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Using Google Bard to Improve Secondary School Students' Essay Writing Performance

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ABSTRACT

Writing is one of the main language skills assessed in English KSSM syllabus. It constitutes 50% of the overall lower secondary school English exam papers and 25% of the 1119 English paper. Despite all the efforts taken to teach writing, students' writing performance is still beyond satisfaction. This is because many teachers have employed teacher-centred method in teaching writing. Furthermore, with the revolution of information technology there is a need to integrate technological tools into teaching of writing. One of them is through the use of Google Bard. Thus, this study was carried out to examine the usefulness of Google Bard in improving students' essay writing performance. Students' perceptions regarding the use of Google Bard were also collected through journal entries, participant observation, questionnaire and interview. The findings show that students showed favourable responses towards the use of Google Bard in improving their essay writing performance. The paired T-Tests conducted show that there are significant improvements in the experimental group post-test compared to pretest in terms of



content, communicative achievement, organisation and language. This is because Google Bard does not only help students with generalisation of ideas and new vocabulary, it also provides flexibility for them to learn at their own pace. Hopefully, Google Bard will also be widely practised in other aspects of language teaching.

Keywords: Artificial intelligence; student-centred learning; essay writing; blended learning

INTRODUCTION

In Malaysia, writing is one of the most important language skills mentioned in KBSM English Syllabus (Pusat Perkembangan Kurikulum, 2000). It constitutes 50% of the overall English paper for the lower secondary school English exam paper and 25% of the overall SPM English 1119 paper. Students need to score well in essay writing in order to perform well for English exam paper.

However, writing is one of the main problems faced by Malaysian students (Siddek & Ismail, 2021). Despite all the efforts taken to teach writing, students' writing performance is still beyond satisfaction. Most of our students are still unable to obtain good results in their writing exams and many are still unable to write well after they have completed their secondary schools. Apart from facing problems in terms of grammar, punctuation and spelling, students also have problems in generating ideas for their essays (Afrin, 2016; Fareed et al., 2016; Misbah et al., 2017).

Thulasi et al. (2015) asserted that Malaysians have poor writing skills because teachers have usually employed teacher centred method in teaching writing to students. Traditional way of essay teaching has made essay lesson a dull and boring subject for the students. Thus, Rahman et al. (2020) recommended that for effective writing, teachers must provide students with new strategies such as creative writing, collaborative writing and peer reviewing techniques. All these can be achieved through student-centred method. Instead of relying on teachers as the main suppliers of input, students should be given more control over their own learning.

Studies conducted recently have shown that the integration of traditional learning approaches and technology to enhance students' writing skills is crucial. According to siddekvenkatesh and Yidana (2016) and Mabuan and Ebron (2017), it is important to combine both face-to-face teaching with online learning. This is termed as blended learning. This is supported by Rahman et al. (2020) who stated that blended learning can be employed in teaching writing to students as it is described as a strategic and systematic approach that integrates the best aspects of face-to-face and online interactions using appropriate communication technology.

There are many blended learning tools that can be used to teach writing. One of them is through the use of artificial intelligence such as ChatGPT, Cloude AI and Google Bard. Many studies have shown the benefits of artificial intelligence in improving students' essay writing performance (Buriak et al., 2023; Quintans-Júnior et al., 2023; Kim, 2023). In this study, Google Bard is chosen as the blended learning tool in the efforts of improving students' writing skills.



Google Bard is one of the latest technological tools that can be used to search for information. Aydın (2023) asserted that collection and expression of knowledge can be accelerated with the help of artificial intelligence. Although many studies have been done on blended learning tools and ChatGPT, there is still lack of research about the use of Google Bard especially in teaching writing to the secondary school students (Aydın & Karaarslan, 2022; Rahman et al., 2023; and Libório et al., 2023).

Thus, this study bridges the gap of the use of Google Bard as a blended learning tool in improving secondary school students' writing performance. This study intends to find out the usefulness of using Google Bard in improving secondary school students' writing performance through the use of paired T-Test, journal entries, observation, questionnaire and interview.

Research Objectives

The aims of this study are to examine:

- i. the usefulness of Google Bard in improving secondary school students' essay writing performance
- ii. students' perceptions regarding the use of Google Bard

Research Questions

This study will seek answers to the following research questions:

- i. How does Google Bard improve secondary school students' essay writing performance?
- ii. What are secondary school students' perceptions towards the use of Google Bard?

LITERATURE REVIEW

The Technology Acceptance Model (TAM) is an important theory regarding technology developed by Davis et al. (1989). According to them, "People form attitudes and intentions towards trying to learn to use the new technology prior to initiating efforts directed at using." TAM has been widely applied to various contexts, including software adoption, e-commerce, and telemedicine. In other words, TAM Theory has been used for electronic applications such as WhatsApp, Facebook, and electronic devices such as iPads, mobile phones and laptops.

Core Constructs of TAM

TAM revolves around three key constructs:

1. **Perceived Usefulness (PU):** This construct refers to the degree to which the user believes that using the technology improve their job performance or accomplish their tasks more effectively. In this study, perceived usefulness refers to students' perceptions regarding the use of Google Bard in improving their essay writing performance. Students will have high perceived usefulness of Google Bard if they think that Google Bard is indeed useful in improving their essay writing performance. For example, Google Bard not only helps them in terms of generalisation of ideas, but also helps them through translation and Read Aloud functions in Google Bard.



2. Perceived Ease of Use (PEOU): Perceived ease of use refers to the degree to which the user believes that a particular technology is easy to learn and use. In this study, students will have high perceived ease of use towards Google Bard if they can easily use Google Bard without teachers' explanation or friends' assistance in using it. They also do not need to refer to user manual before using Google Bard.

3. Behavioral Intention (BI): Behavioural intention refers to an individual's likelihood or intention to use a particular technology. Both perceived usefulness and perceived ease of use will prompt users' behaviour to continue using the technology. In this study, if students have high perceived usefulness and perceived ease of use towards Google Bard, they will be attracted to use Google Bard more often.

Blended Learning

Rahman et al. (2020) and Mustapha et al. (2022) asserted that blended learning is a new approach of teaching that does not solely focus on teachers as information providers. In blended learning, students take part actively in their learning by actively seeking knowledge through various processes. On the other hand, Cronje (2020) defined blended learning as a blend of online and face-to-face instruction. This mode of learning provides students with autonomy to progress while their achievements are monitored by teachers.

Blended learning plays an important role in improving students' writing skills (Annamalai, 2019; Mabuan & Ebron, 2017). This is because blended learning provides more opportunities for students to learn on their own. Students can choose the time, place and resources in order to learn essay writing. They can refer to different online resources and use a variety of online writing platforms suitable to their learning styles and preferences. Eventually, blended approach develops students' self-directed learning and increases students' motivation towards learning.

In this study, students were taught essay writing in a blended learning environment. Apart from teachers teaching in class, students were also asked to learn further on their own using Google Bard. Google Bard is an artificial intelligence that provides students with opportunities to progress on their own based on their proficiency and level of knowledge.

Google Bard

Google Bard AI is a text-based artificial intelligence chatbot developed by Google in competition with ChatGPT. Similar to ChatGPT, Google Bard also can generalise ideas based on the users' prompt and provide personalised feedback for the users. Research shows that Google Bard can help with creative tasks, explaining complex topics and generally extracting information from a variety of sources on the internet (Patrizio, 2023). Although studies had been done about ChatGPT (Aydın & Karaarslan, 2022; Rahman et al., 2023; Libório et al., 2023), there are few studies on the use of Google Bard especially among secondary school students.

In this study, Google Bard was used as a digital tool in teaching essay writing to students. Students were given opportunities to learn essay writing using features available in Google Bard such as translation and Read Aloud functions.



METHODOLOGY

For the purpose of this study, a mixed mode method, convergent design is used. Toyon (2021) stated that convergent design is a type of mixed methods research in which the researcher collects quantitative and qualitative data simultaneously and analyses them separately. After the analysis, the researcher then combines or compares the results to draw a conclusion. Convergent design is used when there is a need to compare statistical results with qualitative findings to understand the research problem better. Both quantitative and qualitative approaches are adopted in answering the research questions. By using both approaches in the data collection process, detailed and rich data can be obtained. Hence, a more comprehensive explanation of the findings can be done (Ling Jen & Hamzah, 2008).

The sample of this study was a group of 40 Form 3 students of one of the secondary schools in Johor Bahru. The subjects were purposely chosen as they were not sitting for any public examination in their year of study. The sample of this study was divided into 2 groups. Experimental group and control group. The experimental group went through treatment or lessons using Google Bard while the control group went through the traditional way of essay writing. The experimental group students' perceptions towards the use of Google Bard were collected through a set of questionnaires and the findings were triangulated using interviews and observation. The pre-test and post-test results were analysed in terms of content, communicative achievement, organisation and language using paired T-tests to find out whether the students had improved significantly in their essay writing through the use of Google Bard. At the same time, questionnaires and interviews were administered to find out the students' perceptions towards the use of Google Bard.

Research Procedures of Control Group

In this study, the subjects in the control group did not receive the same treatment as in the experimental group. First, the subjects were required to sit for the pre-test. Since they were required to produce an essay of about 120 words, they were given 45 minutes to complete the task. This was also the time suggested by Ministry of Education for Notes Expansion essay.

For the control group, the researcher adopted the teacher-centred approach in teaching writing. The researcher would first discuss the content of the essay. Then, the subjects were asked to work individually to produce the essay. The teacher would teach the students to identify the mistakes in the essay and corrected them. Students were then asked to edit their own draft and improved on it. Next, they submitted their draft for marking and grading. Finally, the teacher returned the essay to the students for marking and grading. After the treatment, the subjects were asked to sit for the post-test and completed the writing task within forty-five minutes.

Research Procedures of Experimental Group

Similar to the control group, firstly, the pretest was administered to all the subjects. They were required to answer the question within forty-five minutes. In the first treatment, the subjects were taught explicitly by the researcher about the topic. They were asked to underline the key points in the essay question. In the second treatment, the subjects were asked to find out more information regarding the topic using Google Bard. Google Bard was used as it could help students to generate ideas for their writing task. In the third treatment, students were shown

examples of mistakes they often make in their writing by the researcher. Students would then edit their essay based on the mistakes shown by the researcher. After the treatment, the subjects were given a set of post-test. Subsequently, the subjects were also asked to write a journal entry regarding their experience in using Google Bard. Finally, they were asked complete a set of questionnaire and interviews regarding their perceptions on the use of Google Bard.

Setting

This study was conducted in one of the secondary schools in Johor Bahru. It was conducted in an audio-visual room to provide maximum comfort and conducive environment to the students. All the treatments in this study were carried out in the same room at different time. This study was conducted during the class time as part of their daily lesson so that the context was as natural as possible. However, the treatments for the control and experimental group were conducted at different times.

Population & Sampling

For this study, 40 Form 3 students at a secondary school in Johor Bahru were selected as the subjects. They included both male and female students and they were from different races. 20 students were assigned to the control group while another 20 students were assigned to the experimental group. The technique of sampling used in this study is non-purposive random sampling as the subjects were chosen randomly.

Research Instruments

There were a few instruments used in this study. These included a set of pre-test and post-test writing task, the English PT3 Essay marking scale, journal entries, a set of questionnaires and semi-structured interviews.

Pre-Test and Post-Test

The first instrument used in this study was a set of pre-test and post-test. The pre-test was administered to all the subjects before the treatment while the post-test was administered to the subjects after the treatment. Both the pre-test and post-test consisted of one notes expansion essay. Students had been exposed to notes expansion essay since Form 1. Below is the pre-test used for this research.

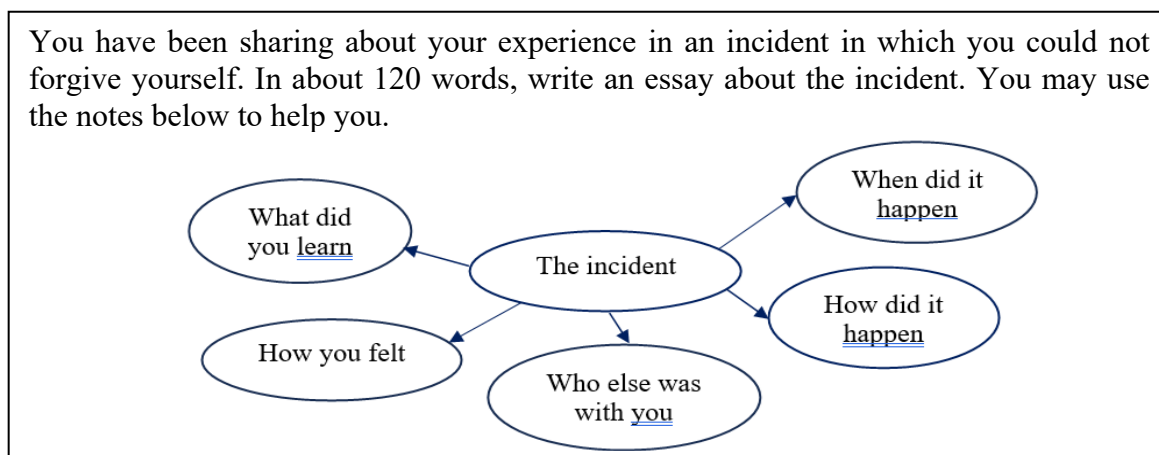


Figure 1: Pre-test (Malar & Majawit, 2022)

In the task above, students were required to write an essay about an incident that they could not forget. They were required to use all the given points while writing their essay.

Meanwhile, in the post-test, students were asked to write an essay about an accident that they were involved in. They were required to use all the given points while writing their essay. The post-test used in this research is shown below.

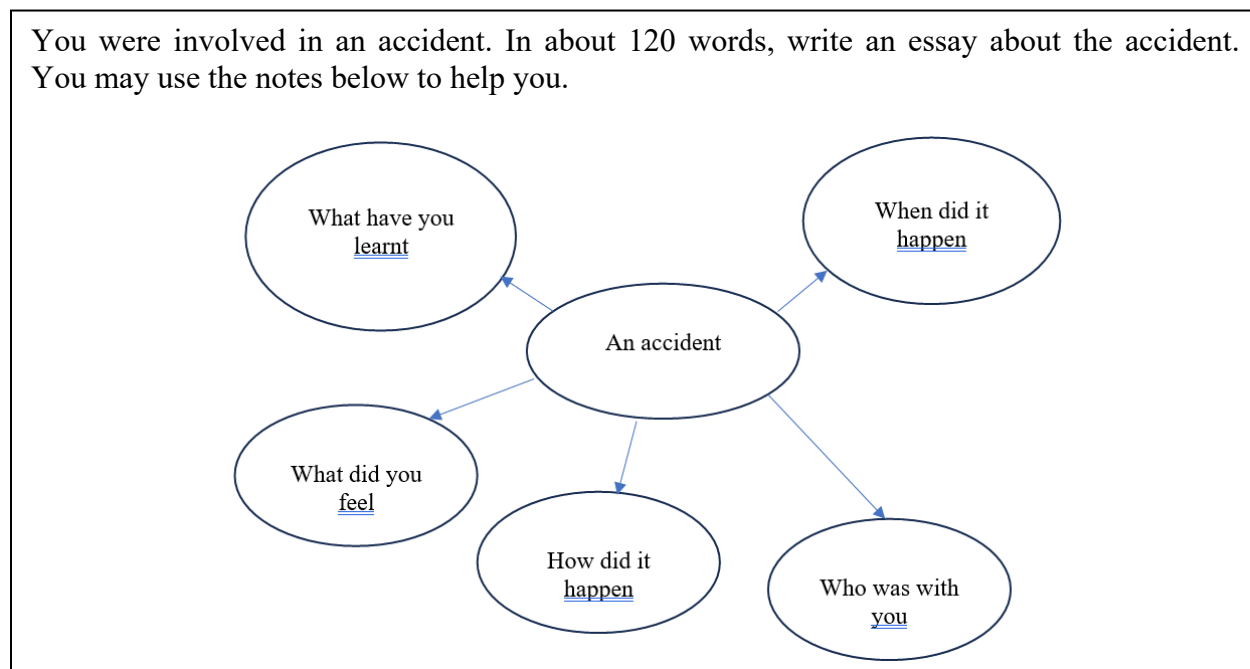


Figure 2: Post-Test (Joseph, 2021)

The answers given by the subjects in the pre-test and post-test were marked using the Form 3 English essay marking scheme. After that, the pre-test and post-test for the experimental and control groups were analysed in detail based on the content, communicative achievement, organisation, and use of language.

English PT3 Essay Marking Scheme

As the subjects in this study were Form 3 students at a secondary school in Johor Bahru, the English PT3 Essay Marking Scheme was used as a rating scale in this study. The marking scheme consists of 4 components: Content, communicative achievement, organisation, and use of language. Below is the marking scheme used for this research.



Table 1
PT3 Essay Marking Scheme

PART 2				
Scale	Content	Communicative Achievement	Organisation	Language
5	All content is relevant to the task. Target reader is fully informed.	Uses the conventions of the communicative task to hold the target reader's attention and communicate straightforward ideas.	Text is generally well-organised and coherent, using a variety of cohesive devices.	Uses a range of everyday vocabulary with occasional inappropriate use of less common lexis. Uses a range of simple and some complex grammatical forms with a good degree of control. Errors do not impede communication
4	Performance shares features of scores 3 and 5			
3	Minor irrelevances and/or omissions may be present. Target reader is on the whole informed.	Produces a text that communicates straightforward ideas using the conventions of the communicative task reasonably well	Uses simple connectors and a limited number of cohesive devices appropriately.	Uses basic vocabulary appropriately. Uses simple grammatical forms with a good degree of control. While errors are noticeable, meaning can still be determined.
2	Performance shares features of scores 1 and 3			
1	Irrelevances and/or misinterpretation of task may be present. Target reader is minimally informed.	Produces a text that communicates simple ideas in simple ways.	Text is connected using basic, high frequency connectors.	Uses basic vocabulary reasonably. Uses simple grammatical forms with some degree of control. Errors may impede meaning at times.
0	Content is totally irrelevant. Target reader is not informed.	Performance Below Band 1		

Questionnaire

A set of questionnaires was used to get the experimental group students' opinions on the use of Google Bard as a blended learning tool. The questionnaire consists of three parts. The first part is about students' demographic information while the second part is about students' perceptions towards blended learning. Finally, the third part of the questionnaire is about students' perceptions on the use of Google Bard. The questionnaire consisted mainly of three constructs: Perceived usefulness, perceived ease of use, and attitude. Below is the questionnaire used for this study.

Table 2
Questionnaires Used in This Study

Section 1:

Student's Demography		
Gender	Male	Female
Student's class:	State: _____	

Section 2:

Student's Perceptions about Blended Learning					
Item	Statement	Not True	Partly True	Mostly True	True
1	I have no problem in surfing for online materials.	1	2	3	4
2	I like to get information online.	1	2	3	4
3	Online materials can help me in my study.	1	2	3	4
4	Apart from teacher teaching in class, I should also get information from online materials.	1	2	3	4
5	Teaching and online materials are both important in my learning.	1	2	3	4

Section 3:

Student's Perceptions about Google Bard					
Item	Statement	Not True	Partly True	Mostly True	True
6	I have used Google Bard before.	1	2	3	4
7	Google Bard is easy to use.	1	2	3	4
8	I can get a lot of information from Google Bard.	1	2	3	4
9	I have improved my essay writing using Google Bard.	1	2	3	4
10	I have learnt new vocabulary and ideas from Google Bard.	1	2	3	4

Interviews

Interviews were administered after the questionnaires. The purpose of interviewing the subjects in this study was to find out about students' perceptions towards blended learning and the use of Google Bard in improving their essay writing. It was also to clarify their answers in the questionnaires. For example, if in the questionnaires, the subjects stated that they had improved in terms of grammar and vocabulary through the use of Google Bard, the students would then be asked to list the words they had learnt in the interview. The interview questions were adapted from Tosun (2015).



1. What is your general opinion about traditional, face to face learning? Why?
2. What do you like about blended learning?
3. What do you like about using Google Bard?
4. What have you improved while using Google Bard?
5. What are the advantages of Google Bard?
6. Will you use Google Bard in the future?

Figure 3: Interview Questions Used in The Study

FINDINGS & DISCUSSION

The students' results in the pre and post-test were presented into different categories according to the research questions of this study. Firstly, the respondents' pretest and post-test results were analysed using T-test to examine whether there was any significant improvement in their post-test results compared to the pretest. Subsequently, the pretest and post-test results were analysed in detail to examine whether there was any significant improvement in terms of content (C), followed by communicative achievement (CA), organisation (O) and language (L). These are the four components tested in English PT3 marking scheme for notes expansion essay. The students' pre and post-tests results were presented below.

Table 3

Pre-Test and Post-Test Results for Experimental Group Students

Num.	Name	Pre-Test				Post-Test				Pre (Total)	Post (Total)	Differences
		C	CA	O	L	C	CA	O	L			
1	Student 1	3	2	2	2	5	4	3	3	9	15	6
2	Student 2	3	2	2	2	5	4	4	3	9	16	7
3	Student 3	3	2	1	2	5	4	3	3	8	15	7
4	Student 4	3	2	1	2	5	4	3	3	8	15	7
5	Student 5	4	2	3	3	5	4	4	4	12	17	5
6	Student 6	4	2	3	3	5	4	4	3	12	16	4
7	Student 7	3	2	2	2	5	4	3	3	9	15	6
8	Student 8	2	1	1	1	5	3	3	2	5	13	8
9	Student 9	3	2	2	2	5	4	4	3	9	16	7
10	Student 10	1	1	1	1	5	4	4	3	4	16	12
11	Student 11	3	2	2	2	5	3	3	3	9	14	5
12	Student 12	3	2	2	2	5	4	4	4	9	17	6
13	Student 13	3	1	1	1	5	4	3	3	6	15	9
14	Student 14	2	1	1	1	5	3	3	3	5	14	9
15	Student 15	3	1	1	1	4	3	3	2	6	12	6
16	Student 16	2	1	2	2	5	3	3	2	7	13	6
17	Student 17	1	1	1	2	4	4	3	3	5	14	9
18	Student 18	4	1	1	1	5	3	3	2	7	13	9
19	Student 19	5	4	3	3	4	3	3	3	15	13	-2
20	Student 20	0	1	1	1	4	2	2	2	3	10	7

The table above shows that all the students except for student number 12 had improved in their post-test essay compared to the pre-test essay. This shows that they have learnt how to generate ideas and new words through the use of Google Bard. The results were then analysed using T-Test to see whether there was any significant improvement in the post-test compared to the pre-test.

Improvement of Overall Students' Essay Writing Performance

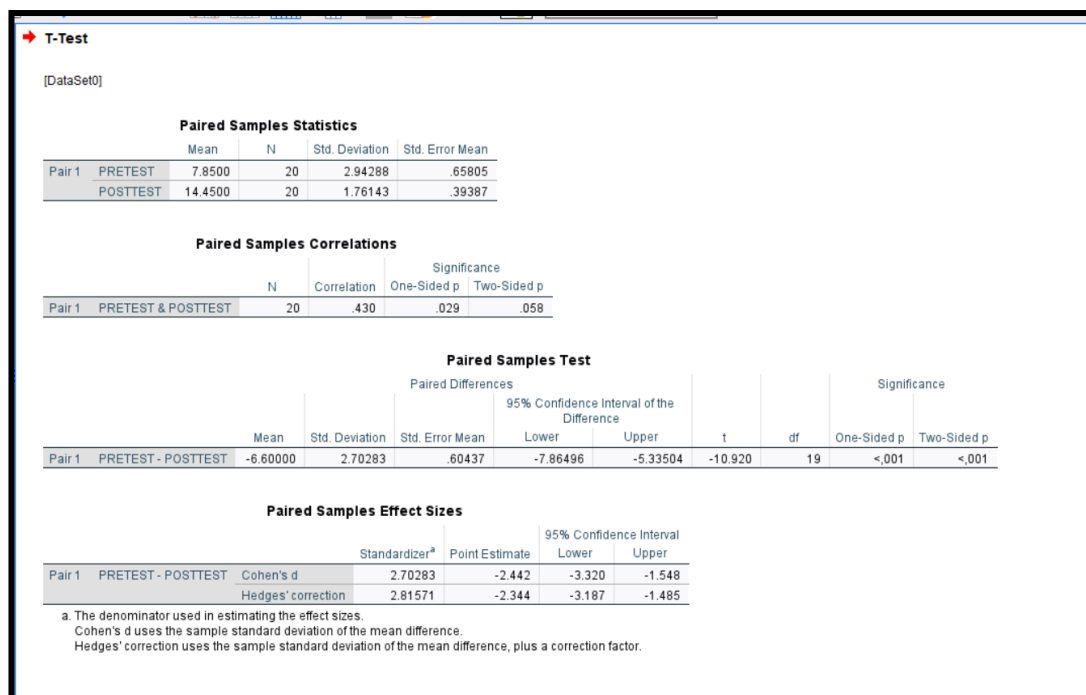


Figure 4: Paired T-Test to Compare Overall Results from Pre-Test and Post-Test

Null Hypothesis: Students did not improve significantly through the use of Google Bard.

A paired sample t-test was conducted to compare the pre-test and post test scores of the experimental group. The experimental group was the students who went through the essay writing class using Google Bard. The results revealed a significant difference between the pre-test and post-test results as the p-value was less than 0.05. These findings suggest that we have to reject the null hypotheses as students had improved significantly through the use of Google Bard in their essay writing. This is because Google Bard helps students in terms of generalisation of ideas and translation of new words. Google Bard also eases students' comprehension of the reading text through the 'Read Along' function in the text.

Improvement of Students' Essay Writing Performance in Terms of Content

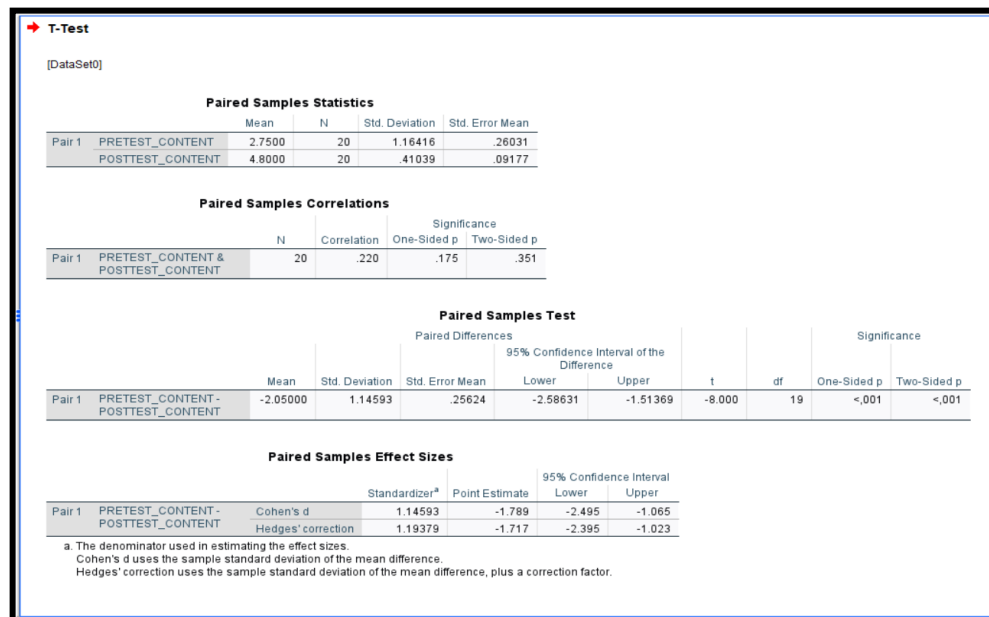


Figure 5: Paired T-Test to Compare Experimental Group Students' Pre and Post-Test Students' Essay Results in Terms of Content

Null Hypothesis: Students did not improve significantly in terms of content through the use of Google Bard.

The second paired sample t-test was conducted to compare the pretest and post-test scores of the content for the experimental group students' essays. In order to score well for this section, students must have the ability to provide relevant and sufficient ideas according to the essay question.

The results revealed a significant difference between the pre-test and post-test results as the p-value was less than 0.05. These findings suggest that we have to reject the null hypotheses as students had improved significantly in terms of content through the use of Google Bard in their essay writing. According to the respondents in their journal entries, Google Bard had helped them to generate ideas for their essay topic. Students were only required to key in the 'prompt' in terms of words for their essay questions and Google Bard would generate ideas in terms of paragraphs for the students' essays.

Google Bard is a great aid for students who usually face problems in generating ideas for their essay question. Students just need to copy, summarise or paraphrase the content generated using Google Bard. In addition, they will also learn how to elaborate the points from the sample essays provided by Google Bard.

Improvement of Students' Essay Writing Performance in Terms of Communicative Achievement

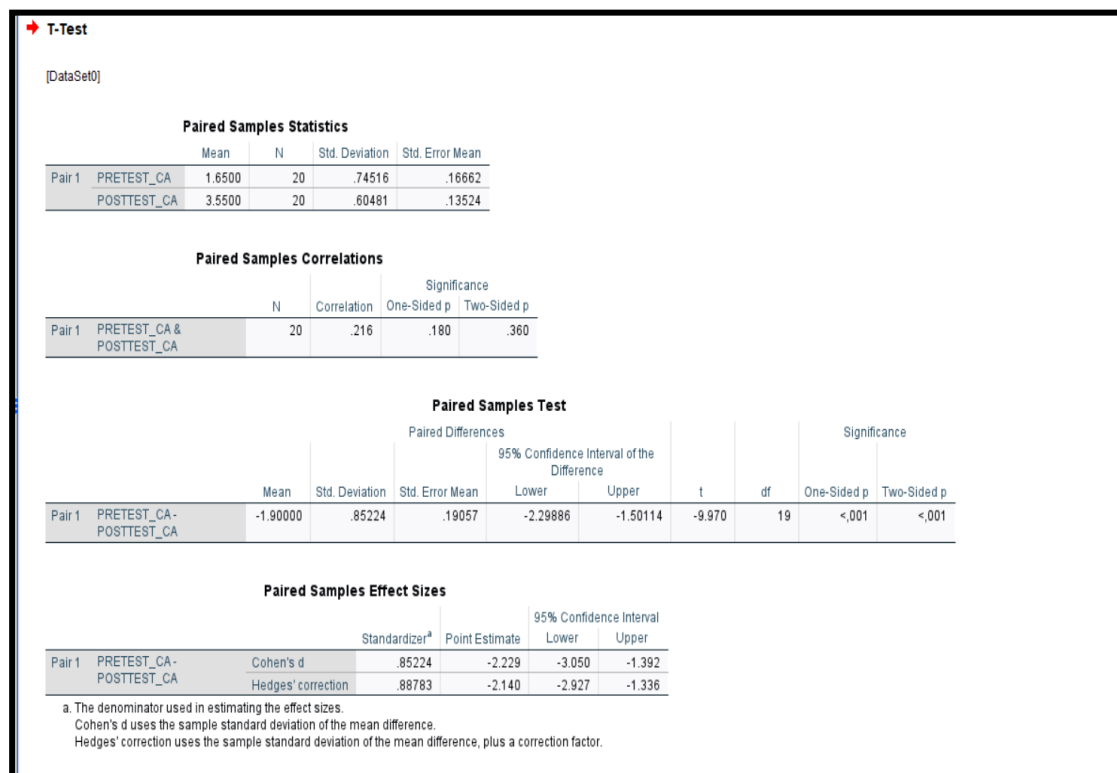


Figure 6: Paired T-Test to Compare Experimental Group Students' Pre-Test and Post-Test Essay Results in Terms of Communicative Achievement

Null Hypothesis: Students did not improve significantly in terms of Communicative Achievement through the use of Google Bard.

The third paired sample T-Test was conducted to compare the pre-test and post-test scores of the 'Communicative Achievement' of the experimental group students' essays. 'Communicative Achievement' refers to the ability of students to produce a text that communicates straightforward ideas using the conventions of the communicative task.

The results revealed a significant difference between the pre-test and post-test results as the p-value was less than 0.05. These findings suggest that we have to reject the null hypotheses as students had improved significantly in terms of communicative achievement through the use of Google Bard in their essay writing. The results show that students had learnt the correct way of writing and suitable words for the essay through the sample answers given by Google Bard.

Improvement of Students' Essay Writing Performance in Terms of Organisation

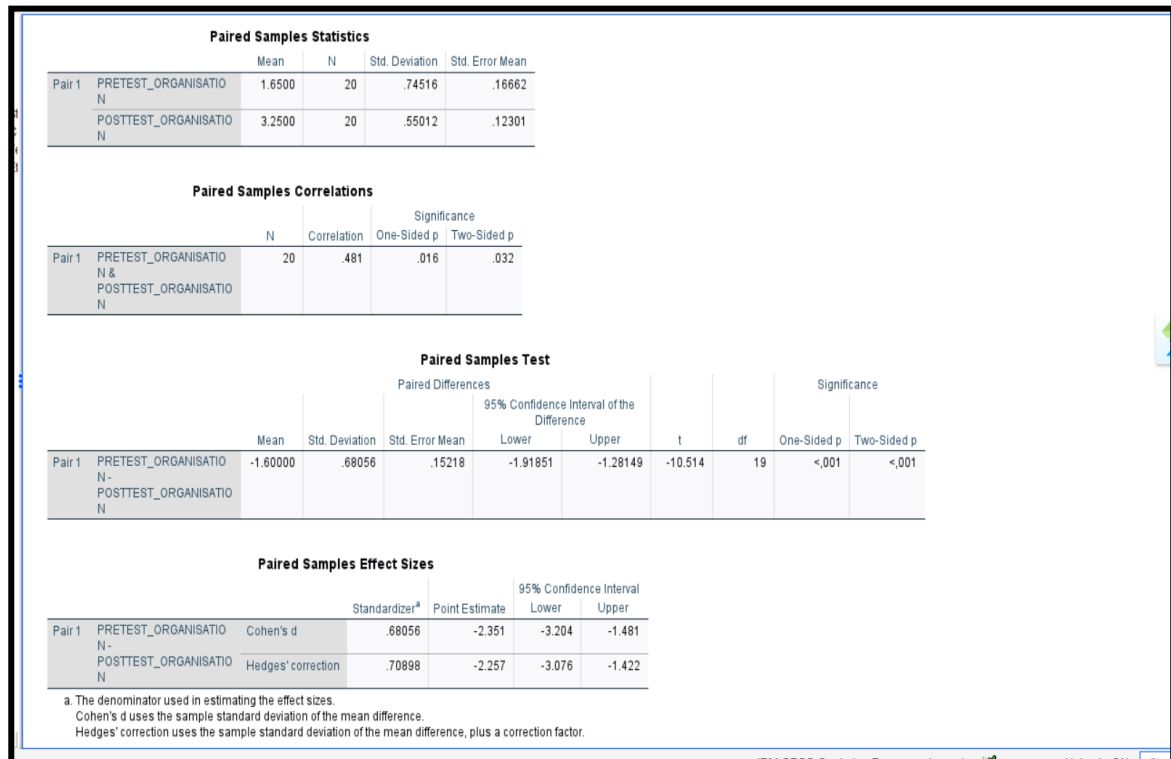


Figure 7: Paired T-Test to Compare Experimental Group Students' Pre and Post-Test Essay Results in Terms of Organisation

Null Hypothesis: Students did not improve significantly in terms of Organisation through the use of Google Bard.

In addition, a paired sample T-test was conducted to compare the pre-test and post-test scores of the organisation of the experimental group students' essays. In order to score well for this part, students must have the ability to use connectors and cohesive devices correctly in their essay.

The results revealed a significant difference between the pre-test and post-test results as the p-value was less than 0.05. These findings suggest that we have to reject the null hypotheses as students had improved significantly in terms of organisation through the use of Google Bard in their essay writing. Students had learnt how to link their ideas together using cohesive devices through the examples provided from Google Bard. In other words, they had learnt how to link their ideas together using cohesive devices. Apart from that, students could also search for suitable cohesive devices to be used in their essay through the 'prompt' function in Google Bard.

T-Test

[DataSet0]

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRETEST_LANGUAGE	1.8000	20	.69585	.15560
	POSTTEST_LANGUAGE	2.8500	20	.58714	.13129

Paired Samples Correlations

		N	Correlation	Significance	
				One-Sided p	Two-Sided p
Pair 1	PRETEST_LANGUAGE & POSTTEST_LANGUAGE	20	.567	.005	.009

Paired Samples Test

		Paired Differences							Significance	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	One-Sided p	Two-Sided p
					Lower	Upper				
Pair 1	PRETEST_LANGUAGE - POSTTEST_LANGUAGE	-1.05000	.60481	.13524	-1.33306	-.76694	-7.764	19	<.001	<.001

Paired Samples Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
Pair 1	PRETEST_LANGUAGE - POSTTEST_LANGUAGE	Cohen's d	.60481	-1.736	-2.429
		Hedges' correction	.63006	-1.666	-2.331

a. The denominator used in estimating the effect sizes.
 Cohen's d uses the sample standard deviation of the mean difference.
 Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.

Null Hypothesis: Students did not improve significantly in terms of language through the use of Google Bard.

The results revealed a significant difference between the pre-test and post-test results as the p-value was less than 0.05. These findings suggest that we have to reject the null hypotheses as students have improved significantly in terms of language through the use of Google Bard in their essay writing. This is because students were able to learn about suitable words related to their essay through the translation feature in Google Bard. Whenever students face problems in finding suitable words in English for their essay, they can use Google Bard to translate the word in their mother tongue into English words. This helps students to use the appropriate English word for their essay. Apart from that, students can also learn about forming sentences grammatically through the use of Google Bard as Google Bard provides answers in chunk or paragraphs.

Findings from Students' Journal Entries

Below are some of the students' responses in their journal entries regarding their experience in using Google Bard. The students' responses were presented using thematic approach. The main themes used for this part are based on TAM's Theory (Davis et al., 1989): Perceived usefulness and perceived ease of use.

Table 4
Identified Themes

Students' Journal Entries	Themes Identified
<u>Student 1</u> One of the benefits of using Google Bard is that it provides us with information from different sources, even the most tedious information. Subsequently, we can expand our vocabulary with Google Bard	Perceived usefulness
<u>Student 2</u> Google Bard provides us with a lot of information from different sources. We can also get to know information from Google Bard very quickly.	Perceived usefulness
<u>Student 3</u> We can learn new words through Google Bard	Perceived usefulness
<u>Student 4</u> The benefit of Google Bard is I can find a lot of information from Google Bard. So can easily do the essay given by the teacher. Other than that, we can know new words to put into the essay. This helps me to get higher marks for my essay.	Perceived usefulness
<u>Student 5</u> The 'Read Along function' in Google Bard helps me to learn the pronunciation of the English words.	Perceived usefulness
<u>Student 6</u> We can get educational information from using Google Bard	Perceived usefulness

<u>Student 7</u> Google Bard is easy to use even for a 10-year-old kid	Perceived ease of use
<u>Student 8</u> Google Bard is better than real Google. We can use Google Bard to get a lot of information and simple to use	Perceived usefulness Perceived ease of use

Findings from Questionnaires

Overall, students who used Google Bard in their essay writing showed positive responses in the process of essay writing since online learning stimulates their thinking skills and critical thinking. This was shown by the responses in the questionnaire below.

Table 5
Students' Perceptions about Blended Learning

Item	Statement	Not True	Partly True	Mostly True	True
1	I have no problem surfing for online materials.	2 (10%)	2 (10%)	5 (25%)	11 (55%)
2	I like to get information online.	0 (0%)	0 (0%)	6 (30%)	14 (70%)
3	Online materials can help me in my study.	0 (0%)	1 (5%)	8 (40%)	11 (55%)
4	Apart from teacher teaching in class, I should also get information from online materials.	0 (0%)	2 (10%)	8 (40%)	10 (50%)
5	Teaching and online materials are both important in my learning.	0 (0%)	0 (0%)	5 (25%)	15 (75%)

Majority of the students (80%) had no problem in surfing for online materials and all of them (100%) stated that they like to get information online while 95% stated that online materials can help them in their study. 90% of the respondents also agreed that apart from teacher teaching in class, they should also get information from online materials and finally, 100% of them stated that teaching and online materials are both important in their learning. This shows that students enjoyed blended learning as most of them (80%) of them did not have problem in surfing for online materials. This is because most of the students have either mobile phone or laptop at home that enables them to surf for online materials. Students who have problem in surfing for online materials might be given guidance and opportunities to surf for online materials at school. Teachers should also guide them in the correct way to surf for online materials such as using the correct words and online websites while surfing for materials.

The table below shows students' perceptions about the use of Google Bard.

Table 6
Students' Perceptions about Google Bard

Item	Statement	Not True	Partly True	Mostly True	True
1	I have used Google Bard before.	10 (50%)	2 (10%)	8 (40%)	0 (0%)
2	Google Bard is easy to use.	0 (0%)	0 (0%)	15 (75%)	5 (25%)
3	I can get a lot of information from Google Bard.	0 (0%)	0 (0%)	10 (50%)	10 (50%)
4	I have improved my essay writing using Google Bard.	0 (0%)	1 (5%)	2 (10%)	17 (85%)
5	I have learnt new vocabulary and ideas from Google Bard.	0 (0%)	0 (0%)	7 (35%)	13 (65%)

Majority of the students, 60% of them stated that they had never used Google Bard before. This was the first time for most of them to use Google Bard. However, all of them expressed that they liked using Google Bard. This is because of the features of Google Bard which are easy to use for students. This is termed as 'ease of use' by Venkatesh et al. (2003) in TAM theory. Venkatesh et al. (2003) asserted that perceived ease of use is the extent to which using the system is free of effort. Students only need to key in the keywords into the 'prompt' function of Google Bard and the responses will be generated for them.

Apart from that, 95% of the students stated that they had improved their essay writing using Google Bard and all of them stated that they had learnt new vocabulary and ideas from Google Bard. This was termed as 'perceived usefulness' in the TAM Theory. Venkatesh et al. (2003) asserted that perceived usefulness is defined as the extent to which using a system enhances an individual's productivity. Google Bard does not only help students in generation of ideas, but also helps them to translate words from their mother tongue into suitable words in their essay writing. Finally, Google Bard also eases their understanding through 'Read Along' function in Google Bard.

Findings from Observation

It was observed that students took part actively while using Google Bard. At first, some of them faced problems in using Google Bard since they had never surfed for information online. Teacher had to guide them step-by-step in surfing for materials. They were also taught to use the correct keywords while surfing for online materials and took only the relevant information that was relevant to their essay task.

However, it was observed that all the students enjoyed using Google Bard. They even ventured further on their own by using Google Bard for their other writing tasks. However, it was observed that not all the students were given equal opportunities in using Google Bard and time was limited for students to explore using Google Bard. To overcome this problem, students



were asked to continue surfing for online materials using Google Bard at home since most of them had either mobile phones or laptops at home.

Findings from Semi-Structured Interview

The interview conducted with the students showed that all of them liked to use Google Bard. This was because Google Bard was something new for them. Google Bard also has many benefits as highlighted by the students.

Firstly, Google Bard helped students to generate ideas for their essays. Students were only required to enter the keywords into the ‘prompt’ for the essay task and Google Bard would generate a lot of content in paragraphs for them.

Apart from that, Google Bard had also improved students’ vocabulary as students could key in words in their mother tongue into the system. Google Bard would then translate the given word into a few suggested English words with explanation. Through this, students had not only learnt about the new words, but they had also learnt the meaning of the new words provided by Google Bard.

Finally, Google Bard had also improved students’ reading comprehension and pronunciation through the ‘Read Along’ feature provided in the text. Once activated, the ‘Read Along’ feature in Google Bard would read out all the words shown in the Google Bard. Students would be able to learn about the correct pronunciation of every word and at the same time understood the text better since they were not only using their sight sensory, but they were using their listening sensory at the same time.

All these benefits are the ‘perceived usefulness’ of Google Bard as discussed by Venkatesh et al. (2003) in TAM Theory.

Finally, all the students stated that they did not face any problem while using Google Bard. This is because Google Bard was an easy-to-use application. Students were only required to key in the keywords into the ‘prompt’ function and the responses would be given by Google Bard automatically in a few seconds. Thus, students did not face any problem while using Google Bard. This ‘perceived ease of use’ feature of Google Bard enables it to be used easily and conveniently (Venkatesh et al., 2003).

CONCLUSION & RECOMMENDATION

Google Bard is indeed an effective tool in improving students’ essay writing performance. The results of this study have shown that Google Bard helps students to improve their essay in terms of content, communicative achievement, organisation and language aspects. In terms of content, Google Bard helps students by generating ideas for their essays. Students just need to key in the words into the Google Bard ‘prompt’ and sample answers will be presented to students. Students can then summarise or paraphrase the ideas to include in their essays.



Furthermore, students can also learn new words through the translation feature in Google Bard. Whenever students face problems in translating words from their mother tongue, students can key in the words into the prompt using the keywords 'translate (word) into English'. Google Bard will then suggest a list of words with their definition. Moreover, Google Bard eases students' understanding through 'Read Along' feature. When activated, the 'Read Along' feature will read out all the words shown on Google Bard response screen. Students can learn the pronunciation of the words through it.

In conclusion, Google Bard is a great aid for students to improve on their writing performance. This is supported by studies done by Guo et al. (2022) and Nazari et al. (2021) who asserted that Artificial Intelligence tools have great benefits in improving students' essay writing performance. This is because apart from generating ideas, Artificial Intelligence tools are also able to perform other functions such as translation, providing feedback, evaluating students' essays and give personalised comments to the users. Future research should be carried out regarding the use of Google Bard in other language learning aspects and with different age groups as Google Bard is still a new technological tool in language teaching and learning.

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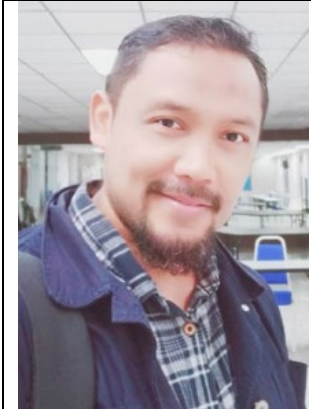
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