Using PTWS Approach to Improve Secondary School Students' Essay Writing Skills

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ABSTRACT

This study addressed writing problems among Malaysian Form 3 school students. This is because second language writing has always presented serious difficulties for language learners. Furthermore, writing is one of the main skills tested in Malaysian English syllabus. In order to solve this problem, a student-centred approach, 'Pair-Think-Write-Share (PTWS)' was invented. It is a technique that encourages students to learn writing through working with their friends. It consists of three stages of essay writing: writing together, peer editing and peer reviewing. The study was carried out on a group of Form 3 students in one of the secondary schools in Johor Bahru, Malaysia. In order to triangulate the data, it was collected through analysis of past documents, a set of pre-test and post-test, questionnaires and semi-structured interview. The paired T-Test conducted in this study showed that students had improved significantly in the post-test compared to the pre-test. Students also showed favourable responses towards the use of Pair-Think-Write-Share (PTWS) in the questionnaire and interview conducted. Thus, Pair-Think-Write-Share (PTWS) approach is suitable for teaching writing as it involves students to write together through activities such as brainstorming, discussion, peer editing and peer reviewing. It is recommended that future research should include the use of PTWS technique with other age group of language learners as well.

Keywords: Collaborative writing, student-centred approach, second language writing, 21st century learning, collaborative writing

INTRODUCTION

Writing has always been a difficult task for students as they often run out of ideas on what to write [1]. Moreover, second language writing has always presented serious difficulties for language learners [2]. Based on The Standard-Based English Language Curriculum (SBELC) implemented in Malaysia, there is a need to emphasize on the students' command in responding, analysing, and evaluating a variety of literary text types.

Students also need to be able to understand a variety of texts using a range of appropriate strategies employed by the teacher. However, the SBELC does not provide any specific instructions on the teaching strategies to be used in teaching essay writing [3]. Similarly, writing is one of the most important skills emphasized in English Secondary School syllabus [4]. Writing skills constituted 50% of the overall English PT3 Exam paper and 25% of the overall English SPM paper. Thus, teachers are expected to teach essay writing using their own strategies and approaches. Due to lack of time and students' poor command of the English language, majority of our English teachers usually employ teacher-centred method in teaching essay writing. In addition, writing problem is particularly critical in learning English as a Second Language (ESL). For ESL learners, writing skills is a much more difficult skill to master compared to the other language skills [5]. This is because writing skills involve many aspects such as handwriting, spelling, flow and punctuation. All these components are important skills in essay writing.

Besides that, studies highlighted that the majority of our students face problems in essay writing due to lack of exposure outside the English classroom. Most of the time, English is only taught during English classes. Students seldom have the chance to practise writing English outside the classroom. Essay writing problems occur because students are not exposed regularly with the English language and do not have adequate writing exercises [5]. The major concerns in students' writing include grammatical, punctuation, and spelling problems. In addition, writing is the most difficult skill to command because it is a non-linear process [6],[7]. There are many steps involved in writing. This includes word choice, language use and punctuation. Due to lack of practice outside the English classroom, it is difficult for our students to improve on their writing. In fact, academic writing can be a problematic and complex process [8]. Furthermore, for English second learners (ESL), this problem is worsened with linguistic and educational barriers [9]. Students are afraid to write in English as they tend to make a lot of mistakes in their writing. They need to draft and rewrite their essay many times to produce an accurate piece of writing. Thus, teachers should play a crucial role in guiding students to improve on their writing performance such as through the use of collaborative writing and digital tools [10],[11].

Although many studies have been carried out to improve students' writing performance, the majority of our students are still facing problems in terms of essay writing [12],[13]. Errors made by rural primary school pupils in writing shows that students often have problems in terms of tenses, spelling, and vocabulary [14],[15]. This is due to a lack of practice outside the English class. The mistakes are also caused by interference from their mother tongue as students usually translate directly from their mother tongue.

The main problems faced by Malaysian students in essay writing include elaboration and organisation of the ideas [15]. Students face difficulty in elaborating their ideas due to poor command of English words and not enough practice in using the language as English is not the mother tongue for most of our students. In fact, cognitive difficulties and poor command of English are the main problems for students to write in English [16]. Thus, this causes them difficulty in composing their ideas during writing. Due to the poor command of English language among Malaysian students and exam-oriented system, most of our teachers have adopted product writing approach in teaching writing to the students.

Generally, product writing approach is a traditional approach compared to the process writing approach where students are involved in stages of writing such as brainstorming, composing essay and editing their essay [17]. However, teachers' predominant role in product writing approach generates dissatisfaction, anxiety, and boredom for the students [18].

In order to solve this problem, a student-centred approach, Pair-Think-Write-Share (PTWS) was invented in this research. It is a technique that encourages students to learn writing through working with their friends. Although writing together or collaborative writing has long existed, it is seldom practised in our country. Many teachers do not trust their students to learn on their own as they feel that most of them are not good enough to write on their own. Thus, more studies should be carried out to examine the effectiveness of writing together in improving students' essay writing.

A. Research Objectives

This study was guided by two objectives such as below:

1. To examine the effectiveness of PTWS (Pair-Think-Write-Share) approach in improving students' writing performance.
2. To examine Form 3 students' perceptions about PTWS (Pair-Think-Write-Share) approach in essay writing.

LITERATURE REVIEW

Collaborative writing has been widely utilised in many fields. One of them is in the production of a piece of writing. In fact, many teachers have come to realise the importance of collaboration in the writing process of

many writers and the techniques based on collaboration can help inexperienced writers increase their skills and self-confidence [19]. Studies done by [20], [21], [22-24] showed that students had improved their writing performance through the use of collaborative writing.

Collaborative writing is a type of group work that provides an alternative to the traditional teacher-centred approach [25]. Teachers who use the collaborative writing approach believes that it is a social process and their role is not only to deliver their knowledge to the students, but rather they act as facilitators in the essay writing classes. At the same time, students actively construct knowledge through learning from their friends.

However, teachers are crucial in interactions among the students [26]. In other words, teachers play an important role in the collaborative writing classes. If teachers do not intervene the students' activities in time, students might get the wrong information. Some of them might even end up doing other tasks apart from the essay writing task.

The traditional approach of teaching writing puts teachers at the centre of the teaching and learning process [19]. Teachers are often regarded as the main supplier of input while students are expected to learn everything from their teachers directly. As a result, students take part passively in the learning process. Rather than actively seeking knowledge, they become passive receivers of information. Teachers are seen as the main source of information and students are expected to learn what is taught to them. Thus, collaborative writing is one of the best methods to implement active learning. In this study, PTWS (Pair-Think-Write-Share) technique is used as it employs collaborative writing approach that involves students working together in the writing process.

METHODOLOGY

The respondents of the study, data collection methods and research procedures were discussed in this section.

A. Respondents

The participants for this study consist of 30 Form 3 students of a secondary school in Johor Bahru. They were 14 to 15 year-old students of both males and females. The weaker students were paired up with higher proficiency students in the writing process so that the weaker students could learn from the higher proficiency students. Upper form students were not chosen in this study as they were preparing for their public examination.

B. Research Procedures

Four research methods were used in this study to triangulate the data from the findings: Analysis of past documents, a set of pre-tests and post-test, questionnaire, and semi-structured interview. At least 3 methods were used in research to triangulate and validate the data collected. Research triangulation is crucial in a research as it increases the credibility and validity of research [27],[28]. In order to increase the credibility and validity of a research, several instruments were employed to collect the data for this study.

First of all, analysis of the students' mid-year PBD was carried out to find the suitable students for this study. Students who performed poorly in the mid-year assessment were chosen in this study. Students were then asked to sit for the pre-test before the treatment. After the treatment, they were asked to sit for the post-test. The difference between the pre-test and post-test results were compared using T-test to see whether there was any significant difference after the use of PTWS (Pair-Think-Write-Share) technique. Finally, students' responses were also gathered through the use of questionnaire and semi-structured interview.

PTWS (Pair-Think-Write-Share) technique consists of 3 main stages as below. The first stage is known as writing together. In this stage, students were asked to write a topic given by teacher. They then worked with their peers to produce the essay. Next, students were given explanation about the writing task. They brainstormed with their partners for the content for essay. Finally, they wrote the essay in pairs together.

C. First Stage: Writing Together

To start the lesson, students were given an essay topic. They were given explanation by the teacher about the writing task. Then, they worked together with their partner to brainstorm the content for the essay. Finally, they completed the essay with their partners.

D. Second Stage: Peer Editing

The second stage is known as peer editing stage. In the second stage, students were shown examples of common mistakes that they had made in their writing such as the use of subject-verb agreement and tenses. Students were also shown ways to make their essays more interesting. Next, they discussed the essay they had completed in the first stage with the same partner. Subsequently, students looked through their essays and made some improvements based on what had been taught by the teacher. Finally, students got together for a final reading.

E. Third Stage: Peer Reviewing

The final stage is known as the peer reviewing stage. In this stage, students exchanged their essays with their friends. They were then shown an example of how to review each other's work by giving them a set of criteria to look at in the essay. After checking through their friends' essays, they gave comments for their friends' essays. Teacher then evaluated the comments, graded the students' essays, and finally returned the essays to the students for correction. Below are the criteria used for reviewing students' drafts.

CRITERIA USED FOR REVIEWING STUDENTS' DRAFS

1. What do you like about your friends' essay?
2. Does the content meet the requirement of the task? Does it answer the question?
3. What do you think the writer could do to improve the essay?

Other comments: _____

Fig. I: Criteria used for reviewing students' drafts

FINDINGS AND DISCUSSION

The results of this study were gathered through a set of pre-test and post-test and students' perceptions about the use of Pair-Write-Think-Share (PWTS) technique were gathered through questionnaire and semi-structured interview.

A. Data Analysis

The findings for this study is presented according according to the research questions.

B. Findings for Research Question 1

The results of this study were gathered through a set of pre-test and post-test and students' perceptions about the use of Pair-Write-Think-Share (PWTS) technique were gathered through questionnaire and semi-structured interview.

Table I: Students' performance in the pretest and post-test

No.	Student	Pretest	Post test	Difference Between Pretest and Post test
1	Student 1	3	10	7
2	Student 2	4	11	7
3	Student 3	4	10	6
4	Student 4	3	11	8
5	Student 5	0	8	8
6	Student 6	4	11	7
7	Student 7	3	11	8
8	Student 8	6	11	5
9	Student 9	4	11	7
10	Student 10	8	11	3
11	Student 11	3	11	8
12	Student 12	4	12	8
13	Student 13	5	12	7
14	Student 14	3	10	7
15	Student 15	5	12	7
16	Student 16	3	8	5
17	Student 17	2	6	4
18	Student 18	4	9	5
19	Student 19	4	9	5
20	Student 20	4	10	6
21	Student 21	3	9	6
22	Student 22	2	9	7
23	Student 23	3	8	5
24	Student 24	4	10	6
25	Student 25	4	13	9
26	Student 26	4	11	7
27	Student 27	3	8	5
28	Student 28	5	10	5
29	Student 29	2	8	6
30	Student 30	2	7	5

It was noticed that in the pre-test, all the students scored below 10 marks for notes expansion essay. The total mark for notes expansion essay is 20 marks. However, all of them had shown improvement in their post-test results. 19 out of 30 students (63.33%) scored 10 marks and above in their post-test. This shows that the use of Pair-Think-Write-Share (PTWS) approach had improved their writing performance. Apart from getting ideas through working together with their friends, they had also learnt to improve their grammar and spelling.

Students' performance in the pre-test and post-test were recorded and tabulated using paired T-test to find out whether there was any significant difference between students who used PTWS technique in their writing. Below is the result tabulated from the paired T-test.

Table II: Paired samples T-Test conducted on the experimental group

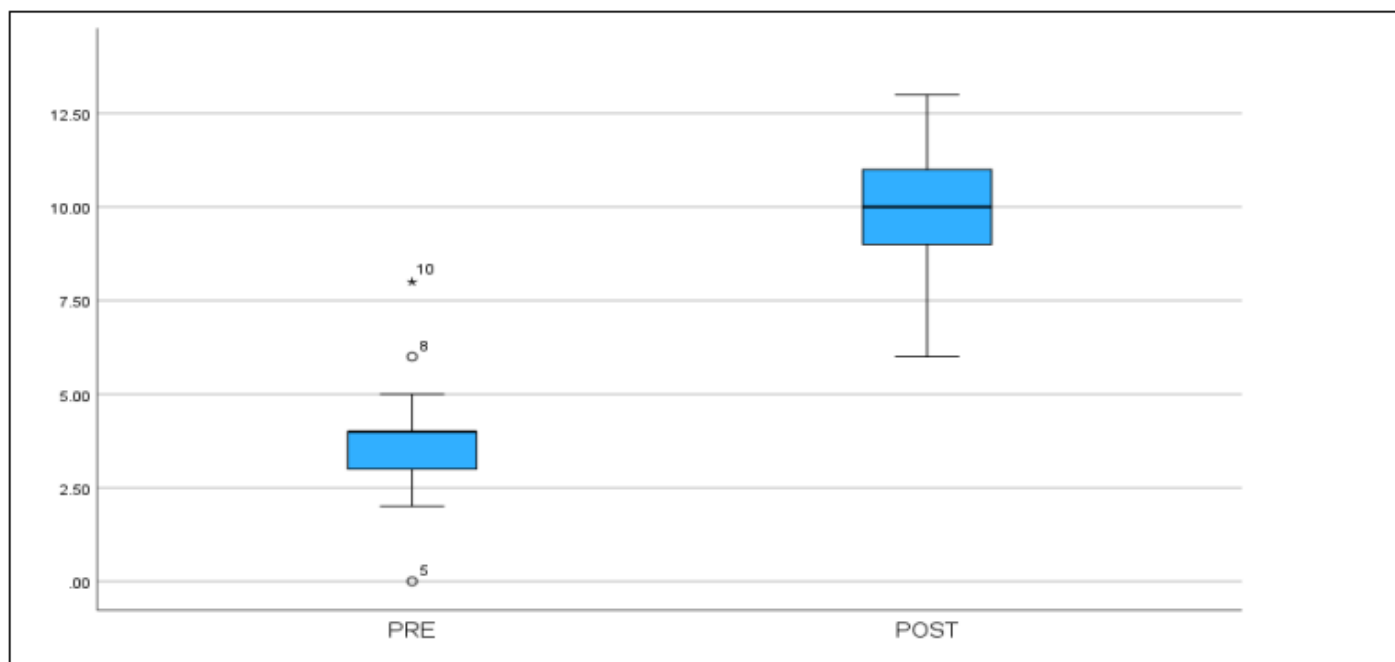|				95% Confidence Interval of the Difference				Significance	
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	One-Sided p	Two-Sided p
Pair 1 PRE - POST	-6.30000	1.39333	.25439	-6.82028	-5.77972	-24.765	29	<,001	<,001

Fig. II Paired T-Test to compare the difference between pretest and post-Test

The paired T-Test conducted for the differences between the pre-test and post-test shows that there was a significant difference between the pre-test and post-test results. The paired T test returned a two-sided P value of less 0.001. Thus, the students had improved significantly through the use of Pair-Think-Write-Share (PTWS) method.

In other words, the use of PTWS technique had helped students to improve on their writing performance. This is because when writing together, students did not only learn from their friends about new words and different ideas, they had also learnt to think critically.

C. Findings for Research Question 2

Students' perceptions about the use of Pair-Think-Write-Share (PTWS) were gathered through questionnaires and semi-structured interviews. Below are the findings from questionnaires and semi-structured interview. Both the questionnaires and semi-structured interviews were adapted from [29].

A. Benefits of Pair-Think-Write-Share (PTWS)
SD- Strongly Disagree
D.-Disagree
NS-Not Sure
A- Agree
SA-Strongly Agree

Table III: Findings from questionnaires

No.	Statement	SD	D	NS	A	SA
1.	PTWS helps to improve my					
	a. Content				3	17
	b. Communicative Achievement				10	10
	c. Organisation			2	5	15
	d. Language			3	5	10
	e. Other:					
2.	Content					
	a. I include all the points for the essay while working with my friend.			2	17	11
	b. I can think of relevant information to put in my writing.			9	10	11
	c. I can provide enough information for my writing.		1	6	15	8
	d. Other		2	5	11	12
3.	Communicative Achievement					
	a. I write using appropriate conventions while working with my friend.		1	2	18	9
	b. I write using appropriate tense.			9	11	10
	c. I write using appropriate format.		2	6	15	7
	d. Other		2	5	10	13
4.	Organisation					
	a. I learn to link my ideas using appropriate sentence connectors.			5	10	15
	b. I learn new connectors from my friend.			5	5	20
	c. I learn to organise my ideas logically.			8	7	15
	d. I learn to divide my content into different paragraphs.			2	10	18
	e. Other					
5.	Language					
	a. I learn new words from my friend while writing together.				7	23
	b. I learn to use a variety of sentences.				20	10
	c. I learn spelling of words.				12	18
	d. I learn about grammatical errors while writing together.			5	10	15
	e. Other:					

A. Perceptions on Pair-Think-Write-Share (PTWS)

No.	Statement	SD	D	NS	A	SA
1.	I can write better if I work alone.	18	10	2		
2.	I enjoy getting ideas from my friend.				3	27
3.	Writing together helps me to write better essay.				6	24
4.	Writing together wastes my time.	15	10	5		
5.	I know more about my friend while writing together.				5	25
6.	I enjoy writing my essay together with my friend.				4	26
7.	I dislike writing together with my friend.	10	10	10		
8.	Writing together with my friend helps me to know about my mistakes.				4	26
9.	I can improve my English while writing together with my friend.				5	25
10.	I hope to have more chance to write essay together with my friend.				4	26

Part A: Benefits of Pair-Think-Write-Share (PTWS)

Q 1	**What have you learnt while discussing and writing your essay together?**
Response(s)	New words, content, different ideas
Q 2	**What have you learnt while editing your essay together?**
Response(s)	Grammar mistakes, tenses
Q 3	**What have you learnt while reviewing your friend's essay?**
Response(s)	New words, content, new ideas

Part B: Perceptions on Pair-Think-Write-Share (PTWS)

Q 1	**Do you enjoy writing together with your friends? Would you rather write with your friend or alone?**
Response(s)	All the students prefer to write with their friends.
Q 2	**What are the problems you face when writing alone?**
Response(s)	No idea what to write.
Q 3	**What are the problems you face when writing together with your friends?**
Response(s)	No problem
Q 4	**Do you prefer to write essay alone or with your friends?**
Response(s)	Write essay together with friends.
Q 5	**What are the benefits of Pair-Think-Write-Share (PTWS)?**
Response(s)	Help to improve my essay writing. I learn more new words and vocabulary.
Q 6	**What are the disadvantages of Pair-Think-Write-Share (PTWS)?**
Response(s)	Class is noisy because students are having discussion.

Both the questionnaire and semi-structured interview showed that all the students gave favourable responses towards the use of Pair-Think-Write-Share (PTWS) approach. They preferred to write together with their friends and are looking forward to this kind of activity again in the future. The only limitation of Pair-Think-Write-Share (PTWS) was class was a bit noisy as students were involved in discussions with their friends.

CONCLUSION AND RECOMMENDATION

Pair-Think-Write-Share (PTWS) approach is suitable for teaching writing as it involves students writing together through activities such as brainstorming, discussion, peer editing and peer reviewing. This is because writing together does not only increase the students' interpersonal skills and self-confidence but it can also improve their writing performance [30]. When writing together, students not only learn about linguistic aspects of the language but they also learn how to use the language to communicate effectively. In addition, writing together also improves students' cognitive skills [31]. This is because through collaborative writing activities such as peer critique and peer review, students learn to examine, analyse and synthesize the given information.

Pair-Think-Write-Share (PTWS) is an innovation for collaborative writing as it involves two or more writers in the process of writing [32]. It does not only help students to produce better essay while writing together, but it also improves their writing skills. Collaborative writing has been proven to be a great aid in enhancing the second and foreign language skills of university students [24], [30]. Collaborative writing strategy has also helped students in generating ideas for their essays and stimulating the students' background knowledge of the given topic. Although essays written through collaborative writing were shorter, they were grammatically more accurate and complex than those produced by individual writers [20]. It is recommended that PTWS to be used with more respondents and involved larger group of students in the future.

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REFERENCES

1. Ling Jen, S., & Salam, A. R. H. (2024). Using Google Bard to improve secondary school students' essay writing performance. Journal of Creative Practices in Language Learning and Teaching, 12(1), 91-112. https://doi. 10.24191/cplt.v12i1.24999

2. Azman, M. N., & Said, N. E. M. (2020). The Effects of Collaborative Writing Strategies on Malaysian ESL Learners' Writing Fluency. *International Journal of Innovative Research and Development*, *9*(2). https://eric.ed.gov/?id=EJ1434126

3. Joannes, R. (2023). The Effect of Analytic Text-Based Writing Strategies on ESL Argumentative Writing Among Malaysian Form-Six Students in Sabah, Malaysia: A Proposal. In *Proceedings International Conference on Teaching and Education (ICoTE)* (Vol. 3, No. 1, pp. 23-29). http://dx.doi.org/10.26418/icote.v3i1.55855

4. Kurikulum, B. P. (2000). Dokumen standard kurikulum dan pentaksiran Geografi Tingkatan 3 KSSM. *Putrajaya:Bahagian Pembangunan Kurikulum*.

5. Rahman, A. M. A., Azmi, M. N. L., & Hassan, I. (2020). Improvement of English writing skills through blended learning among university students in Malaysia. Universal Journal of Educational Research, 8(12A), 7694-7701. DOI:10.13189/ujer.2020.082556

6. Tze Pheng, K., Hashim, H., & Ainil Sulaiman, N. (2021). The use of technology in teaching of writing among Malaysian ESL secondary school teachers. Arab World English Journal (AWEJ) Special Issue on CALL, (7). https://dx.doi.org/10.24093/awej/call7.22

7. Siddek, N. A. J., & Ismail, H. H. (2021). Understanding Learners' Difficulties in Narrative Writing Among Malaysian Primary Learners. Asian Journal of Research in Education and Social Sciences, 3(2), 244-255. http://myjms.mohe.gov.my/index.php/ajress

8. Rahimi, M., & Zhang, L. J. (2018). Effects of task complexity and planning conditions on L2 argumentative writing production. Discourse Processes, 55(8), 726-742. https://doi.org/10.1080/0163853X.2017.1336042

9. Hanauer, D. I., Sheridan, C. L., & Englander, K. (2019). Linguistic injustice in the writing of research articles in English as a second language: Data from Taiwanese and Mexican researchers. *Written Communication*, *36*(1), 136-154. https://doi.org/10.1177/0741088318804821

10. Javadi-Safa, A. (2018). A brief overview of key issues in second language writing teaching and research. *International Journal of Education and Literacy Studies*, *6*(2), 12-25. http://dx.doi.org/10.7575/aiac.ijels.v.6n.2p.15

11. Jen, S. L., Salam, A. R., & Ahmed, M. N. A. (2023). Perceptions of secondary school students towards the use of Wakelet Students' Ambassador Programme. Journal of ICT in Education, 10(2), 13-28. https://doi.org/10.37134/jictie.vol10.2.2.2023

12. Ang, L. H., Tan, K. H., & Lye, G. Y. (2020). Error Types in Malaysian Lower Secondary School Student Writing: A Corpus-Informed Analysis of Subject-Verb Agreement and Copula be. 3L, Language, Linguistics, Literature, 26(4). http://doi.org/10.17576/3L-2020-2604-10

13. Mehat, S. Z., & Ismail, L. (2021). Malaysian Tertiary ESL Students' Writing Errors and Their Implications on English Language Teaching. *Asian Journal of University Education*, *17*(3),235-242. https://doi.org/10.24191/ajue.v17i3.14504

14. Harun, H., & Kabilan, M. K. (2020). Errors in writing made by Malaysian rural primary school pupils. *Studies in English Language and Education*, *7*(2), 438-456. https://doi.org/10.24815/siele.v7i2.17009

15. Abbas, M. F. F., & Herdi, H. (2018). Investigating EFL Learners' Ability in Generating, Organizing, and Elaborating Ideas in an Argumentative Essay. *J-SHMIC: Journal of English for Academic*, *5*(2), 39-47. https://doi.org/10.25299/jshmic.2018.vol5(2).1991

16. Ghulamuddin, N. J. A., Mohari, S. K. M., & Ariffin, K. (2021). Discovering writing difficulties of Malay ESL primary school level students. *International Journal of Linguistics and Translation Studies*, *2*(1), 27-39. https://doi.org/10.36892/ijlts.v2i1.105

17. Jalaluddin, I. (2019). Process approach in teaching of ESL writing: Teacher's assistance and its practicality in real classroom. *Journal of Research, Policy & Practice of Teachers and Teacher Education*, *9*(2), 66-78. https://doi.org/10.37134/jrpptte.vol9.no2.6.2019

18. Nazari, N., Shahbir, M.S. & Setiawan, R. (2021). Application of Artificial Intelligence Powered Digital Writing Assistant in Higher Education: Randomised Controlled Trial. Heliyon 7 (2021) e07014. www.cell.com/heliyon

19. Zhang, M., Gibbons, J., & Li, M. (2021). Computer-mediated collaborative writing in L2 classrooms: A systematic review. Journal of Second Language Writing, 54, 100854. https://doi.org/10.1016/j.jslw.2021.100854

20. Zhang, M. (2018). Collaborative writing in the EFL classroom: The effects of L1 and L2 use. System, 76, 1-12.h https://doi.org/10.1016/j.system.2018.04.009

21. Anggraini, R., Rozimela, Y., & Anwar, D. (2020). The effects of collaborative writing on EFL learners' writing skills and their perception of the strategy. Journal of language teaching and research, 11(2), 335-341. DOI: http://dx.doi.org/10.17507/jltr.1102.25

22. Storch, N. (2021). Collaborative writing: Promoting languaging among language learners. Working collaboratively in second/foreign language learning, 13-34. https://doi.org/10.1515/9781501511318

23. Van Leeuwen, A., & Janssen, J. (2019). A systematic review of teacher guidance during collaborative learning in primary and secondary education. Educational Research Review, 27, 71-89. https://doi.org/10.1016/j.edurev.2019.02.001

24. Pham, V. P. H., & Nguyen, N. H. V. (2020). Blogging for Collaborative Learning in the Writing Classroom: A Case Study. *International Journal of Cyber Behavior, Psychology and* Learning (IJCBPL), 10(3), 1-11. DOI: 10.4018/IJCBPL.2020070101

25. Zhang, M., & Chen, W. (2022). Assessing collaborative writing in the digital age: An exploratory study. Journal of Second Language Writing, 57, 100868. https://doi.org/10.1016/j.jslw.2022.100868

26. Van Leeuwen, A., & Janssen, J. (2019). A systematic review of teacher guidance during collaborative learning in primary and secondary education. Educational Research Review, 27, 71-89. https://doi.org/10.1016/j.edurev.2019.02.001

27. Noble, H., & Heale, R. (2019). Triangulation in research, with examples. *Evidence-based nursing*. https://doi.org/10.1136/ebnurs-2019-103145

28. Bans-Akutey, A., & Tiimub, B. M. (2021). Triangulation in research. *Academia Letters*, *2*. https://doi.org/10.20935/AL3392

29. Ling Jen, S., & Hamzah, M. (2008). *Using Collaborative Writing to Develop Students Writing skills* Master dissertation, Universiti Teknologi Malaysia.

30. Veramuthu, P., & Shah, P. M. (2020). Effectiveness of collaborative writing among Secondary school students in an ESL classroom. Creative Education, 11(1), 54-67. https://doi.org/10.4236/ce.2020.111004

31. Storch, N. (2019). Collaborative writing. Language Teaching, 52(1), 40-59. https://doi.org/10.1017/S0261444818000320

32. Villarreal, I., & Gil-Sarratea, N. (2020). The effect of collaborative writing in an EFL secondary setting. Language Teaching Research, 24(6), 874-897. https://doi.org/10.1177/1362168819829017