Exploring the Effect of Autonomous Online Collaborative Writing on EFL Learners

Khaled Besher Albesher¹

¹ Department of English Language and Literature, College of Languages and Humanities, Qassim University, Saudi Arabia

Correspondence: Khaled Besher Albesher, Department of English Language and Literature, College of Languages and Humanities, Qassim University, Saudi Arabia. Email: kbshr@qu.edu.sa

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Abstract

The study examines EFL student writers' perspectives on autonomous online collaborative writing without the teacher's guidance. This study employs a mixed-methods approach, utilizing a quantitative questionnaire as the primary method and a qualitative interview as a supplementary approach. Thirty-six students from the Qassim University English Language Department participated in the study. The quantitative results showed that autonomous online collaborative writing was ineffective at helping students complete their written drafts. Qualitative analysis identified the negative attitude behind the students' dissatisfaction and emphasized the teacher's role in online collaborative writing. Online collaborative writing requires significant effort and collaboration from each team member; thus, the teacher plays an important role in leading, stepping in when necessary, and giving continuing assistance.

Keywords: collaborative writing, students' autonomy, *Google Docs*, teachers' guidance, idea generation, qualitative analysis, descriptive statistics, skills

1. Introduction

Collaborative learning means "a small group of learners working together as a team to solve problems, complete a task, or accomplish a common goal" (Graham, 2005, p. 11). In the context of collaborative writing, collaborative learning refers to the process wherein a group of individuals works together to produce and finish a *text*. This involves practicing various phases, such as collecting, planning, organizing ideas, drafting, revising, and editing (Rice & Huguley, 1994).

Over the past decade, Saudi universities have prioritized writing skills. However, EFL students struggled with academic writing, both inside and outside of the classroom. Traditional methods of teaching the English language may not effectively improve students' writing skills. Collaborative writing appears to increase students' social skills and writing strategies (Elbow, 1973; Storch, 1999, 2002, 2005; Williams, 2003; No ä & Robert, 2003; Graham, 2005). For EFL students in Saudi Arabia, online collaborative activities in the learning of the English language could be an effective technique for writing effectively. Collaborative writing could enhance their achievement levels. Previous studies focused on various areas, such as collaboration between novice and expert students (Lee, 2004) and the nature of L2 learners' engagement in collaborative writing using *Google Docs* (Kessler et al., 2012). However, there has been no research that investigates how EFL undergraduate students perceive their autonomous online collaborative writing. Thus, this study aims to find out the effect of autonomous online collaborative writing in English without the assistance of an instructor.

2. Literature Review

Collaborative learning in groups is primarily based on Vygotsky's social constructivist theory (Gillies & Ashman, 2003; Rojas-Drummon & Merce, 2003; Thousand et al., 1994; Vanderburg, 2006). Peer collaboration in second language (L2) writing is theoretically based on Vygotsky's (1978, 1981) concept of the zone of proximal development (ZPD). According to the ZPD, there are two stages of development: the ability to complete a task on one's own and the ability to complete a task with an adult or more experienced classmate's help (De Guerrero & Villamil, 2000). Although the ZPD relies on a capable individual, homogenous pairing in L2 classes can also contribute to the development of language learning (Donato, 1988, 1994; Kowal & Swain, 1994; Ohta, 1995, 2000). According to Kowal and Swain (1994), students who work in pairs and take turns can scaffold each other to address their language challenges collaboratively. Ohta (1995, 2000) and Watanabe and Swain (2007) noted that learners with less knowledge may be able to help learners with more knowledge.

Small-group language learning depends on theory and pedagogy (Storch, 2002). Small group instruction usually focuses on the communicative approach to L2 education, which helps learners use an L2. Storch (2018) defined collaborative writing as "an activity that requires the co-authors to be involved in all stages of the writing process, sharing the responsibility for and ownership of the entire text produced" (p. 40). Collaborative writing involves writers working in small groups to produce a shared piece of writing. According to Ballard and Clanchy (1992), collaborative writing is difficult for both speakers of English as a second language and as a foreign language (ESL/EFL) because it involves considerable effort in sharing work, reacting to each other, and taking critiques. Elbow (1973) emphasised the usefulness and vitality of collaborative writing in the classroom, stating that when someone becomes stuck in their writing, they should

preferably engage with another person. This author also stated that "two heads are better than one because two heads can make conflicting material interact better than one head usually can" (p. 49). Some previous authors, such as Storch (2002), found that collaborative writing supported ESL learners in sharing responsibility for content, organisation, and linguistic decisions. In other studies, Storch (1999, 2002, and 2005) demonstrated that using collaborative learning in writing activities is helpful both at the beginning when students brainstorm and talk and at the end when they review and edit each other's work.

Some previous studies indicate the importance of collaborative writing to improve students writing skills (Albesher, 2012; Dobao & Blum, 2013; Elola & Oskoz, 2010; McDonough & Sunitham, 2009; Shehadeh, 2011; Storch, 2005; Storch, 2018; Zeng & Takatsuka, 2009). According to Storch (2005), the influence of cooperation can extend beyond accuracy to text quality. This author used quantitative and qualitative assessments to compare writings created in groups to those written individually in terms of fluency, correctness, complexity, structure, and task fulfillment. In a different study, Shehadeh (2011) conducted an experimental study to find out the students' perceptions of collaborative writing. She found that students' experiences were positive and that collaborative writing was beneficial and helped them improve their speaking skills. Moreover, Albesher (2012) conducted a study on 48 adult ESL students at a Saudi university, requiring 23 to write in groups and 25 to work individually. In his study, the author discovered that collaborative writing had helped students learn to write cohesive essays free of typos and grammatical errors. Dobao and Blum (2013) analyzed the feelings of 55 Spanish EFL students about collaborative writing; 27 worked in groups of four, while the other 28 worked in pairs.

In terms of autonomous learning, Holec (1981) defined autonomy as "the ability to change one's learning" (p. 3). Dickinson (1995) describes a 'situation in which the learner is responsible for all of the decisions concerned with his or her learning and the implementation of those decisions' (p. 167). Even though autonomous learning is an isolated activity that can be done independently, it is considered an opportunity for interactions with others (Benson, 2001; Healey, 2007; Little, 1991; Prince, 2011; Schwienhorst, 2003). According to Little and Brammerts (1996), learner autonomy is both an individual and collaborative experience. An online course preparing instructors to build a wiki was the focus of Kessler and Bikowski's (2010) study. By making meaningful changes to the wiki, these participants demonstrated autonomy by being collaborative learners. Growing learner autonomy and enhancing the quality of collaborative work are two of the skills that have been examined (Elola & Oskoz, 2010; Kuteeva, 2011; Li & Zhu, 2017). Few studies have looked at how online collaborative writing can help students improve a range of skills, such as their ability to work alone and build their independence (Aydin & Yildiz, 2014; Kessler, 2009; Lee, 2010; Kessler et al., 2012). In the study, only four students enjoyed writing on their own, while 51 students liked their collaborative writing experience and the chance to learn from each other and improve their language skills, such as grammar and vocabulary knowledge. Zhai's 2021 study revealed that students found collaborative writing time-consuming and inefficient.

Writing with the assistance of technology could help students significantly increase their writing level (Braine, 1997). Collaborative activities involving technology-based learning (e.g., blogs, wikis, chat rooms, and Google Docs) can help students improve their writing skills effectively. According to Li (2018), both wiki and GD platforms engage writers in several stages of the writing process, including idea exchange, text construction, revision, and drafting. Technology-assisted collaborative writing activities increase learners' writing structure and ideas (e.g., Abrams, 2019; Bikowski & Vithanage, 2016; Elabdali & Arnold, 2020; Li & Zhu, 2017; Strobl, 2014).

Google Docs, a component of Google Drive, enables users to generate many documents (Hedin, 2012). According to Suwantarathip and Wichadee (2014), Google Docs is one of the online learning tools that helps teachers teach 21st-century writing. Google Docs uses a learner-centered methodology that allows users to work collaboratively with others on their projects (Oxnevad, 2013). Perron and Sellers (2011) describe Google Docs as a Google server-hosted program that enables file sharing, collaboration, and modification. They claim that Google Docs increases productivity by letting teams work together on a variety of tasks in one place. Google Docs distinguishes itself as a unique collaborative program by enabling users to edit their written work simultaneously, a feature known as "synchronous editing" (Sharp, 2009).

Previous research looked at the effects of online collaborative activity on English writing. Kessler et al. (2012) investigated the nature of L2 learners' engagement in collaborative writing using *Google Docs*. The study found that students cared more about meaning than sentence form. Both Kessler et al. (2012) and Alharbi (2019) emphasized that working together using GD encourages learners' participation. Examining *Google Docs* out-of-class collaborative writing, Zhou et al. (2012) found that *Google Docs* was useful both in and out of class. Bikowski and Vithanage (2016) examined the impact of online collaborative writing on the writing of 95 L2 students by assigning them to an experimental group that collaborated while the control group worked separately. Even though all the participants' attitudes toward using technology were positive, the results proved that the web-based collaborative writing group did better. According to a study by Lawrence and Lee (2017), using GD enables students to engage in recursive writing practices, which allows them to focus on the structural elements of their writing. Their final drafts have changed and improved from the first draft because of peer feedback. However, in Alharbi's study (2019), EFL learners had certain challenges in using *Google Docs*, which affected their involvement.

This study aims to investigate the effects of collaborative writing through Google Docs, without teacher guidance, on the idea generation, revision, and editing of writing skills essays among English as a Foreign Language (EFL) students. In other words, it seeks to find out how EFL students feel about autonomous online collaborative writing in English. Therefore, the following research questions form the basis of the study:

- 1. What are the students' attitudes toward autonomous collaborative writing in EFL contexts without the teacher's guidance?
- 2. How do undergraduate students feel about using Google Docs to write in English without the teacher's guidance?

3. Does online autonomous collaborative writing influence EFL students' idea generation, revision, and essay editing?

3. Methodology

The research for this study was a mixed method that included a quantitative approach (a questionnaire) as the main instrument and a qualitative approach (an interview) as supplementary information to explore students' attitudes toward autonomous online collaboration. Furthermore, the interview is used to validate the results from the questionnaire.

The selection of appropriate instruments and samples determines the quality of a research study (Cohen et al., 2018). Due to various factors, such as limited accessibility and time constraints, gathering data from the entire population was challenging. The present research was conducted in the English Language Department (ELD) at Al Qassim University, located in Saudi Arabia. The department consists of approximately 500 students. To gather data, it is advisable to choose a limited number of subjects that are representative of the entire population (Cohen et al., 2018). The study employed convenience sampling, which falls under the category of non-probability sampling, to gather data to address the research questions.

The study included 36 adult ESL male students from the English Language Department (ELD) at Qassim University (QU) in Saudi Arabia in December 2022. The students surveyed were second-year English majors; their average age was 21. Some factors influenced the selection of this sample, as follows: 1) Classified as lower intermediate, these students had less writing experience compared to those in their third or fourth year. 2) In the second year of writing, the curriculum focused on teaching writing skills at various stages, such as pre-writing, drafting, rewriting, and editing. The similarities between this curriculum and the course intended for this study would aid the researcher's goal of determining whether collaborative autonomous learning will improve ESL learners' writing skills. In the academic writing class that the students took, they learned how to write many types of essays, such as argumentative, comparative, and cause-and-effect.

This research used two instruments: (a) questionnaires and (b) semi-structured interviews. The questionnaire is used in this study for three reasons: The first purpose of the questionnaire is to understand students' perspectives on autonomous online collaborative writing. The second is the open and free social atmosphere of the ELD study at QU, which allows participants to provide honest responses. The last reason is that the questionnaire has various advantages, including the capacity to save money, time, and effort (Dörnyei, 2010). The questionnaire was created based on prior studies and the author's extensive experience teaching writing for two decades. At the end of the study, the students received the questionnaire, as indicated in Table 5 in Appendix A. All sections of the questionnaire utilized the Likert scale. This scale includes closed-ended statements that help respondents answer specifically using items such as "strongly agree," "agree," "undecided," "disagree," and "strongly disagree" (Dörnyei, 2007).

As provided in Appendix B, the semi-structured interview questions focus on students' experiences after participating in the study to provide further information about their perspectives on autonomous online collaborative writing. The researcher selected three candidates for the semi-interview based on their final test scores: one from the top, another from the middle, and the last from the bottom.

In terms of the study procedure, the students met for two hours every week for a period of six weeks. They learned how to compose essays during the first week of the study by practicing the writing process approach, which focuses on the pre-writing, drafting, revising, and editing stages of writing, along with the activities associated with each stage. During the second week, their instructor instructed them to collaborate with others to complete these stages independently. During the third week of the study, the teachers instructed the participants to download the Google Docs application on their smartphones and provided a training session on the use of Google Docs, including posting, revising, and editing. Following the session, the teacher asked them to write online in small groups of three to four for three weeks. Therefore, they received an argumentative topic to compose a four-paragraph essay using Google Docs.

For data analysis, the researcher used descriptive statistics to examine the questionnaire and determine the frequency and mean score for each question. At the end of the course of study, the researcher chose three students at random for the follow-up interview based on their GBA (high, medium, and low). We asked them a few questions (Appendix B) in the writing course to gather their thoughts. We used thematic analysis (Boyatzis, 1998) to examine the students' attitudes and perceptions of the effect of autonomous online collaborative writing on EFL learners.

4. Results

The researcher examined the questionnaire findings based on frequency, which displays percentages and arranges the various values in either ascending or descending order. He gathered descriptive analysis data to determine the mean scores. The student gave answers on a 5-point Likert scale (5 for strongly disagree, 4 for disagree, 3 for undecided, 2 for agree, and 1 for strongly agree).

4.1 Research Question 1: What Are the Students' Attitudes toward Autonomous Collaborative Writing in EFL Contexts without the Teacher's Guidance?

Table 1 and Figure 1 show, in some detail, the students' attitudes toward autonomous collaborative writing in the English language. The initial results indicated that students were dissatisfied with the value of autonomous collaborative writing. Concerning the ability of students to help the team by writing essays, 83.3% disagreed and strongly disagreed. The mean score was 1.7. Likewise, 91.7% of the students thought that working in groups using *Google Docs* did not motivate them to write essays, with a mean score of 1.7. Furthermore, 83.3% of the students believed that working in groups wasn't an effective strategy for improving their writing ability. The mean score was 1.8. For statement 22, 83.3% of the students did not prefer to get feedback on their compositions from friends, and the mean was 2.0. Regarding the feelings of the students about working in groups compared to working alone in statement 23, 75% felt more dissatisfied

when working with others than when writing alone, with a mean score of 2.0. In addition, 55.5% of the students did not agree with the statement that writing in groups assisted them in improving their writing exam scores, with a mean score of 2.5. On the contrary, 66.7% of the students agreed that they felt embarrassed to show their writing to others, and the mean score was 3.6. Finally, 77.8% agreed that working alone without the assistance of others is very important, with a mean score of 3.9 as shown in statement 18.

Table 1. The students' opinions about using of autonomous collaborative writing

N	Item Description	Strongly agree	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree
		(5)				(1)
4	I was able to help my team by writing essays.	0	0	6	16	14
		0%	0%	16.7%	44.4%	38.9 %
10	Working in groups using Google Docs motivates me to write.	0	1	2	20	13
		0%	2.8%	5.6%	55.6%	36.1%
11	Working in groups is an effective strategy for improving my	0	1	5	17	13
	writing ability.	0%	2.8%	13.9%	47.2%	36.1%
13	I'm embarrassed to show my writing to others.	10	14	3	8	1
		27.8%	38.9%	8.3%	22.2%	2.8%
18	Working alone, without the assistance of others, is very	10	18	5	3	0
	important to me.	27.8%	50.0%	13.9%	8.3%	0%
20	Writing in groups assisted me in improving my writing exam	2	5	9	13	7
	scores.	5.6%	13.9%	25.0%	36.1%	19.4%
22	I would like to get feedback on my compositions from my	1	2	3	21	9
	friends.	2.8%	5.6%	8.3%	58.3%	25.0%
23	I am more satisfied when I collaborate with others than when I	1	2	6	16	11
	write alone.	2.8%	5.6%	16.7%	44.4%	30.6%

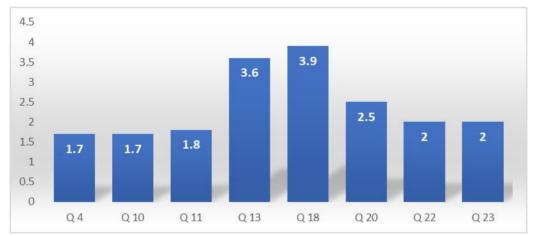


Figure 1. Students attitudes twoards CW

According to the first question's findings, students are unable to collaborate because working in groups is not an effective approach to enhancing writing skills. The majority of students preferred not to receive feedback on their writing from their peers. They preferred working alone, without the help of others. They believed that writing in groups did not help them improve their writing exam grades. They were embarrassed to show people their writing.

4.2 Research question 2: How do undergraduate students feel about using Google Docs to write in English without the teacher's guidance? The second research question, as shown in Table 2 and Figure 2, was answered through sub-factors and can be divided into the following:

• Face-to-face versus Google Docs: This sub-factor was answered in question one: "Writing my essay in person was better than typing it on Google Docs," as shown in Table 2. The mean was 4, and 83.3% of the students said that writing essays in person was better than typing on Google Docs.

- Feeling confident in Google Docs: This sub-factor was addressed in questions 2 and 6. For question two, "I felt more confident writing the essay in Google Docs." The mean values obtained were 1.8 and 1.7. Regarding question 6, "Google Docs assisted me in writing a better final essay," the students reported feeling less confident after using Google Docs.
- Colleagues' ability to provide, contribute, and learn after using Google Docs: Questions 3, 5, and 21 addressed this sub-factor. Statements 3 and 21 had a mean of 1.8, while Statement 5 had a mean of 1.7. This means that students thought that their classmates couldn't provide comments, contribute, or learn from their team members when using Google Docs.
- Increasing understanding and facilitating interaction with others: This sub-factor was addressed in questions 18 and 25. For statement 18, the mean for statement 25 was 2.2, showing that the use of *Google Docs* in groups did not improve students' understanding. On the other hand, the mean score for statement 25 was 1.6, which shows that *Google Docs* did not make it easier to talk to other people.
- Preference for using Google Docs in additional assignments: Statement 9 showed that the average score was 1.7, which meant that students didn't want to use Google Docs for more assignments in the future.

Using **Google Docs** *simultaneously vs. offline*: Statement 7 specifically addressed this sub-factor. The average score was 2.1, which shows that writing with classmates simultaneously using *Google Docs* wasn't more beneficial than working when colleagues were offline.

Table 2. The learners'	perceptions of using Goog	<i>le Docs</i> for writing English

N	Item Description	Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
1	Writing my essay in person was better than typing it on Google	7	23	6	0	0
	Docs.	19.4%	63.9%	16.7%	0%	0%
2	I felt more confident writing the essay in Google Docs.	0	0	6	17	13
		0%	0%	16.7%	47.2%	36.1%
3	My classmates contributed more when writing using Google	0	0	5	22	9
	Docs.	0%	0%	13.9%	61.1%	25.0%
5	I learned from my team members when using Google Docs.	0	0	3	20	13
		0%	0%	8.3%	55.6%	36.1%
6	Google Docs assisted me in writing a better final essay.	0	0	4	20	12
		0%	0%	11.1%	55.6%	33.3%
7	Writing with my classmate simultaneously using Google Docs	2	1	7	18	8
	was more beneficial than working when my colleague was offline.	5.6%	2.8%	19.4%	50.0%	22.2%
9	I'd like to do more assignments with Google Docs in the future.	0	0	5	17	14
		0%	0%	13.9%	47.2%	38.9%
21	My colleagues can provide comments on my writing by using	0	0	4	22	10
	Google Docs.	0%	0%	11.1%	61.1%	27.8%
18	The use of Google Docs in groups improved my understanding.	1	2	10	14	9
		2.8%	5.6%	27.8%	38.9%	25.0%
24	Google Docs facilitated my interaction with others.	0	0	3	18	15
		0%	0%	8.3%	50.0%	41.7%



Figure 2. Students perceptions of using GD

The second research question's findings revealed that students lacked confidence in using Google Docs as a writing tool. Instead, they

expressed a preference for the conventional approach of in-person writing. Their preference stemmed from their perception that Google Docs did not adequately facilitate the creation of a carefully planned final copy for their essays. In addition, the participants expressed the perception that their peers were unable to offer feedback, make contributions, or benefit from the knowledge and skills of their team members while utilizing Google Docs. Therefore, we do not recommend using Google Docs for upcoming academic tasks.

4.3 Research Question 3: Does Online Autonomous Collaborative Writing Influence EFL Students' Idea-Generation, Revision, and Essay Editing?

The third research question was addressed by two sub-factors, as illustrated in Table 3 and Figure 3.

- Preference for sharing, receiving, and providing feedback: Statement 8 mentioned a preference for providing comments and revising the essay online. According to the results, 91.7% either disagreed or strongly disagreed, with a mean score of 1.7. For statement 12, 72.2% did not enjoy sharing writing with classmates and receiving revision feedback, with a mean score of 2.2. Similarly, 80.6% of students' responses to statement 19 demonstrated that group writing on **Google Docs** did not teach students to revise their essays, with a mean of 1.9.
- Revising, generating ideas, and checking spelling using Google Docs: According to statements 14 and 15, the majority of students disagreed with the statement that revising, generating ideas, and making outlines in groups using Google Docs takes longer than revising individually. It was clear from the results of statements 14 and 15 that the majority of students did not agree with the statement that revising, generating ideas, and making outlines in groups using **Google Docs** takes longer than revising individually. The mean scores were 2.1 and 2.6, respectively. This indicated that working in groups online helped them generate, make outlines, and revise essays in a short time. On the contrary, according to statement 16, the majority of participants (77.8%) believed that writing in groups using Google Docs takes a long time to check spelling, punctuation, and grammar, with a mean of 3.9.

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Table 3. Students' opinions on using	autonomous online collaborati	ive writing tor gen	ierating ideas	revicing eccave	and editing
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N	Item Description	Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
8	I liked commenting and revising online.	0	1	2	19	14
		0%	2.8%	5.6%	52.8%	38.9%
12	I enjoyed sharing my writing with my classmates and receiving	1	6	3	18	8
	their revision feedback.	2.8%	16.7%	8.3%	50.0%	22.2%
14	We spent more time revising while writing in groups using	0	4	7	16	9
	Google Docs than I did when writing alone.	0%	11.1%	19.4%	44.4%	25.0%
15	We spent more time generating ideas and making outlines while	1	7	11	11	6
	writing in groups using Google Docs than I did when writing	2.8%	19.4%	30.6%	30.6%	16.7%
	alone.					
16	We spent more time checking,	9	19	16	2	0
	spelling, punctuation, and grammar in groups using Google Docs	25.0%	52.8%	44.4%	5.6%	0%
	than I do when writing alone.					
19	Writing in groups on Google Docs taught me how to revise	0	0	7	20	9
	my essay.	0%	0%	19.4%	55.6%	25.0%



Figure 3. students' feeling about using GD to generat, revise and edit ideas

The third research question's findings revealed that students showed little enthusiasm for sharing their written work with peers and participating in mutual feedback exchanges. Despite the observed benefits of autonomous collaborative writing in facilitating idea

generation, outlining, and essay rewriting within a limited timeframe, using Google Docs during the collaborative process does not necessarily accelerate the revision process due to the time-consuming nature of checking spelling, punctuation, and grammar.

4.4 Results of the Interview

The researcher used the interview to validate the questionnaire results and gather further insights into students' perceptions of autonomous online collaborative writing. He selected three participants for the semi-interview based on the students' last exam results: one from the highest level, another from the medium level, and the third from the lowest level. We conducted interviews with the learners to elicit their descriptions and explanations of their learning experiences. Table 4 presents the results of the thematic analysis of the transcribed interviews.

Table 4. Themes addressing EFL learners' perceptions towards the impact of autonomous online collaborative writing

Themes	Answers		
The effect of writing using technology	Respondent (A) thought that writing using technology would be great with the instructor's		
	assistance.		
	Respondent (B) thought that technology was enjoyable with the teacher's guidance.		
	Respondent (C) thought that using technology would be useful in the teacher's presence.		
The effect of online collaborative	Respondent (A) thought online collaborative writing was difficult since there was no intervention		
writing	from the teacher.		
	Respondent (B) thought that collaborative writing using Google Docs needed the teacher's		
	presence.		
	Respondent (C) thought that Google Docs collaborative writing was negative due to a lack of		
	instructor interventions.		

Here is a detailed description of the interview:

4.4.1 Respondent (A)

Respondent (A) stated that he would like to use the technology through writing, but that he would require the instructor's assistance. He believed that *Google Docs* was most beneficial when used in a group setting rather than individually. He mentioned that his experience using *Google Docs* for collaborative work in the English language was difficult because there was no intervention from the teacher. His main complaint was the absence of discussion moderators. He ended his interview by saying, "I hope to work in the group using *Google Docs* with assistance from the teacher."

4.4.2 Respondent (B)

Respondent (B) felt that getting feedback from the students was beneficial, as long as the instructor provided some direction. He claimed that ESL students would benefit from learning in a collaborative setting using *Google Docs*. He stated, "Using *Google Docs* in collaborative writing was a new experience for me that needed a lot of effort and cooperation from the group team, so the teacher's guidance is essential.". He concluded that technology is enjoyable with the teacher's guidance.

4.4.1 Respondent (C)

Respondent C's experience with *Google Docs* collaborative writing was negative due to a lack of instructor intervention. He believed that the teacher's involvement was critical since the group members were unsure if they were working properly. Using technology would be useful in the teacher's presence.

5. Discussion

The study explores the students' attitudes toward autonomous online collaborative writing using Google Docs in the English language. In other words, the study examines the impact of collaborative writing using Google Docs, without teacher guidance, on the idea-generation, revising, and editing of writing skills essays by English as a Foreign Language (EFL) students. A quantitative approach (questionnaire) served as the main method, and a qualitative approach (interview) provided supplemental information. Therefore, we conducted interviews with three participants to corroborate the results from the questionnaire. This article's primary conclusion was that a teacher's presence is crucial for the positive impact of Google Docs. The majority of students who participated in the study proved that *Google Docs* wasn't useful, and most participants were not willing to use it in their academic writing activities. The students' responses to the questionnaires and the interview summarize the research's findings.

In response to the first study question, Table 1 demonstrates that students have a negative view of the use of autonomous collaborative activities in the English language without the teacher's presence. The study results indicated that students did not receive assistance in contributing to the team and were not motivated to write effectively. Furthermore, the study was demonstrated that working in groups was not a useful technique for improving their writing skills. Although Phipps, Kask, and Higgins (2001) found that having students work together on written assignments was an effective way to get them motivated to do their best, research findings contradict that. In addition, they preferred individual work over group work, peer reviews, and classroom discussions. In the study, participants reported being too reluctant to express their classmates' drafts.

Students were not positive about using Google Docs in English without the teacher's guidance, as shown in Table 2. This became apparent when they reported that using Google Docs did not improve the quality of their writing, interaction, or comprehension. In addition, the data

demonstrated that the students' top choice for finishing their essays was to do it in person rather than using *Google Docs*, and they did not prefer to use it for additional assignments. This result goes against what Alsubaie and Ashuraidah (2017) and Morales and Collins (2007) claim, which is that utilizing *Google Docs* is preferable to talking to someone in person or through any other traditional means of communication.

Regarding the students' perspectives on the use of online autonomous collaborative writing for the purpose of generating ideas, revising, and editing essays, it is evident from the data presented in Table 3 that they did not derive satisfaction from the act of sharing their written work with peers and receiving comments for revision. In terms of time, group work with Google Docs to review grammar, punctuation, and spelling takes longer than individual work. However, as opposed to writing alone, students quickly come up with ideas, construct an essay structure, and edit their drafts. This finding aligns with the research conducted by Zhai (2021), wherein time consumption was identified as a significant obstacle to collaborative writing, which was considered a key source of demotivation.

The questionnaire results showed that autonomous online collaborative writing was ineffective at helping students complete their written drafts. On the contrary, the interviews identified negative attitudes toward the students' dissatisfaction. The results indicated that *online collaborative writing requires huge effort and collaboration from each team member since it needs guidance and intervention from the teacher.* Students who participated in the interview process thought that a teacher plays a very significant role in the classroom *by* leading, moderating, interfering, and encouraging them appropriately.

This result is in agreement with previous studies that showed teachers may mediate the activity in a way that encourages learners to collaborate (Rojas-Drummond & Mercer, 2003; Webb, 2009; Yoon & Kim, 2012). Teachers must intervene when students work in small groups. (Algasab, 2015). In Martin-Beltran's study (2012), she discovered that even when teachers strongly encouraged students to work together, learners sometimes refused to do so without prompting from an instructor. Chiu (2004) found that some students requested the teacher's presence. The teacher encouraged discussion and rethinking instead of answering. After the teacher's presence, learners collaborated and took turns addressing the problem.

6. Conclusion

As mentioned at the beginning of the article, Saudi universities have given extra attention to teaching writing skills throughout the past decades. EFL learners found difficulty achieving the desired writing assessment outcomes. Collaboration activities using *Google Docs* could help students become self-reliant. The study aimed to find out the students' attitudes regarding the use of autonomous online collaborative activities in the English language. The quantitative and qualitative results found that autonomous online collaborative writing wouldn't be beneficial for EFL learners without the teacher's guidance.

Despite receiving training on using Google Docs and collaborating with other team members, the participants' attitudes remained negative. Most of their responses to the questionnaire indicated that autonomous online collaborative writing was ineffective at helping them finish their written drafts successfully. The interviews shed light on the reasons behind this negative attitude. They believed that online collaborative writing needed the teacher's guidance and presence. The interviewee acknowledged the critical role of the teacher. Using *Google Docs* for collaborative writing requires a lot of work and cooperation from everyone on the team, and the teacher could play a crucial role by guiding, intervening, and encouraging them in the right ways.

Regarding research limitations and suggestions, the study investigated the students' attitudes toward the use of autonomous online collaborative activities in the English language. The study participants completed the questions on the survey based on the Likert scale. Even though the study scale allowed for more nuanced responses, there were no yes-or-no questions. Moreover, the questions were given to students at the end of the study; however, the pre-questionnaire should be taken into consideration to track the students' changes in their responses before and after involvement in the study. The third limitation is that the study should be conducted for a full semester (e.g., a longitudinal study). Furthermore, the researcher conducted online collaborative activities in English without the teacher's presence. Therefore, difficulties and challenges emerged, such as a lack of posting, revising, and editing each other. Finally, the research was limited only to male students in the Qassim region of Saudi Arabia. Moreover, it was limited to level three in the English Language Department at Qassim University. Because of this, the results of the study cannot be generalized to all English students as a whole.

In terms of recommendations for future studies, the focus should be on the teacher's role in student-student collaboration within the Google Docs collaborative process. The teacher's presence and guidance could change the students' attitudes toward collaborative activities using *Google Docs* in the English language. Another study should be a quantitative longitudinal comparative experimental study that investigates the learning outcomes and revision behavior of an experimental (collaborative) and a control (individual) group before and after receiving a teacher intervention using *Google Docs*. So, the study's goal would be to look for differences between the two groups, as well as differences within the same group.

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Competing interests

The author declares that there are no conflicts of interests regarding the publication of this paper.

Informed consent

Obtained.

Ethics approval

The Ethical Committee of the Deanship of Postgraduate Studies and Scientific Research, Qassim University, Saudi Arabia has granted approval for this study on 7 October 2022(Ref. No. 22-76-15).

Provenance and peer review

Not applicable.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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References

- Abrams, Z. (2019). Collaborative writing and text quality in Google Docs. Language Learning & Technology, 23(2), 1094-3501.
- Albesher. K. (2012). Developing the writing skills of ESL students through the collaborative learning strategy. Doctoral Dissertation. Newcastle University.
- Algasab, M. (2015). Student-Student collaboration in wiki mediated collaborative writing activities: Exploring EFL teachers' roles in the collaborative process. Unpublished Doctoral Dissertation. York University.
- Alharbi, M. (2019) Exploring the potential of Google Doc in facilitating innovative teaching and learning practices in an EFL writing course. *Innovation in Language Learning and Teaching*, 14(2), 227-242. https://doi.org/10.1080/17501229.2019.1572157
- Alsubaie, J., & Ashuraidah, A. (2017). Exploring Writing Individually and Collaboratively Using Google Docs in EFL Contexts. *English Language Teaching*, 10(10), 10-30. https://doi.org/10.5539/elt.v10n10p10
- Aydin, Z., & Yildiz, S. (2014). Using wikis to promote collaborative EFL writing. Language Learning & Technology, 18(1), 160-180.
- Ballard, B., & Clanchy, J. (1992). Assessment by conception: cultural influence and intellectual traditions. In L. Hamp-Lyons (ed.), *Assessing second language writing in academic contexts*. Norwood, HJ: Ablex, 19-35.
- Benson, P. (2001). Teaching and researching autonomy in language learning. Longman, Harlow.
- Bikowski, D., & Vithanage, R. (2016). Effects of web-based collaborative writing on individual L2 writing development. *Language Learning & Technology*, 20(1), 79-99.
- Boyatzis, R. (1998). Transforming qualitative information: Thematic analysis and code development. Thousand Oaks, CA: Sage Publications.
- Braine, G. (1997). Beyond word-processing: Networked computers in ESL writing classes. *Computers and Composition*, 14(1), 45-58. https://doi.org/10.1016/S8755-4615(97)90037-2
- Chiu, M. (2004). Adapting teacher interventions to student needs during cooperative learning: How to improve student problem solving and time-on-task. *American Educational Research Journal*, 41(2), 365-399. https://doi.org/10.3102/00028312041002365
- Cohen, L., Manion, L. and Morrison, K. (2018). Research Methods in Education (8th ed.). New York: Routledge. https://doi.org/10.4324/9781315456539
- De Guerrero, M. C. M., & Villamil, O. S. (2000). Activating the ZPD: Mutual scaffolding in L2 peer revision. *The Modern Language Journal*, 84(1), 51-68. https://doi.org/10.1111/0026-7902.00052

- Dickinson, L. (1995). Autonomy and Motivation: A Literature Review. *System*, 23(2), 165-174. https://doi.org/10.1016/0346-251X(95)00005-5
- Dobao, A., & Blum, A. (2013). Collaborative writing in pairs and small groups: learners' attitudes and perceptions. *System*, 41(2), 365-378. https://doi.org/10.1016/j.system.2013.02.002
- Donato, R. (1988). Beyond group: A psycholinguistic rationale for collective activity in second-language learning. Unpublished doctoral dissertation, University of Delaware, Newark.
- Donato, R. (1994). Collective scaffolding in second language learning. In J. Lantolf & G. Appel (Eds.), *Vygotskian approaches to second language research* (pp.33–56). Norwood, NJ: Albex.
- Dörnyei, Z. (2007). Research methods in applied linguistics: Quantitative, qualitative and mixed methodologies. Oxford, UK: Oxford University Press.
- Dörnyei, Z., & Taguchi, T. (2010). Questionnaires in second language research: construction, administration, and processing. New York: Routledge. https://doi.org/10.4324/9780203864739
- Elabdali, R., & Arnold, N. (2020). Group dynamics across interaction modes in L2 collaborative wiki writing. *Computers & Composition*, 58, 1-17. https://doi.org/10.1016/j.compcom.2020.102607
- Elbow, P. (1973). Writing without teachers. New York, NY: Oxford University Press.
- Elola, I., & Oskoz, A. (2010). Collaborative writing: Fostering foreign language and writing conventions development. *Language Learning & Technology, 14*(3), 51-71. Retrieved from http://llt.msu.edu/issues/october2010/elolaoskoz.pdf
- Gillies, R. M., & Ashman, A. (2003). Co-operative learning: the social and intellectual outcomes of learning in groups. Routledge, London and New York.
- Graham, D. (2005). Cooperative learning methods and middle school students. *Doctoral Dissertation*. Newcastle: Newcastle University. thesis, Capella University.
- Healey, D. (2007). Theory and research: Autonomy and language learning. In J. Egbert &E. Hanson-Smith (Eds.), *CALL environments: Research, practice and critical issues* (pp. 377–389). Alexandria, VA: TESOL. Computer Assisted Language Learning57.
- Hedin, B. (2012). Peer feedback in academic writing using Google Docs. In *Proceedings of LTHs 7:e Pedagogiska Inspirationskonferens*, (pp, 1–3). Lund.
- Holec, H. (1981). Autonomy and foreign language learning. Oxford, UK: Pergamon.
- Kessler, G. (2009). Student-initiated attention to form in wiki-based collaborative writing. Language Learning & Technology, 13(1), 79-95.
- Kessler, G, & Bikowski, D. (2010). Developing collaborative autonomous learning abilities in computer-mediated language learning: Attention to meaning among students in wiki space. *Computer Assisted Language Learning*, 23(1), 41-58. https://doi.org/10.1080/09588220903467335
- Kessler, G., Bikowski, D., & Boggs, J. (2012). Collaborative writing among second language learners in academic web-based projects. Language Learning & Technology, 16(1), 91-109.
- Kowal, M., & Swain, M. (1994). Using collaborative language production tasks to promote students' language awareness. *Language Awareness*, 3(2), 73-93. https://doi.org/10.1080/09658416.1994.9959845
- Kuteeva, M. (2011). Wikis and academic writing: Changing the writer-reader relationship. *English for Specific Purposes*, *30*, 44-57. https://doi.org/10.1016/j.esp.2010.04.007
- Lawrence, D., & Lee, KW. (2017). Collaborative Writing among Second Language Learners Using Google Docs in a Secondary School Context. *International Journal on E-Learning Practices* (IJELP), *3*, 63-88. https://doi.org/10.51200/ijelp.vi.712
- Lee, L. (2004). Learners' perspectives on networked collaborative interaction with native speakers of Spanish in the US. *Language Learning & Technology*, 8(1), 83-100. Retrieved from http://llt.msu.edu/vol8num1/pdf/lee.pdf
- Lee, L. (2010). Exploring wiki-mediated collaborative writing: A case study in an elementary Spanish course. *CALICO*, 27(2), 260-276. https://doi.org/10.11139/cj.27.2.260-276
- Li, M. (2018). Computer-mediated collaborative writing in L2 contexts: an analysis of empirical research. *Computer Assisted Language Learning*, 31(8), 882-904. https://doi.org/10.1080/09588221.2018.1465981
- Li, M., & Zhu, W. (2017b). Good or bad collaborative wiki writing: Exploring links between group interactions and writing products. *Journal of Second Language Writing*, 35, 38-53. https://doi.org/10.1016/j.jslw.2017.01.003
- Little, D. (1991). Learning autonomy: definitions, issues and problems (Dublin, Authentik Language Learning Resources).
- Little, D., & Brammerts, H. (1996). A guide to language learning in tandem via the Internet. CLCS Occasional Paper No. 46. Dublin, Ireland: Trinity College, Centre for Language and Communication Studies.

- Martin-Beltran, M. (2012). How do teachers participate, mediate, and intervene in the co-construction of language knowledge during learner interaction? In B. Yoon & H. Kim (Eds.), *Teachers' roles in second language learning: Classrooms applications of sociocultural theory* (pp. 99-121). Charlotte, NC: Information Age Publishing.
- McDonough, K., & Sunitham, W. (2009). Collaborative dialogues between Thai EFL learners during self-access computer activities. TESOL Quarterly, 43(2), 231-254. https://doi.org/10.1002/j.1545-7249.2009.tb00166.x
- Morales, C. R., & Collins, S. (2007). Google Suite for higher education (ID No. DEC0703).
- No d, S., & Robert J. (2003). How the web is used to support collaborative writing. *Behavior and Information Journal*, 22(4), 245-265. https://doi.org/10.1080/0144929031000120860
- Ohta, A. (1995). Applying sociocultural theory to an analysis of learner discourse: Learner-learner collaborative interaction in the zone of proximal development. *Issues in Applied Linguistics*, 6(2), 93-121. https://doi.org/10.5070/L462005219
- Ohta, A. (2000). Re-thinking interaction in SLA: Develop-mentally appropriate assistance in the zone of proximal development and the acquisition of L2 grammar. In J. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 51-78). Oxford, UK: Oxford University Press.
- Oxnevad, S. (2013). 6 Powerful Google Docs Features to Support the Collaborative Writing Process. Retrieved from http://www.teslej.org/wordpress/issues/volume14/ej55/ej55m1
- Perron, B. E., & Sellers, J. (2011). Book Review: A review of the collaborative and sharing aspects of Google Docs. *Research on Social Work Practice*, 21, 489. https://doi.org/10.1177/1049731510391676
- Phipps, M., Phipps, C., Kask, S., & Higgins, S. (2001). University students' perceptions of cooperative learning: implications for administrators and instructors. *Journal of Experiential Education*, 24(1), 14-21. https://doi.org/10.1177/105382590102400105
- Prince, P. (2011). What's the story? Motivating e-Learners with fiction. In D. Gardner (Ed.), Fostering autonomy in language learning (pp. 225-232). Gaziantep, Turkey: Zirve University.
- Rice, R. P., & Huguley, J. T., Jr. (1994). Describing collaborative forms: a profile of the team- writing process. *IEEE Transactions on Professional Communication*, 37(3), 163-170. https://doi.org/10.1109/47.317482
- Rojas-Drummond, S., & Mercer, N. (2003). Scaffolding the development of effective collaboration and learning. *International Journal of Educational Research*, 39, 99-111. https://doi.org/10.1016/S0883-0355(03)00075-2
- Schwienhorst, K. (2003). Neither here nor there? Learner autonomy and Intercultural Factors in CALL Environments. In D. Palfreyman & R.C. Smith (Eds.), *Learner autonomy across cultures: Language education perspectives* (pp. 164-180). New York: Palgrave Macmillan. https://doi.org/10.1057/9780230504684_10
- Sharp, V. (2009). Computer education for teachers: Integrating technology into classroom teaching (6th ed). Hoboken, N.J.: John Wiley.
- Shehadeh, A. (2011). Effects and student perceptions of collaborative writing in L2. *Journal of Second Language Writing*, 20(4), 286-305. https://doi.org/10.1016/j.jslw.2011.05.010
- Storch, N. (1999). Are two heads better than one? Pair work and grammatical accuracy, *System*, 27(3), 363-374. https://doi.org/10.1016/S0346-251X(99)00031-7
- Storch, N. (2002). Patterns of interaction in ESL pair work. Language Learning, 52(1), 119-158. https://doi.org/10.1111/1467-9922.00179
- Storch, N. (2003). Relationships formed in dyadic interaction and opportunity for learning. *International Journal of Educational Research*, 37(3/4), 305-322. https://doi.org/10.1016/S0883-0355(03)00007-7
- Storch, N. (2005). Collaborative writing: product, process, and students' reflections. *Journal of Second Language Writing*, *14*(3), 153-173. https://doi.org/10.1016/j.jslw.2005.05.002
- Storch, N. (2018). Collaborative writing. Language Teaching, 52(1), 40-59. https://doi.org/10.1017/S0261444818000320
- Strobl, C. (2014). Affordances of web 2.0 technologies for collaborative advanced writing in a foreign language. *CALICO Journal*, 31(1), 1-18. https://doi.org/10.11139/cj.31.1.1-18
- Suwantarathip, O., & Wichadee, S. (2014). The Effects of Collaborative Writing Activity Using Google Docs on Students' Writing Abilities. *Turkish Online Journal of Educational Technology-TOJET*, *13*(2), 148-156. Retrieved from https://eric.ed.gov/?id=EJ1022935
- Thousand, J., Villa, R., & Nevin, A. (1994). Creativity and collaborative learning: a practical guide to empowering students and teachers, Baltimore: P.H. Brookes Publishing Co.
- Vanderburg, R. M. (2006). Reviewing research on teaching writing based on Vygotsky's theories: What we can learn. *Reading & Writing Quarterly*, 22(4), 375-393. https://doi.org/10.1080/10573560500455778
- Vygotsky, L. (1978). Mind in society. The development of higher psychological processes. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1981). The genesis of higher mental functions. In J. V. Wertsch (ed.), The concept of activity in Soviet psychology. Armonk, NY: M. E. Sharpe, 144–188.

- Watanabe, Y., & Swain, M. (2007). Effects of proficiency differences and patterns of pair interaction on second language learning: Collaborative dialogue between adult ESL learners. *Language Teaching Research*, 11(2), 121-142. https://doi.org/10.1177/136216880607074599
- Webb, N. (2009). The teacher's role in promoting collaborative dialogue in the classroom. *British Journal of Educational Psychology*, 79(1), 1-28. https://doi.org/10.1348/000709908X380772
- Williams, J. (2003). *Preparing to teach writing: Research, theory, and practice*. Lawrence Erlbaum Associates, Third edition. https://doi.org/10.4324/9781410607461
- Yoon, B., & Kim, H. (2012). Sociocultural theory as a theoretical framework for understanding teachers' roles in second language learning. In B. Yoon & H. Kim (Eds.), *Teachers' roles in second language learning: Classrooms applications of sociocultural theory* (pp. xiii-xxvii). Charlotte, NC: Information Age Publishing.
- Zeng, G., & Takatsuka, S. (2009). Text-based peer-peer collaborative dialogue in a computer-mediated learning environment in the EFL context. *System*, *37*(3), 434-446. https://doi.org/10.1016/j.system.2009.01.003
- Zhai, M. (2021). Collaborative writing in a Chinese as a foreign language classroom: Learners' perceptions and motivations. *Journal of Second Language Writing*, 53. https://doi.org/10.1016/j.jslw.2021.100836
- Zhou, W., Simpson, E., & Domini, D. P. (2012). Google Docs in an Out-of-Class Collaborative Writing Activity. *International Journal of Teaching and Learning in Higher Education*, 24(3), 359-375. Retrieved from https://eric.ed.gov/?id=EJ1000688