

## CALL FOR APPLICATIONS: IMPROVE STUDENT WRITING SKILLS BY USING ONLINE COLLABORATIVE WRITING

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### ABSTRACT

Computer-assisted language learning (CALL) is a guidelines approach that utilizes innovation to improve dialect capability, especially in composing. Scholars have access to different programs or websites that can help them in moving forward with their composing aptitudes. In this specific consideration, the center was on examining whether the utilization of Google Docs for online collaborative composing seems upgrade learners' composing capacities. The members of the study were scholars selected within the English Literature Study Program (Bachelor Degree) at Mahasaraswati University. A add up to of 60 scholars were chosen as tests, with 30 scholars doled out to the Treatment group and another 30 to the Test group. Amid a 4-week composing course, the tests locked in bunch composting hones utilizing Google Docs. Information collection included regulating pre-tests, post-tests, and surveys, which were at that point analyzed employing a blended strategies approach. The discoveries show that the Free Tests t-Test (t-count) yielded a score of 6.531, whereas the t-table esteem was 2.007, and the p-value was 0.000. These come about suggest that utilizing Google Docs as a stage for collaborative composing exercises encompasses a critical effect on scholars' composing aptitudes. The truth that the t-count scores surpass the t-table values and the p-values are below 0.05 demonstrates the nearness of a normal contrast between the scores of the Treatment class scholars and the Test class scholars.

Keywords: *CALL, Collaborative Writing, Writing Skills*

### INTRODUCTION

Writing is an essential language skill that plays a vital role in academic success. It involves various factors such as vocabulary, grammar, organization, spelling, and punctuation, which influence both the process and the final outcome of writing. When scholars are learning to write in a foreign language, they face challenges in employing cognitive processes effectively to express themselves in that particular language, as writing is an active and productive skill. Writing is a complex task that requires proficiency in vocabulary, sentence structure, and an understanding of linguistic and writing conventions. The main objective of English writing curriculum in higher education is to equip scholars with the ability to produce clear and effective written texts.

In collaborative writing, scholars work in pairs or groups to create well-written compositions as part of an instructional strategy. This approach encourages scholars to produce high-quality papers with the assistance of their peers. Simply put, it involves scholars collaborating to generate a cohesive piece of writing. According to Sukirman (2016), this strategy often involves two or more scholars sharing the writing process.

Dale (1994) further argues that meaningful communication and decision-making among group members are crucial for developing a shared work. Collaborative writing can enhance scholars' writing processes by providing a supportive environment for

working with partners. The descriptions above suggest that collaborative writing, which involves student interaction and group work, is a social activity that enhances motivation.

Recent research has focused on collaborative writing and its effectiveness. Fernandez Dobao (2012) examined collaborative writing strategies as well as strategies used by individuals or pairs. The findings indicated that collaborative groups produced more accurate outcomes in terms of grammar, vocabulary, word usage, and sentence structure compared to individual writing. Juang (2014) investigated the effectiveness of collaborative writing strategies in teaching writing to scholars. The results were promising, as scholars showed improvement in content, organization, mechanics, and sentence structure, achieving scores that met Very Good-Good standards.

Despite the effectiveness of collaborative writing, previous research has identified challenges in its implementation. Deveci (2018) compared group writing to individual and pair projects and found that texts produced collaboratively were more accurate, with improved grammatical and lexical accuracy. However, the study also identified issues such as passive scholars overly relying on their peers, which negatively affected the overall performance of group writing projects. Meyer (2014) found that some scholars showed limited engagement and motivation during collaborative writing discussions.

Kalpari conducted a study on collaborative writing in descriptive texts for second-grade scholars in senior high school. The findings indicated a significant positive impact on student learning achievement. However, issues with passive behavior in discussions persisted. To address this, incorporating media elements that inspire active participation and collaboration among scholars was suggested. Ismail Ramadhan (2019) supports this view, suggesting that researchers studying collaborative writing should introduce innovative approaches.

In a study by Nguyen et al. (2021), the impact of online collaborative writing on the writing proficiency of EFL scholars was examined. Pre-test, post-test, and questionnaire data were collected, and a mixed methods methodology was employed for evaluation. The findings indicated notable improvements in writing skills among participants, who generally held a positive view of this innovative approach. This study contributes to our understanding of the role of educational technology in enhancing learning performance, filling a gap in research on the effects of online teaching strategies on writing abilities.

Building on previous research, the aim of the current study is to address concerns related to collaborative writing, particularly passive student participation and reliance on peers. While collaborative writing has its own set of concerns, it does not fully resolve these issues. To stimulate scholars' interest in writing and motivate them to share their work with peers, the integration of media becomes crucial. To tackle these concerns, the researcher proposes combining the Collaborative Writing strategy with the use of Google Docs, which is believed to help mitigate the challenges associated with collaborative writing.

This study set intended to determine whether or not scholars' writing abilities could be enhanced through online collaboration using Google Documents. Some capabilities are available to users of Google Document. One of them is the Share option, where users can write or email members to add. Users can also distribute the link so that everyone

can view it. Users will find it simpler to complete papers more quickly and effectively thanks to this collaboration tool.

## METHOD

Scholars majoring in English Literature Study Program (Bachelor Degree) at Mahasaraswati University serve as the study's sample population. In four weeks, they will be required to complete a short story. Given that the scholars have been learning about the structure and writing of English, there are high expectations for the results of this project. The samples will be split into two groups, such as the Test class and the experiment class, as it is an Treatment study. The information about the chosen groups is displayed in the following table:

**Table 1. Group Information**

Class	Number of Scholars	Group Label
Class A	30	Test Group
Class B	30	Experiment Group

Treatment research is the type of study. The Treatment research method, according to Sugiyono (2015), is a study technique used to determine the impact of a treatment under Testled circumstances.

The design of this research follows a quasi-Treatment approach known as the nonequivalent Test group design. While similar to the pretest-posttest Test group design, the key distinction lies in the non-random selection of the Treatment and Test groups. Both groups will undergo a pretest, followed by a treatment, and finally a posttest, as outlined by Sugiyono (2015).

**Table 2. Nonequivalent Test Group Design**

Groups	Pre-test	Treatment	Post-test
Experiment	O1	X	O2
Test	O3		O4

A pre-test is administered before the course of treatment in both the Treatment and Test groups. The post-test is completed at the conclusion of the treatment to evaluate its efficacy. A research variable, according to Sugiyono (2015), is a quality, characteristic, or group of individuals, things, activities, etc. that has distinct variations and is chosen by researchers to be studied and the conclusions formed from it.

In an Treatment design, there is a correlation between two variables. Variables are a study topic that become important research topics. The study looks at two things:

- 1) Independent variables, often known as antecedents, predictors, or stimuli. The independent variable influences or causes changes in the dependent (bound) variable, or vice versa.
- 2) Dependent variables, also known as output variables, criteria, or results. The dependent variable is the one that is affected by or results from the independent

variable. Student learning outcomes serve as the dependent variable in this study, while Google Docs' capacity as a collaborative writing tool serves as the independent variable.

An adjusted rubric will be utilized to grade the test papers in order to evaluate the paragraphs that were written by the two groups. A clear presentation of the primary topic, strong organization, and appropriate language usage will each earn scholars up to 40 points, 30 points, and 30 points, respectively, out of a possible 100 points. The classification of the scholars' scores can be seen in table 2.3 below.

**Table 3. The Classification of Scholars' Score**

No.	Interval Percentages	Qualification
1	80-100	Excellent
2	70-79	Very Good
3	60-69	Good
4	50-59	Low
5	<49	Fail

The most crucial stage of research activity is data analysis. The analysis of quantitative data was used in this study. The normality test, homogeneity test, and T test are the statistics that are used.

**RESULT AND DISCUSSION**

**Result**

After gathering the data, the researcher examined the test-group data that had been provided to them. Table 4 displays the cumulative score of the Treatment group's scholars in the pre- and post-tests.

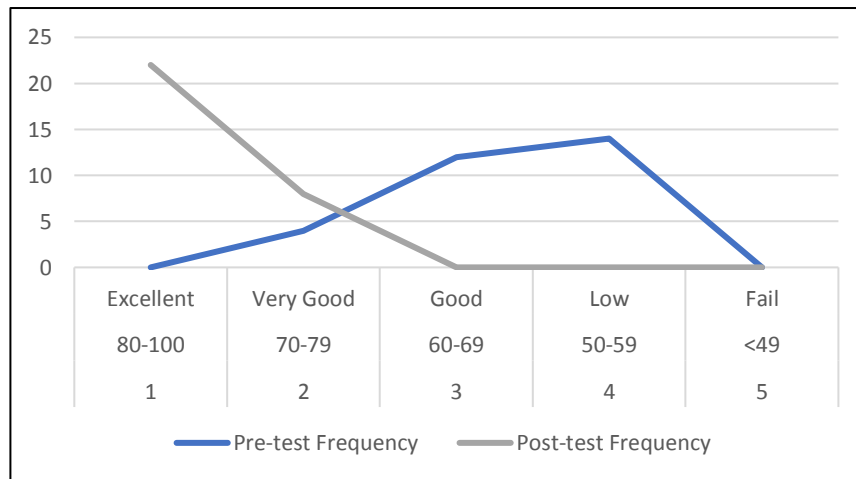
**Table 4. The Score Distribution of Treatment Group**

No	Interval	Qualification	Pre-test		Post-test	
			Frequency	Percentage	Frequency	Percentage
1	80-100	Excellent	0	0%	22	73%
2	70-79	Very Good	4	11%	8	27%
3	60-69	Good	12	44%	0	0%
4	50-59	Low	14	45%	0	0%
5	<49	Fail	0	0%	0	0%
Total			30	100%	30	100%

Table 4 shows that 0 (one percent) of the Treatment class's pupils received a pre-test score in the excellent category, 4 (11 percent) in the very good category, 12 (44 percent) in the good category, and 14 (45 percent) in the low category. In the post-test, 22 (73%) scholars received outstanding scores, 8

(27%) scholars received very good scores, zero (0%), and zero (0%), children received bad scores.

The researcher used a graph to represent the normalcy test in order to make it easier to understand. Figure 3.1 shows the Treatment scores' normal histogram graphically.



Picture 1. Graph for Pre-test and Post-test Score in Treatment Class

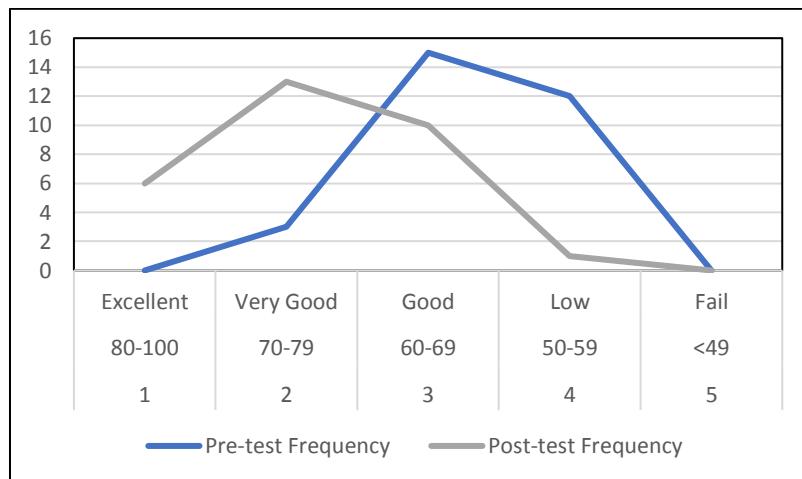
The overall score of the Test group's pupils in the pre-test and post-test may be shown on Table 5, along with the Treatment group's score rating

**Table 5 The Score Distribution of Treatment Group**

No	Interval	Qualification	Pre-test		Post-test	
			Frequency	Percentage	Frequency	Percentage
1	80-100	Excellent	0	0%	6	15%
2	70-79	Very Good	3	12%	13	45%
3	60-69	Good	15	47%	10	37%
4	50-59	Low	12	41%	1	3%
5	<49	Fail	0	0%	0	0%
Total			30	100%	30	100%

Table 5 shows that on the pre-test, the Test class had 0 (%) scholars who received a "excellent" grade, 3 (12%) scholars who received a "very good" grade, 15 (47%) scholars who received a "good" grade, 12 (44%) scholars who received a "low" grade, and 0 (%) scholars who received a "fail" grade. In the post-test, six (15%) of the scholars scored in the excellent group, thirteen (48%) in the very good group, ten (37%) in the good group, one (3%) in the low group, and zero (%) in the fail group.

The researcher used a graph to represent the normalcy test in order to make it easier to understand. Figure 3.2 depicts the Test scores' normal histogram graphically.



Picture 2. Graph for Pre-test and Post-test Score in Test Class

**1) Normality Test**

The normality test surveys whether a particular set of information acclimates to a typical dispersion bend. In this ponder, the analysts utilized the Kolmogorov-Smirnov test to decide regularity. The Kolmogorov-Smirnov strategy was utilized to compare the test conveyance with other disseminations. This test included looking at a test of information with cruel scores that taken after a ordinary dispersion and had indistinguishable standard deviations. Measurable calculations were utilized to conduct the typicality test, with a certainty level of  $\alpha = 0.05$ .

To survey the typicality of the information in both bunches, a one-sample Kolmogorov-Smirnov test was conducted due to the littler test sizes, with each group having less than 50 information focuses and a add up to of 30 scholars in each bunch. The p-scores (Sig.) for the Test class (Pre-Test), Test class (Post-Test), Treatment class (Pre-Test), and Treatment class (Post-Test) were all found to be 0.106. Since all the p-scores were more prominent than 0.05, it demonstrates that the scholars' information within the Test class (Pre-Test), Test class (Post-Test), and Treatment class (Pre-Test) taken after an ordinary dispersion based on the test comes about.

**2) Hypothesis Test**

In this study, the author utilizes the T test equation to look at the speculation. The T test is connected to survey the noteworthiness of the by and large interaction between the autonomous factors X and Y. The T-testing strategy includes comparing the T scores gotten from the calculations of Tcount and Ttable.

The comes about of the normal distinction test between the test comes about for Test class scholars (pre-test) and Test class scholars (post-test) are shown in table 6 underneath.

**Table 6. Paired Sample Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Student's scores Test class (post-test)	71.32	30	8.101	1.223
	Student's scores Test class (pre-test)	61.29	30	7.211	1.113

The table over presents the scores, averages (Mean), and standard deviations (Std. Deviation) of the Test Class (Pre-Test) and Test (Post-Test) scholars. Concurring to the table, the normal scores (Mean) of the Test Class (Pre-Test) scholars are 61.29, with a comparing standard deviation (Std. Deviation) of 7.211. On the other hand, the Test Lesson (Post-Test) scholars have normal scores (Mean) of 71.32, with a standard deviation (Std. Deviation) of 8.101.

While Table 3.4 below illustrates the Paired Samples t-Test difference between Test Class Scholars' Scores (Pre-Test) and Test Class Scholars' Scores (Post-Test).

**Table 7. Paired Sample Test for Test Group**

		<b>Pair 1</b>	
		Student's scores Test class (Post-test) – Student's scores Test class (Pre-test)	
Paired Differences	Mean		11.223
	Std. Deviation		9.956
	Std. Error Mean		2.221
	95% Confidence Interval of the difference	Lower	7.525
		Upper	14.676
T			5.730
Df			27
Sig. (2-tailed)			.000

Based on the table, the Matched Tests t-Test (t-count) score is 5.730, whereas the t-table esteem is 2.056, with a p-score of 0.000. The comes about show that there is a significant distinction within the normal scores between the Test class scholars (Pre-Test) and the Test class scholars' scores (Post-Test). Usually bolstered by the truth that the t-count score surpasses the t-table esteem and the p-score is less than 0.05.

The average difference test results between the experiment class student Score (Pre-Test) and the experiment class student Score (Post-Test) are displayed in table 8 below.

**Table 8 Paired Sample Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Student's scores Experiment class (post-test)	83.13	30	7.563	1.432
	Student's scores Experiment class (pre-test)	60.16	30	7.510	1.412

The table shows the average (Mean) and standard deviation (Std. Deviation) results for the Treatment Lesson (Pre-Test) and Treatment Lesson (Post-Test) scholars. As per the table, the Treatment Lesson Scholars (Pre-Test) scores had an average of 60.16 and a standard deviation of 7.510. On the other hand, the scores of the Treatment Class Scholars (Post-Test) had an average of 83.04 and a standard deviation of 7.563.

While the following table 3.6 displays the Paired Samples t-Test difference between the Experiment Class Scholars' Scores (Pre-Test) and Experiment Class Scholars' Scores (Post-Test).

**Table 9 Paired Sample Test for Experiment Group**

		Pair 1
		Student's scores experiment class (Post-test) – Student's scores experiment class (Pre-test)
Paired Differences	Mean	23.118
	Std. Deviation	9.329
	Std. Error Mean	1.827
	95% Confidence Interval of the difference	Lower 19.347
	Upper 26.561	
T		13.105
Df		27
Sig. (2-tailed)		.000

Concurring with the data given within the table, the Combined Tests t-Test (t-count) yields a score of 13.105, whereas the t-table esteem is 2.056, with a comparing p-score of 0.000. This demonstrates that there is a noteworthy contrast in the average scores between the scholars within the Treatment class (pre-test) and the scholars within the Treatment class (post-test). The distinction is bolstered by the truth that the t-count score is more prominent than the t-table esteem and the p-score is less than 0.05.

**3) Homogeneity Test**

This test determines whether or not the data meet the variance quality criteria. The findings are shown in table 10 below

**Table 10. Homogeneity Test**

Group		N	Mean	Std. Deviation	Std. Error Mean
Student's score	Experiment	30	83.13	7.563	1.432
	Test	30	71.31	8.101	1.223

The table given over presents the average (mean) and standard deviation (std. deviation) scores for both the Treatment class scholars and the Test class scholars. Agreeing with the table, the scores of the test lesson scholars have an average of 83.13 and a standard deviation of 7.563. On the other hand, the scores of the Test lesson scholars have an average of 71.31 and a standard deviation of 8.101.

The table 11 below describes the result of the independent sample test.

**Table 11. Independent Sample Test**

		Student's Score		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.134		
	Sig.	.716		
t-test for Equality of Means	T	6.531	6.531	
	Df	52	51.982	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	13.238	13.238	
	Std. Error Difference	2.125	2.125	
	95% Confidence Interval of the Difference	Lower	9.094	9.094
		Upper	17.432	17.432

The table displayed over shows the comes about of the homogeneity test, particularly Levene's Test (F test), conducted on the test scores of scholars within the Treatment class and the Test class. The coming about p-score is 0.716. Since the p-score is higher than 0.05, it can be induced that the scores of both the Treatment class scholars and the Test class scholars are considered to be comparative or homogeneous.

In the aforementioned table, the outcomes of the average difference test between the scores of scholars in the Treatment class and the Test class are presented. The Independent Samples t-Test was employed because the scores of both the Treatment class scholars and the Test class scholars followed a normal distribution.

According to the provided table, the Independent Samples t-Test (t-count) score is 6.531, the t-table value is 2.007, and the p-score is 0.000. These scores indicate a significant average difference between the scores of the Treatment class scholars and the Test class scholars. This is supported by the fact that the t-count score exceeds the t-table value and the p-score is less than 0.05. Therefore, the utilization of Google Docs as a platform for collaborative writing activities has a substantial impact on the writing abilities of scholars.

## Discussion

According to the results stated above, several interpretations in the discussion can be drawn as follows:

- a) Prior to analyzing the information, it is fundamental for the analyst to survey the normality of the pre- and post-test values in both the test and Test groups. Sugiyono (2015) emphasizes the requirement for the normal arrangement of quantitative investigation information sometime recently conducted information investigation. Consequently, when assessing the data's typicality, the alpha esteem is set to be more noteworthy than 0.05. This demonstrates that all the information relating to the pre- and post-test results within the Treatment and Test groups display reliable dispersion. Arikunto moreover declares that the alpha scores for information ordinariness ought to surpass 0.05.
- b) The comes about of the homogeneity test uncover that the change is altogether more noteworthy than the alpha esteem of 0.05. This shows that the post-test comes about in both classes show both homogeneity and differing qualities. This perception adjusts with Sugiyono's proposal that in arrange to decide information homogeneity, the fluctuation ought to outperform the alpha scores.
- c) Furthermore, the F-test results demonstrate a noteworthy effect of Google Docs on scholars' composing capacities. This conclusion is upheld by the calculated F scores, which are found to be more prominent than the F-table values. This illustrates the impact of Google Docs in improving scholars' capability in composing brief stories.

The previously mentioned talk concluded that the utilization of Google Docs as an instructive device for composing demonstrates to be viable. It has the potential to rouse scholars, create their intrigued, and rearrange the method of composing sections for them. In less difficult terms, the capable utilization of Google Docs altogether impacts the way scholars at Mahasaraswati Denpasar make brief stories. This finding adjusts to

the inquiry about conducted by Nguyen et al. (2021), which investigated scholars' recognition of this guidelines approach and the part of online collaborative composing in improving the composing aptitudes of EFL scholars. The information collected indicated an outstanding change within the composing capacities of the larger part of members.

## CONCLUSION

In this quasi-experimental study about, the scholars at Mahasaraswati Denpasar were presented to Google Docs as a stage for composing short stories. The analysts were persuaded to conduct this think about due to the scholars' lacking composing abilities earlier to the mediation. This finding was backed by the scholars' pre- and post-test comes about. Within the Test group, the average pre-test score was 61.29, extending from 50 to 70. Additionally, the Treatment class had an average pre-test score of 60.16, with the least score of 50 and the most elevated score of 75.

In addition, the increment in post-test scores compared to pre-test scores shows the adequacy of utilizing Google Docs as a stage for scholars' short story composing. Within the Treatment class, the most reduced post-test score was 70, the most noteworthy was 95, and the average score was 83.13. Moreover, the post-test comes about within the Test bunch appeared an average score of 71.32, with the most reduced score recorded as 60 and the most elevated as 85. These measurements clearly illustrate the capability of scholars at Mahasaraswati Denpasar in utilizing Google Docs as a collaborative composing environment.

## REFERENCES

- Helen Dale (1994) Collaborative Writing Interactions in One Ninth-Grade Classroom, *The Journal of Educational Research*, 87:6, 334-344, DOI: 10.1080/00220671.1994.9941264
- Sukirman, Sukirman. (2016). Using collaborative writing in teaching writing. *Langkawi: Journal of The Association for Arabic and English*. 2(1).
- Fernández Dobao, Ana. (2012). Collaborative writing tasks in the L2 classroom: Comparing group, pair, and individual work. *Journal of Second Language Writing*. 21. 40–58. 10.1016/j.jslw.2011.12.002.
- Deveci, T. (2018). Student Perceptions on Collaborative Writing in a Project-based Course. *Universal Journal of Educational Research*. 6(4).
- Kalpari, Deonisius . (2015). Using Collaborative Learning in Descriptive Text Writing on the Eleventh Grade Scholars of SMAN 3 Sungai Ambawang. *JPPK: Journal of Equatorial Education and Learning*. 6(8).
- Ismail, Ramadhan. (2019) Improving the scholars' writing proficiency through Collaborative Writing. *Majesty Journal* 1(1).
- Sugiyono. (2015). *Metode Penelitian Kombinasi (Mix Methods)*. Bandung: Alfabeta.

Nguyen, T. K. C., Tong, T. A. T., Le, T. N. T., & Nguyen, L. T. (2021). Applying Online Collaborative Writing to Enhance SIU Sophomore English Majors' Writing Skills. *Proceedings of the AsiaCALL International Conference*, 533(978-94-6239-343-1), 64–71. <https://doi.org/10.2991/assehr.k.210226.008>