

The Multi-Course Comparison of the Effectiveness of Two EFL Writing Environments: Google Drive versus Face-to-Face on Iranian EFL Learners' Writing Performance and Writing Apprehension

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Abstract

This study examined the differential effects of the Google Drive integrated writing instruction (blended writing instruction) and face-to-face writing instruction on the writing performance and writing apprehension of EFL learners. The participants of the present study were 84 EFL students chosen out of 107 students based on their IELTS writing test scores. The students were randomly assigned into two groups (Google Drive integrated group/face-to-face group). Then, Writing Apprehension Test (WAT) was administered as a pretest to all students in order to measure their level of writing apprehension. During the treatment, the participants wrote fourteen essays which were assessed by their peers. Finally, another IELTS writing test and Writing Apprehension Test (WAT) were administered to evaluate the students' writing performance and level of writing apprehension after receiving instruction. The results of an independent sample t-test revealed that the learners of Google Drive integrated group outperformed in writing post-test than those in face-to-face group. Also, the analysis of another independent sample t-test revealed that face-to-face learners had higher level of writing apprehension compared with Google Drive learners.

Keywords: Google Drive integrated writing instruction, Face-to-face writing instruction, Writing performance, Writing apprehension

Introduction

Writing instruction in foreign language classes is especially important since good writing “requires the acquisition of a range of linguistic abilities, including grammatical accuracy, lexical knowledge, syntactic expression, and a range of planning strategies such as organization, style and rhetoric” (Yavuz-Erkan & Saban, 2011, p. 176).

Written assignments are normally a requirement in any academic pursuit. However, writing has been claimed to be a very difficult skill to be acquired by L2 students since they worry about their lack of language writing skill and they are afraid of negative evaluations from

teacher looking at their assignments (Gupta, 1998). Some researchers (Daly & Wilson, 1983; Lee, 2001) have found that avoidance behavior such as missing class and postponing homework is evidence of the apprehension in a writing class. Today most teachers agree that the over-anxious student lacks self-confidence and produces low quality of EFL writing (Ozturk & Cecen, 2007; Reeves, 1997).

Regarding this issue, some researchers (Bitchener, Young, & Cameron, 2005; Cardelle & Como, 1981) emphasized the practice of revision and rewriting by using feedback to improve students' writing performance. Generally, the treatment of learners' errors is one of the most controversial areas in EFL language pedagogy (Lynch, 2002, as cited in Seyyedrezaie, Ghapanchi, & Seyyedrezaie, 2013).

Considering students' problems of English writing and the potential causes, some researchers assume that the traditional academic writing classrooms, to some extent, distract students' writing ability and decrease their motivation in English writing (Dunlap, 2005; Tunison & Noonan, 2001). In order to improve students' writing performance in English, the teachers are supposed to offer them a less stressful writing environment to minimize the students' writing anxiety (Dunlap, 2005).

Therefore, nowadays, in order to reduce the writing apprehension of students, some teachers use computers and online tools in their writing classrooms, which provide the opportunity for collective critical exchanging, and creating an intellectual environment where collaboration is not only convenient but necessary (Warschauer, 1997). Recently, one Web 2.0 tool that has received a lot of attention in writing classes is Google Drive which is the extension and replacement of Google Docs. Some studies regarding this tool have led to interesting and controversial results (Hardison, 2012; Larson & Sung, 2009). For instance, the results of Hardison's (2012) study revealed that Google Drive is very beneficial in improving EFL learners' writing performance. Whereas, the finding of Larson and Sung's (2009) study indicated that there is no significant difference between the effectiveness of face-to-face writing instruction and writing instruction implementing the web 2.0 tools.

Since Google Drive, the extension of Google Docs, is becoming widespread in writing classes abroad, and a few Iranian EFL teachers are familiar with this tool and consider and use it as a file hosting service like Dropbox, this study aimed at illustrating whether Google Drive is effective in writing class or not.

Therefore, the purpose of the present study was to investigate whether there is any statistically significant difference between the writing performance and writing apprehension of EFL learners who received Google Drive integrated writing instruction (blended writing instruction) compared to face-to-face writing instruction.

Literature Review

The Advent of Google Drive into Educational System

With the integration of computers and internet technology in language teaching, many students practice their writing assignments synchronously as in chatting, instant messaging, and on live discussion boards (Pan & Sullivan, 2005; Warschauer, 1996) and also through Google Drive (Brodahl, Hadjerrouit, & Hansen, 2011) or asynchronously as in emailing and blogging (Ocker & Yaverbaum, 2001; Zeiss & Isabelli, 2005).

As mentioned, one of these tools is Google Drive. Google Drive as an alternative collaborative writing tool enables synchronous editing and allows users to collaborate in real time (Chu, Kennedy, & Mak, 2009). “The interactive feature of Google Drive nominates it not only as a textually social milieu, but also as a practice inducing a writing orientation embedded in a social network orientation in a fashion that radically transforms composition pedagogies”—changing the roles of teachers and students, changing the content of our curriculums, and changing our processes of composing and collaborating (Kessler, Bikowski, & Boggs, 2012). By the same token, the relevance of Google Drive to the writing skill has been widely established in recent research (Brodahl, Hadjerrouit, & Hansen, 2011; Chu, Kennedy, & Mak, 2009).

Collaboration and Peer Review through Google Drive-integrated Instruction vs. Face-to-Face Instruction

In language learning, the old version of Google Drive has been experimentally used as a tool to develop writing skill. Google Drive has become an engaging and helpful technology to foster both collaboration and community in the peer review process. According to Spinuzzi (2007), the features of Google Drive are ideal for group work; it allows students to be able to see each other’s work and to collaborate on the same sections while tracking the changes that are made. Additionally, these real-time changes help students to see where they could make changes, and they know who is correcting their work (Chu, Kennedy, & Mak, 2009). In the study conducted by Brodahl, Hadjerrouit, and Hansen (2011), most of the students expressed their positive attitude towards Google Drive as it enables them to comment directly on their partner’s work. Although the lean towards using Google Drive seems obvious, many teachers still prefer the traditional method of peer review.

The traditional method does have its benefits and downfalls. Benefits include a personal connection between people working together for critical evaluation of their own work and their peers’ in face to face discussion. In the study conducted by Goldberg, Parham, Coufal, Maede, Scudder, and Sechtem (2010), it was determined that a majority of participants felt their peer reviews were meaningful to them, and assisted them in reflecting on their work. Some hindrances to this type of peer review are the difficulty of reading another person’s

handwriting and the lack of incorporating technology in the lesson. All in all, there are both benefits and hindrances to many teaching techniques and practices.

Most previous studies related to Google Drive have used this tool as the only way of teaching; i.e. only online instruction (Chu, Kennedy, & Mak, 2009; Pan & Sullivan, 2005); but they ignored the fact that most EFL teachers try to implement this tool in their class as blended instruction which this study tries to investigate its effects. Moreover, the above studies examined Google Drive in various contexts such as European contexts (Beldarrain, 2006; Brodahl et al., 2011). So, it is important to consider the effect of Google Drive integrated instruction in Iranian classes.

Regarding the gap in the literature, the following research questions were addressed:

1. Is there any statistically significant difference between the writing performance of learners receiving Google Drive integrated writing instruction compared to those receiving face-to-face writing instruction?
2. Is there any statistically significant difference between the writing apprehension of learners receiving Google Drive integrated writing instruction compared to those receiving face-to-face writing instruction?

Methodology

Participants

The participants of the present study were 84 male and female EFL undergraduate students with an age range of 18 to 25. They were chosen out of 107 students who were volunteers for participating in this course, from two Islamic Azad Universities, including Gorgan and Aliabad Katool branches. They were all sophomore students, since they had to have passed the Writing Courses 1 and 2, also Advanced Writing. The reason for this was to ensure that they had enough knowledge and background for writing an essay.

Instrumentation

The instruments that were utilized in this study were Dally-Miller Writing Apprehension Test (WAT), and two sample IELTS writing proficiency tests.

The Dally-Miller Writing Apprehension Test

Daly and Miller's (1975) Writing Apprehension Test (WAT) modified by Gungle and Taylor (1989) for EFL/ESL writers, was used to measure the participants' writing

apprehension level before the first session (as a pretest) and at the end of treatment (as a posttest). This modified version of Dally-Miller Writing Apprehension Test (WAT) is a self-reporting instrument on a 6-point Likert scale, containing 26 items dealing with anxiety about writing, including 13 items with positive polarity and 13 items with negative polarity. Scoring was done on the basis of a 6-point Likert scale asking the students to determine whether they agree or disagree with statements about writing.

IELTS Writing Proficiency Test

A sample IELTS writing test developed by British Council was administered to the participants for both homogenizing them and as a pretest to evaluate their writing proficiency level before the treatment. At the end of the treatment, another sample IELTS writing test was used as the posttest to evaluate the students' writing performance.

Weir's Rating Scale

An analytic rating scale developed by Weir (1990, cited in Weigle, 2002) including seven aspects of writing; i. e. relevance and adequacy of content, cohesion, compositional organization, adequacy of vocabulary for purpose, grammar, and mechanical accuracy (regarding punctuation and spelling) was used for the purpose of rating the participants' performance on their writing assignments and writing test. The band scores for each of these aspects of writing was 0-3.

Design

The design of this study was a quasi-experimental design. The reason for choosing this design rested upon the fact that during a 7-week course of treatment, they were given instruction on the formal essay-writing task to write some five-paragraph essays (Mackey & Gass, 2005). Although the participants of two groups were randomly selected and classified, the design of this study is not true experimental; since it is quite unlikely to have a true experimental design in the field of language learning because of numerous variables involved (Hatch & Farhadi, 1981). The type of instruction (Google Drive-integrated writing instruction/ face-to-face writing instruction) was an independent variable. Writing performance and writing apprehension were the dependent variables. The language proficiency of the participants was the control variable of the study.

Procedure

In order to probe the research questions, the following procedure was followed. In order to have a homogeneous group of participants, a sample IELTS writing test was administered to 107 sophomore students (volunteers). Only 84 students were chosen for participating in the classes and their scores were considered for the study. The students were randomly assigned into two groups (42 students in Google Drive integrated group/42 students in face-to-face group). Then, Writing Apprehension Test (WAT) was administered as a pretest to all of 84 students in order to measure their level of writing apprehension.

Afterwards, the students belonging to blended writing instructional group were provided with training on using Google Drive which was used for publishing students' essays and sharing instructional materials, as well as idea exchange through chatting. Blended group received their instruction on writing essay in the face-to-face class, but they sent their essays, received feedback from their peers, and chatted with the teacher via Google Drive.

During the treatment (fourteen sessions), the instructor taught all of the students in both groups how to write a formal essay using the standard five-paragraph format: An introductory paragraph, three body paragraphs, and a concluding paragraph. The students had to write fourteen essays on the different topics. They were taught to write five-paragraph essays in which they were supposed to consider seven aspects of writing including relevance and adequacy of content, cohesion, compositional organization, adequacy of vocabulary for purpose, grammar, and mechanical accuracy (regarding punctuation and spelling).

For each writing assignment identified in the curriculum, introduction to the topic and the vocabulary and language structures necessary for the target paragraph type were provided in the classrooms of both face-to-face group and blended group. However, the students receiving blended writing instruction were also supported through Google Drive in which they were directed to relevant web sites to do additional study on the topic and language structures.

Also, the students were informed that each essay would be assessed by their peers and all feedback would be submitted via an embedded Google form on teacher page. In both classes (face-to-face and Google Drive integrated class), the instructor organized the students of each class into 6 groups of 7 students in order to give comments on each other's drafts. Each group was asked to read the essays of their group members in order to give feedback. To help the students give comment on the essays, they were given the analytic rating scale for features to look for and tick off including 7 aspects of writing provided by Weir (1990, cited in Weigle, 2002). In fact, the teacher elaborated on different parts of Weir's rating scale on the basis of which the students had to assess their peers' drafts.

To keep the students anonymous for their group members, the teacher assigned each student a specific number. In Google Drive, when the students share their drafts with their peer reviewers, their group members could view, discuss, and comment on the document simultaneously. The teacher assigned each reviewer a specific color to in order to distinguish

their feedback from others'. Through the revision screen, the teacher could understand who had worked on the document and when they had worked on it. The students were encouraged to comment on each other's work, and the teacher offered constant support and assistance through the chatting feature of Google Drive.

Google Drive learners made corrections on the basis of their peer reviewers' comment and published their corrected draft through Google Drive again. For the face-to-face learners, the same process was followed in the form of face-to-face class. Also, Google Drive learners had the opportunity to look at the drafts of students in other groups and their peers' comments because all of the students' drafts had been shared through Google Drive. However, face-to-face learners lack such an opportunity.

After the course of intervention, another sample IELTS writing test was used as the posttest to evaluate the writing performance of the participants in both groups and compare the effectiveness of instructional environments on the learners' writing performance. Moreover, Writing Apprehension Test (WAT) was administered as a post-test to all of the students in order to measure their level of writing apprehension after receiving instruction.

In order to assess the students' writing performance, two raters who were experienced teachers were chosen. The result showed that the inter-rater reliability was .80.

Data Analysis

In order to analyze the data of the study both descriptive and inferential analyses were conducted. The data was evaluated through the SPSS software (version 18). What follow are the pertinent phases of the statistical analysis.

An independent sample T-test was run for examining the effects of Google Drive-integrated writing instruction compared to face-to-face writing instruction (one independent variable having two levels) on learners' writing performance (dependent variable). Another independent sample T-test was conducted for examining the effects of Google Drive-integrated writing instruction compared to face-to-face writing instruction (one independent variable having two levels) on learners' writing apprehension (the other dependent variable).

Results and Discussion

The present study was conducted with 84 EFL students chosen out of 107 students based on their IELTS writing test scores which was administered to measure the participants' writing performance.

The results of the study are summarized in the following tables: The first null hypothesis of the study stated that there is no statistically significant difference between the writing performance scores of Iranian EFL learners who are exposed to blended writing instruction (Google Drive integrated and face-to-face writing instruction) compared to face-to-face writing instruction. So, in order to find out these differences, the students' scores on the writing post-test were gathered. The descriptive statistics which represented the mean scores of writing performance of blended and face-to-face groups are indicated in Table 1.

Table 1
Descriptive Statistics of Writing Performance Post-test Scores of Two Groups

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Google Drive	42	14	21	17.05	3.066	9.400
Face-to-face	42	12	20	15.14	2.749	7.557
Total	84					

According to Table 1, the Google Drive-integrated group ($M = 17.05$, $SD=2.977$) had higher mean score on writing post-test than the face-to-face group ($M = 15.14$, $SD=2.840$). In order to find whether the difference between the mean score of the two groups (Google Drive integrated/ face-to-face) reported above is statistically significant, an independent sample T-test was performed (Table 2).

Table 2
An Independent Sample T-test of Writing Performance Scores of Two Groups

		Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference		
		F	Sig.	T	df	Sig.(2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed		.993	.110	3.323	82	.000	2.360	.480	1.052	4.304
Equal variances not assumed				3.323	81.909	.000	2.360	.480	1.052	4.304

As depicted in Table 2, there is a significant difference in the scores of Google Drive group and face-to-face group; $t(82) = 3.323$, $p = .000$. So it can be concluded that the blended

learners outperformed face-to-face learners in the writing posttest. Therefore, the first null hypothesis was not confirmed.

This finding is in line with the results of Schutte's (1999, as cited in Ghonsooly & Seyyedrezaie, 2014) study revealing the effectiveness of blended mood of delivery in the improvement of the learners' language skills in general. Also, it supports Adas and Bakir's (2013) idea that blended learning was effective in improving students' writing abilities. The result of their study revealed that students' motivation to learn increases when they are given the same material in different ways using technology and simulation. Moreover, it is especially in line with Beldarrain's (2006) study which revealed Google Drive is a user-friendly suite of online collaborative tools that has tremendous potential for use in the writing classroom.

The result of the online class instruction improving the Iranian EFL students' writing performances is the same as the finding of Bagheri, Yamini, and Behjat's (2013) study. They concluded that blended environment enhanced EFL students' writing ability more than traditional instruction. However, this finding contradicts Larson and Sung's (2009) finding indicating that there is no significant difference in writing performance of students receiving face-to-face and blended instruction.

One justification behind the superiority of Google Drive integrated writing instruction over face-to-face writing instruction is the employment of some additional links related to the same topics discussed in class. So, the learners had more opportunity in Google Drive since they had access to the additional materials provided by the links.

The second null hypothesis of the study stated that there is no statistically significant difference between the writing apprehension of Iranian EFL learners who received Google Drive integrated writing instruction (blended writing instruction) compared to those receiving face-to-face writing instruction. So, in order to investigate this null hypothesis, the learners' writing apprehension scores on the posttest were tabulated. The descriptive statistics of the writing apprehension of learners in the two different writing instructional groups (Google Drive integrated/face-to-face) are presented in Table 3.

Table 3
Descriptive Statistics of Writing Apprehension of Two Groups

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Google Drive	42	39	68	62.38	20.469	418.979
Face-to-face	42	60	77	72.52	19.922	396.886
Total	84					

As can be seen from Table 3, the mean of writing apprehension of face-to-face group (72.52) was larger than mean score of Google Drive-integrated group (62.38). In order to

investigate whether this difference is statistically significant, another independent sample T-test was conducted (Table 4).

Table 4.
An Independent Sample T-test of Writing Apprehension of Two Groups

		Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference		
		F	Sig.	T	df	Sig.(2- tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Post- test	Equal variances assumed	1.460	.477	14.280	82	.000	10.140	1.043	8.250	12.010
	Equal variances not assumed			14.280	81.909	.000	10.140	1.043	8.250	12.010

The result of the table above, $t(82) = 14.280$, $p = .000$, indicated that the difference between the writing apprehension of Google Drive integrated group and face-to-face group was statistically significant. In fact, the students receiving face-to-face instruction had higher levels of writing apprehension in comparison with those receiving Google Drive integrated writing instruction. Therefore, the second null hypothesis was not confirmed.

The finding of Tsai's (2012) study indicating that traditional writing class had significantly higher level of anxiety than web-based class supports this finding of the present study. On the other hand, the finding of the present study stands in contrast with Chuo's (2007) study which indicated that although both instructional models reduced students' writing apprehension significantly, neither group's apprehension was reduced more significantly than the others'. Also, the result of this study contradicted with Sullivan and Pratt's (1996) study which revealed even though the writing apprehension of students in both the computer-assisted writing class and traditional class decreased significantly, face-to-face learners showed less writing apprehension than online learners.

The effectiveness of Google Drive integrated instruction in decreasing learners' writing apprehension, may be due to the attractive nature of Google Drive which allows learners become involved in a constructive classroom environment in which they can work cooperatively with their peers and consequently this environment can decrease their writing apprehension.

Conclusion and Pedagogical Implication

The results of an independent sample T-test analysis revealed that both types of writing instruction models seemed to have significantly different effects on enhancing learners' writing performance. As a result of the first research question, the learners receiving Google Drive integrated writing instruction (blended writing instruction) performed better in writing posttest than those receiving face-to-face writing instruction. Moreover, the analysis of another independent sample T-test indicated that the learners receiving face-to-face writing instruction showed higher level of writing apprehension in posttest than those receiving Google Drive integrated writing instruction (blended writing instruction). In other words, face-to-face writing instruction leads to high level of writing apprehension and the other one decreases the students' writing apprehension.

The findings of this study revealed the effective role of Google Drive-integrated writing instruction in reducing writing apprehension and creating a learning environment in which students who had anxiety were not disadvantaged because they had the opportunity to receive feedback on their essays and see teacher feedback on other students' essays through Google Drive. Also, the findings of this research have important implications for EFL teachers because it familiarizes them with a less stressful writing environment (Google Drive) to decrease the students' level of anxiety in writing performance as Google Drive can provide the learners with opportunities to involve in assignments anonymously.

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