

Collaborative Writing Practice through Online Learning: Insights from Iranian EFL Learners' Perceptions

Nazli Azodi, Ph.D. Candidate, Department of English, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran
azodi_n@yahoo.com

Ahmadreza Lotfi*, Associate Professor, Department of English, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran
lotfi.ahmadreza@gmail.com

Ahmad Ameri-Golestan, Assistant Professor, Department of English, Islamic Azad University, Majlesi Branch, Isfahan, Iran
ahmadamerigolestan@yahoo.com

Abstract

This study investigates the benefits of e-collaborative and collaborative writing tasks on the perception of Iranian EFL learners in a process-oriented approach. The study involved 74 intermediate Iranian EFL students at Islamic Azad University, Isfahan Branch. They were divided into three groups by random assignment as two experimental groups and one control group. The experimental groups were required to perform their tasks in collaboration; only one of these two groups had access to the Telegram Application outside the classroom. The control group, however, followed the conventional method of learning how to write. The participants were required to write two journals during the course. They were asked to write about their understanding, attitude, and experience on the writing activity. There were 136 diary entries to be analyzed in order to discover the themes in them. These themes were literally the emerging concepts in the diary entries related to research question of the study about the participants' perception. After the identification of these dominant themes, content analysis was performed to interpret the data. According to the results of the study, a high percentage of students' satisfaction showed positive perceptions of e-collaborative activities, and they reported that the instructional implementation of an e-collaborative writing project with a five-stage writing process did assist EFL learners to accomplish a collaborative writing task.

Keywords: Collaborative writing, E-collaborative writing, journal writing, perception, process writing

Introduction

It is generally agreed that the ability to write effectively in second language (L2) is becoming more and more important for many language learners around the world (Ghoorchaei, Tavakoli, & Nejad Ansari, 2010). It is important to bear in mind that teaching English L2 writing is different from other skills given the fact that it is generally employed as a support skill in language learning. Developing collaborative writing skills seems to be the essential prerequisite for the extensive writing activities in most academic settings. These skills are particularly important both for accessing and participating in an academic community and for contributing to the knowledge-building process in scholarly disciplines.

Additionally, with the current technological advancements and the use of the computer and Internet in language classrooms, learners have more opportunities to practice online collaborative writing activities, and this collaboration is not restricted to the classroom setting. They can share

information and construct and exchange knowledge and meaning with each other in all stages of the writing process. As far as teaching writing is concerned, when students are off-site, they will be more focused on activities related to their studies, and they are able to perform better. They can follow the instructions taught in the class and interact with their peers in different stages of the writing process. Even though it seems beneficial to ask students to use online devices at home and interact with their peers and teachers, there are also some problems in interacting with teachers and learners while they are off-site. For some reasons, teachers may not have enough time to spend for the learners when they are off-site. On the other hand, controlling students and urging them to do such activities can be difficult, but it is not impossible.

This study tried to focus on the nature of process writing and attempted to investigate how technological advances such as social networking applications could change their perceptions toward writing. It attempted to find out whether group interaction in a writing assignment would have helped learners change their attitudes, understanding, and perception toward writing activities. It attempted to identify the potential of scaffolding for supporting the instructional design. The scaffolding underpinning the instructional design was to provide empirically based guidelines for designing online application devices to enhance collaborative writing. Consequently, the study investigated students' perceptions of instructional design of online collaborative writing.

Review of Literature

Education has been affected by technological advancements, growth of Internet dominance in everyday life and the usage of mobile communication technologies. It is evident that transferring to information society needs integration of e-learning technologies into the educational process (Krasnova & Ananjev, 2015). Writing is a complex form of social and cultural activity which involves a high level of abstraction as learners attempt to communicate meaning (Vygotsky, 1986). Vygotsky argued that “social interaction precedes development; consciousness and cognition are the end product of socialization and social behavior” (Heidar, 2016). Based on this notion, collaborative writing was introduced which is to have cooperation with others by contributing ideas in order for quality learning and growth to take place. Thus, collaborative writing has defined as the process which provides participants the opportunity to explore, discuss, cooperate and develop learning capabilities (Dobao, 2012; Heidar, 2016; Noël & Robert, 2004).

The process-oriented approach to teaching L2 writing was first introduced by Flower and Hayes (1981) and it was later refined by Hayes (1996). In this approach, the writer's motivational and affective characteristics are addressed during the writing process. The approach emphasizes learners' exploring, discovering and generating what and how they want to write. The stages of the process writing approach have been presented in similar ways that differ in part from the order proposed by Flower and Hayes (1981) in some sources (Johnson, 2008; Karatay, 2011; Simpson, 2013). One difference is that the subcomponents of the main stages of the process are instead posited as separate stages: *prewriting*, *drafting*, *editing*, *revising*, and *publishing*.

Implementing collaborative writing activities and process-oriented approach in academic environments in Iran has affected higher education in recent years. For this reason, several studies investigated the role of collaboration in academic settings. One research examined the effect of collaborative interaction on the development of writing skill in a homogeneous and heterogeneous context which showed a significant improvement in both groups after applying collaborative interactions among learners (Maftoon & Ghafouri, 2009). Another study investigated the effect of group work on writing accuracy based on gender. The results revealed

that the students in the collaborative writing group outperformed the students with no collaboration and it also showed that the females in the group outperformed the males (Jafari & Nejad Ansari, 2012). Another research studied the effect of collaborative activities on the writing performance of Iranian intermediate EFL learners in the textbook evaluation course. The research showed that the students working in groups outperformed those writing individually based on such writing components as content, organization, grammar, and vocabulary (Hosseinpour & Biria, 2014).

Considering all these results, it can be admitted that the flexibility of education with a student-centered approach seems necessary. According to Krasnova and Ananjev (2015), individual peculiarities of students, their diverse personal work styles, studying habits, and individual pace should be taken into account to provide the students with self-paced learning. A blend of traditional face-to-face instruction and online delivery can provide such flexibility to the educational settings. Krasnova (2015) proposed “blended learning can be defined as a method of teaching that combines the most effective face-to-face teaching techniques and online interactive collaboration, both constituting a system that functions in constant correlation and forms a single whole”. In addition, Rybushkina and Krasnova (2015) argued “some of the commonly recognized advantages of blended learning include flexibility, personalization and interactivity derived from an online component and direct observation, immediate feedback and spontaneity inherent from conventional teaching”.

This study tried to focus on the nature of process writing and attempted to investigate how technological advances such as social networking applications could change their perceptions toward writing. Research has shown that exploring students’ perceptions and beliefs can play an important role in developing a suitable program to meet the students’ needs for writing. According to Choi (2016), students’ perception of writing processes can inform the teachers about the strategies they apply in writing. In addition, Gordon (2008) stated that writing habits of the learners can affect the quality of their writing. Gopee and Deane (2013) also argued that a suitable way to ease the pressure of writing classes is to explore learners’ perception about writing. As Rahimi and Ghannadzadeh (2010) argued insufficient attention is paid to learners’ perception as far as their writing skill is concerned in Iran, and dynamics of collaboration in writing classes should be investigated further in Iran.

It should be noted that diary studies have attracted attention from researchers who are interested in gathering qualitative data, and they define diaries as first person observations of experiences that are recorded over a period of time. It is also believed that diary writing plays an important role in diarists’ private reflections. The benefits of diary writing in English language teaching and learning can be as a research technique (McDonough & McDonough, 1997). Moreover, Nunan (1992) proposed that as one of the most important advantages of diary writing is that it can provide insights into process of learning which would be difficult to obtain in any other way. In addition, diary studies enable us to see the diversity among learners even within a homogeneous class (Bailey, 1983). Also, diary studies allow potential kinds of data to emerge that may not have been part of the researcher’s initial plan.

To this end, this study aimed at examining the effects of applying online application devices, which was *Telegram Instant Messaging Service*, on the perception of Iranian undergraduate English students before and after the treatment. It attempted to find out whether group interaction in a writing assignment would have helped learners change their perception toward writing activities. It attempted to identify the potential of scaffolding for supporting the instructional design. The research questions that guided the study are:

Q1. Does implementing online application devices for enhancing collaborative writing have any significant effect on Iranian EFL learners' perception toward English writing?

Q2. Does implementing collaborative writing have any impact on Iranian EFL learners' perception toward English writing?

Q3. What are the participants' perceptions toward collaborative writing?

Therefore, it was hypothesized that the implementation of online application devices for enhancing collaborative writing has no impact on EFL learners' perception toward English writing. Furthermore, it was hypothesized that the implementation of collaborative writing has no impact on EFL learners' perception toward English writing.

Method

The study was designed in a quasi-experimental method, and it was conducted with three groups i.e., one control and two experimental groups. It was performed over the courses of a sixteen-week semester in process-oriented approach Essay Writing classes for EFL learners majoring English Translation at Islamic Azad University, Isfahan Branch, Iran.

Participants

A total of 74 students participated in the study; 55 were female and 19 were male, and their age ranged from 21 to 29 years old. All the subjects majored in English Translation at Islamic Azad University (Isfahan Branch) in Iran. All of them had Persian as their L1, and they had studied English as their first foreign language in mainstream education; furthermore, they had learned the preliminaries of writing in another course two academic years before. Formally, the subjects were expected to represent intermediate level language learners (in the range of B1 on the CEFR scale). The selection of experimental and control groups has been done by random assignment. The study was done in the first and the second semester of the academic year 2017 and 2018. All the subjects in the three groups learned how to write the introductory, body, and concluding paragraphs of an essay as a process. They also learned how to write Comparison-Contrast, Cause-Effect, and Classification essays.

This study required three groups; namely one control and two experimental groups. The subjects in one experimental group were asked to use *Telegram Application* to perform e-collaborative tasks. To make sure that the subjects in that experimental group have no problems in using the Internet, they were asked if they access smartphones or not before the treatment, moreover, they were clarified how to use *Telegram Application* during the project. As all the subjects had sufficient techno-literacy in this regard, they did not need special instruction. Moreover, the other experimental group had to write collaboratively in the class to which most learners were familiar. Nevertheless, the researcher explained the learners how to write in a group following the process approach in details. The control group was provided with the conventional method of teaching writing.

Procedure

As explained above, the selection of the three groups; namely two experimental groups (EG1 & EG2) and one control group (CG) was done by random assignment. This study utilized journal writing to address the research questions. The detailed procedure is explained in the following section.

Data Collection Procedure

To begin, in order to elicit information about their perception toward collaborative and e-collaborative writing and writing activity in general, the participants were asked to write journals at two different times before and after the treatment. Addressing the research questions of the study, the students were required to write diaries about their attitude, understanding, and experience on writing. They were asked to write one diary at the beginning and another one at the end of the course. The participants were informed that the information obtained from their diaries would only be used for the purpose of the current research. Their diaries were anonymous, and the data from the diaries were coded as student diary entry #1, #2, etc. The study wanted to investigate if there is any noticeable change in their perceptions about writing activity before and after the treatment.

In order to facilitate the process of journal writing for the participants and later analyze the obtained data from these diaries, the researcher provided some guidelines for the students. The guidelines included some questions about their past experience in English learning, their previous teachers, the obstacles and difficulties in English learning, their attitudes, feelings and motivations in learning English, as well as their opinions about learning how to write in English. The list of the questions were given to the students at the beginning of the course to give them a clear picture of what they need to provide in their diary entries and to avoid any unsystematic accounts of their experiences, feelings and attitudes. Finally, the students were told that they are free to write whatever comes to their minds even if it is not included in the questions.

As discussed earlier, experimental groups received collaborative and e-collaborative tasks, while the control group were conducted in a traditional method, which was completing class activities individually without any assistance. The activities assigned as homework were also completed by each student individually and without peers' involvements. However, those who participated in the experimental groups were required to form groups of three members in order to do their writing tasks. The students were free to select their partners in their groups to avoid anxiety or interpersonal problems among the members. The main difference between the two experimental groups was using *Telegram Application* in one of them which enabled them to be involved in e-collaborative tasks.

The learners of the experimental group with e-collaborative tasks, (EG1), needed to use *Telegram Application* in order to share their writing assignments and assist the members of their group to complete them when they were not in the class. These learners had the chance of writing in a group even when they were out of the class setting. In fact, the researcher created a group in this application named *Essay Writing Community* which enabled its users to share and read writing assignments while they were away from the class environment. This application was selected for two main reasons. First of all, this application facilitates its users by providing the chance to share and access files and documents safely. Secondly, it can be installed both on cell phones and laptops or computers.

Following the process-based approach in writing, the EG1 participants were asked to brainstorm on the topic introduced by the researcher in the class and to organize their ideas in their groups in order to perform the first stage, prewriting. Then, while the subjects were at home, one member in each group wrote the first draft and shared it on the Telegram so that all other students were able to read the written assignment. After that, the second member of each group had to revise the text and send it on the Telegram. Next, the last member of each group had to edit the text with similar procedure. Now, the researcher as the instructor of the class commented on this written assignment and shared it on the Telegram. At last, each group wrote their final draft in the class based on the received comments. The participants were required to switch their

roles as writer, reviser, and editor every week for each writing assignment. The writing stages and activities are illustrated in Figure 1. All the stages repeated every week for each assignment.

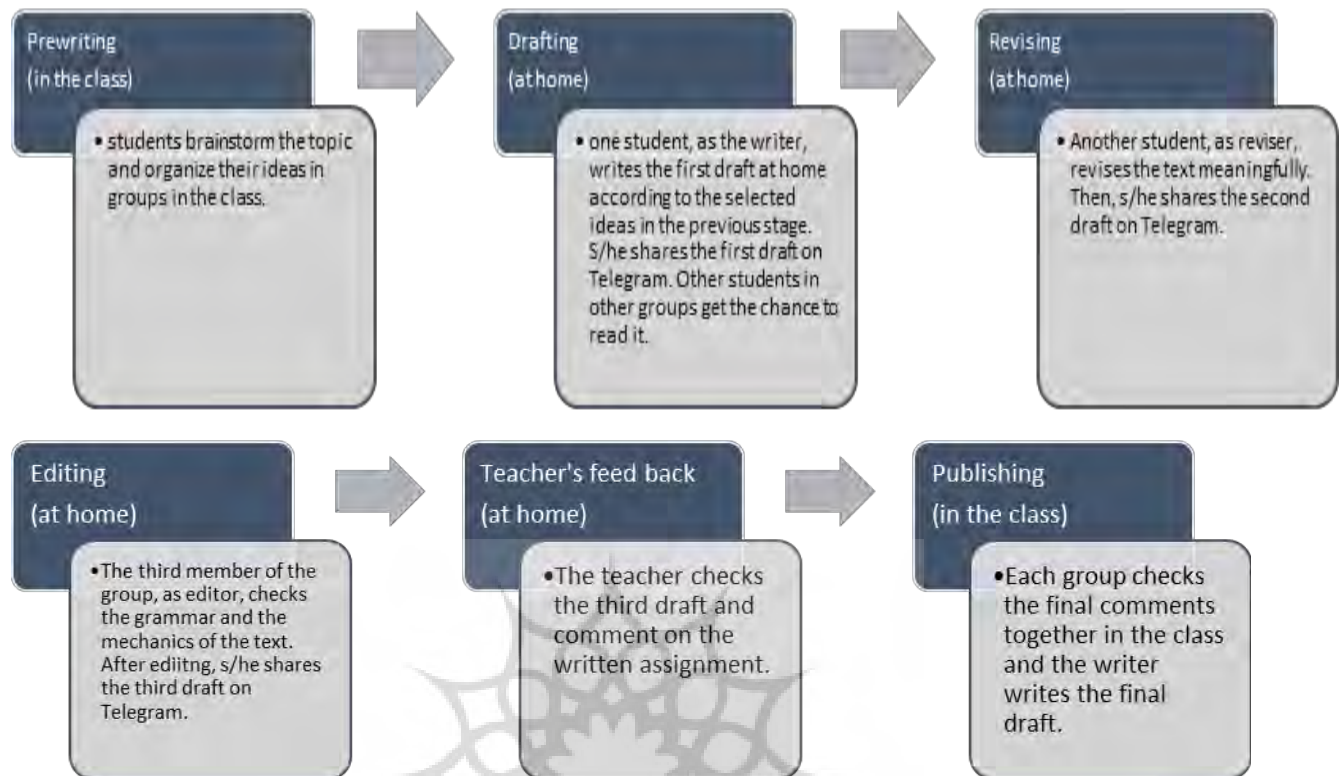


Figure 1. Procedures of the EG1 (e-collaborative tasks)

Rating Procedures

The data obtained from the journal writings of the participants that was written in two different times during the project was to elicit information about their perception toward collaborative and e-collaborative writing and writing activity in general before and after the treatment. There were 74 participants or diarists in this study, therefore, the original data set totaled 148 diary entries, which are the data collected from students' diaries. After reviewing the whole data, some entries which were too short, off-topic, and repeated were excluded from it. Thus, there remained 136 diary entries in total to be analyzed in order to discover the themes in them (EG1= 27, EG2= 24, CG=17).

The themes were literally the emerging concepts in the diary entries related to research question of the study about the participants' perception. After the identification of these dominant themes, content analysis was performed to interpret the data. According to Nešić and Spasić-Stojković (2017), the aim of this procedure is to present data in terms of frequency of mention. The salient words and explicit mentions that show the diarists' attitudes, understanding, and difficulties about writing were counted and then the mentioned themes were grouped into categories. In the process of counting and categorizing, some of the themes were easy to be recognized such as difficulties in brainstorming or being distracted in the class, while others needed more detailed analysis, which was taking the whole text into consideration and then drawing conclusions based on students' perceptions. This could be a weakness of the categorizing process due to some uncertainties of the diarists in some parts of their diaries.

To make valid inferences from the results, these frequency of mentions converted into percentages. As these variables classified in categories and represented by frequency counts, nonparametric test, that is Chi square test, was applied to estimate the apparent relationship among the categories in the three groups of the study.

Data Analysis Procedures

To interpret the data obtained from the diary entries of the three groups, the explicit mentions of the diarists' attitudes, understanding, and difficulties encountered during writing activity were counted and then these mentioned themes were grouped into categories. As discussed before, identification process of some themes were easier than others, for example, the categorization of the vocabulary difficulty was less time-consuming due to its direct mentioning, however, a few themes demanded more cross-checking and attention. Therefore, after reading the whole diary the theme competition, for instance, was recognized.

All the explicitly mentioned themes in the diary entries are presented in terms of frequency/distribution. These frequencies then were analyzed based on their distribution in the total diary entries of each set in each group. The obtained results which were categorized in writing individually and writing collaboratively are discussed in the following sections.

Results

This part provides the outcome of the analysis of the collected data to reveal if there was any changes in the perception of the participants. The extracted themes of the diary entries first categorized and then converted into percentages. To estimate the apparent relationship among these categories in the three groups the Chi square test was applied.

Results of EFL Learners' Perception of Writing Individually

The participants of this study were required to write two diaries about their feeling and understanding of writing in general and how they feel when they write individually or when they are in a group. Some students mentioned writing individually directly without explaining the reasons, however, some others mentioned some factors by which individual writing preference could be inferred. In this part, the diarists' preference on individual writing is shown by the frequency of mention. These frequencies are also indicated in percentage which were calculated on the number of each group. The frequency and percentage of the mentions are shown in Table 1 below:

Table 1. *EFL Learners' Perception of Writing Individually in EG1, EG2, & CG*

Mentions	EG1		EG2		CG	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
At-home / D1	19	70.3%	14	58.3%	9	53%
At-home / D2	13	48.1%	11	46%	8	47%
Time/ D1	17	63%	16	67%	11	65%
Time/ D2	6	22.2%	11	46%	9	53%

Concentration/ D1	16	59.2%	15	62.5%	11	65%
Concentration/ D2	6	22.2%	12	50%	10	59%
Googling/ D1	13	48.1%	11	46%	6	35.2%
Googling/ D2	9	33.3%	7	29.1%	5	29.4%

As illustrated in the Table, some changes can be seen in the students' perception during the course in these three groups. At first, the number of students in EG1 who preferred writing individually at home reduced from 70.3% to 48.1%, while this number experienced the same trend in EG2 and CG but with slighter difference, which is 58.3% - 46% and 53% - 47% in EG2 and CG respectively. Some other students preferred writing individually at home because they mentioned that they have more time at home and while they are in the class, its limited time causes some pressure on them which inhibits their writing abilities. This number experienced a fall in EG1 from 63% to 22.2%. On the other hand, this change in EG2 was from 67% to 46% and in CG from 65% to 53%.

Other factors which influenced students' preference are having better concentration and accessing the internet at home. After counting the frequency of mentions, these mentions have also decreased in the second diary entries. Regarding concentration, students in EG1 showed a change from 59.2% to 22.2%, however, this change in EG2 was from 62.5% to 50% and in CG from 65% to 59%.

The last reason why students preferred to write at home than in the class was googling the topic of their writing which helps them find related vocabularies, idioms, and expressions, and sometimes read some samples. The internet has literally replaced the paper dictionary students used to apply in the past, therefore, the researcher, for the sake of convenience in data analysis procedure, counted the word 'dictionary' under the category of 'Googling'. This frequency declined in the three groups, 48.1%- 33.3%, 46%- 29.1%, 35.2%- 29.4, in EG1, EG2, and CG respectively.

To find out whether the differences among these figures were of statistical significance or not, the researcher had to look down the χ^2 value in front of the Groups row under the *Sig.* column Table 2:

Table 2. Results of the Chi Square Test for Comparison of EFL Learners' Perception of Writing Individually in EG1, EG2, & CG

	At home/D1	At home/D2	<i>Sig.</i>	Time/D1	Time/D2	<i>Sig.</i>	Concentration/D1	Concentration/D2	<i>Sig.</i>	Googling/D1	Googling/D2	<i>Sig.</i>
EG1	19	13	.28	17	6	.02*	16	6	.03*	13	9	.39
EG2	14	11	.54	16	11	.33	15	12	.56	11	7	.34
CG	9	8	.80	11	9	.65	11	10	.82	6	5	.76

As presented in Table 2, the perception of the students experienced a significant change for the themes ‘time’ and ‘concentration’ among the students in EG1 who applied Telegram Application.

These results are also graphically shown in the bar chart in Figure 2:

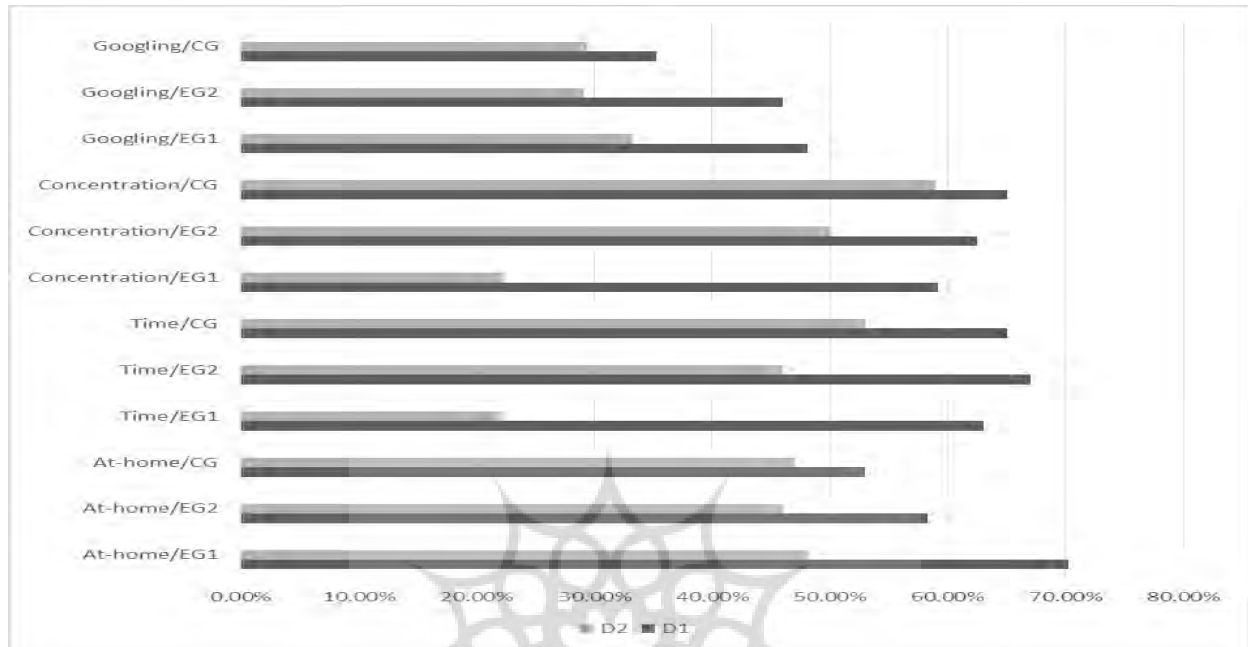


Figure 2. *Students' Perception of Writing Individually*

This figure illustrates how perception of the students varied during the course. As it was expected, there was no significant change in CG, the control group followed the conventional method of teaching. However, the students in EG1, experienced both collaboration and Telegram Application, expressed considerable change in their perception of writing at home and using the internet and specifically of time and concentration. It also indicates that those students who enjoyed collaboration in the class expressed their perception differently after the treatment which is an indicator of effectiveness of collaborative activities for writing in the class.

Results of EFL Learners' Perception of Writing Collaboratively

In the above section, those mentions that were related to students' perception of individual writing were analyzed. In this part, their perception of collaborative writing and its related mentions will be shown. Table 3 represents the frequency and percentage of the mentions in this category:

Table 3. *EFL Learners' Perception of Writing Collaboratively in EG1, EG2, & CG*

EG1	EG2		CG			
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
In-class/D1	2	7.4%	3	12.5%	1	6%
In-class/D2	12	44.4%	16	67%	2	12%

Competition/D1	3	11.1%	2	8.3%	2	12%
Competition/D2	11	41%	6	25%	1	6%
Anxiety/D1	15	56%	9	37.5%	10	59%
Anxiety/D2	3	11.1%	2	8.3%	9	53%
Telegram App/D1	2	7.4%	1	4.1%	1	5.8%
Telegram App/D2	23	85.1%	1	4.1%	1	5.8%

A glance at the table provided reveals that the participants of the study were not interested in collaborative activities at the beginning of the course, however, this perception totally changed at the end of the course. This change is more noticeable in EG1 and EG2 which varied their mention from 7.4% to 44.4% in EG1 and from 12.5% to 67% in EG2. But this change was just at 6% in CG which followed conventional methods. Another mention in the diary entries were those which expressed feeling of competition among others either explicitly or implicitly. This variation was again more remarkable in EG1 and EG2 at 29.9% and 16.7% respectively, while this feeling experienced a fall in CG by 6%.

The other mention in the diary entries that was related to writing collaboratively was the feeling of stress or anxiety among the participants while writing. For various reasons the participants of the three groups claimed that they feel nervous when they start to write, which was 37% in EG1, 37.5% in EG2, and 59% in CG. Interestingly, this amount decreased significantly in both EG1 and EG2 at 11.1% and 8.3%, which showed the influence of collaboration in eliminating this problem among the students. In contrast, the students in CG did not change their attitude as far as their anxiety was concerned, which was a negligible difference of 6%.

The last but not least mention which is related to the most important aim of this current study is the role of the Telegram Application in the students' perception towards writing. As discussed before, today almost all students are reliant on the internet while writing for several reasons, however, to write in a group both in the class and at home with the assistance of Telegram Application was a completely new experience. As can be seen, the numbers of mentions of Telegram application in the first diary entries of the three groups are insignificant, but this number had a remarkable rise of 78% in EG1 at the end of the course. On the contrary, this amount remained nearly unchanged in EG2 and CG.

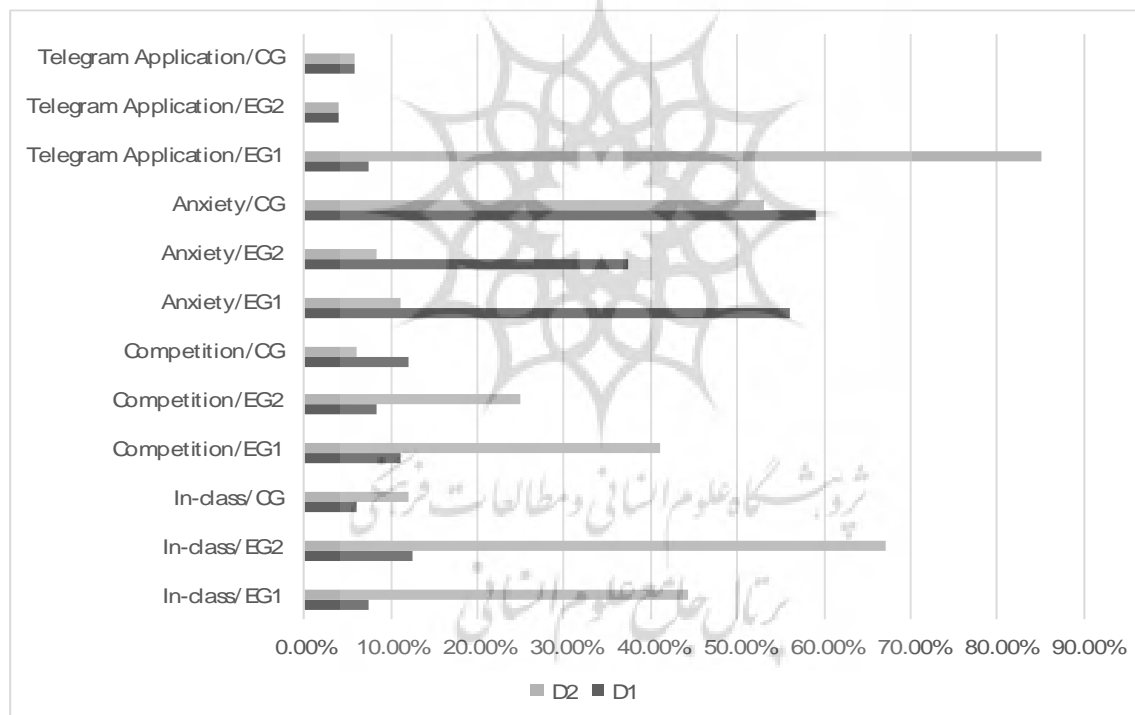
To find out whether the differences among these figures were of statistical significance or not, the researcher had to look down the relevant χ^2 value under the *Sig.* column Table 4:

Table 4. Results of the Chi Square Test for Comparison of EFL Learners' Perception of Writing Collaboratively in EG1, EG2, & CG

	In-class/D1	In-class/D2	Sig.	Competition/D1	Competition/D2	Sig.	Anxiety/D1	Anxiety/D2	Sig.	Telegram App/D1	Telegram App/D2	Sig.
EG1	1	12	.00*	3	11	.03*	15	3	.00*	2	23	.00*
EG2	3	16	.00*	2	6	.15	9	2	.03*	1	1	1.00
CG	1	2	.56	2	1	.56	10	9	.81	1	1	1.00

The information provided indicates that there were significant changes in EG1 students' perception in four themes, namely 'in-class', 'competition', 'anxiety', and 'Telegram Application'. Moreover, the perception of the students in EG2 experienced significant changes in themes on 'in-class' and 'anxiety'.

To get a clear analysis, the obtained results are illustrated in the bar graph 3:

**Figure 3.** Students' Perception of Writing Collaboratively

According to the bar graph, nearly few students of all three groups preferred to write in the class collaboratively at the beginning of the course. It is clear from the graph that this attitude changed dramatically among the students in EG1 and EG2 at the end of the course. However, as the students in CG were not provided with collaboration in the class they did not mention different attitudes towards collaboration in their second diaries. We can also see from the graph that competition was not first an important factor in writing for the students in the three groups,

but after experiencing collaboration in EG1 and EG2 they mentioned this factor in a high percentage.

Another noticeable change in the perception of the students is how they express their anxiety towards writing. The investigation of their diary entries indicated that collaboration in EG1 and EG2 played an important role to reduce anxiety. Nevertheless, those students in CG followed conventional methods did not feel differently in this regard.

The last item to be analyzed is the role of applying Telegram Application in one of the two experimental groups of the study, EG1. By referring to the figure 3, it is clearly evident that the students in EG1 found this application particularly helpful. It is obvious that the participants in EG2 and CG did not have any opinions on Telegram Application.

Results of EFL Learners' Perception of Miscellaneous Mentions

When we want to explore the notion of learner beliefs, we have to distinguish between quantitative/analytic and qualitative/experiential conceptions of language and language learning, according to Benson and Lor (1999). The former refers to consider the language as a collection of things such as grammatical concepts and word patterns, while the latter involves to consider the language an environment to which the learner responds. This framework is useful when we analyze the diaries of the learners.

In previous sections, the qualitative orientation towards language learning as far as writing ability is concerned was analyzed. In this section, the mentions of the learners in their diary entries which are related to their linguistic competence and also are related to how to start writing and progress to the end of the activity will be analyzed. As they are not the direct response to the questions of the study they were called miscellaneous mentions.

One frequent difficulty expressed in the diary entries were concerns about language problems. As shown in Table 5, the most frequent problems are related to the grammar, vocabulary, and spelling.

Table 5. Language Problems in EG1, EG2, & CG

Language Problems	EG1		EG2		CG	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Grammar/ D1	13	48.1%	9	37.5%	10	58%
Grammar /D2	5	18.5%	6	25%	8	47%
Vocabulary/ D1	14	52%	14	59%	5	29.4%
Vocabulary/ D2	6	22.2%	10	42%	3	18%
Spelling/ D1	7	26%	5	21%	2	12%
Spelling/ D2	2	7.4%	2	8.3%	1	6%

From the table it could be inferred that the students in the three groups; that is EG1, EG2, and CG, expressed their concerns about their previous grammar knowledge at the beginning of the course at 48.1%, 37.5%, and 58% respectively. These concerns were reduced in EG1 at the end of the course by 18.5%, in EG2 by 25%, and in CG by 47%.

Another source of difficulty in writing for the students was claimed to be the knowledge of vocabulary. This amount is expressed to be more problematic than the grammar in both EG1 and EG2. As illustrated in the Table 3.5, this difficulty was reduced from 52% to 22.2% in EG1, while this change was not considerable enough in EG2 and CG (59%-42%, 29.4%-18%).

The last problem mentioned frequently in the students' diaries is spelling. After comparing the obtained percentage of spelling difficulty in the three groups, it became apparent that the students in EG1 had less problems in this regard at the end of the course. The percentage was reduced from 26% to 7.4%, however, the relevant number changed from 21% to 8.3% and from 12% to 6% in EG2 and CG respectively.

To figure out whether the differences among these figures were statistically significant or not, the researcher had to check the χ^2 value under the *Sig.* column in the row labeled Groups in Table 6:

Table 6. Results of the Chi Square Test for Comparison of EFL Learners' Perception of Language Problem in EG1, EG2, & CG

	Grammar/D1	Grammar/D2	<i>Sig.</i>	Vocabulary/D1	Vocabulary/D2	<i>Sig.</i>	Spelling/D1	Spelling/D2	<i>Sig.</i>
EG1	13	5	.06	14	6	.07	7	2	.09
EG2	9	6	.43	14	10	.41	5	2	.25
CG	10	8	.63	5	3	.48	2	1	.56

According to the Table 6, even though there were some changes on the language problems, which are grammar, vocabulary, and spelling, in the perception of the students in all three groups after the treatment, these changes were not significant. Figure 4 represents a quick glance of the obtained data.

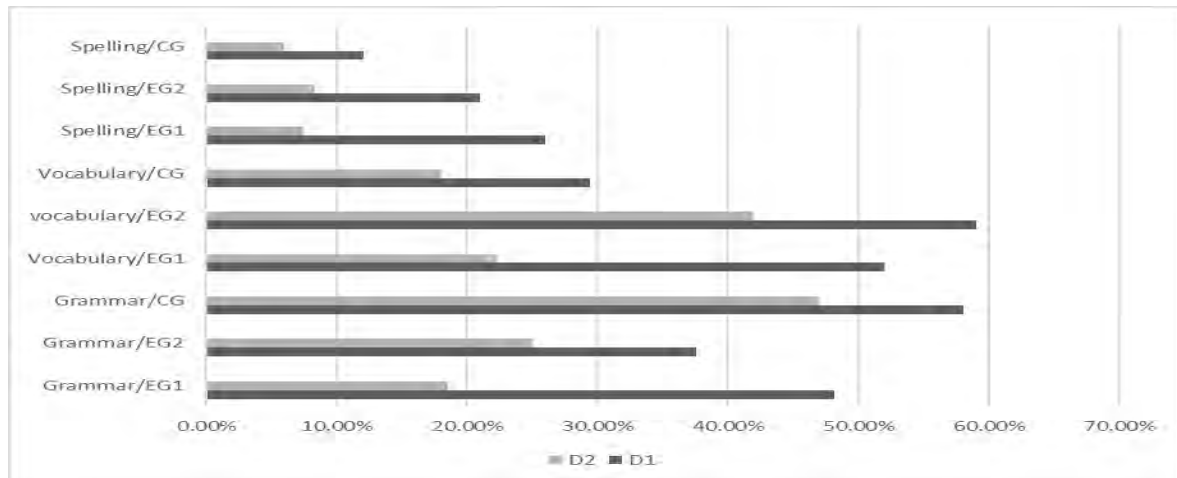


Figure 4. *Students' Perception of Language Problems*

It is evident from the bar graph that students in EG1 had this perception that they had less difficulty in grammar, vocabulary, and spelling at the end of the course. Even though the two other groups, EG2 and CG, mentioned these three less frequent in their second diary entries, these changes in the frequency of mentions were not significant comparing to EG1. It is also worth noting that the learners in each of the three groups rarely mentioned changes in these sections directly; the change could be inferred from the reduction in the frequency of mentions.

The last salient feature that students in all three groups mentioned was brainstorming. They perceived it as one of the main source of difficulty while writing, and they claimed that finding what to write about a topic has been the most stressful part of the activity. The findings are represented in table 7.

Table 7. *Difficulties in Brainstorming in EG1, EG2, & CG*

EG1	EG2		CG			
Mentions	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Brainstorming/D1	18	67%	13	54.1%	8	47%
Brainstorming/D2	4	15%	5	21%	7	41%

According to the Table 7, mentions of frequency of brainstorming in EG1 and EG2 declined from 67% to 15% and from 54.1% to 21% respectively, whereas this number changed in CG just from 47% to 41%. To figure out whether the differences among these figures were statistically significant or not, the researcher had to check the χ^2 value under the Sig. column in the row labeled Groups in Table 8:

Table 8. *Results of the Chi Square Test for Comparison of EFL Learners' Perception of Brainstorming in EG1, EG2, & CG*

	Brainstorming/D1	Brainstorming/D2	Sig.
EG1	18	4	.00*
EG2	13	5	.06

CG

8

7

.79

It is apparent from the information supplied that the students' perception on brainstorming changed significantly only in EG1 after the treatment. These results can also be shown in the bar graph below.

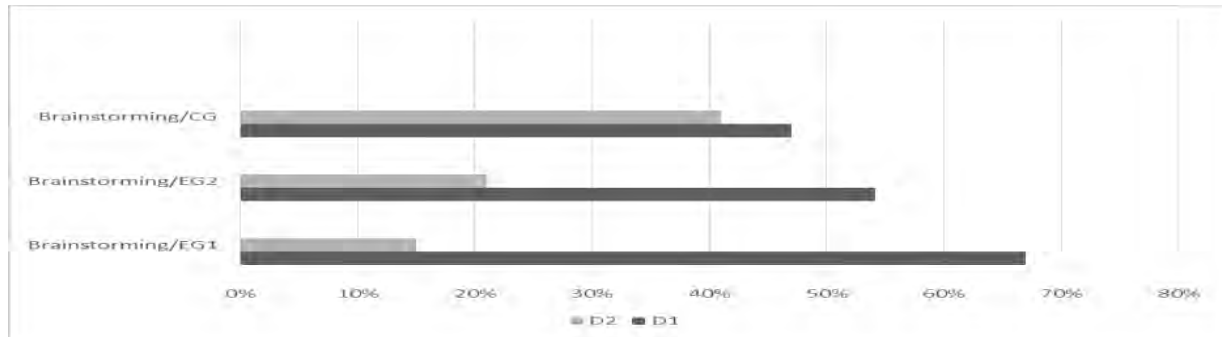


Figure 5. *Students' Perception of Brainstorming*

A glance at the information provided in the above figure reveals that collaboration helped students considerably to find new ideas on a topic. In fact, one of the most important effects of using collaboration is sharing ideas and experiences which cannot be ignored. Many students stated in their diaries that they are not interested in writing due to the problem they have always had in finding ideas from the very first step of this activity. Some students claimed that lack of ideas to begin writing has made them less confident and motivated. Fortunately, according to their second diaries collaboration somehow solved this problem.

These findings illustrated some of the difficulties students identified in their diaries as the source of problem while they are engaged in writing activity. These diarists did not clearly explain the reason of these problems they encounter, however, it can be inferred from other parts of their diaries that they have also the same problem in writing when they are required to write in their first language. What is certain is that the most important factors which inhibit them from writing and make writing a daunting task is their weakness in grammar and vocabulary. Lastly, the findings showed that the students are aware of these problems they have in their writing.

Discussion

The research questions sought to examine the effects of applying online application devices for enhancing collaborative writing on the perception of the learners. The findings illustrated above indicated that using Telegram application can change the learners' perceptions toward English writing. This can be inferred by the students' preference to write at home before the treatment, as they claimed writing in the class is stressful for many reasons; such as, noise, time limitations, and lack of concentration. They mentioned their insufficient vocabulary and grammar knowledge causes a lot of problems for them in the class as well. Another obstacle the students mentioned in their first diaries was their difficulties in brainstorming.

However, those problems were then mentioned less frequently in their second diaries which can be resulted from the use of Telegram application when they were at home. Furthermore, the learners admitted that reviewing their classmates' drafts at home improved their grammar and spelling. Therefore, e-collaboration applied in the study to enhance collaborative activities affected the students' perception. This change in perception was significant as far as they reported 'time', 'concentration', 'in-class' activities, 'competition', 'anxiety', and applying

‘Telegram Application’. The significant change in the students’ perception was also significant in ‘brainstorming’. These findings are consistent with Gan’s (2015) and Tarmizi and Cheung (2017) who stated that the use of technology can facilitate collaborative writing and web-based writing tasks are important tools to enhance the educational experience of students and their collaborative writing.

The study attempted to investigate the effects of collaborative writing on the learners’ perceptions as well. The results showed that there was a decline in their preference in writing activities at home after the treatment which indicated the change in their attitudes toward collaborative tasks for writing in the class. The students also stated that the feeling of competition was helpful in their class’ writing activities. This result is also in line with the previous result done by Haji Jalili and Shahrokhi (2017), who showed that collaboration led to the reduction of learners’ writing anxiety rates. However, their perception toward grammar, vocabulary, and spelling did not change significantly, whereas, there was a substantial change in the perception of the students for brainstorming. This finding aligns with Strobl’s (2014) and Konstantina’s (2017) claims that the discussions that normally happen during the planning stage of collaboration produce an improvement in content selection of the group documents.

Regarding the participants’ perception toward collaborative writing, group work or CW had an overall significant effect on the perception of the learners, although this impact was different in various areas. These results are in line with the findings obtained by Shehadeh (2011) who concluded that most students in his study were quite supportive of the group activity and found it useful in multiple ways. Students also perceived in-class activities or collaborative writing was more helpful than they had expected. Some reported that they did not have a good perception of collaborative writing because what they experienced as collaborative activity was totally different. The way they produced a text in several stages with the assistance of other members in the group, as editors and revisers, alongside the supervision of the teacher was a completely new experience. For these reasons, their perceptions of collaboration significantly changed. They also reported less anxiety after experiencing collaborative writing. Moreover, they enjoyed the collaboration rather than being concerned about the time limit or noise in the class. These findings confirm Storch’s (2005) earlier findings that students were typically positive of the collaborative writing activities.

As final remark, some studies may not advocate the argument that collaborative writing could help students to be motivated in developing their writing skills. They believe students’ lack of proficiency might silence them and their contribution to the writing task. This may offset the benefits of collaborative writing activities as the tasks are aimed at helping students acquire the academic communicative competencies and skills that they need through interactions in order to improve their writing (Manathunga & Hernández-Leo, 2015; Prinsen, Volman, Terwel, & van den Eeden, 2009; Shehadeh, 2011). As a matter of fact, some research suggests that learners do not appreciate writing in a group. They are not motivated to participate in collaborative writing tasks as they have continued disagreements and members are incompatible (Bremner, 2010; Meyer, 2014). On the other hand, research also reveals that the success of collaborative writing hinges upon the responsibility that each member of the group takes on (Spector, 2016).

After all, the research on collaborative and e-collaborative writing demonstrate the effectiveness of such tasks, as it affirms Vygotsky’s notion of the zone of proximal development (ZPD) (Heidar, 2016; Thompson, 2012; Yeh, 2014). ZPD is attributed to the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers. Less proficient students may be able to develop the target

skills with the help of their more capable peers by collaborative and e-collaborative tasks. The scaffolding may imply that collaborative writing task is effective in helping the learners to enrich their cognitive development.

Conclusion

This paper explored the impact of collaborative and e-collaborative writing tasks on the perceptions of the EFL university students. The study applied the journal writing of the learners as an interpretive and naturalistic approach that focused on the perception of the students during the course. These diaries as a personal self-reflective texts were supposed to offer different insights into the unobservable process of writing process and to see the diversity among the learners though within a homogeneous class. The analysis of the diary entries were also to reveal what can benefit or impair the learners' experience of language learning.

As discussed before, the learners in the three groups mainly expressed similar experiences for writing process. Interestingly, a great number of themes reflected by the learners were non-linguistic (social and psychological) factors. One of the most important implication of the learners' perception is that some measures must be taken in our classes to make writing activity more appealing. For instance, the teachers can choose more challenging topics for writing and they should avoid banal repetitive ones. Each suggested topic can be discussed orally in the class before the individual or the groups get engaged in brainstorming. Moreover, they need to find ways to eliminate those factors in the class which cause anxiety for the learners. The findings of the study indicated that most students were not satisfied with the amount of time they have in the class, and they perceived such limitation inhibits their full concentration on the process of writing.

The other dominant themes identified in the diary entries of the learners were their grammatical problems and inadequate vocabulary knowledge. Students' diaries reflected their preferences as to how they would like to be taught the grammar which is implicit method of teaching grammar and the one which involves more of writing and speaking. Many diarists reported that they are not able to convey the ideas they have in mind because of these language problems. Even some of them reported that they had better linguistic knowledge before attending the university. Such weakness among students can greatly affect their self-confidence and slow down their improvement in learning a foreign language. It shows an urgent need for the modification of teaching linguistic components to the university students.

The adopted approach to teach writing in the current study was process-oriented approach, therefore, the learners needed to get familiar with different stages of writing process. The students first reported that they have always had trouble in brainstorming. Fortunately, the e-collaborative tasks helped them considerably to overcome this problem and change their perception positively. Their diaries revealed that when they discuss the topic in a group they can take advantage of other's attitudes and ideas. In addition, they perceived that peer evaluation and peer review assisted them greatly in the later stages of process writing. They reported that they had experienced teacher's feedback on their written products in the past which it often occurred randomly. The new method, which combined collaboration and e-collaboration, provided an opportunity for the learners to benefit from both teacher-evaluation and peer-evaluation. According to their diaries, this method changed their attitudes toward writing assignments and it was no longer a tedious and time-consuming task.

It can be concluded, therefore, that diary studies can provide significant insights into students' experiences in the classrooms. The findings can be useful in various fields of language learning and teaching. Moreover, it can be inferred that teachers cannot underestimate the value of online activities particularly at a time they can be blended with in-class activities.

However, it has certain limitations. First, convincing and instructing the students in one of the two experimental groups to follow the procedures of the process writing accurately was not an easy task. The students have been accustomed to the conventional method of studying in their classes, and it took extra hours and sessions to create the groups and to explain everything clearly in order to integrate online learning activities with face to face learning.

Another limitation of the study relates to the inherent nature of the diary studies. According to Nunan (1992), it is difficult to ascertain how realistically the diary entries reflect what was going on in the diarists' mind. There might be this possibility that the diarist hides, revises, or even makes up some information deliberately or subconsciously.

The last weakness of the diary writing is its subjectivity nature. As Bailey (1983) put it diaries lack objectivity because that data is completely based on the diarist's perception of her/his experiences. Despite these limitations the information obtained from the diaries are rich enough to disregard such problems.

The findings of the study may have some theoretical and practical implications. As for theoretical aspect the researchers who are interested in developing a comprehensive model for L2 writing process this study can provide some useful hints. Another theoretical implication is that this study can be another attempt to extend social constructivist theory from spoken discourse to written discourse. Such collaboration creates meaningful and purposeful communication which leads to cognitive processes as a source of L2 learning.

As for the practical implications, this study provided important information on the students' insights which can be useful for the researchers and teachers. Researchers can use the diaries of the students to find different psychological, social, and cultural factors influencing the process of language learning specifically writing process from the eyes of the learners. These perceptions can help them find strengths and weaknesses of the learners to develop an appropriate model for such contexts. Teachers can also benefit from these insights to focus on the reported points in their classes and they can also require their students to write diaries during the course. The diaries are helpful both for the learners and the teachers as they provide reflective thinking. These diaries also provide a useful source of students' meta-cognitive awareness of writing strategies and the actual strategies that they can implement while writing.

References

- Bailey, K. M. (1983). Competitiveness and anxiety in adult second language acquisition: Looking *at and through* the diary studies. In H. Seliger & M. H. Long (Eds.), *Classroom oriented research in second language acquisition* (pp.67-103). Rowley, MA: Newbury House.
- Benson, P., Lor, W., (1999). Conceptions of language and language learning. *System* 27, 459-472.
- Bremner, S. (2010). Collaborative writing: Bridging the gap between the textbook and the workplace. *English for Specific Purposes*, 29(2), 121–132.
- Choi, Y. H. (2016). Writing strategies in the process of L2 computer-mode academic writing with the use of multiple resources. *English Teaching*, 71, 3-28.
- Dobao, A. F. (2012). Collaborative writing tasks in the L2 classroom: Comparing group, pair, and individual work. *Journal of Second Language Writing*, 21(1), 40–58.
- Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication*, 32(4), 365-387.
- Gan, B., Menkhoff, T., & Smith, R. (2015). Enhancing students' learning process through interactive digital media: New opportunities for collaborative learning. *Computers in Human Behavior*, 51, 652–663.

Ghoorchaei, B., Tavakoli, M., & Nejad Ansari, D. (2010). The Impact of Portfolio Assessment on Iranian EFL Students' Essay Writing: A Process-oriented Approach. *GEMA online Journal of Language Studies*, 10(3), 35-51.

Gopee, N., & Deane, M. (2013). Strategies for successful academic writing—Institutional and non-institutional support for students. *Nurse education today*, 33(12), 1624-1631.

Gordon, L. (2008). Writing and good language learners. na.

Haji Jalili, M., & Shahrokhi, M. (2017). The Effect of Collaborative Writing on Iranian EFL Learners' L2 Writing Anxiety and Attitudes. *Journal of Applied Linguistics and Language Research Volume 4, Issue 2, 2017, pp. 203-215*.

Hayes, J. R. (1996). A new framework for understanding cognition and affect in writing. In C. M. Levy & S. Ransdell (Eds.). *The science of writing: Theories, methods, individual differences, and applications* (pp. 1-27). Mahwah, NJ: Lawrence Erlbaum.

Heidar, D. M. (2016). ZPD-assisted Intervention via Web 2.0 and Listening Comprehension Ability. *English for Specific Purposes World*, 17(4), 1–17.

Hosseinpour, N. & Biria, R. (2014). Improving Iranian EFL Learners' Writing through Task-based Collaboration. *Theory and Practice in Language Studies, Vol. 4, No. 11, pp. 2428-2435*.

Jafari, N., & Nejad Ansari, D. (2012). The Effect of Collaboration on Iranian EFL Learners' Writing Accuracy. *International Education Studies*.

Johnson, A.P. (2008). *Teaching reading and writing: A guidebook for tutoring and remediating students*. New York: Rowman and Littlefield Education.

Karatay, H. (2011). Süreç temelli yazma modelleri: Planlı yazma ve değerlendirme. M. Özbay (Ed.), *Yazma eğitimi içinde* (s. 21-43). Ankara: Pegem Akademi.

Konstantina, Ch. (2017). Collaborative Writing within Wikis: The Impact of the Interaction between Native and Non- Native Speakers of the Greek Language on their Writing Skills. *Aristotle University of Thessaloniki*.

Krasnova, T. (2015). A Paradigm Shift: Blended Learning Integration in Russian Higher Education. *Procedia-Social and Behavioral Sciences*, 166, 399-403.

Krasnova, T., & Ananjev, A. (2015). Students' perception of learning in the online discussion environment. *Mediterranean Journal of Social Sciences*, 6(6 S1), 202-207. <http://dx.doi.org/10.5901/mjss.2015.v6n6s1p202>

Maftoon, P., & Ghafoori, N. (2009). A Comparative Study of the Effect of Homogeneous and Heterogeneous Collaborative Interaction on the Development of EFL Learners' Writing Skill. *The Journal of Applied Linguistics Vol. 2, Issue 1*.

Manathunga, K. Hernández-Leo, D. (2015). Has Research on Collaborative Learning Technologies Addressed Massiveness? A Literature Review. *Educational Technology & Society*, 18(4), 357–370.

McDonough, J., & McDonough, S. (1997). *Research Methods for English Language Teachers*. London: Arnold.

Meyer, L. (2014). Tech Basics for Active, Collaborative Learning. *Campus Technology Magazine*, 28(2), 5-9.

Nešić, I., & Spasić-Stojković, M. (2017). Insights from Students' Language Learning Diaries. *The Journal OF Teaching English for Specific and Academic Purposes*. Vol. 5, No 3, 2017, pp. 529544.

Noël, S., & Robert, J. M. (2004). Empirical study on collaborative writing: What do co-authors do, use, and like? *Computer Supported Cooperative Work*, 13(1), 63-89.

Nunan, D. (1992). *Research methods in language learning*. Cambridge: Cambridge University Press.

Prinsen, F. R., Volman, M. L. L., Terwel, J., & van den Eeden, P. (2009). Effects on participation of an experimental CSCL-programme to support elaboration: Do all students benefit? *Computers & Education*, 52(1), 113–125.

Rahimi, A., & Qannadzadeh, J. A. (2010). Quantitative usage of logical connectors in Iranians' EFL Essay writing and logical and linguistic intelligences. *Procedia-Social and Behavioral Sciences*, 5, 2012-2019.

Rybushkina, S., Krasnova, T. (2015). Key Factors to Use Blended Learning in Teaching Foreign Languages in Russian Engineering Universities. *EDULEARN15 Proceedings*, 6886-6892.

Shehadeh, A. (2011). Effects and student perceptions of collaborative writing in L2. *Journal of Second Language Writing*, 20(4), 286–305.

Simpson, A. (2013). *A process approach to writing*. Retrieved from <http://www.developingteachers.com>

Spector, J. M., Ifenthaler, D., Samspon, D., Yang, L., Mukama, E., Warusavitarana, A., Lokuge Dona, K., Eichhorn, K., Fluck, A., Huang, R., Bridges, S., Lu, J., Ren, Y., Gui, X., Deneen, C. C., San Diego, J., & Gibson, D. C. (2016). Technology Enhanced Formative Assessment for 21st Century Learning. *Educational Technology & Society*, 19(3), 58–71.

Strobl, C. (2014). Affordances of web 2.0 technologies for collaborative advanced writing in a foreign language. *CALICO Journal*, 31(1), 1–18. doi: 10.11139/cj.31.1.1-18

Tarmizi, T. & Cheung, Y. L. (2017). Collaborative Writing in Classroom Instruction: A Synthesis of Recent Research. *The English Teacher*, 46(2), 43 - 57.

Thompson, I. (2012). Stimulating reluctant writers: A Vygotskian approach to teaching writing in secondary schools. *English in Education*, 46(1), 85–100.

Vygotsky, L. S. (1986). *Thought and Language*. Cambridge, MA: MIT Press.

Yeh, H.-C. (2014). Exploring How Collaborative Dialogues Facilitate Synchronous Collaborative Writing. *Language Learning & Technology*, 18(1), 23–37.