ISELT Interdisciplinary Studies in English Language Teaching

Volume 2. Issue 1. Summer 2023. Pages 109 to 126.

Research Paper

The Effects of Shared, Interactive, and Independent Writing Strategies on EFL Learners' Writing Accuracy and Complexity

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10.22080/iselt.2023.25138.1050

Received:
March 6, 2023
Accepted:
April 27, 2023
Available online:
May 2, 2023

Keywords:
Interactive Writing, Independent Writing, Persuasive Genre, Shared Writing

Abstract

Second Language (L2) writing has always been a matter of difficulty for foreign language learners and an appealing topic for researchers in the field. Following a quasi-experimental method, this study aimed to investigate the comparative effects of shared, interactive, and independent writing on Lebanese EFL learners' writing accuracy and complexity. To achieve this aim, 74 non-Iranian female EFL learners were selected through a convenience sampling technique. The results of the Oxford placement test indicated that their level of English proficiency was intermediate. Afterward, the participants were assigned to three experimental groups (i.e., shared, interactive, and independent writing groups). The syntactic accuracy was gauged in terms of t-units and complexity was calculated based on the number of the words in t-units. The results of statistical analysis manifested that the group which used interactive writing strategies outperformed the other two groups, and no significant differences were found between shared and independent writing groups. Moreover, the performance of the interactive writing group differed significantly from those of the other two groups. Hence, it was concluded that an interactive writing strategy may lead to more accurate and complex writing performance. This study might have implications for language instructors, EFL learners, material developers, and syllabus designers.

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1 Introduction

Writing skill is an important component in language learning and arises in communication in a tangible form (Veramuthu & Shah, 2020). In addition, writing skill is the most complicated fulfillment of the process of language learning (Singer & Bashir, 2004). This skill is naively considered as merely constructing grammatical sentences; however, sentences should be connected to each other by cohesive devices in ways that can be followed by readers (Halliday & Hasan, 1976). In other words, various parts of the text have to work together in a particular context (Carrell, 1982; Witt & Faigley, 1981). Matsuda (2001) found that for most writers – especially less experienced ones – it is often helpful to have an explicit understanding of some of the strategies that can be internalized through practice. Therefore, students require instructions that stimulate them to use strategies to be successful in learning independently, or in Wenden's (1998) words, they need conscious instruction about how they should deal with a learning situation.

As Nunan (1999) explained, different genres of writing "are typified by a particular structure and by grammatical forms that reflect the communicative purpose of the genre" (p. 280). Learners should be taught how to use effective composing strategies. The recent shift of attention from what to learn to how to learn necessitates efficient learning and the use of some learning strategies. Of the writing text types, argumentative writing is a genre that is integral in school and beyond. In the same vein, Newell et al. (2011) argued that "The ability to compose high-quality arguments (and their claims, warrants, and evidence) are essential skills for academic success" (p. 273). Not surprisingly, academic language teaching features persuasion (Coffin, 2004). Persuasion in writing is defined as a form of rhetorical production involving the identification of a thesis or claim, the provision of supporting evidence, and an assessment of warrants that connect the thesis, evidence, and subject matter of the argument (Newell et al., 2011).

It is believed that persuasive writing includes formal operational skills such as formulating, analyzing, and synthesizing reasons; as a result, persuasive writing is postponed to high schools or even college level (Applebee et al., 1986). The rhetorical structure of formal persuasive writing is far beyond putting the grammatical structures together. It includes thinking, planning, organizing, drafting, and revising (Newell et al., 2011). In addition, persuasion "requires students to express points of view and consider the perspectives of other people on a specific issue that needs to be clarified and supported by evidence to persuade the reader" (Alkthery & Al-Qiawi, 2020, p. 461).

The terms analytical and hortatory are sometimes used to distinguish two fundamental differences in persuasive purposes and strategy (Coffin, 2004). An 'analytical exposition' (persuading that) presents a well-formulated objective claim or thesis, while the relationship between writer and reader is typically interpersonally distant. In contrast, 'hortatory exposition' (persuading to) aims to convince the reader to respond in a certain direction – to take social action. In such persuasive texts, the interpersonal relationship between reader and writer is often more 'charged' (Coffin, 2004; Martin, 1989).

Studies conducted on writing skill (e.g., Bhowmik & Kim, 2021; Caplan, 2020; Hyland, 2000; Ivanic, 1998; Matsuda, 2001) have indicated that most foreign language learners are unaware of writing genres and strategies. In writing classes, teachers try to find out the best way to improve learners' L2 writing, especially in the persuasive genre. Mastery over writing strategies is of significance because it enriches students to create written discourses vital to our society (Breaden, 1996).

Among the strategies used in writing instruction, three different strategies of shared writing, interactive writing, and independent writing may increase English writing accuracy, defined by Richards and Schmidt (2010, p. 613) as a grammatical t-unit "consisting of one independent clause together with whatever dependent clauses are attached to it" and the writing complexity, normally defined in terms of the number of words per t-unit (Birjandi & Ahangari, 2008).

However, although previous studies have shown the effect of each of these strategies on adult EFL learners' writing performance, it seems that a comparative study with young EFL learners is missing in the literature. For this purpose, the following research questions were formulated:

1. Are there any statistically significant differences among the effects of shared, interactive, and independent writing strategies on intermediate non-Iranian EFL learners' writing accuracy?
2. Are there any statistically significant differences among the effects of shared, interactive, and independent writing strategies on intermediate non-Iranian EFL learners' writing complexity?

2 Literature Review

2.1 Teaching Writing

Writing will not make competent writers per se; therefore, it has to be instructed. Reppen (1995) stated that "simply allowing students to write a lot will not necessarily provide sufficient practice in the types of writing valued for academic learning" (p. 321). Teaching writing empowers L2 students by providing them with tools to accomplish different purposes through writing. This way the second language writers will also be able to evaluate their own writings as they begin to understand how and why texts are organized in certain ways (Reppen, 1995).

Hyland (2009) discussed three broad approaches to teaching writing, focusing on theories that are mainly concerned with texts, writers, and readers. The first approach focuses on the products of writing by examining texts, either through their formal surface elements or their discourse structure. The second approach focuses on the writer and describes writing in terms of the processes used to create texts. The third approach emphasizes the role that readers play in writing, adding a social dimension to writing by elaborating on how writers engage with an audience in creating texts.

In order for the teachers to make the experience of writing easier and better for the students, Elbow (2000) suggested the following. First, writers should understand certain features of the writing process to take charge of themselves. Second, writers need two kinds of mentalities. The first one is a fertile mentality, producing new ideas, and the second is a skeptical and

critical mentality for critiquing and revising ideas. Third, learners' selves are individual and to some degree unique.

Carrió-Pastor and Romero-Fortezab (2013) stated that "The ability to write autonomously in English enables students to draw on a wider information base and carry out research effectively" (p. 235). The importance of writing this way undoubtedly makes teaching writing very important. In addition, Kazemi et al. (2014) argued that writing skill gains greater importance in higher education for being identified as a member of the disciplinary community of expert writers. Martin and Provost (2014) claimed that written communication skills remain the single most critical attribute for success in higher education. Without appropriate writing instruction, the probability to become a skilful writer would be little.

In the same vein, Ka-kan-dee and Kaur (2015) stated that there is a critical need to investigate and develop effective teaching strategies to develop students' writing competence. They highlighted the importance of argumentative teaching strategies to teach writing. The absence of argumentative teaching strategies to teach writing to both ESL and EFL learners makes a lot of difficulties in the use of complex syntactic forms and appropriate elements in producing argumentative writing. Hence, there is a need to change teaching writing as the students enter higher levels since the writing strategies taken by the lower graders are often different from higher graders (Fletcher & Portalupi, 2007).

2.2 Persuasive Writing: Theoretical Underpinnings

In the 1980s the genre approach disseminated the notion that student writers could benefit from studying different types of written texts. By investigating different genres, students can perceive the differences in structures and apply what they learn to their own writing (Nunan, 1999). Even in the classroom, where academic writing usually predominates, writing tasks can be introduced that are based on different real-world genres, such as essays, editorials, and business letters. According to Nunan (2001), "genre theory grounds writing in a particular social context and stresses the convention-bound nature of … discourse. Writing, therefore, involves conformity to certain established patterns, and the teacher's role is to induce learners into particular … text types" (p. 94).

This theory perceives texts as attempts to communicate with readers (Miao, 2005). In the same vein, communicative purposes determine the social contexts in which writing is used and the genres that are characterized by both the grammatical items and the overall shape or structure of the discourse. In order to develop learners' ability in writing persuasive texts, teachers can use different strategies. There are often three main teaching strategies used by teachers to teach writing in classrooms. The first is shared writing, often defined as a collaborative composition between teacher and learners where the teacher is a writer (Swartz et al., 2001). As the second strategy, interactive writing involves the same procedure of shared writing with the difference that in interactive writing the teacher and students share the

transcription of their shared compositions (Pearson & Gallagher, 1983). Interactive writing is similar to shared writing (Pinnell & McCarrier, 1994) in that the teacher and students collaboratively decide on a message and work through the writing process together; however, in interactive writing, the teacher will generally solicit a sentence from students based on a reading, conversation, or prior class experience. Deciding the exact point at which the students serve as scribes is a responsive teaching decision that offers a scaffold to the students (Button et al., 1996). The pattern of exchange is directed by the teacher, who makes strategic decisions about which literacy concepts to highlight, which writing principles to address, and which spelling strategies to use for scaffolding the young writers. The teacher serves as an audience member and a guide, carefully choosing the direction of the conversation for instructional effectiveness.

The third strategy is independent writing, through which the learners write independently without reliance on the teacher and their competent peers (Burns & Myhill, 2004). Independent writing is a chance for EFL learners to apply all they have learned about the writing process. This is executed through both assigned and self-initiated writing. It is at this phase in writing instruction that a teacher can make or break a writer (Power & Hubbard, 1991). Independent writing can open the door for involvement and can also accelerate writers' motivation. The independent writing strategy can spark students' interest all by themselves. The innumerable hours which teachers spend trying to spark learners' interest can be accomplished through independent writing. The key is knowing how to present writing to the students (Routman, 1991). Moreover, Calkins (1994) opined that independent writing is writing with a selection of topics, any topic of interest the learners may have with a balance between given and free choice. This balance could be done by designating a particular writing genre in which the learners must write.

2.3 Empirical Studies

Storch (2005) explored the effect of collaboration on writing. In this classroom-based study, the participants were 23 adult ESL students completing degree courses. Students were given a choice to write in pairs or individually. Although most chose to work in pairs, some chose to work individually. All pair work was audiotaped and all completed texts were collected. All pairs were also interviewed after class. The researcher compared texts produced by pairs with those produced by individual learners and investigated the nature of the writing processes evident in the pair work. The study also elicited the learners' reflections on the experience of collaborative writing. It was found that pairs produced shorter but better texts in terms of task fulfillment, grammatical accuracy, and complexity. Collaboration afforded students the opportunity to pool ideas and provide each other with feedback. Most students were positive about the experience, although some did express some reservations about collaborative writing.

Dobao (2012) investigated the effect of collaborative writing tasks. Previous research from the perspective of sociocultural theory suggests that writing tasks completed in pairs offer learners an opportunity to collaborate in the solution of their language-related problems, co-construct new language knowledge, and produce linguistically more accurate

written texts. Accordingly, this study compared the performance of the same writing task by four-learner groups (n = 15), pairs (n = 15), and individual learners (n = 21). It examined the effect of the number of participants on the fluency, complexity, and accuracy of the written texts produced, as well as the nature of the oral interaction between the pairs and the groups as they collaborate throughout the writing process. The analysis of interaction focused on language-related episodes (LREs) revealed that although both groups and pairs focused their attention on language, groups produced more LREs and a higher percentage of correctly resolved LREs than pairs. As a result, the texts written by the four-learner groups were more accurate not only compared to those written individually but also those written in pairs.

Jafari and Ansari (2012) attempted to find the effect of group work on Iranian EFL learners' writing accuracy. Moreover, the effect of gender on text production was also investigated. Over a month, sixty Iranian EFL learners were chosen as the participants of this study. They were divided into two groups. The experimental group wrote collaboratively while the control group underwent individual writing tasks. Both groups participated in four essay writing sessions. The participants wrote on the same topics and genres. The results revealed that the students in the collaborative writing group outperformed the students in the control group, emphasizing the significant role of collaboration in L2 writing. Regarding gender effect, the data analysis showed that the females in the collaborative group outperformed males in the same group proving that gender plays a significant role in the Iranian EFL collaborative writing setting.

Jalili and Shahrokhi (2017) aimed at investigating the effects of individual and collaborative writing on the writing complexity, accuracy, and fluency of Iranian intermediate EFL learners. To this end, sixty EFL learners were divided into two groups. The participants in both groups were asked to compose a story based on the provided picture sheet. One group worked individually, and the other group worked in pairs. The t-test results indicated no significant differences in the complexity of the texts produced by the pairs and the individuals. Moreover, the findings demonstrated that collaborative writing fostered more accurate L2 written productions while individual writing promoted more fluent compositions.

Veramuthu and Shah (2020) explored 32 secondary school students' attitudes toward improving writing skills through collaborative writing. They gathered the data through a questionnaire to assess students' attitudes toward collaborative writing. The results indicated that students showed positive attitudes while writing collaboratively.

Caplan (2020) did a needs analysis with a sample of international MBA students, using English as a second language. They used online surveys, focus group interviews, and verbal protocol analysis with four MBA professors to better understand one key written genre that emerged from the analysis. It was found that the genre of the case study write-up is both important for and challenging to ESL students.

Bhowmik and Kim (2021) conducted a systematic literature review to examine the empirical evidence of the challenges teachers encounter in teaching ESL writing and the strategies that can be adopted to help overcome the challenges.

They recommended incorporating skill integration in the writing classroom, providing students with opportunities to write more, and adopting explicit writing instruction to deal with the challenges of writing instruction.

Given the previous literature review, it seems that the effects of these strategies (i.e., shared writing, interactive writing, and independent writing) on the writing accuracy and complexity of young EFL learners, have not been investigated in a single experimental study. Moreover, in the previous studies (e.g., Jalili & Shahrokhi, 2017) the researchers have not integrated the writing task with speaking prompts. Furthermore, as the educational systems intend to fulfill the requirement for the 21st century, collaborative approach may be one of the key elements that may mark a paradigm shift to aid ESL students to become proficient in writing. Therefore, in addition to filling the niche in the literature, this study could be significant for EFL teachers and learners since it may raise their awareness of the effects of these collaborative writing strategies on writing accuracy and complexity.

3 Method

3.1 Participants and Setting

Selected through a non-probability convenience sampling technique, the initial sample of the study incorporated 100 Lebanese intermediate EFL learners with the age range of 12-13. They were six-graders, studying at a Lebanese school in Qom, Iran, where they are taught the materials developed by the Lebanese educational system. The first language of the participating students was Arabic. In order to check the homogeneity of the sample in terms of the level of English language proficiency, one of the researchers distributed Quick Oxford Placement Test (QOPT) to all of them. The participants, who obtained scores within the range of 30 to 47, equal to B1 and B2 CEFR levels, were identified as intermediate-level learners (*Geranpayeh*, 2003). They were selected as the main participants of the study (n=74) and were randomly assigned to three experimental groups, each roughly 25 (i.e., shared, interactive, and independent groups, henceforth EG1, EG2, EG3, respectively). They used English as the obligatory medium of instruction at school.

3.2 Instrumentation

3.2.1 Quick Oxford Placement Test (QOPT)

For homogenizing the participants of the study before the treatment, the paper-and-pencil version of the Quick Oxford placement test (QOPT) developed by the University of Cambridge Local Examinations Syndicate (2001) in collaboration with Oxford University Press, was administered to make sure that the learners were in the same level of proficiency in the English language. It is a valid standardized test for specifying ESL or EFL learners' level of language proficiency (see Beeston, 2000; Jones, 2000). The test band scores are validated based on the CEFR bands (see *Geranpayeh*, 2003). It is composed of 60 multiple-choice items in total, measuring English grammar, vocabulary, and reading comprehension.

3.2.2 Pre- and Post-Tests

A topic was given to the participants to determine the level of their writing accuracy and complexity before and after the study. This topic was "Write a letter to your parents to persuade them to let you go on a school camping trip". The

participants were asked to write one persuasive paragraph in 40 minutes and at least 250 words. The same topic was given as the post-test to measure the degree of change in the participants' writing accuracy and complexity after the treatment.

3.2.3 Materials

Six topics were chosen by the researchers and assigned to the participants in all groups to write a one-paragraph persuasive text about them. To make sure that the topics were not too complex for the participants, the researchers decided to choose the topics from among those which had been assigned by the school supervisor and used by other teachers in other similar classes in the same school prior to this study. The topics were as follows:

1. Is child labor useful for the future life of the children?
2. Why trees are important for human life?
3. Are rich people necessarily successful?
4. Is visiting museums during travel to new places amusing?
5. Why do some people prefer to eat at food stands or restaurants?
6. Is attendance in school classes necessary for learning?

To fulfill the goals of this study, the following steps were taken:

3.3 Procedure

At first, the QOPT was administered to the main participants. According to the results of this test, those students who were identified as intermediate-level learners were selected. The participants were randomly assigned to three experimental groups. Then, the writing pre-test with the title "Write a letter to your parents to persuade them to let you go on a school camping trip" was administered to all groups.

During the treatment sessions, the first experimental group (EG1) received shared writing strategy, the second experimental group (EG2) received an interactive writing strategy, and the third experimental group (EG3) received an independent writing strategy. A one-paragraph persuasive letter was the focus of the study in the class. It is worth mentioning that all 74 participants were present in all stages of the study like pre-test, treatment sessions, and post-test. The treatments lasted six sessions, and the participants wrote a persuasive letter on the specified topic in each session.

In EG1, the participants received a shared writing strategy for six sessions during a week. Following Swartz et al. (2001), students had to write a one-paragraph persuasive letter and organize the paragraph by formulating topic sentence, supporting sentences, and conclusions. In order to achieve the study goals, the teacher printed large colored pictures and brought one paragraph reading sample to the class for students. Then, during treatment sessions, students made groups of three or four to be able to write persuasive letters based on ideas shared about the reading passage. The teacher walked around the class and stopped by each group, took the best sentence of each, and wrote on her paper. At last, the teacher wrote the final edited paragraph on the board by herself.

In the EG2, the students received interactive writing strategy for six sessions. Based on Pearson and Gallagher

(1983), the participants were asked to interact together regarding the topic and pictures then they wrote about them cooperatively. The learners discussed the topic for about 15 minutes before writing. Then, one representative from each group came to the board and wrote one sentence completing the other friends' sentences to make a final paragraph. Every group wrote its own part with a different color than the others. The students were writers and the teacher acted as a supervisor. First, the teacher presented the topic and a text sample evidently, expressed an opinion, and constructed a structure in which linked ideas were sensibly assembled to advocate the writer's purpose. Second, she offered logically ordered reasons that were adhered to by facts and details. After introducing the key features of persuasive writing and analyzing the text sample together on the board, she stuck some new pictures on the board regarding the topic of the new lesson.

In the EG3, the students received independent writing strategy for writing one-paragraph persuasive text. According to Burns and Myhill (2004), students made groups of three or four then the teacher brainstormed like the other stages by reading passage and using pictures. In the next step, the teacher asked questions regarding the reading and students answered cooperatively. Then, each participant took one paper individually and wrote her own paragraph based on the specified topic. During the individual writing phase, the teacher advised them one by one and directed them toward the purpose. Furthermore, the students' errors were corrected separately. The teacher wrote the topic of each session on the board and asked the students to write at least 250 words in 40 minutes about the given topic.

After the sixth treatment session, a writing post-test was given to the participants in all groups, and its results were compared to the results of the pre-test in terms of the effect of the shared, interactive and independent writing strategies on non-Iranian EFL learners' writing accuracy and complexity in a one-paragraph persuasive letter.

Finally, the collected scores were subjected to analysis of covariance (ANCOVA) through SPSS software. The researcher implemented ANCOVA not only to compare the performance of the experimental groups after the treatment but also to show whether any post-test differences were due to the effect of treatment (i.e., writing strategies) or their possible variation in the starting point (i.e., pre-test).

4 Results and Discussion

4.1 Results

Table 1 shows the descriptive statistics of the OPT data collected from all groups of the study before the treatment.

Table 1 Descriptive Statistics of the Participants' OPT Scores

	N	Minimum	Maximum	Mean	Std. Deviation
OPT	100	11	60	37.45	12.51
Valid N (listwise)	100				

As Table 1 indicates, the overall mean and standard deviation of the participants' OPT scores were 37.45 and 12.51, respectively. From these initial participants, 74 students whose scores were between 25 and 49 were chosen. The descriptive statistics for the participants' writing accuracy and complexity scores in the EG1 are presented in Table 2.

Table 2 The Results of the Participants' Pre-test and Post-test Scores in the EG1

	N	Min	Max	M	SD
Accuracy pretest in EG1	24	.11	.29	.20	.04
Accuracy posttest in EG1	24	.07	.19	.14	.03
Complexity pretest in EG1	24	2.79	7.27	4.70	1.21
Complexity posttest in EG1	24	3.68	5.61	4.72	.56
Valid N (listwise)	24				

As it is evident in Table 2, the participants' writing accuracy pre-test mean score in EG1 was 0.20 with a standard deviation of 0.04, and their writing accuracy post-test mean score was 0.14 with a standard deviation of 0.03. Regarding the participants' writing complexity in the EG1, their mean score in the pre-test was 4.70 with a standard deviation of 1.21, and the post-test mean score was 4.72 with a standard deviation of 0.56. Table 3 indicates the descriptive statistics for the participants' writing accuracy and complexity scores in the EG2 group.

Table 3 The Results of the Participants' Pre-Test and Post-Test Scores in the EG2

	N	Min	Max	M	SD
Accuracy pretest in EG2	25	.07	.30	.21	.06
Accuracy posttest in EG2	25	.03	.22	.10	.04
Complexity pretest in EG2	25	3.12	6.95	4.50	.82
Complexity posttest in EG2	25	4.16	6.42	5.08	.61
Valid N (listwise)	25				

As Table 3 indicates, it was found that participants' mean score in the writing accuracy pre-test in the EG2 was 0.21 with a standard deviation of 0.06, and their mean score in the writing accuracy post-test was 0.10 with a standard deviation of 0.04. In terms of writing complexity, the participants' pre-test mean score was 4.50 with a standard deviation of 0.82, and their post-test mean score was 5.08 with a standard deviation of 0.61. The descriptive statistics for the participants' writing accuracy and complexity scores in the EG3 are displayed in Table 4.

Table 4 The Results of the Participants' Pre-test and Post-test Scores in EG3

	N	Min	Max	M	SD
Accuracy pretest in EG3	25	.07	.33	.20	.06
Accuracy posttest in EG3	25	.03	.27	.15	.06
Complexity pretest in EG3	25	3.52	6.25	4.64	.62
Complexity posttest in EG3	25	3.82	6.05	4.68	.58
Valid N (listwise)	25				

Table 4 shows that the participants' writing accuracy pre-test mean score in EG3 was 0.20 with a standard deviation of 0.06, and their writing accuracy post-test mean score was 0.15 with a standard deviation of 0.06. Regarding the participants' writing complexity in the EG3, their mean score in the pre-test was 4.64 with a standard deviation of 0.62, and the post-test mean score was 4.68 with a standard deviation of 0.58. In order to investigate the first research question, which addressed the difference among the effects of shared, interactive, and independent writing strategies on intermediate non-Iranian EFL learners' writing accuracy, the researcher had to run an Analysis of Covariance (ANCOVA). Of course, prior to running ANCOVA, the researcher checked the necessary statistical assumptions (Table 5).

Table 5 Analysis of Covariance for Accuracy Scores

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	.03a	3	.01	5.36	.002	.18
Intercept	.05	1	.05	22.11	.000	.24
Accuracy Pre-Test	.005	1	.005	1.89	.043	.12
Groups	.03	2	.01	7.47	.001	.17
Error	.16	70	.002			
Total	1.53	74				
Corrected Total	.206	73				
a. R Squared = .187 (Adjusted R Squared = .152)						

As it is shown in Table 5, the participants' writing accuracy in pre-test scores is significantly and positively related to their writing accuracy post-test scores (p=0.043< 0.05) with a magnitude of 0.126. After adjusting for pre-test scores, there was a significant effect of the group, F (1, 70) = 7.478, p< 0.05, partial η^2 = 0.176. As the p-value is less than 0.05, the difference among the three groups was significant in terms of writing accuracy. Then, the LSD post hoc test was run to see where the differences lay between the groups (Table 6).

Table 6 The Pairwise Analysis of Accuracy Scores

(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
EG1	EG2	.03*	.01	.01	.01	.06
	EG3	-.01	.01	.25	.04	.01
EG2	EG3	-.05*	.01	.000	.08	-.02
*. The mean difference is significant at the .05 level.						

Based on Table 6, the mean score of the participants in the EG2 differed significantly from both EG1 (p=0.011<0.05) and EG3 (p=0.000<0.05). No significant difference was seen between EG1 and EG3 (p=0255>0.05). As the mean differences indicate, EG2 outperformed both EG1 (I-J=-0.036) and EG3 (I-J=-0.052) and it can be concluded that interactive writing strategies can lead to more accurate writing performance. Similar to the first research question, responding to the second research question, which aimed at investigating the difference among the effects of shared, interactive, and independent writing strategies on intermediate non-Iranian EFL learners' writing complexity, demanded running another ANCOVA after checking the required statistical assumptions (Table 7).

Table 7 Analysis of Covariance for Complexity Scores

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2.622a	3	.874	2.555	.062	.099
Intercept	69.204	1	69.204	202.364	.000	.743
Complexity Pre-Test	.178	1	.178	.521	.007	.473
Groups	2.316	2	1.158	3.386	.039	.088
Error	23.938	70	.342			
Total	1750.291	74				
Corrected Total	26.560	73				
a. R Squared = .099 (Adjusted R Squared = .060)						

As shown in Table 7, the first line highlighted shows that participants' writing complexity pre-test is significantly and positively related to the writing complexity post-test (p< 0.05) with the amount of 0.47. The next line shows the main effect of different writing strategy types on the dependent variable – writing complexity post-test scores. After adjusting for pre-test scores, there was a significant effect of the group, F (1,70) = 3.386, p < 0.05, partial η^2 = 0.088. As p-value is less than 0.05, the difference among the three groups in terms of writing complexity was significant.

A pairwise comparison was needed to check the difference between each pair of groups. The LSD Post Hoc test was performed on the data to achieve the goal. The results of the Post Hoc test are presented in Table 8.

Table 8 The Pairwise Analysis of Complexity Scores

(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
EG1	EG2	-.35*	.16	.04	.68	-.01
	EG3	.04	.16	.78	.28	.37
EG2	EG3	.39*	.16	.02	.06	.72
*. The mean difference is significant at the .05 level.						

Table 8 indicates that the mean score of the participants in the EG2 differed significantly from both EG1 (p=0.041<0.05) and EG3 (p=0.020<0.05). No significant differences were seen between EG1 and EG3. As the mean differences indicate, EG2 outperformed both EG1 (I-J=0.350) and EG3 (I-J=0.396) and it can be concluded that interactive writing strategies can lead to more complex writing performance.

4.2 Discussion

The purpose of this study was to investigate the effects of shared writing, interactive writing, and independent writing strategies on the writing accuracy and complexity of young EFL learners. It was found that the group, which used interactive writing strategies outperformed the other two groups and no significant differences were found between shared and independent writing groups.

In the same vein, the results obtained in this study were consistent with the results gained from the analysis of the texts produced by Storch (2005). He indicated that interactively written texts scored higher than individually written ones in terms of accuracy. Moreover, Nixon and McClay (2007) found that interactive groups achieved higher scores than individuals on their writing in terms of communicative quality along with organization and linguistic appropriateness. Similarly, Jafari and Ansari (2012), who explored the impact of interaction on Iranian EFL learners' writing accuracy, found results similar to those of the present study, indicating that learners, who worked in interaction with each other, produced more accurate texts than those in the independent group. They inferred that the improved accuracy in interactive writing group may be due to the learners' enhanced motivation to concentrate on grammatical accuracy and the participation in revision process which led to more accuracy.

Moreover, the finding of this study was in line with that of Jalili and Shahrokhi's (2017) study in terms of both writing accuracy and complexity in spite of the fact that Jalili and Shahrokhi (2017) used a picture description task as a prompt for the interactive writing task with some adult participants. Furthermore, the results of Jafari and Ansari (2012) also confirmed the findings of the present study in terms of writing accuracy in favor of the collaborative work group although they had only used dyads as a pattern of interaction in their study.

Moreover, the findings of the study can be justified on the ground that the interactive writing strategy emphasizes the integration of language skills. In this context, it stresses the combination of writing and oral skills in order to improve the learners' writing skill. According to the principles of interactive writing, learners should practice writing in actual writing

activities (Pinnell & McCarrier, 1994). Another justification that may explicate the results concerning the higher accuracy and complexity of interactive writing group is that interactive writing afforded learners the chance to provide and get immediate feedback on language, a privilege that is not available when learners write individually. Furthermore, as Wigglesworth and Storch (2009) asserted, another reason might be that, when working interactively, students are able to pool their resources, and on the whole, produce the correct outcome.

The results of the present study are in contradiction with the findings of the following studies. Dobao (2012) found no statistically significant differences in syntactic and lexical complexity between the texts written interactively and independently. The conflicting results gained from Dobao's (2012) study can be attributed to the difference in the size of groups and the learners' second language (i.e., Spanish). Storch (2005) also found no significant difference between the individual and collaborative writing groups, which might be due to the short length of the text and the small sample size. Moreover, Watanabe (2014) found conflicting findings, indicating that the learners came up with a statistically significant greater number of words when writing independently than interactively, proposing that independent writing may be more encouraging for producing more written text, which may be justified in the ground that the participants' use of first language as a meditational tool for learning L2 (Storch & Wigglesworth, 2003) and the scoring operationalization in Watanabe's (2014) study were different from this study.

5 Conclusion and Implications

From the transcendence of interactive writing over shared and independent writing strategies, it can be concluded that interaction among learners and between the teacher and learners through sharing ideas can lead to better performance of the learners in terms of both accuracy and complexity of writing. Another conclusion that can be made is that interactive writing can maximize the students' interaction in English, and it can take away the big burden of running large classes. Therefore, the teacher has to change his or her role to be a motivator or problem solver. Furthermore, interactive activities can be an effective way to deal with the problems faced by Iranian teachers in EFL classes. It creates a comfortable non-stressful environment for learning and practicing English. It helps students to learn more, have more fun, and develop many other skills such as learning how to work with one another.

In the light of the findings of the present study, the researcher would like to suggest some practical implications which can be useful to students and teachers as well as material developers and syllabus designers. The first implication is for the students. By implementing group activities like interactive writing, language learners could reach high levels of writing proficiency. When the students interact with each other, they learn more as they are more involved. In other words, interaction which makes the learner think about the meaning of a word will be more helpful than teaching without it. Another implication of the present study for EFL learners may be enhancing their motivation to learn. When the students write interactively, they may have a sense

of self-satisfaction. It means that they feel that their learning has some benefits for them and at the same time for their peers and gradually the sense of futility of attending language classes fades in them. The findings of the present study can also be useful to foreign language teachers who are in search of effective methods for teaching writing in a meaningful context and non-threatening environment. Syllabus designers and material developers can also take advantage of the findings of this study. They could include innovative exercises in relation to writing skill, by selecting appropriate classroom group activities and tasks, while taking the students' needs, strengths, levels, learning styles, learning strategies, teachers' teaching styles, etc. into consideration.

This study encountered two main limitations. Firstly, the limited number of students participating in this study and the representativeness of this small available sample may influence the generalizability of the findings. Moreover, the results of the study may have been influenced by the participants' age. Third, only non-Iranian EFL learners from a Lebanese School in Qom participated in this study due to availability issues.

Based on the limitations of the study, the following suggestions can be put forward for further research. Since the participants of this study were non-Iranian intermediate EFL learners, further research is needed to check if the results of the present study are generalizable to other EFL learners with different first languages. Moreover, learners from other levels of proficiency can be selected for further studies. In addition to shared and interactive teaching of writing, other methods of cooperative writing may be implemented in future studies.

Acknowledgments

The authors would like to acknowledge the help and support of Islamic Azad University, Qom Branch, for the opportunity given to them to publish this paper.

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