Utilizing Google Docs for Enhancing Secondary Stage Students' EFL Writing Skills

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Abstract

The present study aimed at enhancing secondary stage students' EFL writing skills by utilizing Google Docs for collaborative writing. The study followed the one-group pre-post-test design. The participants of the study consisted of 25 first year students in El Motawara Secondary School in Sers El Layan, Menoufia Governorate, during the second term of the academic year 2019/2020. Instruments and materials of the study were a checklist of EFL writing skills, a pre-post EFL writing skills test and a rubric to score it, and a teacher's guide for utilizing Google Docs. A pre-post EFL writing test was administered to the study group. The students were taught using Google Docs to enhance their EFL writing skills. Then, the test was re-administered. t-test was used to compare the mean scores of pre-test and post-test. Results of the study revealed that the study participants showed a great improvement in EFL writing skills with their five main skills; content, accuracy, fluency, organization, and mechanics skills as a result of using Google Docs for collaborative writing. In the light of the results, implications, recommendations, suggestions for further research and conclusions were provided.

Keywords: EFL writing skills, Web 2.0 tools, Google Docs.

تحسين مهارات الكتابة باللغة الإنجليزية كلغة أجنبية لدى طلاب المرحلة الثانوية باستخدام مستندات جوجل للكتابة التشاركية

المستخلــص باللغــة العربيــة

استهدف البحث الحالي تحسين مهارات الكتابة باللغة الإنجليزية كلغة أجنبية لدى طلاب المرحلة الثانوية باستخدام مستندات جوجل للكتابة التشاركية. وقد استخدمت الدراسة التصميم التجريبي ذو المجموعة الواحدة وقياس قبلي-بعدي، وتكونت مجموعة الدراسة من خمس وعشرين طالبا من طلاب الصف الأول الثانوي بمدرسة سرس الليان الثانوية المطورة بمحافظة المنوفية، واشتملت أدوات الدراسة على قائمة مهارات الكتابة باللغة الإنجليزية كلغة أجنبية واختبار قبلي-بعدي في مهارات الكتابة باللغة الإنجليزية كلغة أجنبية ومقياس أداء متدرج لتقديره، وقد تم اختبار مجموعة الدراسة قبل إجراء المعالجة لتحديد مستواها في مهارات الكتابة باللغة الإنجليزية، ثم إعادة اختبار مجموعة الدراسة بعد استخدام مستندات جوجل لتحديد مدى فاعليتها في تحسين مهارات الكتابة باللغة الإنجليزية كلغة أجنبية، واستخدمت الباحثة اختبار ت للعينة المزدوجة لمقارنة متوسطات درجات الاختبار القبلي والاختبار البعدي لمجموعة واحدة، وكشفت نتائج التحليل أن مهارات الكتابة باللغة الإنجليزية كلغة أجنبية بمهاراتها الخمس الرئيسية وهي مهارات المحتوى والدقة والطلاقة والتنظيم والميكانيكية لدى المشاركين قد تحسنت بشكل ملحوظ نتيجة لاستخدام مستندات جوجل للكتابة التشاركية.

الكلمات المفتاحية: مهارات الكتابة باللغة الإنجليزية كلغة أجنبية ، أدوات "الويب ٢"، مستندات جوجل.

Introduction

Writing is the use of graphic marks to represent specific linguistic utterances. Writing is not language; it represents language. It involves making an utterance visible (Rogers,2005: 2). Writing is one of the important language skills that facilitates connections and communication among members of families, communities, and nations. It promotes personal development and self-expression. In addition, writing allows writers to gather, refine, share, and preserve knowledge and understandings. It is a complex process that requires activities such as brainstorming, word mapping, outlining, drafting, editing and revising. The process is facilitated by group collaboration in the different writing stages (pre-writing, during writing, and post-writing (Zaza & Ahmed 2012).

Collaboration is an activity that enables participants to accomplish a document collectively, as opposed to simply splitting up the document, work independently of each other, and then assemble individual contributions to a final document. Collaborative writing is a coordinated activity that enables participants to edit and revise each other's contribution to the document. Collaboration is grounded in the social-constructivist learning theory (Vygotsky, 1978), and assumes that participants can achieve more in terms of learning benefits than individuals (Hadjerrouit, 2012).

With Web 2.0 tools such as Google Docs, blogs, wikis, podcasts, social bookmarking, photo sharing, instant messaging, VoIP applications,

RSS feeds, mashups, etc., which highly surmount users' participations, the possibilities for communication and collaboration have proliferated (Zaza & Ahmed 2012). Google Docs is a tool that allows learners to work collaboratively by creating collective content, and as such, they facilitate collaborative writing and group discussion.

Firth and Mesureur (2010) demonstrated several practical applications in which the Google Docs suite is currently being used within a university ESL program in Tokyo. Specifically, it gives examples of the scope and limitations of the free online software on four levels: (1) the program level – management of teaching assignments and reporting of grades; (2) special program management – online book reports for extensive reading; (3) course management – homework production and submission, and self and peer assessment; and (4) project work – collaborative writing and student-generated questionnaires.

The first heard of Google was as a search engine for research. Educators and students alike could search for anything. They just "googled" it to retrieve thousands of entries about the topic. Next, Google used its creativity and technological strength and created an array of tools especially useful to the educational community. One of the important Google tools is Google Docs. Google Docs is a combination of word processor, spreadsheet, and presentation tool, and forms and a timeline, that enables students to share their work easily among multiple users, access it from any device that has internet access, and save their work automatically so they won't lose what they have written. Especially since the release of Google Docs, teachers and students can now create, edit,

and share documents synchronously. Educators find Google Docs helpful because they can monitor student work while they are in the process of writing or revising in class and identify and work with students who are having major problems. Check the demos and click the download button to install Google Docs on the computer (Crane, 2012 and Roblyer & Doering, 2014).
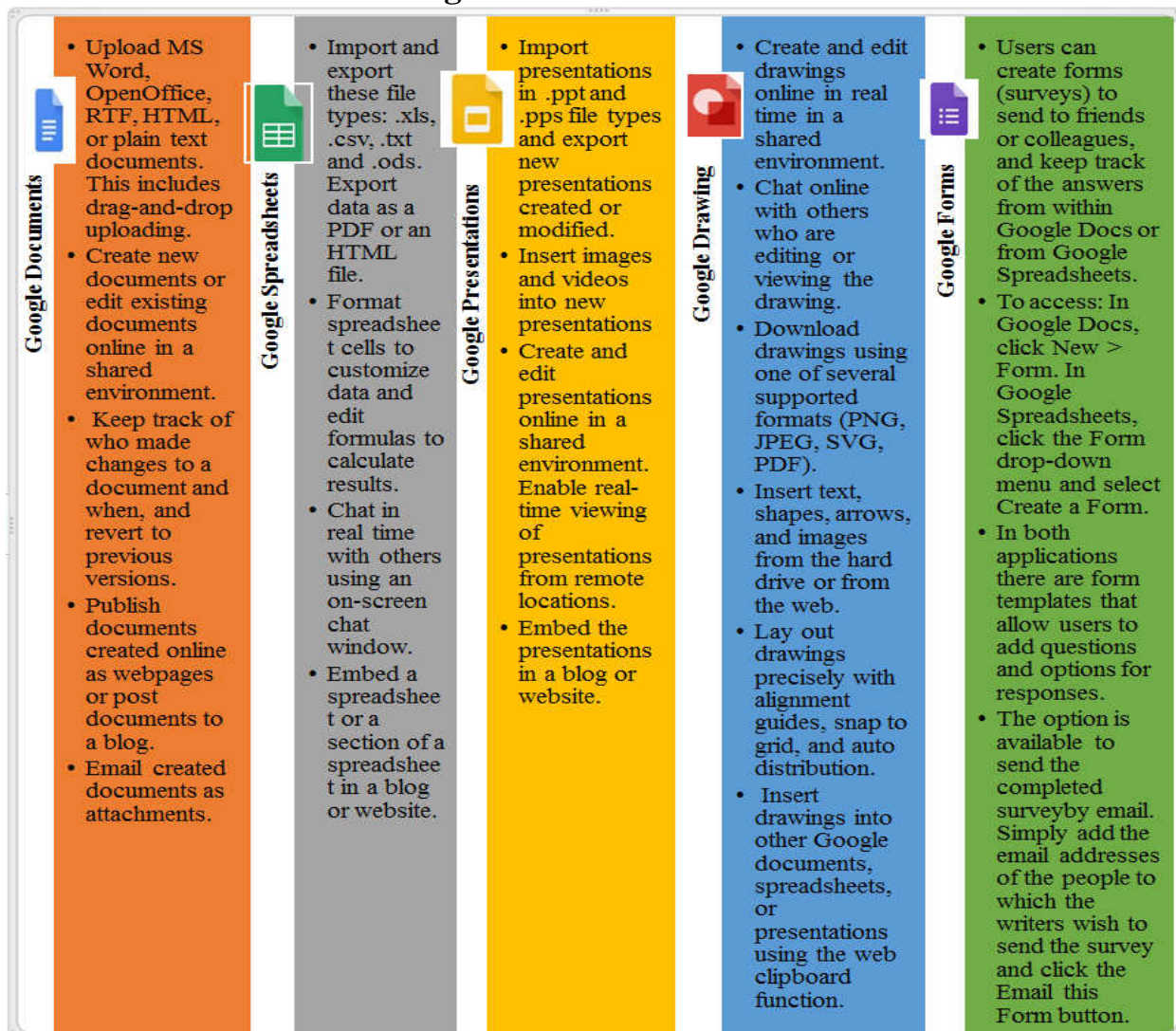
An excellent way of gathering feedback on the web is by using Google forms. This Web 2.0 tool is available free of charge when one signs up for a Google account. This tool can be accessed via Google Documents (http://docs.google.com). If fact, many students had not used Google forms before and were pleasantly surprised at how easy and convenient it was to create a form and gather feedback on the internet. After publishing a form online, students were able to ask their classmates for feedback on their own websites. The results of the survey are conveniently captured in a spreadsheet format. Gathering feedback from others is important as it allows students to better gauge their own work and to make improvements where necessary. It also encourages students to improve their standards of work as they know that their work will be seen and evaluated by their peers (Christopher, 2011).

Google Docs are used by students to collaborate after school hours on projects and to foster online collaboration among peers. Ann and Davis (2012: 126-129) defined Google Docs as a free web-based application that can be utilized to create documents, spreadsheets, drawings, flowcharts, forms, and presentations online. It is, in effect, the free online alternative to Microsoft (MS) Office. It may not be power packed with all the features

and functionalities of MS Office, but it is gaining credence as a collaborative productivity tool, enabling users to work together as   a team in real time to create and edit documents online.

Ann and Davis mentioned the advantages of utilizing Google Docs include: (1) Accessing the data from any computer with an internet connection and a standard browser, as all documents are stored online in a shared space. (2) Sharing and collaborating in real time on co-authored publications or committee work, as multiple users can view and make changes at the same time.   (3) Setting limits on who can access documents to increase online security and privacy. (4) Using the availability of an on-screen chat window to discuss document revisions and new ideas.

Figure 1: The features of the five applications that comprise the Google Docs online

Google Documents	Google Spreadsheets	Google Presentations	Google Drawing	Google Forms
• Upload MS Word, OpenOffice, RTF, HTML, or plain text documents. This includes drag-and-drop uploading. • Create new documents or edit existing documents online in a shared environment. • Keep track of who made changes to a document and when, and revert to previous versions. • Publish documents created online as webpages or post documents to a blog. • Email created documents as attachments.	• Import and export these file types: .xls, .csv, .txt and .ods. Export data as a PDF or an HTML file. • Format spreadsheet cells to customize data and edit formulas to calculate results. • Chat in real time with others using an on-screen chat window. • Embed a spreadsheet or a section of a spreadsheet in a blog or website.	• Import presentations in .ppt and .pps file types and export new presentations created or modified. • Insert images and videos into new presentations • Create and edit presentations online in a shared environment. Enable real-time viewing of presentations from remote locations. • Embed the presentations in a blog or website.	• Create and edit drawings online in real time in a shared environment. • Chat online with others who are editing or viewing the drawing. • Download drawings using one of several supported formats (PNG, JPEG, SVG, PDF). • Insert text, shapes, arrows, and images from the hard drive or from the web. • Lay out drawings precisely with alignment guides, snap to grid, and auto distribution. • Insert drawings into other Google documents, spreadsheets, or presentations using the web clipboard function.	• Users can create forms (surveys) to send to friends or colleagues, and keep track of the answers from within Google Docs or from Google Spreadsheets. • To access: In Google Docs, click New > Form. In Google Spreadsheets, click the Form drop-down menu and select Create a Form. • In both applications there are form templates that allow users to add questions and options for responses. • The option is available to send the completed surveyby email. Simply add the email addresses of the people to which the writers wish to send the survey and click the Email this Form button.

(Adapted from Ann & Davis, 2012: 126-129)

Mahmood (2017) added that collaborative writing tools such as Google Docs enable learners to participate in, and to form, communities that engage in purposeful communication. Incorporating Google Docs into the academic curriculum, non-native speakers can improve their collaborative learning skills, which in turn can improve their writing skills.

Some studies were conducted on the use of Google Docs for collaborative writing. Zhou, Simpson, and Domizi (2012) showed that: (1) most students were unfamiliar with Google Docs prior to the study, (2) Google Docs changed the means of communication used in collaborative writing, (3) 93% of students considered Google Docs a useful tool for group work, (4) using Google Docs had no effect on students' paper grades, and (5) half of the students reported they would like to use Google Docs in the future. The results suggest that Google Docs was a useful tool for collaborative writing and influenced student's learning. Lin and Yang (2013) revealed that most students demonstrated positive attitudes towards utilizing this online writing system and were satisfied with their meaningful interactions with peer e-tutors. Suwantarathip and Wichadee (2014) indicated that students in the Google Docs group gained higher mean scores than those working in groups in a face-to-face classroom, and that students had positive attitudes toward collaborative writing activity and high collaboration in their groups utilizing Google Docs, while nearly all of them perceived that this learning tool is easy to use.

In addition, Jeong (2016) showed that Google Docs is a web-based free word processor and can be utilized as a tool of creating a web-based platform for submitting students' English essay writings and peer-editing. Ebener (2017) revealed that students' writing improved, and students experienced more engagement when technology was used to enhance collaboration, feedback, editing, and revision, and that students generally enjoyed using Google tools to accomplish writing tasks. Alsubaie and Ashuraidah (2017) indicated significant increase in the students' scores

using Google Docs. Furthermore, the results were consistent as that students perceived Google Docs as a useful tool for both individual and group work. Woodrich and Fan (2017) revealed varied degree of success and student comfort level in participating writing tasks in three modalities. Sholihah and Setyandari (2018) showed that there are significant improvements of students' writing skill after applying collaborative learning using "Google Docs". So, it is proven that utilizing "Google Docs" in reviewing students' work can be an alternative method to improve writing ability. Alharbi (2020) indicated that Google Docs supports writing instruction, specifically through (1) instructor and peer feedback that focuses on global and local issues in writing, (2) peer editing and drafting of writing at the global and local levels and (3) peer responses to feedback. Quantification of feedback and learners' text revisions revealed variations between the instructor and peer feedback and among the five pairs of students. Zioga and Bikos (2020) showed that the use of a Web platform may positively contribute towards the enhancement of argumentative discourse writing skills of pupils in Year 5 of Primary Education.

Context of the Problem

The researcher noticed, from her experience as an instructor at Edu-Fun Center, Sers El Layan, Menoufia Governorate, for three years that there is a weakness of some EFL writing skills among first year secondary stage students. In addition, studies: Al-shater (2006); Ali (2009); Elwe (2011); El-sayed (2012); Ali (2013); Fathi (2013); Abdel-haq, Mohamed and Zahran (2013); Abdel-Rahim (2014); Shadi (2015); Alshamy (2018);

Abdel-Gawad (2019); El-Naggar (2019); and Lashin (2020) revealed a weakness in some writing skills among secondary stage students, despite of the importance of EFL writing skills. Abdel-Rahim (2014) stated that writing is difficult for Egyptian secondary stage students. Their writing lacks coherence, cohesion, organization, content and ideas, sentence fluency and writing conventions.

Furthermore, the researcher conducted a pilot study at El Shahid Mahmmod Azat Secondary School, Sers El Layan, Menoufia Governorate in December 2015. The results showed that there was a statistically significant difference between the students' mean scores and the mastery level determined as 70% at the ($\alpha \leq 0.01$) level in favor of the mastery level. This revealed that there is a weakness in some EFL writing skills among first-year secondary stage students. Therefore, this study aims to investigate the effectiveness of utilizing Google Docs for enhancing secondary stage students' EFL writing skills.

Statement of the Problem

There is a weakness in some EFL writing skills among secondary stage students. This study investigates the effectiveness of utilizing Google Docs for enhancing these skills.

Questions of the Study

The present study aimed to find answers for the following questions:

1. What are the EFL writing skills required for first-year secondary stage students?

2. How can Google Docs be utilized for enhancing first-year secondary stage students' EFL writing skills?

3. What is the effectiveness of utilizing Google Docs for enhancing first-year secondary stage students' EFL writing skills?

Delimitations of the Study

This study was delimited to:

1. Participants of first-year secondary stage students at El Motawara Secondary School in Sers El Layan, Menoufia Governorate (N= 25).

2. Some EFL writing skills that are required for first-year secondary stage students (five main skills and fifteen subskills).

3. Some genres of writing (Descriptive writing, expository writing, essay and e-mail).

Participants of the Study

The participants of the present study consisted of first-year secondary stage students at El Motawara Secondary School in Sers El Layan, Menoufia Governorate, during the second term of the academic year 2019/2020 (N= 25).

Instruments and Materials of the Study

1. A checklist of some EFL writing skills.
2. A pre-post EFL writing skills test and a rubric to score it.
3. A teacher's guide for utilizing Google Docs for enhancing first-year secondary stage students' EFL writing skills

The Checklist of the EFL Writing Skills

The checklist of EFL writing skills aimed at determining the most important EFL writing skills to be enhanced for the first-year secondary stage students. The initial form of the Checklist of some EFL Writing Skills included ten main-skills and twenty-five sub-skills. The checklist of the EFL writing skills was submitted to a panel of jury members; EFL specialists in the faculty of education (n=13) and experts and supervisors in the field of EFL teaching (n=10) to determine the degree of importance of each skill to first-year secondary stage students. Moreover, the jury members were asked to add, omit or modify to the writing skills any comments they considered important. Based on the suggestions of the jury members, the checklist of the EFL writing skills was modified. The final form consisted of five main skills and fifteen sub-skills.

The EFL Writing Skills Pre-Post-Test

Based on the checklist of the EFL writing skills, the EFL writing skills pre-post-test was designed to measure the 15 sub-skills assigned as very important by the jury members before and after utilizing Google Docs to estimate its effectiveness in enhancing these skills. It consisted of two questions. Each question was assigned to measure all the 15 skills. In the first question, students were asked to write an essay. In the second question, students were asked to write an e-mail.

Test Validity

To measure the test face validity, the first version of the test was submitted to a panel of EFL specialists in EFL curricula and instruction:

faculty of education (n=17) and experts and supervisors in the field of teaching (n=10) to evaluate each question in terms of covering the specified sub-skills, sufficiency of the number of questions, clarity of the test instructions and items and suitability of the test for the students' language level. Most of the jury members accepted the test as it was suggesting that it does not need any modifications either by adding or omitting any of the test items. However, two jury members suggested some changes in phrasing the questions. Except for this, the jury members indicated that the test has clear instructions and is appropriate for measuring what it is intended to measure. Accordingly, it could be said that the EFL writing skills test has face validity.

Test Reliability

For estimating the reliability of the EFL writing skills test, the following two methods were used:

Test-retest Method

The test was administered to a group of first-year secondary stage students at El Motawara Secondary School in Sers El Layan, Menoufia Governorate (n= 34) (other than the experimental group who received the treatment) during the second semester of the academic year 20019/2020. Then, it was re-administered to the same group again after two weeks. The Pearson correlation coefficient between the two administrations was (0.912) which is significant at the 0.01 level. This means that the EFL writing pre-post-test is reliable.

Inter-rater Method

Inter-rater reliability means two or more raters give consistent grading. Accordingly, the researcher gave an English language instructor * a copy of students' answers to the EFL writing pre-post-test and the rubric to score the students' answers. It was found that the Pearson correlation coefficient was (0.912) which is significant at the 0.01 level.

A rubric for Scoring the Students' Performance in EFL Writing Skills Test

The researcher developed an analytic rubric to score the students' performance in the EFL writing skills test. The rubric covered the five main EFL writing skills in the test scored on a five-points Likert scale. Part (A) is devoted to "Content skills ". Part (B) deals with "Accuracy skills". Part (C) is allocated to " Fluency skills". Part (D) is devoted to "Organization skills". Part (E) deals with "Mechanics skills". According to the jury members' suggestions, the scale was reduced to a four-points Likert scale ranging from "4" to "1" where 4 is given for the highest performance and 1 for the lowest. Therefore, the total score of the test is 120 marks.

The Teacher's Guide for utilizing Google Docs

To achieve the objective of the present study, the researcher used Google Docs for enhancing first-year secondary stage students' EFL writing skills. A teacher's guide was prepared in order to help teachers and researchers to utilize Google Docs for enhancing the participants' EFL

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writing skills through presenting the detailed steps of their implementation. The implementation of Google Docs was presented through thirteen online and offline lessons, 90 minutes each. Lesson one was the pre-test administration. Lesson two dealt with the introductory phase about both writing and Google Docs. At the beginning of each lesson, the researcher presented the skills, objectives of the lesson, procedures, teaching aids and materials, and the role of the teacher and the students. At the end of each lesson, there was a formative assessment that involved three forms: self-assessment, peer assessment and teacher assessment. The rest of the lessons dealt with the enhancement of the students' EFL writing skills using the process writing approach through Google Docs.

Utilizing Google Docs

Google Docs was used in the during and post writing stages. In the during writing stage, it allowed students to collaborate to write their documents as well as saving/ archiving the documents. In the post-writing stage, it allowed students to add comments and modify mistakes. In addition, the teacher tracked and knew what and when exactly each student writes or edits in the document through "version history".

Assumptions Upon Which Google Docs was Based

The treatment was based upon the following assumptions:

1. Google Docs can enhance the writing skills. They allow collaboration between students in the during, and post writing inside and outside the class.

2. Google Docs can enhance students' construction of their knowledge in a learner centered environment in which they connect their new knowledge to their prior knowledge. In addition, they enhance social interaction among them which is a vital principle in language learning.

3. Google Docs is a good tool for students to collaborate with each other to write their documents as well as saving/ archiving the documents. Also, it is used to add comments, modify mistakes. In addition, the teacher can track and know what and when exactly each student writes or edits in the document through "version history".

4. The pedagogical sequence of pre-writing, writing and post writing guides the mental process of successful writing. It is a complex process that can be taught according to the processing approach.

Administering the Pre-Post-Test of the EFL Writing Skills

The EFL writing skills test was pre administered to the study group on the 9th of February 2020, that is, two days prior to the experiment. The post-test was administered to the study group three days after the experiment, which ended on the 11th of March 2020. The post-test was administered online because the schools were obligatorily closed because of Coronavirus.

Duration of Administration of Google Docs

The administration of Google Docs started at the second semester of the school year 2019/2020 from 9th of February to 11th of March. It

lasted for 13 lessons with three lessons a week each of which lasted for 90 minutes.

Results of the Study

Results of the present study confirmed that the participants' EFL writing skills were significantly developed as a result of being taught using Google Docs. There was a statistically significant difference between the mean scores of the study participants in the 15 sub-skills of writing on the pre and post-test in favor of the post-test. There was a statistically significant difference between the mean scores of the study participants' pre-post EFL writing skills test in favor of the post-test.

Table 1: Results of the t-test between the pre-test and post-test in the overall EFL writing skills

Test	No.	Mean	Std. Deviation	t-value	DF	A Sig	η2
Pre	25	39.36	6.58	30.49	24	0.01	0.974
Post	25	112.36	11.43				

Table (1) indicates that the mean score of the study participants in the post application of the EFL writing skills test was higher than their score in the EFL writing pre-test, t-value is (30.49) which is significant at the ($\alpha \leq 0.01$) level. The effect size is high as ($\eta2$) is (0.974). Consequently, the main hypothesis is verified.

Results of the present study confirmed that there was a statistically significant difference between the mean scores of the study participants in each of the EFL writing main skills (content, accuracy, fluency, organization, and mechanics) in the pre and post-test in favor of the post-test.

Table 2: Results of the t-test between the pre-test and post-test in the EFL writing content skills

Skills		Test	No.	Mean	Std. Deviation	t-value	DF	α Sig	η2
Content	write a clear topic sentence	Pre	25	2.64	0.95	15.48	24	0.01	0.909
		Post	25	7.12	1.17				
	develop the topic sentence through supportive details	Pre	25	3.20	1.00	20.83	24	0.01	0.948
		Post	25	7.84	0.80				
	declare the writer's purposes and the writer's line of thought	Pre	25	2.88	1.01	15.71	24	0.01	0.911
		Post	25	7.68	1.10				
	use transition words appropriately	Pre	25	2.16	0.55	19.41	24	0.01	0.940
		Post	25	7.52	1.33				
	achieve lexical cohesion through repetition of words and lexical set chains	Pre	25	2.12	0.44	11.35	24	0.01	0.843
		Post	25	5.76	1.56				
	write different genres of writing	Pre	25	3.12	1.20	14.65	24	0.01	0.899
		Post	25	7.68	0.94				
	write different forms of writing	Pre	25	2.16	0.55	23.11	24	0.01	0.957
		Post	25	7.68	1.10				
The overall content		Pre	25	17.20	3.05	29.90	24	0.01	0.974
		Post	25	51.64	5.94				

Table (2) indicates that the mean score of the study participants in the EFL writing content skills post-test was higher than their score in the EFL writing content skills pre-test. t-value is (29.90) which is significant at the ($\alpha \leq 0.01$) level. The effect size is high as (η2) is (0.974). In addition, there were statistically significant differences between the mean scores of the pre-post-test of content sub-skills at the ($\alpha \leq 0.01$) level in favor of the post-test. The effect size for all content sub-skills was high and ranged from (0.84) to (0.95). The highest effect size for the content sub-skills was (23.11) for "Writing different forms of writing". The lowest effect size for

the content sub-skills was (11.35) for "Achieving lexical cohesion through repetition of words and lexical set chains". Consequently, the first sub-hypothesis is accepted.

Table 3: Results of the t-test between the pre-test and post-test in the EFL writing accuracy skills

Skills		Test	No.	Mean	Std. Deviation	t-value	DF	α Sig	η2
Accuracy	use varied grammatical structures correctly	Pre	25	3.12	1.01	20.75	24	0.01	0.947
		Post	25	7.84	0.80				
	use appropriate vocabulary that convey the meaning clearly	Pre	25	2.08	0.40	18.75	24	0.01	0.936
		Post	25	6.56	1.08				
The overall Accuracy		Pre	25	5.20	1.15	26.56	24	0.01	0.967
		Post	25	14.40	1.63				

Table (3) indicates that the mean score of the study participants in the EFL writing accuracy skills post-test was higher than the mean score in the EFL writing accuracy skills pre-test. t-value is (26.56) which is significant at the ($\alpha \leq 0.01$) level. The effect size is high as (η2) is (0.967). In addition, there were statistically significant differences between the mean scores of the pre-post-test of accuracy sub-skills at the ($\alpha \leq 0.01$) level in favor of the post-test. The effect size for all accuracy sub-skills was high and ranged from (0.936) to (0.967). Consequently, the second sub-hypothesis is verified.

Table 4: Results of the t-test between the pre-test and post-test in the EFL writing fluency skills

	Skills	Test	No.	Mean	Std. Deviation	t-value	DF	α Sig	η2
Fluency	write not less than 150 words for the topic	Pre	25	4.08	1.47	11.29	24	0.01	0.842
		Post	25	7.84	0.80				
	express ideas and opinions on a variety of topics	Pre	25	2.16	0.55	30.05	24	0.01	0.974
		Post	25	7.84	0.80				
The overall Fluency		Pre	25	6.24	1.67	20.75	24	0.01	0.947
		Post	25	15.68	1.60				

Table (4) indicates that the mean score of the study participants in the EFL writing fluency skills post-test was higher than the mean score in the EFL writing fluency skills pre-test. t-value is (20.75) which is significant at the ($\alpha \leq 0.01$) level. The effect size is high as (η2) is (0.947). In addition, there were statistically significant differences between the mean scores of the pre-post-test of fluency sub-skills at the ($\alpha \leq 0.01$) level in favor of the post-test. The effect size for all fluency sub-skills was high and ranged from (0.842) to (0.947). Consequently, the third sub-hypothesis is accepted.

Table 5: Results of the t-test between the pre-test and post-test in the EFL writing organization skills

	Skills	Test	No.	Mean	Std. Deviation	t-value	DF	α Sig	η2
Organization	set the introduction, body and conclusion of the essay	Pre	25	2.16	0.55	30.05	24	0.01	0.974
		Post	25	7.84	0.80				
	ensure the logical sequence of sentences and ideas	Pre	25	2.40	0.82	25.11	24	0.01	0.963
		Post	25	7.84	0.80				
The overall Organization		Pre	25	4.56	1.23	28.93	24	0.01	0.972
		Post	25	15.68	1.60				

Table (5) indicates that the mean score of the study participants in the EFL writing organization skills post-test was higher than the mean score in the EFL writing organization skills pre-test. t-value is (28.93) which is significant at the (α ≤ 0.01) level. The effect size is high as (η2) is (0.972). In addition, there were statistically significant differences between the mean scores of the pre-post-test of organization sub-skills at the (α ≤ 0.01) level in favor of the post-test. The effect size for all organization sub-skills was high and ranged from (0.963) to (0.974). Consequently, the fourth sub-hypothesis is verified.

Table 6: Results of the t-test between the pre-test and post-test in the EFL writing mechanics skills

Skills		Test	No.	Mean	Std. Deviation	t-value	DF	α Sig	η2
Mechanics	**apply correct punctuation rules**	Pre	25	2.96	1.02	15.58	24	0.01	0.910
		Post	25	7.68	1.11				
	use correct spelling	Pre	25	3.20	1.00	10.00	24	0.01	0.806
		Post	25	7.28	1.40				
The overall Mechanics		Pre	25	6.16	1.91	12.88	24	0.01	0.874
		Post	25	14.96	2.32				

Table (6) indicates that the mean score of the study participants in the EFL writing mechanics skills post-test was higher than their score in the EFL writing mechanics skills pre-test. t-value is (28.93) which is significant at the (α ≤ 0.01) level. The effect size is high as (η2) is (0.972). In addition, there were statistically significant differences between the mean scores of the pre-post-test of mechanics sub-skills at the (α ≤ 0.01) level in favor of the post-test. The effect size for all mechanics sub-skills was high and ranged from (0.806) to (0.910). Consequently, the fifth sub-hypothesis is accepted.

Discussion and Interpretation of the Results

The purpose of the present study was to develop some EFL writing skills using Google Docs. The findings of the present study are encouraging since they indicated that using Google Docs has a positive effect on the participants' writing skills: the content, accuracy, fluency, organization, and mechanics skills.

These results could be attributed to several factors. The first factor is related to the nature of Google Docs which included some aspects and tools for developing EFL writing skills. Firstly, Google Docs were helpful in providing authentic content to help students improve writing the main idea and support it with specific information. Moreover, Google Docs captured the attention of learners and provoked curiosity and this specifically what the researcher has already observed. Google Doc helped the students to change their concept about learning English language in general and EFL writing skills in particular. This helped them to turn from passive learners into active ones. In addition, they helped the researcher to turn from lecturer into monitor, guide and facilitator.

Secondly, the environment of the present study was encouraging, non-threatening and less stressful because of the nature of Google Docs as it captured students' attention and interest. Google Docs can be a private, safe learning environment. The whole environment was totally different from a traditional class. Some of the lessons were in the class where the researcher used the smart board to make students able to watch pictures and slideshow clearly. Other lessons were online at home. The researcher treated the participants as friends. In addition, the researcher spread a spirit

of humor among the students to lessen the burden of writing and free them from the tension and worry they might experience. Working in groups and in pairs helped them to write freely, learn from each other, and evaluate themselves and the other groups.

The use of Google Docs allowed students to learn inside and/or outside the classroom. In addition, absent students could see, comment and edit their groups' writing and evaluate them while they were at their homes. Moreover, they could ask the researcher at any time about any misunderstood or unclear points since the researcher and the students could interact. In terms of appearance, most of the students were not familiar with Google Docs. But after practice, they could use Google Docs and benefited from its features that helped the students to collaborate with each other at the during and post writing stages.

One of the prominent advantages of Google Docs that might help to develop some of students' writing skills in this study is that they offered the researcher and students a wide range of possibilities for extra writing practice opportunities both inside and outside of the classroom. So, the experimental group could get authentic material at any time and any place to develop their writing skills. Moreover, Google Docs are considered an opportunity to compensate students for short time of lessons. So, the teacher could extend and duplicate the sessions outside the classroom.

These results are consistent with studies that proved the great contribution of using Google Docs in developing EFL writing skills (Valent´ın, Pardo, and Kloos, 2009), Firth and Mesureur, 2010), Zhou, Simpson, and Domizi, 2012), Jeong, 2016), Alsubaie and Ashuraidah,

2017), Ebener, 2017), Mahmood, 2017), Woodrich and Fan, 2017), Sholihah and Setyandari, 2018) and Zioga and Bikos, 2020).

Conclusion

Based on the findings and results of the study, it can be concluded that some EFL writing skills of the participants of the present study were developed as a result of utilizing Google Docs. The effectiveness of this treatment may be due to the fact that Google Docs is a good tool for students to collaborate with each other to write their documents as well as saving/ archiving the documents. Also, it is used to add comments, modify mistakes. In addition, the teacher can track and know what and when exactly each student writes or edits in the document through "version history".

Besides, the study participants showed a great enhancement in EFL writing skills with their five main skills; content, accuracy, fluency, organization, and mechanics skills. They became much more motivated and encouraged to be active classroom participants after writing and sharing on Google Docs, so the rest of the class can edit, comment and evaluate them. Consequently, it can be concluded that utilizing Google Docs is effective in enhancing secondary stage students' EFL writing skills.

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