

The Effect of Digital Dialogued Journaling on Improving English Writing: A Linguistic Communicative Approach

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Abstract

Writing is a complex process that requires advanced linguistic skills. Although many college students studied English as a foreign language (EFL) for twelve years in preparatory and high schools, they still face major problems in producing correct writings that meet their colleges' requirements. Students' problems include inability to generate ideas, organize discourse, control sentence structures, choose appropriate vocabulary, and use effective styles. A potential solution to such problems can be found in the application of modern technologies in the classrooms. Telecommunication technologies which include synchronous and asynchronous communication have provided various tools that can be used to assist EFL students to learn writing skills. Therefore, the current quantitative, quasi-experimental study aimed at examining the effect of asynchronous communication, specifically digital dialogued journaling on students' writing skills. Digital dialogued journaling includes blogs, webpages, discussion forms, or word-processed applications such as Google documents. Using the platform of Google documents, the present study attempted to provide new strategies for teaching writing courses at higher education to help EFL students develop their writing skills. Data was collected from undergraduate students in the College of Languages and Translation, at Al-Imam Muhammad Ibn Saud Islamic University, Riyadh, Saudi Arabia. Data collection depended on a number of instruments: First, a pretest was used to measure the participants' level of writing before implementing the teaching strategies of dialogued journaling. Secondly, an online dialogued journal, designed by the researcher using Google documents, was employed for the experiment. The journal was sent to the same sample via emails, and the participants posted their reflective writings on different issues regarding their academic journey learning English. Students' interactive dialogues included prose writing, descriptive and argumentative paragraphs, poetry, and their personal stories. The students-teacher dialogues made the corpus data which enabled investigating the effectiveness of dialogued journaling on improving students' writing. Thirdly, a posttest was used to collect data regarding the degree of change that occurred as a result of the experiment. Fourthly, a Likert scale questionnaire was used at the end of the experiment to identify the participants' levels of satisfaction with dialogued journaling. Data analysis was based on using the Analysis of Variance (ANOVA) to compare the results of pretest and posttest. A rubric with five scale criteria was used to examine each rank of students' writing, and to report each student's score before and after treatment. The Text Analyzer Software was also employed to examine the participant's writing lexical density and phrase frequencies. Data analysis results indicated a significant statistical difference between the overall writing scores of the pretest and the posttest. Moreover, the examination of the participants' writing revealed much improvement in writing styles, word choice, and the student's voice, which are critical factors in writing. Hence, the significance of the current study is that it provides a new technological tool, such as Google document, for teaching writing skills at higher education. This study includes an instructional model that incorporates digital journaling into teaching English writing. The present research is also a contribution in the field of teaching English, adopting the communicative approach by integrating theories of connectives and constructivism into linguistic theories.

Keywords: asynchronous communication, digital dialogue journaling, connectivism, constructivism, EFL writing skills, linguistic communicative approach

1. Introduction

Writing is not only one of the main components of language skills, but it also has a unique role as a tool for communication. Research (Chan, 2010; Cruz, 2015; Ellis, 2013; Garcia, & Elbeltagi, 2013; Jayaron & Abidin, 2016) indicated that writing is a valuable tool for academic and occupational purposes, and has its own status as an independent course in many institutions of higher education. However, the writing process is daunting because it necessitates mastering a variety of skills, including treatment of content, organization of ideas, and application of grammatical rules and rhetorical devices. EFL teachers' endeavor is to employ the most successful teaching strategies to help students improve their writing skills. One of these strategies is the linguistic communicative approach, which can be integrated into modern technologies (Eggen & Kauchak, 2011; Guerra & Bota, 2011; Hight, 2013; Liu & Lan, 2016). Telecommunication technologies which include synchronous and asynchronous communication tools provide various digital technologies to assist EFL students in improving their writing skills. While synchronous communication is transmitted instantly, asynchronous communication is not transmitted at regular time intervals. The most significant aspect of asynchronous communication is that it allows mediated communication electronically when the users do not communicate simultaneously. Using such telecommunication features facilitates interactions among users, and provides comfortable learning environments. An example of these environments is creating a channel of dialogues through using digital journals such as Google documents. Digital dialogued journaling is written conversations in which teachers and students interact regularly to help students improve their writing skills. The teacher selects a topic and begins the dialogues with students, asking various questions to encourage them to discuss and write their reflections, comments, and arguments, and through such discussions and continual feedback, students acquire writing skills. The teachers-students dialogues motivate students to improve their writing performance using a variety of genres and styles including descriptive, argumentative, and creative writing such as poetry and short stories. Being engaged in such dialogues helps students to become aware of their weaknesses and focus on improving them. Research (Suwantarathip & Wichadee, 2014; Tardy, 2012; Teng et al., 2012; Xia, Fielder, & Siragusa, 2013; Yu, 2010) asserted that foreign language teaching required new strategies to help students improve their writing skills, including the use of appropriate paragraphs organization, lexical diversity, syntactical varieties, meaningful ideas, and coherent styles, which could be achieved through effective communicative and constructivist approaches that embraced cyber settings, blended learning, and online dialogued collaborative journaling. Hence, the current research examined the impact of using Google document journaling on improving EFL students' writing skills.

1.1 Problem Statement

The current research targeted the difficulties that students at the College of Languages and Translation, Al-Imam Mohammad Ibn Saud Islamic University, Riyadh, Saudi Arabia, faced in acquiring English writing skills. The students' exam records showed low scores in writing courses, and their profiles revealed that they had problems in writing their assignments. Evidence of the students' lack of fundamental writing skills was found in their writing pieces, including essays and critique reports. The students encountered problems writing their research papers in English which affected their overall performance, and hindered them from achieving their academic objectives. Data from teachers' reports and class observation also indicated that the students had serious challenges in completing their writing projects. They had problems organizing their ideas, using appropriate syntactical structures, applying correct grammatical rules, utilizing suitable word choice and word voice when writing various assignments including argumentative and persuasive essays, descriptive paragraphs, daily dialogues, creative short stories, or narrative reports. Analysis of the problem also revealed that the students had difficulties in pursuing their higher education due to their weak writing skills. Previous research (Chan, 2010; Dylan, 2013; Faraj, 2015; Hight, 2013; Madkour, 2011; Miyazoea & Anderson, 2012; Richards & Rodgers, 2011; Rutger & Henk, 2012; Suriat & Tajularipin, 2010; Vaughn, Bos, & Schumm, 2011) indicated that low performance in writing hindered students' academic achievements, and that language acquisition was best achieved when students were able to communicate their ideas and perspectives effectively in supportive learning environments.

1.2 Purpose Statement

The purpose of this quantitative, quasi-experimental study was to examine the impact of digital dialogued journaling, as a communicative teaching approach, on improving college students' writing skills. The present study aimed at investigating potential solutions for encouraging students to acquire writing skills through enhancing interactive communications among teachers and class peers using asynchronous communication tools such as Google document journals. The data of this research was collected from a sample of 30 female students of the College of Languages and Translation, at Al-Imam Mohammad Ibn Saud Islamic University in Saudi Arabia. Data analysis procedures included creating a Google document that was used as an online journal. The

Google document journal provided the corpus data which contained the students-teacher's reflective writings, comments, and feedback on various issues regarding their academic journey of learning English as a foreign language. Moreover, a pretest-posttest was conducted to compare students' scores before and after using the journal. The Analysis of Variance (ANOVA) was used to compare the results of pretest and posttest. The analysis of Google document journal corpus data depended on using a five scale rubric criteria to report each student's quality of writing in order to determine the effectiveness of Google dialogued journal as a linguistic communicative approach for improving students' writing skills. Research (Eggen & Kauchak, 2011; Gredler, 2005; Hou & Wu, 2011; Jayaron & Abidin, 2016; Lin & Griffith, 2014) showed that potential solutions for students' problems in academic writing were detected through adopting a new pedagogical perspective for teaching English as a foreign language, and specifically writing skills, by applying collaborative methodologies, including blended learning, critical thinking and interactivity, social knowledge construction, online discussion forums, and digital dialogued journaling.

1.3 Definitions of Terms

Asynchronous communication: refers to the transmission of data without using an external clock signal; i.e. data can be transmitted intermittently rather than in a steady stream. Asynchronous communication does not necessitate that users should be online at the exact time since time intervals facilitates the interaction of each individual user at his convenience (Cowley, 2007).

Digital Dialogue Journaling: involves written conversations in which students and teachers communicate regularly via the Internet using e-mails, e- notebook, blogs, or Google documents, among others (Peyton, 2000).

Google Word Processing Documents: refers to a variety of Google templates that were developed for word processing to allow users to communicate and interact through online writing activities. Google document templates have layout, editing, and style tools that help users to write various genres, including prose, poetry, essay writing, resumes, reports, research papers, and journals. Google documents also allow users to share, communicate, and comment on what they write in real-time. The features of Google documents include history track features to help users retrieve their documents. Another feature of Google documents is the translation tool which helps users translate from one language to another (Google Inc., 2016).

Journal Writing: refers to regular writing in logs or notebooks to collect ideas, which can be used for either personal reflections or formal writing. Journal writing includes creative writing, diaries, expository writing, personal narratives, and reflections (Wu-Yuin et al., 2015).

Synchronous communication: refers to online communication protocol in which data is transmitted in a continuous stream when users communicate concurrently (Cowley, 2007).

1.4 Significance of the Study

The current study examined the use of digital dialogued journaling as a tool to help EFL students improve their writing skills. Rather than providing statistical feedback on students' performance, teachers can participate in continual written conversations to communicate with students and encourage them to interact, and to share their perspectives on various topics. Such engagements motivate students to use different genres of writing. While digital dialogued journaling is used at various educational settings, it has not yet been employed as a part of the English curriculum at the College of Languages and Translation, at Al-Imam Muhammad Ibn Saud Islamic University. Therefore, the current study is a contribution in the field of teaching English, specifically for solving the problems of acquiring writing skills for Saudi students. This study provided evidence that using new technological tools such as Google documents were effective for increasing EFL students' writing proficiency. The present study includes an instructional model that integrates digital dialogued journaling into the writing courses at higher education. This research is also a contribution in the field of teaching methodologies, incorporating the theories of connectivism and constructivism into some communicative linguistic theories.

1.5 Theoretical Framework

The current research was based on the theories of connectivism, constructivism, and communicative linguistic theories. According to Siemens (2005; 2006), connectivism considers learning an internal construction of knowledge, and a network of creating complex data. The theory of connectivism introduced a new paradigm in digital learning which allowed learners to connect, collect, and construct new data. The platform of *connection* supports students to manipulate and construct knowledge. In this sense, technology facilitates and scaffolds students' learning while they connect with each other and with their teachers. For instance, using online dialogues can help students progress cognitively while they process knowledge collaboratively. Research (Denzil, 2013; Dunaway, 2011; Garcia, Brown, & Elbeltagi, 2013; Yuankun, 2003) highlighted the advantages of the

connectivism theory and integrated it with theory of community of practice, design-based theory, and activity theory to enhance learning environments. According to Siemens (2005), the theory of connectivism emphasizes some important principles which include: (a) learning is a process of diverse collaborative activities; (b) learning depends on connecting specialized nodes; i.e. accurate sources of information; (c) learning may rely on non-human appliances; (d) continual learning is based on maintaining connections; and (e) effective learning depends on emphasizing the role of social and cultural contexts. Based on these principles, teachers can create cooperative learning environments where students become experts in exploring and constructing knowledge through interactive tasks.

Constructivism is similar to connectivism as it emphasizes the role of the mental process in human development. Piaget (1964), for example, considers learning a combination of cognitive development and adaptation to environment which motivates learners to discover and construct new knowledge. The constructivist social learning theories of Vygotsky (1973; 1987), Bandura (1977), and Lave's (1988) can also be integrated into the theory of connectivism. The main principle of Vygotsky's theory is that cognitive development requires social interaction. Bandura's theory asserted the importance of learning through observing and modeling behaviors, attitudes, and emotional reactions. Lave's theory emphasized social interaction as a critical component for effective learning. Therefore, interactive teaching, which may reside in using such a tool as digital dialogued journals, can provide numerous opportunities for students to foster their communicational, interpersonal, and writing skills. Integrating connectivism into social constructivism can provide teachers with new ideas to extend the learning environments beyond the classrooms. In this respect, Liu and Lan (2016) asserted that the constructivist approach to web-based EFL learning fostered students' motivation, and increased their language proficiency.

The theories of connectivism and constructivism are compatible with some linguistic theories including the communicative linguistic theory. The communicative approach to writing suggests that developing writing skills requires social interactions. Writing is an act of constructing ideas, sentences, and paragraphs in a coherent and meaningful way, which can be developed in collaborative settings. Hence, the cognitive theory of composition is rooted in the researches of Piaget (1964), Vygotsky (1973), and the studies of Braddock (1974), Faigley and Witte (1981), Flower and Hayes (1981), and Penrose and Sitko (1993), among others. These studies focused on sentence and paragraph composition to pinpoint various levels of proficiency in writing, including syntactic development, and quality of writing in terms of coherence and cohesion. The linguistic composition theory provides guidance for teachers to identify students' syntactical, semantic, and stylistic problems, and enhance practice to raise students' language proficiency levels. In this regard, Chomsky (1965; 1957) explained the theory of syntax in three components. The three components are syntactical, phonological, and semantic, and that language learners must be able to generate new sentences. Pike's (1971) tagmemic theory is employed to teach writing skills to help students use small language units to construct bigger syntactical structures. Piaget's (1964) constructivist theory is relevant to tagmemicism since both theories emphasize synthesizing, and manipulating existing knowledge to build up new concepts and structures. This means that language learners can construct meaningful sentences through social interactions. Moreover, Halliday (1985) proposed a linguistic theory that could help students learn seven basic functions for language proficiency. These functions include the instrumental function, which depends on using language to construct sentences; the regulatory function, which requires using language to communicate; the interactional function which involves using language to create interaction with people; the personal function, which means using language to express personal feelings; the heuristic function which refers to using language to learn and to innovate; the imaginative function, which involves using language to create a world of imagination; and the representational function, which refers to using the language to process and present information. These seven functions can be enhanced through an integration of the theories of connectivism and constructivism to design instructional plans that teachers can integrate into dialogued journaling to assist EFL students to improve their writing skills.

2. Literature Review

The literature review of the present study was conducted to examine the relationship between online dialogued journaling and EFL writing skills. The review of the literature contains four issues that are relevant to the purpose of this study. These issues are: the effect of synchronous and asynchronous communication on learning and teaching English, specifically writing skills; the process of writing and the challenges that EFL learners face; the implications of dialogued journaling for EFL students; and the impacts of using Google documents digital journals on students' writing skills. The literature review presented herein also contains an analysis of previous findings about the strategies employed in teaching English writing.

2.1 Synchronous and Asynchronous Communication Tools for Teaching Writing

While traditional approaches of teaching writing depend on face-to-face learning environments, cognitive approaches that incorporate tools from Information Communication Technology (ICT), including telecommunication, smart phones, and social media, among others, rely on digital platforms. Traditional teaching focuses on providing EFL students with language rules, regular practice of paragraph and essay writing, and the instructor's feedback. Technology-based teaching methodologies are based on providing cooperative learning opportunities to allow students not only to connect, collaborate, share, and communicate their ideas, but also to generate new ideas for their English writings. In this respect, Jayaron and Abidin (2016) emphasized that using educational technologies was effective in English language learning when students depended on information technology to develop academically and socially, using such tools as emails, chat rooms, messenger screens, wikis, and forums. Chao, Hung, and Chen (2012) asserted the positive impact of synchronous learning environments on English writing because students acquired new skills for organizing their ideas. Shwarz and Asterhan (2011), and Teng et al. (2012) emphasized the importance of synchronous communication because it created social intimacy among students, which encouraged them to express themselves in writing spontaneously. Moreover, Hastie, Hung, Chen, and Kinshuk (2010), and Shaw (2012) indicated that synchronous *Online Forum Discussions* (OFDs) was an effective method for acquiring writing skills through electronic writing. The OFDs helped in encouraging students to write their comments on specific topics which resulted in enhancing the writing activities in the classrooms. According to Xia, Fielder and Siragusa (2013), OFDs are important means for strengthening students' engagement and collaboration with their teachers using modern technology. Moreover, Hou and Wu (2011) affirmed that synchronous communication helped in fostering the continuity of the writing classroom, where negative behaviors were modified through construction of social knowledge, using instant messaging tools. Thus, synchronous learning enabled students to become more active, participating in formal and informal writing tasks.

On the other hand, asynchronous learning is online learning where students can complete their tasks on their own space and time using blogs, diaries, webpages, online groups, or journals. The advantages of asynchronous learning include the elimination of classroom pressure and the increase of teacher-student interactions (Oztok, Zingaro, Brett, & Hewitt, 2012). Another advantage of asynchronous learning is that it maximizes the thinking time in the threaded discussions, thus, enriching the contribution of all learners (Oztok et al., 2012). For example, Shepherd and Aagard (2011) described how World Wide Web 2 (Web 2.0) technologies facilitated using online journaling to assist students in improving their writing skills. Computer-aided communication encouraged students to share feedback regarding their grammar usage, lexical development, and content organization, which increased their linguistic knowledge (Yilmaz & Granena, 2010; Yilmaz, 2011; Yilmaz & Yuksel, 2011). Moreover, research (Miyazoe & Anderson, 2010; Teng et al., 2012) asserted that the principles of constructivism, which enhanced the construction of new knowledge, could be incorporated in asynchronous tasks to teach writing skills.

In this respect, Ellis (2008) stressed the relationship between linguistic knowledge and language practices. He also emphasized that the units of language are based on constructions; i.e. students learn language from participating in social interactions. According to Ellis (2013), students learn to construct various dynamic patterns of language, which encompass lexis, syntax, semantics, pragmatics, and genre, through complex social activities that help them write about their ideas and feelings. Ellis (2008) emphasized the importance of creating contexts of language to encourage students to initiate topics and control the language development of such topics. In real life contexts, students get engaged in full performance, learning how to use the language rather than learning about the language. Halliday (1985) emphasized the regulatory function of the language, i.e. using the language to enhance communicative abilities. Chaika (2007) asserted that language learners should develop communicative competence. Brumfit (1984) proposed a communicative approach in language teaching to engage language learners in social contexts. Teachers can help students practice the language and acquire communicative and writing skills through creating various social settings. In addition, Jayaron and Abidin (2016), and Scherer-Bassani (2011) suggested that teachers should provide students with purposeful discussions to guide them to complete their writing assignments successfully. Thus, the integration of cognitive science and linguistic theory contributed to various studies on the writing process. In this regard, Connor (2011), Cruz (2015), and Matsuda et.al (2010) provided sources for the courses of English writing to help teachers explore means of connections in inclusive settings to identify students' discourse styles. Hicks (2013) examined how to help students develop their writing skills in multifaceted settings using digital writing. Digital writing allows students to enhance writing skills while composing web texts such as wikis, blogs, or online journals.

2.2 *The Complex Process of Writing and EFL Challenges*

Writing for EFL students is complex and requires a high level of language proficiency. Teaching writing skills needs systematic instruction to guide students on a daily basis while applying the writing procedures. Writing instruction should include not only writing activities, but also student-teacher interactions to provide students with continuous feedback and adequate strategies to improve their writing skills. Although the majority of college students have learned English at schools for several years, they continue to encounter serious problems to complete their writing assignments successfully. EFL students' challenges include using meaningful ideas, organizing coherent paragraphs, using appropriate syntactical structures, applying accurate grammar rules, and selecting relevant vocabulary. Such students also had difficulties understanding the writing process itself. Research (Chan, 2010; Madkour, 2009; Muller, 2010; Yu, 2010) indicated that students who did not possess adequate knowledge of the writing components, namely content, organization, structure, and mechanics, encountered linguistic difficulties in writing coherently. He and Niao (2015) showed that the college students' problems in writing were mainly due to lack of vocabulary, inadequate knowledge of grammar, and negative language transfer from the native language, which resulted in using the wrong translation of vocabulary. Yu (2012) summarized students' problems as consisting mainly of inadequate textual organization and lack of pragmatic strategies which impede students' ability to write satisfactorily, in terms of purpose, genre, style, and audience. Liu and Zhao (2011) discussed De Beaugrande and Dressler's (1981) criteria of discourse that EFL students were not aware of, which included coherence, cohesion, informativeness, intentionality, acceptability, situationality, and intertextuality. While intentionality refers to the purpose of the text, acceptability requires taking into account the readers' role and their background knowledge, and situationality demands using an appropriate style in relation to certain situations and cultures. Therefore, engaging students in social interactions to improve their perceptions of pragmatic strategies becomes necessary.

To solve the writing problems of EFL students, research (Brodahl, Hadjerrouit, & Hansen, 2011; Grgurovic, 2011; Hinkelman & Gruba, 2012; Yoon & Lee, 2010) suggested increasing students' learning opportunities through social interactions, including social media. Such a solution highlighted the importance of providing a real-life communicative context to motivate students to write for an audience. Research (Behjat, Yamini, & Bagheri, 2011; Grgurovic, 2011; Miyazoe & Anderson, 2010; Yoon & Lee, 2010) indicated that effective teaching strategies, such as blended learning, allowed multiple platforms for communication, which increased contact with audience as well as access to new knowledge. Tardy (2012) asserted that using online environment, students had access to audience to read their writings and provide feedback. Moreover, research (Ferriman, 2013; Miyazoe & Anderson, 2010; So & Lee, 2013; Yoon & Lee, 2010) emphasized that blended learning environments had positive impacts on developing writing skills in a short time. For example, Min, (2011) indicated that the writing process and instruction in a blended learning environment were more effective than traditional classrooms. Obar and Lambacher (2014) concluded a longitudinal study which ascertained that undergraduate students who were engaged in asynchronous blog writing for one semester, improved the writing process tremendously. Murphy and Southgate (2011) asserted that blended learning provided a variety of teaching materials, new learning contexts, and a wide range of teaching modes, tools, and resources, all of which were integrated to meet students' needs and help them raise their grades in writing and achieve their academic goals. Lam (2015) suggested that an eclectic approach to foreign language writing instruction was essential for scaffolding students' writing. He thus underscored the effectiveness of the integral model for teaching writing skills. Wu-Yuin et al. (2015) suggested that keeping a learning journal enabled students to summarize key concepts, elaborate ideas, or reflect on the learning material, and enabled self-assessment and peer sharing feedback. Such an integral model resulted in achieving higher scores in their writing courses.

2.3 *Journaling for Improving Writing Skills*

Muncy (2014) conducted a study with 350 student blogs, representing 15,951 journal entries, and the study's results emphasized that using online journals helped students improve their reflective writing. Hight (2013) indicated that students who used journaling improved their writing skills significantly. Thorne (2012) affirmed that using a narrative method in the form of journaling impacted students' efficacy of writing through reinforcing their sense of authorship. The students used the narrative journal to understand the process of writing poetry as an attempt to understand human relationships inside the classrooms. Lin and Griffith (2014) examined the strengths and weaknesses of online technology in EFL writing instruction, and concluded that online collaborative settings enhanced students' writing skills, critical thinking skills, and knowledge construction through social engagement. Faraj (2015) indicated that the most important advantages of journal writing were using it for scaffolding EFL students and motivating them to acquire organization, as well as syntactical and semantic skills for improving the quality of their writing. When students played the role of writers, they learned

how to apply the same steps that writers used, including *prewriting, drafting, revision, editing, and publishing*. Similarly, Sun (2010) scrutinized the use of online journaling in the form of a web blog, specifically designed for EFL students, and concluded that dialogued journaling had positive effects for strengthening students' writing strategies. Yilmaz (2015) examined using technology for writing short stories to enhance EFL creative writing skills, and concluded that the technological platforms, including the use of computers and the Internet, had positive effects on learners' writing process, raising their interests in improving language proficiency, and fostering cooperation while giving and receiving feedback on their writings.

2.4 Using Google Documents for Creating Dialogued Journals

Although Google documents have been used for a long time, many college students and teachers did not have adequate knowledge about their features and effectiveness in education, specifically for EFL learners. In addition, teachers were reluctant in using modern technology or integrating online applications into learning and teaching in higher education because of lack of training, insufficient financial resources, and fear of online social interactions. However, research (Gehringer, 2010; Guerra & Bota, 2011; Perron & Sellers, 2011) found that Google documents enabled students to create, edit, and improve the quality of their writing. Liu and Lan (2016) indicated that Google documents enhanced motivation, vocabulary knowledge, grammar application, consequently writing abilities. Zhou, Simpson, and Domizi (2012) asserted that Google documents fostered learning and teaching in three main areas, which encompassed fostering collaborative learning; increasing students' grades; and strengthening the communicative approach of teaching. For instance, Apple et al. (2011) found that web-based collaborative activities, such as Google documents facilitated the development of three skills among college students: teamwork social skills, computing skills, and foreign languages skills. Brodahl et al. (2011) indicated that students' writing competence improved after using online writing applications of Google documents. In this respect, Suwantarathip and Wichadee (2014) compared a group of students' writing abilities using Google documents with that of students who studied in traditional classrooms, and found that the students in the Google document group gained higher mean scores. Lin and Yang (2013) examined the impacts of students' experiences of integrating Google documents and peer e-tutors on their writing, and asserted that students developed the mechanisms of writing various types of essays in spite of the challenges they faced, including missing data due to lack of knowledge on how to use the documents templates. Teachers were also able to implement various instructional strategies to identify EFL students' problems and provide solutions using Google documents dialogued journaling. As such, Google documents provide collaborative features to facilitate writing in a foreign language classroom.

3. Research Method

This quasi-experimental research targeted the effect of using Google documents as dialogued journals on EFL college students' writing skills. Data was collected employing the pretest-posttest procedures to examine the impacts of digital dialogued journaling on students' writing skills. In addition, a Google document journal that the researcher designed for the present study, was used to collect the corpus data. The journal was sent to the participants via their emails. The participants were asked to post their reflective comments on different issues regarding their academic journey learning English. The interactive dialogues included prose writing, descriptive and argumentative paragraphs, and creative writings, including poetry and short stories. This Google journal made the corpus data which enabled an analysis of students' writing problems and the skills they needed to acquire. Moreover, a Likert scale questionnaire was used at the end of the experiment to examine the participants' satisfaction with Google documents journal.

3.1 Research Questions

The current research attempted to answer the following questions:

- 1). What is the statistical relationship between Google dialogued journal and students' writing scores?
- 2). What are the impacts of using Google document dialogued journal on EFL students' writing skills?
- 3). What is the significant difference between the pretest and posttest scores?
- 4). What is the process of using Google documents as online dialogued journals for EFL writing classroom?

3.2 Research Hypothesis

There is a statistically significant relationship between Google dialogued journal and students' writing skills. The *null* hypothesis is that there is no statistically significant relationship between Google dialogued journal and students' writing skills.

3.3 Participants' Characteristics

The participants of this study consisted of 30 female undergraduate students at the College of Languages and Translation, at Al-Imam Muhammad Ibn Saud Islamic University, Riyadh, Saudi Arabia. The participants were enrolled in 3 courses to enhance their writing skills. The first course was required as a part of the students' preparatory language studies while the other two courses were part of students' specialized language courses. The participants were also asked to write papers that required advanced writing and research skills.

3.4 Data collection Instruments and Procedures

The quantitative data sources included the results of the pretest and the posttest, the participants' Grade-Point Average (GPA), the participants' grades of three writing courses, online and off line classroom observations, and Google document journal entries. The pretest required writing a short argumentative essay of 1000 words on *the advantages of traveling*. The posttest required writing another argumentative essay on *the importance of studying English for undergraduate students*. These topics were specifically selected because they targeted students' academic and social life. The participant had 50 minutes to finish each test. The argumentative essay was relevant to the topic-oriented online discussions that took place in Google document journal (see Appendix A). The Google document journal allowed the participants to express their opinions, comments, and feedback while collaborating with their teacher. The participants used the Google document journal for 5 weeks before they took the posttest. The pretest-posttest data was analyzed using ANOVA to compare the results of the students' performance before and after the experiment. The journal corpus data was analyzed using a rubric with a five-scale criteria to examine each rank of students' writing, and to report each student's score before and after treatment. The rubric was used to assess students' quality of writings, which included content, organization, syntactical development, vocabulary (word choice and voice), and language mechanics (see Appendix B). The researcher compared each score of the rubric to determine if the writing skills had improved. Using the pretest and posttest allowed examining the difference in scores based on each participant's performance. Then, the text analyzer software was used to examine the linguistic complexity, lexical diversity, and syntactic complexity of Google document journal corpus data.

3.5 Setting UP Google Document Journal

The procedures of creating an online dialogued journal using Google documents included the following: selecting an appropriate theme template; introducing the topic of the journal to the participants; writing the objectives and the learning outcomes of the journal; and sending the link journal to the participants via their emails, with instructions on how to use the journal. The journal was entitled "*Reflections on a Journey of Learning English*". The objectives of the dialogued journal included the following: (a) help students improve their writing skills, (b) motivate students to improve their vocabulary, (c) urge students to construct correct English sentences, (d) motivate students to write their opinions using different genres, (e) encourage students to use different writing styles, (f) help students to enhance critical and creative thinking, (g) share constructive feedback, (h) encourage students' confidence in writing, and (i) create real-life audience to enhance students' authorship.

3.6 The Features of Google Documents for Online Journal Writing

Teachers should discuss with students the features of Google documents dialogued journaling so that they know how to use it effectively to acquire writing skills. The first feature is the upper bar menu, which contains editing, chatting, comments, sharing, and searching tools. The second feature is the inclusion of external links from the web and data from the users' files. In addition, Google documents have the same features of Microsoft Word regarding paragraph layouts, fonts, color bullets, fonts, bolding, underlining, and using italics, bullets, and numbering. Another advantage of the Google documents journal is that it can be retrieved chronologically. Moreover the journal can be used online or offline, simplifying the participants' writing process. The journal also facilitates writing naturally, understanding clustering of ideas and sentence stems, and building an inventory of vocabulary. The chatting room enhances the interactions between the teacher and each participant, which helps in the writing phases of brain storming of ideas, editing, and revising.

4. Results

The participants' profiles revealed that based on their GPA, the percentage of participants with advanced language level reached 32% while the participants' intermediate level was 56%. The beginner level reached 12%. Figure 1 displays the results.

Participants' Language Levels

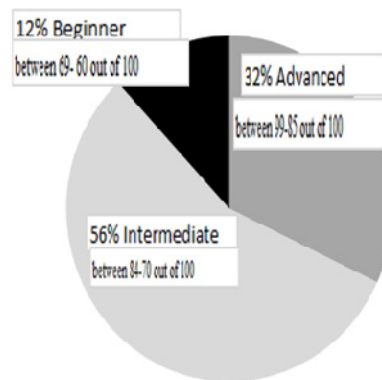


Figure 1. Participants' language level

As displayed in Figure 1, the advanced level refers to language scores between 99-85 out of 100. The participants' language advanced level was 32%. The percentage of the participants with intermediate language level reached 56%. The intermediate level points to language scores between 84-70 out of 100. The percentage of the participants with beginner language level reached 12%. The beginner level points to language scores between 69-60 out of 100. Moreover, data analysis of the participants' exam records revealed the participants' language proficiency regarding five components of the English language. Figure 2 displays the results.

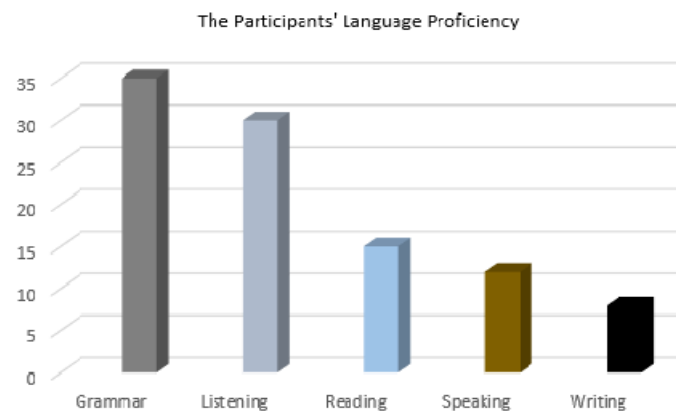


Figure 2. Participants' language proficiency in five English skills

As Figure 2 shows, the participants' grammar knowledge was the highest among the English language components, reaching 34% while the percentage of participants' listening abilities was 29%. The percentage of the participants' reading skills was 14%, and the percentage of the speaking skills was 12%. The percentage of the participants' writing abilities was only 8%, pointing to the participants' weakest skill in English. Data analysis of the participants' writing final exam records indicated that they had several problems that hindered them from performing at their best capacity in their writing exams. Figure 3 shows these problems.

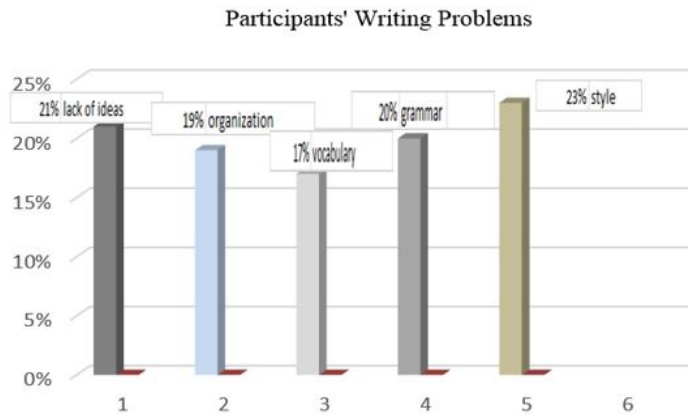


Figure 3. The participants' writing problems

As displayed in Figure 3, the participants faced five main problems that impacted their writing performance negatively. The first problem was lacking ideas on the topics of their assignments, and this problem reached 21%. The second problem was lacking the ability to organize their ideas coherently to convey logical and meaningful pieces of writing, and the percentage of this problem was 19%. The third problem was using accurate vocabulary. The participants were unable to make correct word and voice choices to express their opinions clearly as their exam records pointed to the percentage of 17%. The fourth problem was applying the grammatical rules correctly. The primary data analysis revealed that the participants' ability to use grammar rules was 20%. The paradox was that while the participants' percentage of grammar level was 34% (as shown in Figure 2), they did not use grammar correctly in their writing, which showed a 20% deficiency. The fifth problem was using appropriate styles for their writing assignments, and the percentage of this problem reached 23%. Such problems indicated clearly that students needed new strategies, such as the Google document dialogued journaling, to help them improve their writing skills. Data analysis pointed to a significant difference between the overall scores of the participants' pretest and posttest, demonstrating the positive impact of Google journal on students' writing skills. To validate H_1 , there is a statistical relationship between Google document dialogued journal and students' writing skills, the researcher used the independent sample t -test to explore if there was any statistical significant difference between the two groups. The results showed a statistical significant difference between pretest group and posttest group at the level of 0.1 as the 2-tailed significance was less than 0.1 and the t values of items exceeded that of $df(99)$ which was 2.6264. Thus, the null hypothesis, there is no statistical relationship between Google dialogued journal and students' writing skills is rejected. Based on the statistical data analysis, the current research showed that the participants' writing skills benefited from Google dialogued journaling. Table 1 displays the results.

Table 1. The pretest-posttest scores

Participant #	Pretest Scores out of 100	Posttest Scores out of 100	Percentage of Improvement
1	58	79	21%
2	56	76	20%
3	62	84	22%
4	73	90	23%
5	61	86	25%
6	50	77	27%
7	65	87	22%
8	70	86	16%
9	48	70	22%
10	61	81	20%
11	50	71	21%
12	70	88	18%
13	75	89	14%
14	69	89	20%
15	44	67	23%
16	53	77	24%
17	69	87	18%
18	61	89	28%
19	43	67	24%
20	73	90	17%
21	60	76	16%
22	66	87	21%
23	47	66	19%
24	59	70	11%
25	70	89	19%
26	58	76	18%
27	64	88	24%
28	60	81	21%
29	49	68	19%
30	64	79	15%

As shown in Table 1, the highest score for the pretest was 70 out of 100 while the highest score of the posttest was 90 out of 100. Participant # 18 achieved 28% improvement in writing skills, thus, reaching the highest percentage among all the 30 participants. Participant # 13 achieved the lowest percentage of improvement, which was 14%. The mean average of the pretest scores was 60.26667, and the median was 61. The mode was 61, 70, and the range was 32. The mean average of the posttest was 80.33333, and the median was 81. The mode was 89, and the range was 24. Moreover, the data analysis of the rubric showed the exact areas that the participants developed while using the Google journal. Table 2 shows the results.

Table 2. Rubric data results

Writing Skills	Pretest Scores out of 20	Posttest Scores out of 20	
Effective Use of Word Choice	11	18	35%
Unique Voice/Point of View	9	16	35 %
Consistent Variety of Sentence Structure	10	19	45%
Consistent Agreement Between Parts of Speech	11	17	30%
Correct Use of Mechanics and Capitalization and Punctuation	10	18	40%
Total	51/100	88/100	37%

As displayed in Table 2, the rubric analysis results showed that the pretest scores were 11 out of 20 for the effective use of word choice, while the posttest score was 18 out of 20, and the pretest score was 9 out of 20 for the unique voice/point of view while the posttest was 16 out of 20. The score of the pretest for the consistent variety of sentence structure was 10 out of 20 while the posttest score was 19 out of 20. The pretest score for the consistent agreement between parts of speech was 11 out of 20 while the posttest core was 17 out of 20. The pretest score for the correct use of mechanics, including capitalization and punctuation was 10 out of 20 while the posttest score was 18 out of 20. The improvement percentages for the effective use of word choice, the unique voice/point of view, the consistent variety of sentence structure, the consistent agreement between parts of speech, and the correct use of mechanics, including capitalization and punctuation were 35%, 35%, 45%, 30%, and 40% respectively. The total percentage of students' writing improvement was 37%, indicating the positive impact of Google document dialogued journal on EFL students' writing skills.

The corpus data analysis of the Google dialogued journal revealed that the journal reached 1050 pages in the first week, with 686,700 words. The Text Analyzer software (2016) allowed an accurate and consistent analysis of each word and phrase in the journal document. The results of text analysis showed the most frequent phrases and frequencies of the words that the participants used and it also helped in calculating lexical density. Table 3 displays the results of average word count.

Table 3. Text analysis results

Data Description	Details
Average Word Count	9523
Average of Different Words	1776
Complexity Factor (Lexical Density)	18.6%
Readability (Gunning-Fog Index) = (6 easy words and 20 hard words)	7.5
Total Number of Characters	100043
Number of Characters Without Spaces	62398
Average Syllables Per Word	1.7
Sentence Count	1362
Average Sentence Length (Words)	14.21
Max Sentence Length (Words)	72
Min Sentence Length (Words) :	1
Readability (Alternative) Beta : (100 easy words, and 20 hard words (optimal 60-70))	48.8

Table 3 shows that the average of text word count reached 9523 words in the first week. The complexity factor, which refers to lexical density, reached 18.6% and the average sentence length reached 14.21 sentences. The total number of characters reached 100043 with spaces, and 62398 without spaces. The maximum sentence length was 72 words. The readability, alternative beta (100-easy 20-hard, optimal 60-70) was 48.8. Measuring lexical diversity is important for identifying the content of writing through analyzing how students use content

words, including nouns, verbs, adjectives and adverbs, and by measuring lexical density, the text quality can be revealed. Moreover, the analysis of the corpus data of Google dialogued journal also indicated some of the problems that students faced. The following are some examples:

Participant # 1 wrote in week one: *I can learn English bases in classroom or by a self-study. Education means. I study, and I memorize words. It's not that difficult to learn it, but it also remaining hard learn the bases without travelling and learn about culture Knowing about English culture is important to understand the language well enough. I do not need technology.*

The same Participant # 1 wrote in week five: *I was wrong when I did not pay attention to the facilities that modern technologies could provide for EFL students. I was happy to find my teacher and my class peers interacting with me. I learned to correct my language mistakes. I also learned to organize my ideas logically and to express them accurately. I know my grammar rules better and I know how to apply them. I now know that I need to focus on the SVC basic structure of the sentence as my teacher explained to me while I was using the Google document dialogued journal. I have definitely acquired new writing skills.*

Participant # 6 wrote in week one: *I can't write without translation, i agree because translation is one of better ways to learn foreign language because the main idea is if you want to learn foreign language you need to know your mother tongue very well and translation is good tool to adopt a met linguistic attitude towards language and to see it with others eyes and understand how it really works.*

The same Participant # 6 wrote in week five: *I can now write without translating from my mother tongue into English. The Google journal was very useful that helped me to build self-confidence. My frequent dialogues about my paragraph writings, which I shared with my teacher and my peers, were developed nicely into an argumentative essay on the importance of learning English. Using this journal, I learned grammar, new vocabulary, word choice, and sentence structures. I enjoy writing now.*

Participant # 27 wrote in week one: *Because English language is the language of communication. Because nowadays almost everybody speak English and wherever you go, you will find you can use English to communicate. It is also the language of technology like computer science and medicine.*

The same Participant # 27 wrote in week five: *I have learned new techniques to improve my writing skills: writing a draft, editing, revising, and learning from feedback. I have now passion to improve my English language. I have learned to pay attention to my spelling, punctuation marks, tenses, and word choice. It is the first time I know about Google documents. I like the journal very much. It has helped me to communicate with my teacher and peers wherever they are. I have learned to brainstorm ideas for my essay writing, organize my ideas, and write an outline before I start writing my first draft. The Google journal has everything I need, an online dictionary, web search tools, web links, email access, chat room, and comments tools. It is like all in one. I have everything that I need to write. I am also confident because I can reach y teacher at any time. This helps me to improve my writing skills.*

Based on the five scales of the rubric regarding the assessment of the quality of writing, which include content, organization, syntactical development, word choice, word voice, and conventions, a comparison between each of these participants' extract before and after the treatment sheds lights on the effectiveness of Google journal in terms of the quality of writing. For example, participant #1 had syntactical and conventions problems which affected the organization of the ideas while participant # 6 had problems with word choice and the application of grammar rules which hindered her ability to organize her ideas properly. Participant # 27 had problems achieving an effective style due to weakness in using coherent sentences. The fragmented sentences that most of the participants used showed their inability to construct correct and well developed paragraphs to communicate their ideas. The pretest extracts show problems in grammar, sentence structure, style, and organization of ideas while the posttest extracts show coherence and cohesion in using English to express the same ideas in an organized and meaningful manner. Participant # 1 improved her writing by 21% while participants # 6 improved her writing by 27%, and participant # 27 improved her writing by 24%. Hence, data analysis indicated the positive effect of Google dialogued journal on students' writing skills. Moreover, the analysis of the four-point Likert scale questionnaire was distributed among the participants showed their satisfaction about using the journal (see Appendix C). Table 4 displays the results.

Table 4. The results after using Google dialogued journal

M	SD	RI	Rank
Mean	Standard Deviation	Relative Importance	
3.242	0.614	81.06%	7.5
2.818	0.727	70.45%	18
2.697	0.810	67.42%	19
2.121	0.781	53.03%	21
3.303	0.637	82.58%	4.5
3.030	0.770	75.76%	14
3.242	0.614	81.06%	7.5
3.000	0.661	75.00%	16.5
2.273	0.876	56.82%	20
3.121	0.740	78.03%	11
3.273	0.801	81.82%	6
3.515	0.619	87.88%	1
3.303	0.684	82.58%	4.5
3.212	0.415	80.30%	9.5
3.182	0.808	79.55%	10
3.091	0.765	77.27%	13.5
3.000	0.707	75.00%	16.5
3.212	0.600	80.30%	9.5
3.424	0.561	85.61%	2
3.364	0.653	84.09%	3
3.091	0.631	77.27%	13.5
Overall mean and standard deviation	3.072	0.269	76.80%

As displayed in Table 4, the overall mean for the scale was ($M= 3.07$), and the scale indicated a high agreement level as the means of the items ranged from 2.121 to 3.515 and the standard deviations ranged from 0.415 to 0.876, indicating an acceptable harmony in the participants' answers, which was shown through the value of the standard deviation of ($SD=0.348$). Figure 4 shows a comparison among the items of the scale based on the 21 items of the questionnaire.

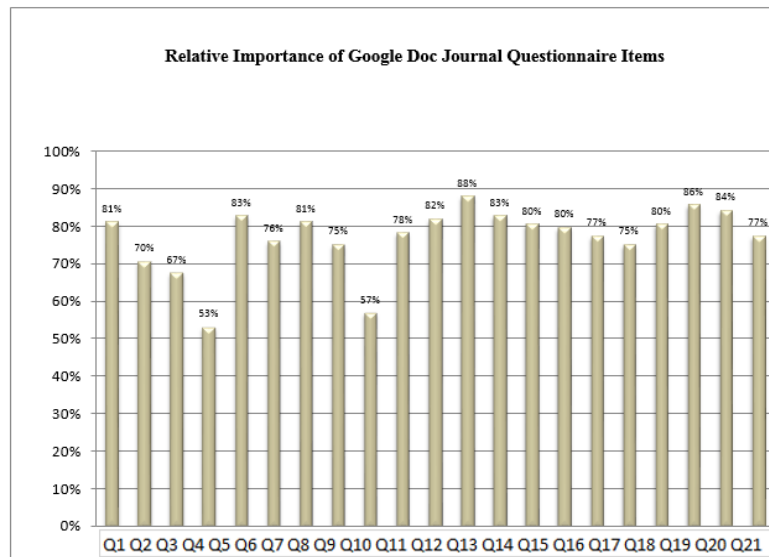


Figure 4. The participants' satisfaction with Google journal

As Figure 4 shows, 88% of the participants found Google dialogued journal helpful, and 86% of the participants believed that the journal motivated them to acquire writing skills, and 84% reported that it helped them to improve their sentence structures while 83% believed that it encouraged them to generate new ideas. Data analysis also revealed that 53% of the participants were reluctant to use the journal due to lack of technological experience, and 57% of the participants thought that the journal consumed time and efforts. About 70% of the participants reported that it helped them to analyze their assignments before writing while 67% of the participants had difficulties due to fear of online social interactions.

5. Discussions and Recommendations

Based on data analysis results, many examples were detected to provide evidence on the effectiveness of Google document dialogued Journal for improving students' writing skills. The research findings of the present study provided evidence to address the research questions. For example, data analysis indicted a significant statistical relationship between Google dialogued journal and students' scores in writing. The percentage of students' improvement in writing reached 29% as revealed by the posttest results. Regarding the second research question, the impacts of using Google dialogued journaling on the EFL students' writing skills were numerous. The students were able to improve their abilities to use effective vocabulary, including word choice and voice to express their ideas while writing various paragraphs. They were also able to construct a consistent variety of sentence structure, use appropriate agreement between parts of speech, and use correct conventions, i.e. language mechanics. The total percentage of students' quality of writing improvement in these specific areas was 37%, based on the rubric data analysis. Moreover, the students were involved for the first time in new open-ended learning environments using the online platform of Google journal. This journal created a network of students and teachers, and within this network, some clusters of themes emerged, where the students shared web links, stories, and their writing files to learn how to improve the writing process. The Google journal depends on creating points of connection to urge learners to construct new knowledge. Hence, the current study' findings emphasized some important issues related to writing skills, including: (a) the positive impact of Google documents journaling on achieving students' individual needs, (b) the efficiency of the dialogued journaling to increase students' intrinsic motivation, positive interactions, and advanced language communication to improve their writing skills, (c) students become aware of different components of the writing process, including the lexical, syntactical, semantic, and pragmatic levels through using such activities as journal writing, which combined writing poetry, short stories, and reflective paragraphs, (d) supporting the face-to face classrooms which can help teachers achieve better management of classes with learners of varying language levels, and (e) allowing authentic assessment of students through providing continual feedback about each student's progress. Based on these findings, the first recommendation of the current study is to use modern technologies, such as Google documents, to reinforce writing skills through digital dialogued journaling. The second recommendation is to provide professional development for EFL teachers to train them to integrate such technologies in their teaching methodologies. The third recommendation is to equip the writing classrooms with the appropriate

technologies required to facilitate students' learning. Figure 5 shows how teachers can use the communicative linguistic model of integrating Google document journal into the writing classroom to create dots of connections among students.

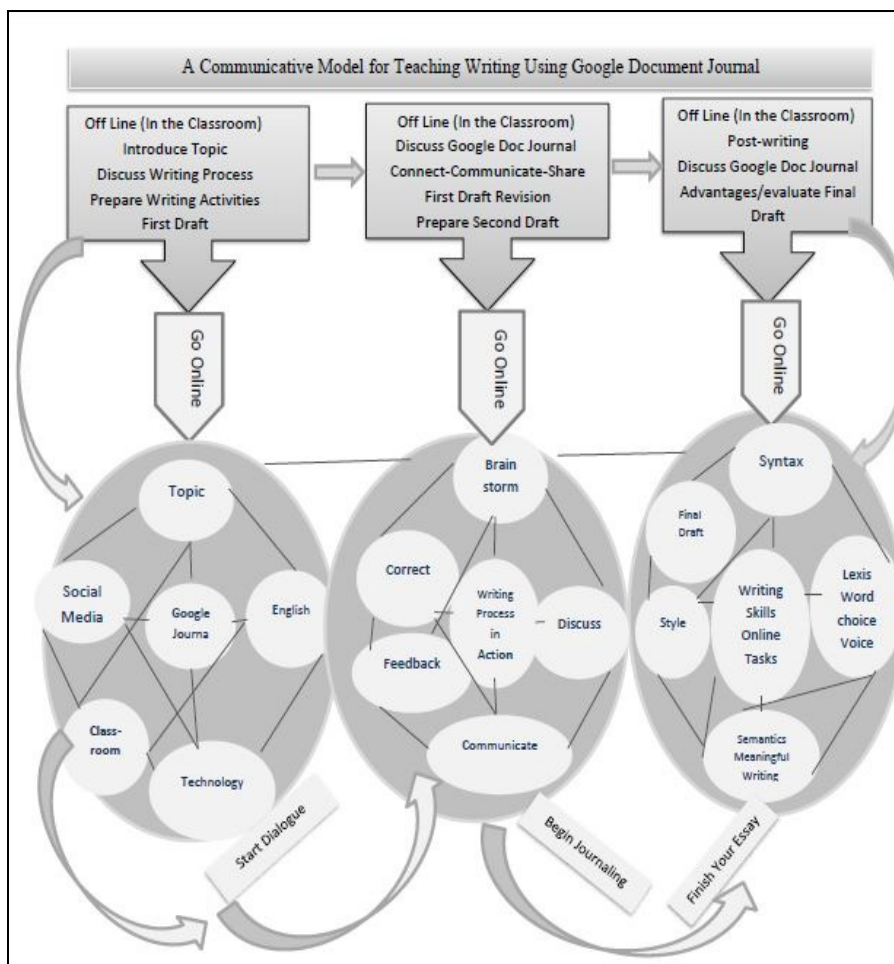


Figure 5. A communicative linguistic model for improving writing skills

Figure 5 shows that the EFL students can construct new knowledge through maintaining connections, which is essential to facilitate continual learning. The participants were writing about the English language, and from this topic various connected dots emerged such as *schools*, *classrooms*, *travelling*, *social interactions*, and *technology*. Each dot is considered a network of ideas that can provide students with channels of communication to enhance the natural contexts for writing development. Through these connected networks, the students learn how the linguistic complexity consists of lexical diversity, coherent syntactic structures, consistent agreements of styles complexity, and constant contact with readership. This model is based on integrating off line and online writing activities. Teachers introduce the Google document journal in the classrooms prior to allowing students' online journaling to prepare their first drafts. When students start their online tasks, they learn to brainstorm and generate ideas for their topics, and discuss and share feedback. Then, teachers discuss the second drafts in the classrooms. The last phase of using this model is to urge students assess their own writings using the six rank rubric so that students check their syntactical, semantics, and lexical errors before submitting their essays.

6. Conclusion

The present study investigated the effectiveness of using the templates of Google documents to design a dialogued journal to help EFL students improve their writing skills. The specific problem was that students at the College of Languages and Translation at Al-Imam University faced difficulties achieving their academic goals because of their low performance in writing. Therefore, the purpose of this research focused on assessing

students' knowledge and writing skills after using the Google document dialogued journaling. This study concluded that the Google journal provided new means of communication to enhance collaborative writing, which affected the individual needs of all students. The quality of students' writing improved, and their abilities to acquire advanced writing skills increased. Online dialogued journals open new channels for communicative approaches for teaching English writing, when teachers can participate in written conversations with the students to guide them to develop their writing skills. Teachers can integrate theories of connectivism, constructivism, into the communicative linguistic theories for using the Google journal model suggested in this study. As such, the current study is a contribution in EFL teaching methodologies, specifically for the writing courses at higher education, since it provides a new experience in using blended learning to scaffold students' progress at Al-Imam University, consequently at other higher institutions that can replicate this study.

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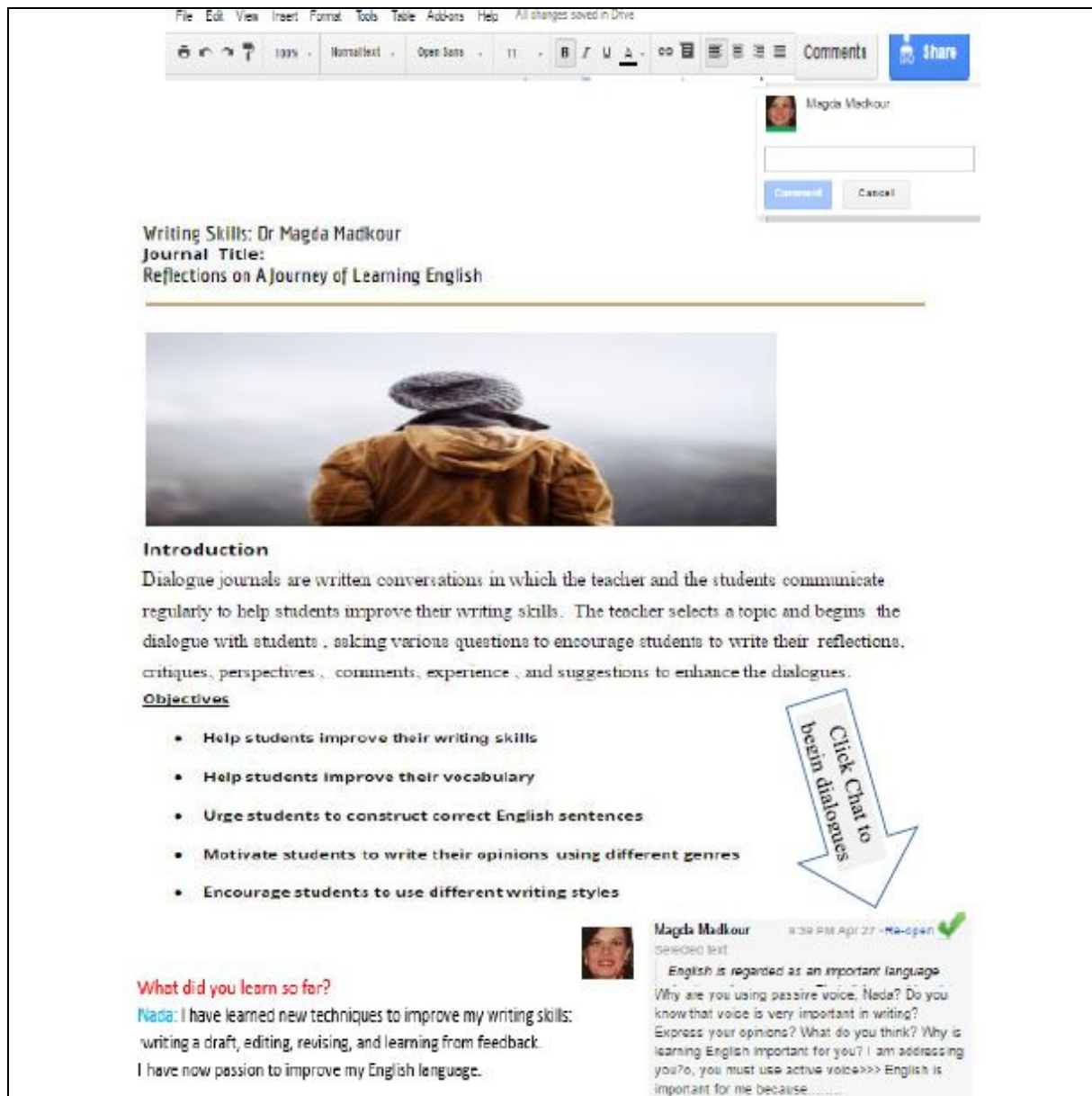
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Appendix A

Google Dialogued Journal for Improving Writing Skills



The screenshot shows a Google Docs interface. At the top, there is a menu bar (File, Edit, View, Insert, Format, Tools, Table, Add-ons, Help) and a toolbar with various editing tools. A comment box is open, showing the user's profile picture and name 'Magda Madkour'. The document content includes:

Writing Skills: Dr Magda Madkour
Journal Title:
Reflections on A Journey of Learning English



Introduction
Dialogue journals are written conversations in which the teacher and the students communicate regularly to help students improve their writing skills. The teacher selects a topic and begins the dialogue with students, asking various questions to encourage students to write their reflections, critiques, perspectives, comments, experience, and suggestions to enhance the dialogues.

Objectives

- Help students improve their writing skills
- Help students improve their vocabulary
- Urge students to construct correct English sentences
- Motivate students to write their opinions using different genres
- Encourage students to use different writing styles

A blue arrow points to the objectives list with the text: "Click Chat to begin dialogues".

What did you learn so far?
Nada: I have learned new techniques to improve my writing skills: writing a draft, editing, revising, and learning from feedback. I have now passion to improve my English language.

Magda Madkour 9:39 PM Apr 27 - Ma-egan ✓
Selected text
English is regarded as an important language
Why are you using passive voice, Nada? Do you know that voice is very important in writing? Express your opinions? What do you think? Why is learning English important for you? I am addressing you?o, you must use active voice>>> English is important for me because.....

Appendix B

A Modified Writing Rubric: Adopted from the National Council of Teachers of English

Items/ 4 points for each item (Lexis 2 points each)	5 Writing Quality Exceeds Requirements	4 Writing Quality Meets Requirements	3 Writing Quality Partially Meets Requirements	2 Writing Quality Does Not Fully Meet Requirements	1 Writing Quality Does Not Meet Requirements
CONTENT/IDEAS	Writing is purposeful and focused. Ideas are authentic and organized.	Writing is purposeful and focused. Ideas are organized.	Writing does not clearly communicate knowledge. The reader is left with questions.	Writing is limited in communicating knowledge. Length is not adequate for development.	Writing is extremely limited in communicating knowledge. There is no central theme.
ORGANIZATION	Writing includes a strong beginning, middle, and end, with accurate transitions, and coherent closure.	Writing is correct with appropriate format and incorporates a coherent closure.	Writing is confused and loosely organized. Transitions are weak and closure is ineffective.	Writing is brief and underdeveloped with very weak transitions and closure.	Writing is disorganized and underdeveloped with no transitions or closure.
SYNTACTIC DEVELOPMENT	Frequent and varied sentence structure.	Simple compound, and complex, sentences.	Limited variety in sentence structure. Some run-ons or fragments.	Little variety in sentence structure. Many run-ons or fragments	Variety in sentence structure. Frequent run-ons or fragments
LEXIS WORD CHOICE	Purposeful use of word choice.	Variety of word choice to make writing interesting.	Shows some use of varied word choice.	Language is trite, vague or flat.	Careless or inaccurate word choice, which obscures meaning.
LEXIS VOICE/POINT OF VIEW	Writer has strong voice/ point of view. Writing engages the audience.	Writer uses voice/point of view. Writes with the understanding of a specific audience.	Writer's voice/ point of view shows that sense of audience is vague.	Writer's voice/ point of view shows little sense of audience.	Writer's voice/ point of view shows no sense of audience.
CONVENTIONS	Consistent agreement between parts of speech. Uses correct punctuation, capitalization, etc. Consistent use of spelling strategies.	Maintains agreement between parts of speech. Few errors in mechanics. Applies spelling strategies.	Occasional errors between parts of speech. Some errors in mechanics. Some evidence of spelling strategies.	Inconsistent agreement between parts of speech. Many errors in mechanics. Limited evidence of spelling strategies.	Parts of speech show lack of agreement. Frequent errors in mechanics. Little or no evidence of spelling strategies.

Appendix C

End of Experiment Questionnaire: The Participants' Degree of Satisfaction Regarding Google Journal

Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1) Google dialogued journal is helpful for improving the content of my writing as well as the quality of my sentence structures and style.				
2) Google dialogued journal is useful for providing continual feedback.				
3) I am not comfortable using Google dialogued journal because I am afraid of online social interactions.				
4) Inexperience of using technology made me reluctant to use Google dialogued journal.				
5) Google dialogued journal helps me to strongly communicate my views.				
6) I prefer using Google dialogued journal platform than attending face-to-face classrooms.				
7) Google dialogued journal increases interactions with my teacher, and this helps me to correct my mistakes immediately.				
8) I am not comfortable using Google dialogued journal because I have never used it before.				
9) Google dialogued journal consumes time and efforts.				
10) Google dialogued journal menu is useful, especially the chat box so I can connect with my class peers and discuss my topics.				
11) Google dialogued journal is highly beneficial for students who need help to increase writing skills.				
12) Google dialogued journal is helpful for improving writing skills.				
13) Google dialogued journal helps me to generate ideas for writing.				
14) Google dialogued journal helps me to learn new vocabulary, and this is useful for writing my ideas clearly.				
15) Google dialogued journal helps in acquiring interpersonal skills, and this gives me confidence to write.				
16) Google dialogued journal helps in strengthening my authorship.				
17) Because I used Google dialogued journal, I had audience to read my writings.				
18) Using Google dialogued journal helps me to apply the writing process of prewriting, drafting, revision, editing, and publishing.				
19) Google dialogued journal is a useful tool for motivating me to write on a daily basis.				
20) Google dialogued journal is helpful for improving sentence structures.				
21) Using Google dialogued journal makes me a real writer, and I follow the same process the writers use.				

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