Peer Feedback Practices in Wiki Base Collaborative Writing: A Case Study in the EFL Saudi Context

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Abstract

This study aimed to examine the perceptions and attitudes of EFL students regarding peer feedback practices in wiki-based collaborative writing tasks, as well as its impact on their writing performance. A total of 28 second-year high school students, who were studying English as a foreign language (EFL), participated in the study. Quantitative data was collected to answer the research questions. The key finding of this study indicates that the benefits of utilizing feedback practices for wiki-based writing outweigh the challenges they pose. Moreover, the majority of students hold positive attitudes towards exchanging feedback and engaging in wiki-based writing, which enhances their overall writing skills.

Keywords: Attitudes towards feedback, EFL students, collaborative writing, peer feedback, wiki-based

1. Introduction

Writing has become a crucial skill in EFL classes. Writing instruction is essential in foreign language classes because it helps students develop a variety of linguistic skills, such as lexical knowledge, syntactic expression, grammatical accuracy, and planning techniques. However, many students struggle with writing in their second or foreign language. Writing in pairs and groups is a typical approach used in foreign language classes to help students overcome their writing difficulties. Additionally, peer feedback is commonly used in the educational context, particularly when teaching writing, as it can help students master this skill. The exchange of feedback among students in collaborative work allows them to gradually improve their writing.

In order to learn the writing skill, a process of collaborative writing is required inside the classroom to promote interaction among peers. This interaction, for the most part, leads to enhanced learning outcomes and an enjoyable experience (Dobao, 2012; Shehadeh, 2011; Wigglesworth & Storch, 2009). Furthermore, EFL writing collaboration involves the implementation of multiple interactive activities, as collaborative writing is the process of producing written work as a group where all students have contributed to the content and decisions about how the work will be done (Storch, 2005). Therefore, teachers consider group work to be good preparation for the types of complex tasks that students are likely to encounter in the workplace.

On the other hand, the incorporation of technology into writing instruction in recent decades, particularly the development of computer-supported social tools such as wikis and blogs, has opened new ways of teaching by allowing authorship, information sharing, knowledge building, and easier collaboration among learners (Huffaker, 2005; Ray, 2006). This has become an alternative method to face-to-face collaborative writing. Many studies suggest that collaborative online writing can be highly helpful for second language (L2) learners, as it allows them to practice English in a nonthreatening and engaging environment with few time and space constraints (Sun & Chang, 2012; Warschauer, 1997).

Furthermore, Teaching English as a Foreign Language (TEFL) necessitates effective solutions and innovative approaches to take advantage of technical learning environments, such as learning in a variety of environments other than the classroom. As computer-based technologies advanced, online tools such as wikis - web-based platforms that allow written collaboration - created virtual spaces to support collaborative writing in L2 classes. Wiki platforms offer innovative methods for delivering content and solving problems associated with traditional education by changing learning environments, allowing learners to gain a lot of knowledge from the content. They offer a seamless learning environment, as one of their most important features is that learning continues even when your time and location change.

As research demonstrates that students are more engaged in online collaborative writing on Wiki platforms than in traditional collaborative writing. Thus, this study aims to examine whether peer feedback practices in collaborative writing through Wikis can be used to support students' poor performance in writing.

1.2 Research Questions

- What are the benefits and challenges of peer feedback practices in wiki-based writing in the EFL Saudi context?

- How do EFL Saudi students perceive peer feedback in wiki-based writing in the Saudi EFL context?

2. Literature Review

2.1 Theoretical Framework

The importance of pair and group work in the classroom is emphasized in current communicative language learning and teaching approaches. Human learning takes place in a social environment, according to sociocultural theory (Vygotsky, 1978). Vygotsky's sociocultural theory (SCT) is founded on the belief that children are social, and that successful learning takes place in social settings that are rich in interaction, and that learners build on what they already know. These social interactions have a direct influence on children's cognitive growth. In other words, knowledge is social in nature and constructed through interaction.

The sociocultural theory claims that through interaction with a more knowledgeable individual, a learner can complete a task that they are unable to carry out on their own. This idea explains how social interaction contributes to learning (Ellis, 2008). As a result, the concept of "scaffolding" emerged as a technique by which knowledgeable individuals might assist in learning. When scaffolding a learner, the goal is not to provide the learner with answers, but to aid their learning with techniques such as prompting, modeling, or giving clues. Morris (2008) asserted that, based on ZPD, peer feedback can assist a student in moving from their actual level to their potential level. The concept of scaffolding, which occurs when people collaborate in groups to write together, is closely related to SCT and ZPD. Scaffolding is a fundamental cornerstone of studies on collaborative writing, such as those by Storch (2005) and Lee (2010). Peer interaction activities can be included in L2 writing classes, as they provide students with the opportunity to engage in real social interaction and work together to solve problems in the target language. Such interaction is available in wiki-based collaborative writing activities, as students are required to complete a jointly written text. Collaboration in L2 student writing practice is significantly influenced by the concept of ZPD. Students can socialize with one another through peer feedback and collaborative writing. Within the ZPD, students interact to develop skills and knowledge that they have not yet mastered independently, using what they already know as a foundation.

2.2 The Nature of Collaborative Writing

Collaborative writing requires students to work as a pair, a team, or a small group to complete and produce one piece of written work. In both professional writing context and ESL/EFL writing classes, collaborative writing is becoming more and more common. Collaboration in writing is described by Storch (2013) as "the co-authoring of a text by two or more writers" (p. 34). Collaborative writing, on the other hand, is defined by Lowry et al. (2004) as an iterative

and social process that involves a team working toward a shared goal by negotiating, coordinating, and communicating to create a common product. Thus, writing exercises that involve multiple authors who work together rather than individually through the various stages of the writing process (such as planning, drafting, etc.) are known as collaborative writing activities.

2.3 Collaborative Writing and Peer Feedback

One of the most important skills to acquire when learning a new language is the ability to write. It is tangible written communication. Writing helps learners to express their thoughts and feelings. Fareed et al. (2016) state that writing tasks are considered the most difficult skills that require practice. Writing is now viewed as a collaborative process that enhances students' social skills, rather than an individual activity. Collaboration among students and the sharing of peer feedback have been recommended as beneficial strategies to encourage interaction in the writing class. Collaborative writing includes peer feedback, which can assist slow learners or beginners who are still learning how to write, in meeting their fundamental requirements (Porto, 2002).

Kepner (1991) stated that "feedback" can be defined as any process used to inform a learner whether an educational response is correct or incorrect. Feedback is one of the most useful tools for guiding students' learning (Hattie, 1999). He believes that feedback is the most effective single facilitator of achievement. Whether it is provided by a teacher, a peer, or even a book, feedback is detailed information produced and provided by an agent about someone's performance (Hattie & Timperley, 2007). Peer feedback, also known by other terms such as peer response, peer review, peer editing, and peer assessment, is described as utilizing students as sources of information for one another in a manner where they undertake roles and responsibilities that are typically carried out by a formally qualified teacher, such as commenting on and critiquing each other's drafts in both written and oral formats during the writing process (Liu & Hansen, 2002). In recent years, feedback has become more common in English as a Second Language/Foreign Language (ESL/EFL) writing instruction (Zhao, 2010). According to some studies, it is crucial for enhancing students' writing abilities and academic achievement (Plutsky & Wilson, 2004) and it helps increase students' writing competence (Lam, 2010) and reduce students' anxiety in writing (Yastıbaş & Yastıbaş, 2015). Peer feedback has several benefits for L2 writers since it helps students improve their writing quality and enhance their writing confidence (Coniam & Lee, 2008; Lin & Yang, 2011). The process writing approach emphasizes teacher and peer feedback as essential writing elements that give the text a real audience (Hyland & Hyland, 2006a). Peer feedback is a way for students to share ideas and receive constructive comments to improve their writing. It also raises self-awareness, builds confidence, increases motivation, boosts their critical thinking skills, and supports their social skills (Hirose, 2008; Orsmond et al., 2013). Similarly, Yang et al. (2006) claim that peer feedback promotes critical thinking, learner autonomy, and socialization among students. In general, peer reviews give reviewers the chance to practice and improve their language skills (Lundstrom & Baker, 2009).

Online conversations have the potential to stimulate student inquiry and foster collaborative

learning while also encouraging reflection and critical thinking (Black, 2005). In second language (L2) writing classes, peer feedback is a regular activity in which students examine and provide feedback on each other's drafts (Storch, 2019). Many research studies have used tools such as a discussion board, wiki, and blog in a Computer Mediated Communication (CMC) environment to improve student involvement and facilitate peer feedback. According to Ware and O'Dowd (2008), the opportunity to provide peers with feedback was highly valued in online collaborative writing. Students can improve their knowledge construction by participating in online collaborative written tasks, group discussions, and arguments critiques (Zhu, 2012).

2.4 Wiki Based Collaborative Writing

In recent years, the rapid development of computer applications in various sectors of life, as well as the authentic need to improve the quality of language learning, has motivated researchers to focus on ways to better integrate computers with language learning in order to improve language skills (Min Liu et al., 2003). Computer-mediated communication (CMC) refers to the use of technological means to establish communication between individuals and groups in particular contexts, such as training and learning (Eastment, 1999). Online collaborative writing involves synchronous or asynchronous computer-mediated communication tools. It allows students from local or international schools to collaborate in teams to exchange ideas, give feedback, and share resources (Show-Mei Lin, 2009).

Rashid et al. (2019) showed that collaborative writing has provided enough security for students to participate in class work, even for those who lack confidence in themselves. Hence, there is a fast-growing interest in online collaborative writing using new technologies such as Wikis, Padlet, or Google Docs. Much research on web-based collaborative writing in the EFL context has found that online tools (wikis, Google Docs, blogs, and Facebook groups) improve the collaborative writing process for EFL students (Bani-Hani et al., 2014; Lin & Yang, 2011; Lund, 2008; Miyazoe & Anderson; 2010). For instance, Bani-Hani et al. (2014) looked at how forty-two Jordanian EFL learners improved their writing skills by participating in Facebook communities. This study found that 92.9% of participants felt comfortable writing their ideas and opinions in their Facebook groups, 97.6% of participants felt encouraged when their Facebook group members liked their comments, and 54.8% of participants preferred discussing their work in a Facebook group rather than in a classroom. Fortunately, students can share writing materials via the cloud, work on writing outside of the classroom, and use a built-in comments and suggestions feature to reinforce writing (Ramanair, 2017). Elola and Oskoz (2010) found that collaboration over the internet improved fluency and accuracy.

Yen and Chen (2019) investigated the participants' negotiation using a mobile enhanced collaborative writing approach. The results showed that participants had a positive attitude toward collaborative writing. Numerous studies have shown that Wiki can assist language learners in enhancing their writing skills through promoting collaboration. A wiki is one of the most widely-used social collaborative networking tools. Wiki is an online collaboration tool with an open editing system that enables users to modify content and compose texts collectively (Godwin-Jones, 2003; Kessler, 2009).

According to Dudeney and Hockly (2007), wikis are "collaborative web spaces, consisting of multiple pages that can be modified by any user." Meanwhile, Ciesielka (2008) described a wiki as an innovative method for creating, editing, and publishing information in a collaborative online context. The technical design of the wiki platform includes three main function tabs: editing, a history record, and a discussion space. Each tab serves a specific purpose; for instance, the editing tab turns the wiki page into an editable page, allowing readers to write on it. The history page contains a chronological record of all editing actions performed on a particular wiki page. Moreover, each wiki page includes a discussion area where users can engage in conversations regarding the page's content.

Li and Kim (2016) examined peer interaction across writing tasks for two ESL groups. They assessed the language function produced during task arrangement, the writing change function performed through text co-construction, scaffolding strategies, and changes in patterns of interaction across tasks. The researchers analyzed students' cooperation during wiki-based collaborative writing, using data such as wiki modules, meetings, and reflection papers. The examination of the two ESL groups revealed different patterns of interaction, which changed within each group across two identical tasks. However, the findings indicated that, pedagogically, Wiki was a useful tool for collaboration in small group writing. The usefulness of this tool, however, depended greatly on the instructional context, the communicative strategies of the participants, their personal circumstances, and the affordances of the tool in mediating students' participation in writing tasks.

Even though collaborative writing tasks based on wikis are beneficial to ESL learners, sometimes they are not efficient due to a lack of digital literacy in dealing with computers and online platforms. This may result in a fear of using these kinds of programs. Additionally, the study did not mention any kind of training sessions conducted before using this platform. Li and Kim's study included participants from different nationalities, which may have caused communication misunderstandings due to cultural differences.

Aydin and Yildiz (2014) conducted a study to investigate the effect of task type on students' writing performance. The study included 34 intermediate-level university students studying EFL. They were asked to work together on three wiki-based writing assignments: argumentative, informative, and decision-making. The data demonstrated that in all three activities, students prioritized meaning over form. Furthermore, in 94% of the time, the use of wiki-based collaborative writing projects resulted in the correct use of grammatical structures. The students expressed satisfaction with the usage of wikis in writing workshops, and they believed it helped them enhance their writing skills.

Similar findings were found in Kessler's (2009) study, which investigated students' attention to language form while working on a group writing project using a wiki. The research participants were 40 aspiring EFL teachers from a Mexican university. Rather than forming pairs, participants worked independently to correct their own and their fellow participants' grammatical errors after the instructor initiated the wiki exercise. The findings revealed that more grammatical errors were overlooked than corrected, suggesting that the majority of participants tended to focus on meaning rather than form.

Wang (2015) divided his students into a wiki group and a non-wiki group. Over a span of 12 weeks, students in each group worked on drafting, peer-editing, and revising the same two written tasks. Pre-test and post-test results were compared in order to determine whether collaborative work on a wiki platform improved students' business writing skills. Wang (2015) observed that students who collaborated on a wiki not only enjoyed the experience, but also demonstrated improvement in their writing abilities for English for Specific Purposes (ESP), particularly in the context of business writing. The use of a wiki stimulated students' interest in language learning, enhanced their writing skills, and fostered collaboration, all of which are essential in the workplace.

In a case study conducted by Franco (2008), the aim was to investigate whether collaborative learning through the use of a wiki would enhance students' writing abilities. The study involved 18 Brazilian students from a private language school. Both quantitative and qualitative methods were employed to analyze the data derived from the students' writings and comments on the wiki. The findings of the study indicated that combining collaborative learning with a wiki platform offered various benefits for improving students' writing skills.

The positive attitudes that teachers and students hold towards writing with the aid of a wiki have been supported by several studies. For instance, Alzahrani (2012) conducted a study involving 24 students at a Saudi university to assess their opinions on using wikis as an e-learning tool. The results showed that students preferred utilizing wikis to enhance their learning experience. Similarly, Al Khateeb (2013) conducted a qualitative study with a group of teachers in Saudi Arabia who teach EFL writing classes. The objective of the study was to identify the teachers' perspectives on the advantages and disadvantages of using wiki-based projects in writing classes. The findings demonstrated that the teachers had positive attitudes towards integrating wiki-based writing exercises into their classes.

Some research has focused on face-to-face collaborative writing (e.g., Storch, 2005) and collaborative writing on wikis (e.g., Aydin and Yildiz, 2014; Franco, 2008; Wang, 2015), as well as the potential benefits of peer feedback on students' writing through online platforms (e.g., Lee, 2010; Oxnevad, 2013; Zhu, 2012). However, the goal of this study is to assess the effectiveness of integrating peer feedback into EFL collaborative writing lessons from students' perspectives. There is a limited body of research on peer feedback practices in wiki-based collaborative writing, particularly in the EFL context. Therefore, the present study will investigate how students in groups negotiate meaning and provide support for one another in wiki-based collaborative writing in the EFL Saudi context.

3. Methodology

3.1 Research Design

For the purpose of this study, a quantitative approach was adopted to collect data and analyze it based on the research question. To address the research questions, a quantitative descriptive approach was employed using a questionnaire to collect the data.

3.2 Context of the Study

The study was conducted with 28 students who ranged between 16 and 17 years old and were in their second year of high school. The students are learning English as a foreign language (EFL) in an environment where English is not widely spoken or regularly used in their daily lives. In their local communities, Arabic is the primary and native language. Due to this situation and the students' young age, it is not common for them to communicate in English outside of their lessons. The students used a textbook titled Mega Goal 2.1, published by McGraw-Hill. This textbook is part of a dynamic series designed for high school students and young adults, focusing on American English for international communication. The series covers a range of levels, from absolute beginner to intermediate. Mega Goal 2.1 is the fourth book in the series, following Mega Goal Intro. This book integrates the four main skills of English: reading, speaking, listening, and writing. The students' language level is B1, and they are expected to understand the main points of clear texts about familiar topics. Additionally, they should be able to produce coherent texts about topics they are familiar with or have a personal interest in. Students had the option to work from home or choose another location.

3.3 Instrument

The wiki is selected as the medium for collaborative writing activities because it has numerous unique features that encourage online peer cooperation. Wiki, as an online writing system and high-speed database platform, allows users to easily create, edit, modify, and delete web material due to its simple functions. At the beginning of the semester, students will be divided into four groups, consisting of eight to nine students per group. They will receive essential training on how to use the wiki before forming these groups, as well as training on the writing process before writing any text. The aim of this is to facilitate collaborative writing among students during the semester using the online platform (wiki). In regular writing classes, they will be asked to write an essay individually, like other students, while in the wiki groups, they will write collectively. The purpose of this approach is to encourage students to interact in a way that allows them to generate ideas and receive feedback from their peers.

3.3.1 Questionnaire

A questionnaire is a research instrument that consists of a series of questions used to gather data from respondents. According to Brown (2001), questionnaires are defined as written instruments that provide respondents with a set of questions or statements, to which they are required to respond either by writing out their replies or selecting from preexisting responses. The students' questionnaires are composed of four sections (Table 1). Upon completing the collaborative writing sessions, all students were requested to fill out a questionnaire about their experiences and attitudes towards collaborative writing, as well as the impact of peer feedback on the improvement of their writing skills.

Table 3. 1 The Types of questions in the questionnaires of peer feedback in collaborative writing on the wiki.

Participants' Personal Information	Name (optional), English proficiency IELTS/TOEFL
Likert scale	The participant selects one choice from multiple choice, such as "agree" and "disagree" that are represented with numbers to facilitate analysis of the findings.
YES/NO	The participant answers "Yes" or "No" in response to the yes/no question. With the open-ended question, the participant may comment on that question.
Open-ended	E.g., Do you think that learning and practicing writing skills in groups will help you to write better? If so, how? If not, why not?

3.4 Data Collection Procedure

In order to gather information from respondents regarding their point of views about peer feedback practices in wiki-based collaborative writing, I obtained permission from the authorities to send a survey to the participants.

4. Results

The benefits and challenges of peer feedback practice in wiki-based collaborative writing in the EFL Saudi Context Survey Tool contains 28 items. Respondents were asked to self-report their perceptions of local wiki-based writing. The survey consisted of two parts: the first part attempted to answer the following question: *"What are the benefits and challenges of peer feedback practices in wiki-based writing in the EFL Saudi context?"* divided into two subscales. The first contains 8 elements and describes the benefits of the practice of peer feedback in wiki-based writing, and the second contains 5 elements and describes the challenges. The second part consisted of 15 items on the topic "How do Saudi EFL students perceive peer feedback in wiki-based writing?"

4.1 Reliability

When it comes to reliability, researcher point to the degree to which a particular instrument accurately collects the desired information in a predictable manner. In other words, can the same instrument accurately capture reliable information from different populations, or even the same population at different times? The most common method for determining reliability is Cronbach's Alpha. The Alpha values for the survey used in this study are given below:

Table 4.1 Cronbach's alpha values of survey sections

Section	subscales	Items	Cronbach's Alpha
First section	Benefits	8	0.85
	Challenges	5	0.75
Second section		15	0.80

As shown in Table 4.1, Cronbach's alpha value is between (0.76) and (0.85), which is a good measure of the value of the variable.

4.2 Validity

The validity determines whether the instrument effectively measures what it purports to measure. There are several types of validity, including Construct Validity. To evaluate the structural validity and level of internal consistency of the survey, correlation coefficients were computed between scores and subscale scores. The findings are presented in Table 4.2.

Table 4. 2 Correlational matrix of total score of items and their subscale

Subscales	Items	Person Correlation	Items	Person Correlation	Items	Person Correlation	Items	Person Correlation
Benefit	1	0.69**	2	0.68**	3	0.70**	4	0.66**
	5	0.63**	6	0.68**	7	0.71**	8	0.83**
Challenges	1	0.79**	2	0.61**	3	0.78**	4	0.67**
	5	0.52**						
Perceive of peer feedback	1	0.53**	2	0.70**	3	0.75**	4	
	5	0.65**	6	0.71**	7	0.61**	8	0.59**
	9	0.56**	10	0.35*	11	0.37*	12	
		0.54**	14	0.84**	15	0.50**		0.68**
	13							0.35*

* Coefficients significant 0.05   ** Coefficients significant 0.01

As demonstrated in Table 4.2, all subscales exhibited a significant correlation (p<0.05) with the total score of their respective subscales. Furthermore, there are mutual relationships between the majority of the subscales. Consequently, Table 2 displays the correlation

coefficients between the subscales, illustrating a robust internal relationship among them.

4.3 Survey Results

The twenty-eight items included in the questionnaire and the totals of each section and subscale were analyzed using descriptive statistics (means, standard deviations, frequencies, and percentages). The following tables present the results of the first section which answers the following question:

"*What are the benefits and challenges of peer feedback practices in wiki-based writing in the EFL Saudi context?*"

Table 4. 3 Descriptive statistics of the first section

Sub-scales	Items	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Means	SD
		N	%	N	%	N	%	N	%	N	%		
benefits	1- Peer feedback has improved my writing content and organization.	12	42.9	12	42.9	4	14.3	0	0	0	0	4.28	0.72
	2. Peer feedback has improved my writing grammar.	16	57.1	8	28.6	4	14.3	0	0	0	0	4.43	0.74
	3. Peer feedback helps me improve the spelling and punctuation in my writing	15	53.6	10	35.7	3	10.7	0	0	0	0	4.42	0.69
	4. Peer feedback provides me with new ideas	9	32.1	13	46.4	5	17.9	1	3.6	0	0	4.07	0.81
	5.Peer feedback helps me improve the word choice in my writing.	20	71.4	7	25	1	3.6	0	0	0	0	4.67	0.54
	6.My classmates help me find mistakes that I was not aware of.	18	64.3	7	25	2	7.1	1	3.6	0	0	4.50	0.79
	7.Peer feedback helps me overcome my fear of writing in English.	11	39.3	7	25	8	28.6	2	7.1	0	0	3.96	0.99
	8. Peer feedback helps me to improve my writing.	12	42.9	7	25	8	28.6	1	3.6	0	0	4.11	0.93
	Total											4.29	0.54
Challen	1.I did not trust my peer	2	7.1	1	3.6	1	3.6	7	25	17	60.7	1.71	1.18

suggestions and corrections												
2. I did not understand my peers' corrections	1	3.6	3	10.7	6	21.4	13	46.4	5	17.9	2.35	1.02
3. I Believe my peer should not correct my writing	1	3.6	1	3.6	1	3.6	7	25	18	64.3	1.57	0.99
4. I did not find my classmates' comments in peer response sessions useful.	0	0	2	7.1	5	17.9	5	17.9	16	57.1	1.75	1.04
5. I did not like peer feedback. I still prefer teacher feedback	0	0	3	10.7	12	42.9	8	28.6	5	17.9	2.46	0.92
Total											1.97	0.70

In Table 4.3, the benefits of peer feedback practice in wiki-based writing in the context of EFL Saudi recorded a high score (M=4.29, SD=0.54). The highest score is (5). Peer feedback helps me improve the word choice in my writing (M=67, SD=0.54). As seen in Table 4, most of the participants (96.4%) reported that they have improved their word choice, whereas (3.6%) were undecided. The second item (6) I found was "My classmates help me find mistakes that I was not aware of" (M=4.50, SD=0.79). The third item (2) was "Peer feedback has improved my writing grammar" (M=4.43, SD=0.74).

The lowest score is (7), which is "Peer feedback helps me overcome my fear of writing in English" (M=3.96, SD=0.99). Regarding whether peer feedback assisted them in overcoming their fear of writing in English, (64.3%) of students agreed, about (28.6%) were neutral, and about (7%) disagreed with that statement. Interestingly, (0%) of participants disagreed with the statements made in items 1, 2, 3, and 5. The challenges of peer feedback practice in wiki-based writing in the context of EFL Saudi recorded very low scores (M=1.97, SD=0.70), with the highest items being: (5) "I did not like peer feedback. I still prefer teacher feedback" (M=2.46, SD=0.92). Most students (46%) disagreed with that, while about (43%) were uncertain and about (11%) of participants felt that they prefer teachers' feedback over peers' feedback. In the second rank, we have item (2), "I did not understand my peers' corrections" (M=2.35, SD=1.02). The third rank is item (4) "I did not find my classmates' comments in peer response sessions useful" (M=1.75, SD=1.04). In contrast, the lowest score was recorded for the item (3) "I believe my peer should not correct my writing" (M=1.57, SD=0.99). About (90%) of participants disagreed with the statement that peers should not correct their writing, and (3.6%) were unsure. On the other hand, (7.2%) believed that peers should not edit their work.

Table 4. 4 Descriptive statics of the second section

Items	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Means	SD
	N	%	N	%	N	%	N	%	N	%		
1. I enjoyed using wikis for collaborative writing.	13	46.4	11	39.3	3	10.7	0	0	1	3.6	4.25	0.92
2. I like it because my classmates can read my compositions, not only the teacher	19	67.9	7	25	2	7.1	0	0	0	0	4.60	0.62
3. I preferred doing collaborative writing on wikis to writing individually.	12	42.9	5	17.9	7	25	3	10.7	1	3.6	3.85	0.73
4. Wiki-based collaborative assignments improved my writing skills.	6	21.4	18	64.3	3	10.7	1	3.6	0	0	4.03	0.69
5. Wiki collaborative writing helped me attend to content development.	5	17.9	16	57.1	6	21.4	1	3.6	0	0	3.89	0.73
6. Wiki collaborative writing helped me attend to language use.	10	35.7	13	46.4	5	17.9	0	0	0	0	4.17	0.72
7. Wiki collaborative writing helped me attend to essay structure/organization.	12	42.9	10	35.7	6	21.4	0	0	0	0	4.21	0.78
8. I enjoyed the revision process in the wiki.	17	60.7	8	28.6	2	7.1	1	3.6	0	0	4.46	0.79
9. My group engaged in discussion during using the wiki.	15	53.6	7	25	4	14.3	2	7.1	0	0	4.25	0.96
10. My group often discussed the writing assignment outside the wiki (e.g., in face-to-face conversations, emails, online chat, etc.).	15	53.6	7	25	4	14.3	2	7.1	0	0	4.25	0.96
11. I was able to make important contributions to the wiki-based writing assignments.	18	64.3	9	32.1	1	3.6	0	0	0	0	4.60	0.56
12. I think my group members valued my contribution.	21	75	5	17.9	1	3.6	1	3.6	0	0	4.64	0.73
13. I valued the ideas and help my group brought to the wiki activities.	12	42.9	14	50	1	3.6	1	3.6	0	0	4.32	0.72
14. My group members agreed on the final drafts easily.	19	67.9	2	7.1	7	25	0	0	0	0	4.42	0.87
15. All my group members contributed to the wiki tasks equally.	7	25	8	28.6	8	28.6	5	17.9	0	0	3.60	1.06
Total											4.24	0.42

Table 4.4 presents the results of the descriptive statics of the second section which answers the following questions:

"*How do EFL Saudi students perceive peer feedback in wiki-based writing*?" It can be observed that EFL Saudi students have shown a high level of perception towards peer feedback in wiki-based writing, with a recorded score of 4.24 (SD=0.42). Among the items, the highest scores were received for item 12: "I think my group members valued my contribution," with a mean score of 4.64 (SD=0.73), indicating that approximately 93% of students agreed with this statement. The proportion of students who were uncertain or disagreed was found to be 3.6% for both categories.

Two items tied for the second rank, both with a mean score of 4.60 (SD=0.56 and SD=0.62 respectively). These items are, item 1: "I was able to make important contributions to the wiki-based writing assignments," and item 2: "I like it because my classmates can read my compositions, not only the teacher." It should be noted that the numerical values differ for each question, as indicated in Table 4.4.

In the third rank is item 8: "I enjoyed the revision process in the wiki," with a mean score of 4.46 (SD=0.79). The lowest score was recorded for item 15: "All my group members contributed to the wiki tasks equally," with a mean score of 3.60 (SD=1.06). The majority of students (53.6%) agreed with this statement, followed by an undecided group (28.6%) and a minority (approximately 18%) who disagreed that all students contributed equally to the wiki tasks.

5. Discussion

This section discusses the main findings from the quantitative data. The data has been discussed in relation to the reviewed literature. The quantitative findings suggest that peer feedback practices in wiki-based writing are beneficial and outweigh their challenges. The students' responses regarding benefits and challenges. Among the eight benefits statements, it can be seen that item 5, "Peer feedback helps me improve the word choice in my writing," has the highest score with a mean (M) of 67 and a standard deviation (SD) of 0.54. This was anticipated given that students' vocabularies are always expanded by peer feedback and negotiation during collaborative writing. In fact, this finding aligns with many studies such as Storch (2002) and Shehadeh (2011), which confirmed that peer feedback enriches students' ideas and improves vocabularies. This also supports Vygotsky's (1978) notion of the Zone of Proximal Development (ZPD), where peers scaffold one another. They might have written a full sentence, but through interaction with more knowledgeable ones, they learned new vocabularies that best expressed the meaning they were trying to communicate. The lowest score is item 7, "Peer feedback helps me overcome my fear of writing in English," with a mean (M) of 3.96 and a standard deviation (SD) of 0.99. Despite having the lowest score, the majority of students (64.3%) agreed with the statement. This is consistent with research by Yastıbaş & Yastıbaş (2015), which found that peer feedback reduces students' writing anxiety. The overall mean was 4.29 (SD = 0.54), indicating that the majority of students agreed with all items. The

majority of the participants (around 82% combined the Agree and Strongly Agree scales) believe that peer feedback is beneficial to their writing.

The survey comprises fifteen questions that aim to gather students' opinions about wiki-based writing in order to obtain quantitative findings, as presented in Table 4. It is evident that item 12, "I think my group members valued my contribution," received the highest score with a mean (M) of 4.64 and standard deviation (SD) of 0.73. This finding indicates that receiving feedback from peers was highly valued in wiki-based collaborative writing, which promotes student collaboration. The second highest score was obtained for item 11, "I was able to make important contributions to the wiki-based writing assignments," with an M of 4.60 and SD of 0.56. This highlights the importance of collaborative work for students. This finding aligns with Li and Kim's (2016) research, which found wikis to be an effective tool for small-group collaboration and supports Vygotsky's sociocultural theory (SCT), which posits that human learning occurs in social contexts. The social aspect of wikis as a tool for computer-mediated communication (CMC) allows students to work together, with more capable students providing assistance to those who may need it. This aspect is consistent with the Zone of Proximal Development (ZPD) theory, as students' progress from their current level to a potential level through scaffolded support from one another. The lowest score was obtained for item 15, "All my group members contributed to the wiki tasks equally," with an M of 3.60 and SD of 1.06. This finding is in line with Arnold et al.'s (2009) research, which highlighted unequal contributions among participants. The second lowest score was obtained for item 3, "I preferred doing collaborative writing on wikis to writing individually," with an M of 3.85 and SD of 0.73. Approximately 14% of the participants disagreed with this statement, indicating that some students prefer writing individually. This finding aligns with studies conducted by Storch (2005) and Tian (2011), where some students expressed a lack of enjoyment when working in groups. There could be various reasons for this, such as conflicts in ideas, varying proficiency levels, and unproductive group members. I consider this to be the most significant issue faced by students during wiki-based collaborative writing, as observed from the posts where some students heavily relied on more accomplished peers.

6. Conclusion

While there is research on the advantages of both traditional and online collaborative writing, many studies on this crucial subject do not examine the impact of peer feedback practices on wiki-based writing. The main goal of this study was to examine the perceptions and attitudes of EFL students about peer feedback practices in wiki-based collaborative writing tasks and their impact on their writing performance. The theoretical framework of the study was based on the sociocultural theory (SCT), in which social interaction develops learners' communicative competence, as well as the zone of proximal development (ZPD), in which more knowledgeable students aid others in progressing from the actual to potential level. The participants were 28 second-year high school students learning English as a foreign language (EFL). Questionnaires were used as an instrument for data collection, employing a quantitative approach to gather data. Descriptive statistics were utilized to analyze the quantitative data.

The main conclusion of this study is that feedback practices in wiki-based writing are advantageous and outweigh the challenges that they present. Moreover, the majority of students have positive attitudes towards contributing to wiki-based writing and receiving feedback, which positively impacts their overall writing abilities.

6.1 Pedagogical Implications

The findings of this research have several potential implications relevant to policy makers in English education and practice, particularly with regard to setting parameters for teaching productive skills, specifically writing. It is recommended that peer feedback be integrated into all EFL writing classes from an early stage in order to effectively implement collaborative writing in Saudi schools, whether face-to-face or online. Additionally, the integration of wiki-based writing has shown its value as a tool for collaborative writing. Students who use wiki-based writing can exchange feedback and edit their work through drafting, revising, and submitting. The use of social media and web technologies has the potential to broaden L2 writers' experiences and provide meaningful opportunities for interaction that may promote their linguistic development. This study has identified a number of pedagogical and instructional implications for those involved in foreign language writing, including foreign language learners, instructors, and curriculum designers. For learners, collaborative work and online collaboration tools, such as wikis, should be utilized even outside the classroom. For language instructors, transitioning to online collaborative writing is suggested as a creative way to involve all students, regardless of their abilities, in the writing process and improve their writing skills. Furthermore, instructors should emphasize the importance of offering and accepting feedback from one another. Finally, curriculum designers should utilize the findings of this research to incorporate collaborative writing projects into the new curriculum of the twenty-first century, which promotes online learning environments.

6.2 Limitation of the Study

A few elements of the study's design and methodology limited the generalization of the findings. First, in addition to the small number of participants, the participants are only EFL high school students from a secondary school in Jeddah. Thus, the generalization of the findings of the study to other educational contexts is limited. The second limitation resulted from giving participants only a short period of time to write collaboratively. The twelve-week period of collaborative writing was insufficient for the participants to improve their writing abilities and for the researcher to evaluate how much the participants' ability to write essays improved. Last but not least, the fact that the students have never participated in collaborative writing exercises and that even training sessions were insufficient to properly comprehend its procedures could have a negative impact on the written product. On the other hand, limitations relating to students' attitudes toward taking part in collaborative writing and their preference for writing individually may have an impact on how well the group process works. Finally, if the research participants were evaluated on their individual contributions, the findings might have been different.

6.3 Recommendation for Future Research

This study examined the attitudes and perceptions of EFL students towards peer feedback practices in wiki-based collaborative writing activities and how these practices influenced their writing abilities. The study addressed certain gaps in previous research on wiki-based writing and peer feedback. However, there are several additional aspects and issues that require further investigation.

Firstly, future studies could enhance the design by using a larger sample that includes participants of different genders over an extended period of time. This would help to shed light on gender interactions and their potential impact on student collaboration. Additionally, researchers are advised to lengthen the implementation period and assign students more group writing tasks in order to obtain more valuable results.

Secondly, the participants in this study had varying degrees of English proficiency, with some having limited or no prior writing experience in English. Therefore, it is recommended that researchers offer additional training programs in future studies. This is important because different outcomes may be achieved if participants possess better English language and writing skills.

References

Al Khateeb, A. (2013). Wikis in EFL writing classes in Saudi Arabia: Identifying instructors' reflections on merits, demerits and implementation. *Teaching English with Technology,* (4), 3–22.

Alzahrani, I. (2012, June). *Evaluate wiki technology as e-learning tool from the point view of AlBaha University students: A pilot study with undergraduate students in both faculties of science and education.* Paper presented at the 7th Annual Meeting of the Education, Learning, Styles, Individual Differences Network (ELSIN), Cardiff, Wales.

Arnold, N., Ducate, L., Kost, C. (2009). Collaborative writing in wikis: Insights from culture projects in intermediate German classes. In L. Lomicka & G. Lord (Eds.), *The next generation: Social networking and online collaboration in language learning* (pp.115–144). San Marcos, TX: CALICO.

Aydin, Z., & Yildiz, S. (2014). Using Wikis to promote collaborative EFL writing. *Language Learning & Technology, 18*(1), 160–180.

Bani-Hani, N.A., Al-Sobh, M.A., & Abu-Melhim, A.R.H. (2014). Utilizing Facebook groups in teaching writing: Jordanian EFL students' perceptions and attitudes. *International Journal of English and Linguistics, 4*(5), 27–34

Black, A. (2005). The use of asynchronous discussion: Creating a text of talk. *Contemporary Issues in Technology and Teacher Education, 5*(1). Retrieved October 3, 2005, from http://www.citejournal.org/vol5/iss1/languagearts/article1.cfm

Brown, J. D. (2001). *Using surveys in language programs*. Cambridge, England: Cambridge University Press.

Coniam, D., & Lee, M. W. K. (2008). Incorporating wikis into the teaching of English writing. *Hong Kong Teachers' Centre Journal*, *7*, 52-67.

Dobao, A. F. (2012). Collaborative writing tasks in the L2 classroom: Comparing group, pair and individual work. *Journal of Second Language Writing*, *21*, 40-58.

Dudeney, G., & Hockly, N. (2007). *How to teach English with technology*. Upper Saddle River, NJ: Pearson Longman.

Eastment, D. (1999). *The Internet and ELT*. Oxford, England: Summertown.

Ellis, R. (2008). *The Study of Second Language Acquisition* (3rd ed.). Oxford: 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

Fareed, M., Ashraf, A., & Bilal, M. (2016). ESL Learners' Writing Skills: Problems, Factors and Suggestions. *Journal of Education and Social Sciences*, *4*, 82-93. https://doi.org/10.20547/jess0421604201

Franco, C. D. P. (2008). Using wiki-based peer-correction to develop writing skills of Brazilian EFL learners. *Novitas-ROYAL, 2*(1), 49-59.

Godwin-Jones, R. (2003). Emerging technologies, blogs and wikis: Environments for online collaboration. *Language Learning &Technology, 7*(2), 4-11.

Hattie, J. A. (1999). *Influences on Student Learning* (Inaugural professorial address). University of Auckland, New Zealand.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1), 81-112.

Hirose, K. (2008). *Cooperative learning in English writing instruction through peer feedback.* Retrieved from https://jasce.jp/conf05/hirosepaper.doc

Huffaker, D. (2005). The educated blogger: Using weblogs to promote literacy in the classroom. *AACE Journal, 13*(2), 91-98.

Hyland, K., & Hyland, F. (2006a). Contexts and issues in feedback on L2 writing: An introduction. In K. Hyland & F. Hyland (Eds.). *Feedback in second language writing: Context and issues* (pp.10-19). New York: Cambridge University Press

Kepner, C. G. (1991). An experiment in the relationship of types of written feedback to the development of second-language writing skills. *The Modern Language Journal*, *75*, 305-315.

Kessler, C. G. (2009). Student-initiated attention to form in wiki-based collaborative writing.

Language Learning & Technology, 13(1), 79-95.

Lam, R. (2010). A peer review training workshop: Coaching students to give and evaluate peer feedback. *TESL Canada Journal, 27*(2), 114-127. https://doi.org/10.18806/tesl.v27i2.105

Lee, L. (2010). Exploring wiki-mediated collaborative writing: A case-study in an elementary Spanish course. *CALICO Journal, 27*(2), 260–276.

Lee, S.C.N. (2010). Written peer feedback by EFL students: praise, criticism and suggestion. *Komaba Journal of English Education*, *1*, 129–139.

Li, M., & Kim, D. (2016). One wiki, two groups: Dynamic interactions across ESL collaborative writing tasks. *Journal of second language writing*, *31,* 25-42.

Lin, W.C., & Yang, S.C. (2011). Exploring students' perceptions of integrating Wiki technology and peer feedback into English writing courses. *English Teaching: Practice & Critique, 10*(2), 88–10

Lin, W. C., & Yang, S. C. (2011). Using wiki online writing system to develop English writing skills among college students in Taiwan. *Curriculum & Instruction Quarterly, 14*(2), 75102.

Liu, J., & Hansen, J. (2002). *Peer Response in Second Language Writing Classrooms.* The University of Michigan Press: Michigan.

Lowry, P. B., Curtis, A., & Lowry, M. R. (2004). Building a taxonomy and nomenclature of collaborative writing to improve interdisciplinary research and practice. *The Journal of Business Communication, 41*(1), 66-99

Lund, A. (2008). Wikis: a collective approach to language production. *ReCALL, 20*(1), 35- 54

Lundstrom, K., & Baker, W. (2009). To give is better than to receive: The benefits of peer review to the reviewer's own writing. Journal of second language writing, 18(1), 30-43.

Min Liu, Moore, Z., Graham, L., & Shinwoong. (2003). A look at the research on computer-based technology use in second language learning: A review of the literature from 1990-2000. *Journal of Research on Technology in Education, 34*(3), 250-273.

Miyazoe, T., & Anderson, T. (2010). Learning outcomes and students' perceptions of online writing: Simultaneous implementation of a forum, blog and wiki in an EFL blended learning setting. *System*, *38*, 185–199.

Morris, C. (2008, January). *Lev Semyonovich Vygotsky's Zone of Proximal Development.* Retrieved November 15, 2010, from Success is Thinking and Working Smarter not Harder Web site: http://www.igs.net/~cmorris/zpd.html.

Orsmond, P., Maw, S. J., Park. R. J., Gomez, S., & Crook, C. A. (2013). Moving feedback forward: Theory to practice. *Assessment & Evaluation in Higher Education, 38*(2), 240-252. https://doi.org/10.1080/02602938.2011.625472

Plutsky, S., & Wilson, B. A. (2004). Comparison of the three methods for teaching and evaluating writing: A quasi-experimental study. *The Delta Pi Epsilon Journal, 46*(1), 50−61.

Porto, M. (2002). Implementing cooperative writing response groups and self-evaluation in South America: Struggle and survival. *Journal of Adolescent and Adult Literacy, 45*(8), 684-691.

Ramanair, J. (2017). Collaborative writing using wiki: Tertiary students' perspectives. *Electronic Journal of Foreign Language Teaching, 14*(1)*,* 84–101.

Ray, J. (2006). Blogosphere: The educational use of blogs (aka Edublogs) *Kappa Delta Pi Record* 17-175 ,7.

Shehadeh, A. (2011). Effects and Student Perceptions of Collaborative Writing in L2. *Journal of Second Language Writing*, 20,286-305

Show-Mei Lin. (2009). *How computer-mediated communication affects ELL students' writing processes and writing performance.* (Unpublished PhD dissertation). University of Oklahoma, Norman, Oklahoma.

Storch, N. (2002). Patterns of interaction in ESL pair work. *Language learning, 52*(1), 119-158.

Storch, N. (2005). Collaborative writing: Product, process, and students' reflections. *Journal of Second Language Writing, 14*(3), 153-173.

Storch, N. (2013). *Collaborative writing in L2 classrooms.* Bristol, UK: Multilingual Matters.

Storch, N. (2019). Collaborative writing as peer feedback. *Feedback in Second Language Writing.* 143-162. https://doi.org/10.1017/9781108635547.010.

Sun, Y. C., & Chang, Y. J. (2012). Blogging to learn: Becoming EFL academic writers through collaborative dialogues. *Language Learning & Technology, 16*(1), 43-61.

Tian, J. (2011). *Effects of Peer Editing Versus Co-writing on Writing in Chinese-as-a-Foreign Language* (Doctoral dissertation). University of Victoria.

Vygotsky, L. (1978). *Mind in Society.* Cambridge: Harvard University Press.

Wang, Y. C. (2015). Promoting collaborative writing through wikis: A new approach for advancing innovative and active learning in an ESP context. *Computer Assisted Language Learning, 28*(6), 499–512.

Ware, P., & O'Dowd, R. (2008). Peer feedback on language form in telecollaboration. *Language Learning & Technology, 12*(1), 43–63.

Warschauer, M. (1997). Computer-mediated collaborative learning: Theory and practice. *Modern Language Journal, 81*(4), 470–481.

Yastıbaş, G. Ç., & Yastıbaş, A. E. (2015). The effect of peer feedback on writing anxiety in Turkish EFL (English as a foreign language) students. Procedia-Social and Behavioral Sciences, 199, 530-538.

Yen, S-W., Chen, C-T. (2019). EFL learners' peer negotiations and attitudes in mobile-assisted

collaborative writing. *Language Education & Assessment, 2*(1), 41-56.

Zhao, H. (2010). Investigating learners' use and understanding of peer and teacher feedback on writing: A comparative study in a Chinese English writing classroom. *Assessing Writing, 15*(1), 3-17. http://dx.doi.org/10.1016/j.asw.2010.01.002

Zhu, C. (2012). Student satisfaction, performance, and knowledge construction in online collaborative learning. *Journal of Educational Technology & Society*, *15*(1), 127–136.

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