

THE IMPACT OF USING DISCOVERY LEARNING ON EFL STUDENTS' WRITING SKILL

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ABSTRACT

The aims of the research are to enhance writing skills on hortatory exposition texts for the third year of MTs As'adiyah Putri 1 Sengkang. This research used a quasi-experimental method with two groups of pre-test and post-test designs. The subject of the research was the third-year students of MTs As'adiyah Putri 1 Sengkang. In this research, two classes were taken as samples. Class IX A was chosen as the experimental class and IX B as the control class. The experimental class consists of 25 students and 23 students from the control class. Writing tests (pretest and posttest) were used to collect data, which was then analyzed using descriptive and inferential statistics in SPSS. The results of the pre-test and post-test showed a significant enhancement. It was proven by the mean score of the students' experimental post-test (74.96) is higher than the mean score of the students' pre-test (55.44) and the t-test value of the post-test is 0.004, which is smaller than 0.05. The gain scores of both groups show enhancement in students' writing skills. However, the gain score of the experimental class was higher than the control class. The gain score of the experimental class was 19.52. From this research finding, it showed that the use of discovery learning could enhance the students' writing skills on hortatory exposition texts.

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1. INTRODUCTION

Writing involves a drawn-out and difficult process as well as being "not merely how humans produce some words" (L'Etang, 2008; Dayij & Al. Gomoul, 2011). Writing in a second language is a complex process that involves the ability to compose a text in order to represent one's thoughts in writing. Furthermore, writing typically involves psychological problems, language problems, and cognitive challenges, which is why writing is frequently regarded as a challenging skill to master (De La Paz & Graham, 2002; Hyland, 2011; Connelly et al., 2012). One of the reasons why students believe writing is a hard talent to learn is the obstacles associated with it.

Writing should be encouraged in order to help students learn about who they are and what they have to say (Hyland, 2007), as well as how to make the reader care about the

content, grasp it, and have a variety of experiences. They then combined words into phrases, paragraphs, and free compositions.

Writing is important in education for a variety of reasons, including the ability to communicate ideas to others, organize and filter through random thoughts, express one's true thinking, and develop ideas (Warnock, 2009; Graham, 2018). People are drawn to writing because it can be a means of communication within a community or across the globe. A person can communicate with someone who can grasp what they mean and how they feel if they can write clearly (MacArthur, 2006; Graham et al., 2020; Amiruddin & Muslaini, 2022).

Writing instruction in English is generally difficult. Given the difficulties the pupils are having, it makes sense. The researcher discovered that the majority of pupils struggle with their writing abilities based on the preliminary students, some students of MTs As'adiyah Putri 1 Sengkang. Based on the information above that the researcher obtained after speaking with the teacher and the students in interviews, it can be concluded that students often struggle to articulate and organize their thoughts into a strong paragraph or essay. They also frequently lack vocabulary, and their writing occasionally is not appropriate for the topic assigned.

To improve students' writing abilities, teachers must establish an effective teaching strategy for writing. Student Teams Achievement Divisions (STAD) Based on Discovery Learning is one of the teaching strategies that may be used to teach writing. A cooperative learning approach created by Slavin and his colleagues, Student Teams Achievement Divisions (STAD), "has proved important in producing favorable benefits in different grades and topics" (Ariawan, 2018; Yusuf et al., 2019; Awada et al., 2020).

Literature Review

Writing is an essential tool for intercultural communication (Graham, 2018). It is a tool we use to express our thoughts and feelings to others in our society. Writing is a tool for both self-expression and communication. Writing is a process that involves revision and rewriting; it is more complicated than just stringing words together. Writing instruction entails they come up with, preparing, and drafting their draft text, we help students perceive writing as a constant process of revision and rewriting (Graham et al., 2020).

Writing is a process that writers go through in various order stages (planning, drafting, editing, etc.) in order to create written content (Balaman, 2018; Hafner & Ho, 2020; Amiruddin et al., 2022). Writing is a language ability and a type of communication activity used to transfer ideas from the mind to written documents (Hafner & Ho, 2020).

Moreover, writing is a technique of conveying ideas or thoughts in words (Balaman, 2018), and it should be done at our leisure. According to the expert mentioned above, the researcher has come to the conclusion that writing is a way for us to convey verbally what is on our minds and in our hearts. Then, as part of media communication, we can convey them to the reader in written form.

Furthermore, in order to maximize performance, STAD places a strong emphasis on cooperative learning activities and student engagement to inspire one another and aid in subject matter mastery (Jacobs & Renandya, 2019; Budiyo & Ngumarno, 2019). Students are assigned to groups of four or five STAD members that are diverse in terms of performance level, gender, and ethnicity.

The STAD method is a cooperative learning-based approach in which students are put into teams to complete the task that has been assigned to them (Poetra et al., 2019; Syakur & Sabat, 2020). Additionally, STAD (Students Team Achievement Division) is one of the numerous cooperative learning techniques that support cooperation and self-control in learning. The Student Team Achievement Division (STAD) is a cooperative learning strategy in which small groups of students with varying levels of ability cooperate to achieve a common learning objective (Slavin, 2011; Slavin, 2013). Another focus of this research is discovery learning.

The goal of the discovery/inquiry learning approach is to intuitively understand concepts, meanings, and relationships before coming to a definitive conclusion (Fussell et al., 2016; Belton, 2016; Banawi, 2019). When a person uses their mental processes to find some notions and principles, this is when discovery takes place. Through observation, categorization, measurement, prediction, determination, and inference, discovery is accomplished. The aforementioned procedure is known as the cognitive process, whereas the actual discovery is a mental integration of ideas and principles in the mind (Fussell et al., 2016).

Identifies the following five qualities of discovery learning that set it apart from conventional learning models (Saab et al., 2005; Raab et al., 2009; Nofrianto et al., 2020):

- a. Learning is active, requiring students to engage in practical activities and problem-solving exercises rather than merely receiving information.
- b. Discovery learning encourages mastery and application by placing more emphasis on the process than on the final output.
- c. The lessons learned through failure in this instructional paradigm motivate the student to keep looking for answers.
- d. Feedback is a crucial component of the learning process, and students can achieve deeper understandings through collaboration and debate.
- e. Discovery learning encourages individual interests and satisfies people's innate curiosity.

Hortatory exposition is a style of spoken or written discourse used to convince readers or listeners that a certain action is appropriate or inappropriate (Susanto et al., 2019; Yanwar, 2020; Yolanda & Zaim, 2021). The speaker or writer requires certain justifications as the underlying underpinnings of the suggested notion in order to reinforce the explanation. A text of this type is referred to as an argumentative essay (Jameel, 2022). It offers justification for the thesis that is stated in the orientation. It indicates that the author has emphasized a point and offered advice to persuade and convince the audience (Susanto et al., 2019).

A hortatory exposition text is one that attempts to urge the audience to act in the interests of others (Yanwar, 2020). The Objective Hortatory exposition presents and influences the readers in ways that are inappropriate (Yolanda & Zaim, 2021). Scientific books, journals, periodicals, newspapers, articles, academic speeches or lectures, research reports, etc. All contain obscene exposition material. Horrific expositions are common in scientific, intellectual, and educated communities. It means a text that makes an assertion and then backs it up with facts and evidence to persuade the reader. The speaker or writer presents certain arguments as the essential explanations for why something is the case in order to strengthen the persuasion.

2. METHOD

The experimental class and control class were the two groups used in this study's quasi-experimental approach (Plonsey et al., 2007; Creswell & Creswell, 2017; Stockemer et al., 2019). While the control class used STAD in a traditional manner, the experimental class used STAD based on discovery learning. It utilized STAD, which is based on Discovery Learning, to improve students' writing abilities.

The following is a description of the research design:

E	O ₁	X ₁	O ₂
C	O ₁	X ₂	O ₂

Description:

E: Experimental

C: Control

O₁: Pre-test

O₂: Post-test

X₁: Treatment for the Experimental group

X₂: Treatment for the Control class

Writing tests were used as the research instrument. Both the pre-test and the post-test were administered to the students. The pupils were given two themes for each test; they had to choose one and write an essay about it. The importance of writing and the need for mobile phone bans in schools were the subjects. The text is of the hortatory exposition type. Data analysis in this research is descriptive and inferential.

3. RESULTS AND DISCUSSION

Five types of criteria are used to classify the student test scores from the pretest and posttest. The results of the pre-test for the experimental and control groups. In the experimental group, there were no students who received very good or very low scores, two students (8%) who received good scores, eleven (44%), who received fair scores, and twelve (48%) who received poor scores. No kids in the control group received very good or very

low scores, whereas one (4.3 percent) student received a good score, fifteen (65.2 percent) students a middling score, and seven (30.4 percent) students a poor score.

The frequency and percentage of post-test results for both groups indicate that both experimental and control groups had post-test scores. The scores of the kids in both groups improved. However, the experimental group exhibits significant augmentation as a result of the students' STAD-based, discovery-based instruction. We can observe that in the experimental group, 1 student (4%) received a very high score, 17 students (68%) had good scores, 7 students (28%) received fair scores, and no student received a low or very low score.

No students in the control group received very good, low, or extremely poor scores, while 11 students (47.8%) received good scores and 12 students (52.1%) received fair scores. The following mean score and standard deviation of the students' pre-test and post-test are in Table 1.

Table 1. Mean Score and Standard Deviation Of The Students' Pre-Test and Post-Test

Group	Pretest		Posttest	
	Mean score	Standard deviation	Mean score	Standard deviation
Experimental	55.44	10.025	74.96	6.560
Control	57.30	8.562	69.74	5.233

The pre-tests and post-test mean scores and standard deviation differences are displayed in Table 1 for comparison. The improvement in the experimental group, which was taught using STAD based on the discovery learning approach, is still superior, even if the score in the control class increased.

The pre-test results of the students in the experimental group had a mean score of 55.44 and a standard deviation of 10.025. In the follow-up test, the mean score increased to 74.96, and the SD was 6.560. The control group's mean pre-test score was 57.30 and its pre-test standard deviation was 8.562, whereas its mean post-test score was 69.74 and its post-test standard deviation was 5.233.

The posttest results of the students in the experimental group and the control group are inferred in Table 2.

Table 2. The Posttest Results Experimental Group and The Control Group

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Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Sko r	Equal variances assumed	1.769	.190	3.031	46	.004	5.221	1.723	1.753	8.689
	Equal variances not assumed			3.059	45.128	.004	5.221	1.707	1.784	8.658

The sample homogeneity in the post-test is displayed in Table 2. It is evident that the p-value is 0.190 and the F test is 1.769. The sample condition in the post-test is homogeneous, according to Levine's homogeneity test, if the p-value (0.190) is higher than level significance (α) = 0.05. Then, the p-value in the box for the 2-tailed sig. t-test for equality of means is 0.004 and the t-test is 3.031, with Df being 46. If the p-value is less than level significance (α) = 0.05 ($0.004 < 0.05$), there is a significant difference in the post-test. The alternative hypothesis (H1) is therefore accepted. Consequently, the research hypothesis that STAD, which is based on the discovery learning technique, improves students' writing skills is supported.

The experimental and control classes gain scores. The increased score for both groups demonstrates an improvement in the students' writing. But the experimental group's gain score (19.52) was higher than the control group's (12.44). It means that using STAD based on discovery learning has benefits over using traditional methods or teacher-directed learning as the other method.

Using STAD based on discovery learning can improve the students' writing skills in experimental class, according to the gain score in the table above.

4. CONCLUSION

The researcher advances the following conclusions as a result of the findings and discussion:

- The results of the significance analysis of the student's scores on the pre-test and post-test show that the application of STAD based on discovery learning improved the writing skills in the third year of MTs As'adiyah Putri 1 Sengkang. The t-test value of the post-test is 0.004, which is less than (α) = 0.05, and the mean score of the students' post-test (74.96) is greater than the mean score of the students' pre-test (55.44). It indicates that the research's H1 hypothesis was verified. This finding addressed the research's problem statement since STAD-based discovery learning increased students' writing abilities.
- Students' writing of the five writing components is improved by STAD, which is based on discovery learning. In terms of content, organization, vocabulary, language use, and mechanics, it aids students in producing quality essays. The

students' vocabulary has improved the most noticeably. Students are actively chatting, sharing, and gathering ideas in the classroom during lessons using STAD which is centered on discovery learning.

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