scale regarding the expressive writing ability of science learning to 25 class XB students. Before the pretest was carried out, the researcher had coordinated with the subject teachers to determine the scale distribution schedule. The results of this pretest will provide an initial picture of the condition of students' expressive abilities in science learning and allow researchers to select research subjects who have low levels of expressive abilities in science learning (Alfiyansah et al., 2023).

In the second stage, researchers selected 8 students based on the pretest results who had a low level of

expressive ability in science learning. The meeting began with prayer and introductions, followed by an explanation of the concepts of expressive writing skills and time agreement. Followed by an ice breaking activity to relieve tension (Chen et al., 2022). The researcher asked group members to reveal problems with expressive writing skills in science learning. Then give worksheets, encourage group members to speak, discuss the schedule, and close the meeting with prayer and thanks for the presence of group members.

At the third meeting, the researcher opened with greetings, prayers and thanks to the group members. The researcher explained the group's service goals with the ability to write expressively, carry out ice breaking activities to reduce tension, and motivate group members to be active. After preparation, researchers enter the core stage, where they address the problem. Then group members were given the task of developing strategies for expressing emotional feelings by expressing them through written expressions. This is intended so that group members understand each other's feelings through expressing expressions in writing (Fedotova, 2023). The researcher also gave assignment sheets to group members to write down obstacles in expressing emotional expression through writing and explore messages and impressions from the meeting before ending with prayer and greetings (Widiasanti et al., 2023).

At the fourth meeting, the researcher opened with greetings, prayer, and asking about how the group members were doing. The researcher explains the topic and purpose of the meeting, which aims to strengthen the thinking of group members regarding science learning which initially creates stress and emotions. Before getting into the main discussion, the researcher provided an ice-breaking activity in the form of a quiz. In the main discussion, the researcher continues the topic of strategies for controlling and releasing emotions in science learning (Nurhidayah et al., 2023). Then group members provide evaluations and input to each other on the planning strategies created in carrying out expressive writing skills (Hasna, 2019). Before ending the meeting, prayers and greetings were held (Savera et al., 2022).

At the fifth meeting, the researcher conducted a posttest on the research subjects by distributing a scale of expressive writing ability for science learning. The posttest uses a science instrument or scale. The posttest was given to find out after the service was provided to see the teacher's performance in providing changes to the expressive writing abilities of Sebatik Vocational School students. The posttest administration ran smoothly and conductively in accordance with predetermined procedures.

Table 1. Pretest and Posttest Results

Pretest	Posttest
54	99
46	96
53	94
58	107
52	81
44	88
61	97
58	101
426	763
53.2	95.4

The pretest and posttest diagram depiction service depicted in diagram form was provided to the experimental group. The experimental group was given teacher performance services in providing expressive writing skills to Sebatik Vocational School students. There was a significant change, students with the initials SCP with a pretest result of 54 scores, after being given the service (posttest) it became 99 scores. The student with the initials RBP had a pretest result of 46 scores, after being given the service (posttest) it was 96 scores. Students with the initials ASD had a pretest result of 53 scores, after being given services (posttest) it was 94 scores. The student with the initials HAR had a pretest result of 58 scores, after being given the service (posttest) it was 107 scores. The student with the initials AN had a pretest result of 52 scores, after being given the service (posttest) it was 81 scores. Students with the initials FA with pretest results were 44, after being provided with services (posttest) they became 88. Students with the initials AA with pretest results were 61, after being provided with services (posttest) they became 97. Students with the initials RR with pretest results were 58, after being given the service (posttest) it became 101. It was concluded that the 8 students experienced a change in the scale level of expressive writing ability in science learning after being provided with teacher performance services in expressive writing.

Table 2. Wilcoxon Test Calculation Result

Test Statistics	
	Posttest - Pretest
Z	-2.521 ^b
Asymp. Sig. (2-tailed)	0.012

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

After carrying out the Wilcoxon signed ranks test, the z count was -2.521 and then compared with the Z table of 0.05. The Z table of 0.05 is 1.96, so the calculated Z is greater than the Z table $-2.521 > 1.96$. To see the probability number, the Asymp value. Sig. (2-tailed) is $0.012 < 0.05$ so H_0 is rejected and H_a is accepted. So the conclusion is that the performance score in expressive

writing skills in science learning in the experimental group has increased between before being given services and after being given services.

According to Rohmadani (2017) the expressive writing method also contains a process of reconstructing the problems experienced by individuals, so that individuals are able to rationalize the problems they face. Writing has its own power because paper and pencil are always there and can be used by teenagers as a medium to express their emotions (N. Rahmi et al., 2021). Writing also has its own strengths compared to speaking (Rohmadani, 2017) or admittedly, ignoring other aspects of their development (Agustin, 2018). This statement is supported by Soper and Bergen (Harahap, 2018) who say that expressive writing has the benefit of reducing frustration due to unfulfilled or unattainable desires. The use of expressive writing is considered capable of reducing stress because individuals succeed in releasing negative emotions (feelings of sadness, disappointment, grief) into the individual's writing which can begin to change attitudes, increase creativity, activate memory, improve performance, and increase life satisfaction. Additionally, according to (Maharani et al. (2017) the use of expressive writing can increase the body's immunity to avoid psychosomatics and increase student learning achievement, concentration, short-term memory capacity, and improve self-image (Setiawati et al., 2022). Writing can eliminate self-destructive emotional disturbances such as fear, guilt, anxiety, anxiety and anger (Safithry et al., 2020).

Based on the results of research and analysis using the Wilcoxon Signed Ranks test, it was found that there was a significant change in students' expressive writing abilities in science learning after being provided with teacher performance services. This research involved eight students with the initials SCP, RBP, ASD, HAR, AN, FA, AA, and RR from Sebatik Vocational School. The pretest and posttest results showed a significant increase in students' expressive writing ability scores after receiving teacher performance services.

From the results of the Wilcoxon Signed Ranks test, the calculated z value is $-2.521 > z$ table (1.96) at the significance level $\alpha = 0.05$. Asymp probability value. Sig. (2-tailed) is $0.012 < \alpha = 0.05$, so the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted. This indicates that there is a significant increase in students' expressive writing abilities after being provided with teacher performance services.

In conclusion, teacher performance services in providing students' expressive writing skills at Sebatik Vocational School have proven to be effective in improving students' expressive writing abilities in science learning. These results support the important role of teachers in facilitating and guiding students in developing their expressive writing skills. The

implications of this research can make a significant contribution to curriculum development and teaching practices in schools, as well as improving students' emotional well-being and academic achievement.

Conclusion

Based on the results of research on the effectiveness of teacher performance in maximizing students' expressive writing abilities in science learning at Sebatik Vocational School, it was found that there was a significant increase in students' expressive writing abilities after being provided with teacher performance services. Analysis using the Wilcoxon Signed Ranks test shows that the calculated z value is $-2.521 > z$ table (1.96) at the significance level $\alpha = 0.05$. Asymp probability value. Sig. (2-tailed) is $0.012 < \alpha = 0.05$, so the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted. Thus, the teacher's service performance in providing students' expressive writing skills at Sebatik Vocational School has proven to be effective in improving students' expressive writing abilities in science learning. The implications of this research can make a significant contribution to curriculum development and teaching practices in schools, as well as improving students' emotional well-being and academic achievement.

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Author Contributions

Author contributions include M.; collecting data, analyzing data, writing original drafts, and so on; N.; focus on methodology and review writing.

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Conflicts of Interest

The authors declare no conflict of interest.

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