Interactive versus Collaborative Writing Instruction: An Experimental Study

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Abstract

This study investigated the effects of Interactive and Collaborative Instructional pedagogies on Iranian EFL learners’ writing. It adopted pre-test and post-test control group quasi-experimental design with two experimental and one control groups. The participants were 90 college students in two branches of Islamic Azad University. The participants of the study were 90 male and female sophomore Iranian EFL students, 19 to 24 years of age. The main data collection tool was an essay writing task. This study used a factorial design with one control and two experimental groups. The Control Group (CG) received the usual traditional class. Experimental Group One (EG1) received treatment in Interactive Writing for 13 weeks, while, Experimental group two (EG2) received treatment in Collaborative Writing. Data were analyzed using ANCOVA. Pre-test post-test comparisons revealed that students who received interactive pedagogy gained the most from the instruction $t = -18.302; p = 0.000; p<0.5$, followed by students who received collaborative pedagogy with a significance level of $t = -16.253; p = 0.000; p<0.5$. The control group recorded no significant gain in their post-test performance $t = 0.339; p = 0.736; p>0.5$. The total variance accounted for by all the independent variables taken together was 51% (i.e. $W^2 = 0.51$%). Findings indicated that interactive pedagogies befitted students more than collaborative ones.

Keywords: interactive writing, collaborative writing, instructional pedagogy

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1. Introduction

As a difficult, complicated, and demanding socio-cognitive activity, writing is often subject to a number of constraints and problems imposed on L2 learners (Silva, 1990, 1993). Traditional teaching methods, time constraints, and writing standards have caused teachers and students to become more product-focused and pay less attention to the purpose for learning to write (Glenn as cited in Irwin & Kondol, 2008). Assignments for prescribed writing topics often cause teachers and students to get stuck in the standard modes of writing narration, process analysis, cause-effect, description, definition, analysis, classification, exemplification, comparison, and analogy (Bosher, 1998).

Irwin and Knodle's (2008) solution to this problem is to ask the students to view writing as a decision making process. In other words, teachers should encourage the students to view the real goal of writing as an activity to express students' ideas, and to rely on their knowledge of the writing process as a way to scaffold their ideas, and let their ideas take precedence. Students need to see more examples of writing that get away from the traditional linear models of essay writing. They need to see the writings of good writers in order to analyze how they have constructed the beginning, middle, and end of their writings to suit their own writing purpose.

According to Roca de Larios, Murphy & Marin (2008) the quality of L2 writing is more closely related to learners' writing strategies than to their L2 proficiency. In other words, the determining factor of L2 writing quality is not the learners' linguistic competence, but their composing competence. The effective use of writing strategies is a good indicator of one's composing competence. Similarly, McVey (2008) identified two key categories of problems that students find in writing: problems of ability and problems of engagement. Problems of ability are related to understanding language, grammar, and written structures. Problems of engagement are related to the students' incentives and willingness. To address the problems of engagement and ability simultaneously, a number of pedagogies have been proposed in the literature of which the two most notable ones are Collaborative writing and interactive writing.

Collaborative writing provides a variety of classroom activities and it can be a big cause of motivation, by serving as a break from oral or reading activities. In fact, learners' writing work is an evidence of success or failure in language learning. In other words, it helps both the learners and the teachers to see the progress of writing. It provides opportunities which enable the teachers to analyze and monitor any learning problems. Collaborative learning can occur between just two learners or within a larger group.
While in collaborative learning, learners engage in a common task where each individual depends on and is accountable to each other, in interactive writing every individual is responsible for his or her own writing, though he/she finishes the project in an interactive atmosphere. The interactive process enhances learners’ learning and develops their social skills like decision-making, conflict management, and communication (Smith & MacGregor, 2009). Interactive learning actively engages the learners in struggling with the material, while making the writing process visual to the whole class through negotiating the composition of texts, reading and rereading texts, Searching, checking, and confirming while reading and writing (Stanswarts, 2016).

2. Literature Review

2.1. Interactive Writing

Interaction, according to Martin (1989), is using language as a tool of mediation among a community of learners, a tool that becomes a social mode of thinking where students learn by engaging in dialogues. He defined interaction as:

Circular in form, cooperative in manner, and constructive in intent, it is an interchange of ideas by those who see themselves not as adversaries but as human beings coming together to talk and listen and learn from one another…. It is out of these classroom conversations that students' depth and complexity of higher order thinking can grow (p.10).

One of the ways of learning to write is through Interactive Writing activities (Belden, Russonello, & Stewart, 2005). Research into the role of interaction in L2 learning started in the early 1980s. Long (1993) proposed "various 'conversational modifications' (e.g., clarification requests, confirmation checks) through which input could become comprehensible to learners [are necessary] for L2 learning" (p.557). According Swain and Suzuki (2008):

Interactive Writing is shown to be fruitful, mainly by engaging learners as well as capturing their attention and interest. Appropriate for students at all levels, Interactive Writing can take on many forms like peer editing or classroom activities in which students take on active roles in the lesson. (p.557)

Bull and Shurville (1999) argued that Interactive Writing activities could improve spelling and increase letter-sound recognition for weaker language students. Because Interactive Writing activities rely on students' prior knowledge, every Interactive Writing activity builds a schema for future analyses of writing. The connection of written and oral language is also stressed in this type of learning. A small group in which students are given a
sample text and asked to identify something in the text can be a good example of interactive writing. Younger students might be asked to identify parts of speech. Older and more advanced students might be asked to identify various structures and the genre of the text (Wollman-Bonilla, 2000). Finally, each group's analysis of the writing is shared with the entire class. In this way, all students are given a chance to participate in language activities (Bhatia 1993, 1999). Students compose details and dialogue to accompany the pictures the teachers provide for them (Thompson, 2001). This exercise requires both the ability to interpret, and the ability to apply a writing style appropriate for each pictured situation. Writing, in this approach, is not, anymore, a boring, academic activity. Some examples of the types of writings done by learners are sending an informative real email (e.g. to the teacher or classmates) in which they request some information, or desire to become a member of a society or to write an article for a peer-edited journal. Then, students will not forget the enjoyment of getting a reply for their writing. When students see these authentic writing situations, they are encouraged by the fact that their writing has value in the classroom and later in life (Pittard, 1999). Wollman-Bonilla (2000) argued that Interactive Writing is dynamic and provides an opportunity for students to be more active in the class and in this way can improve the quality of their writing. According to Knodle and Irwin (2008):

Students' words become more important to them if their audience is more than one. When their writing is made public, suddenly style and clarity become more important [...]. Most researchers and theoreticians in the field of second language acquisition (SLA) assume that participation in communicative interaction is one way in which a second language (L2) is acquired by learners. Activities that occur during interaction (e.g., the provision of corrective feedback, noticing, the production of modified output, the negotiation of meaning) are considered to play an integral role in the learning processes. (p. 32)

As part of a lesson plan for writing interactively, teachers can and should act as learners' facilitators. Writing short emails to the teacher is at first a little embarrassing, but after two or three first ones, the learners get motivated and try to write more. The first emails to the teacher, their classmates (which can be encouraged and forced by the teacher), and friends become a solid starting point for further real meaningful writings.

2.2. **Collaborative Writing**

Collaboration is often contrasted with competition. As a result, In Collaborative Writing classrooms students work together in small groups to achieve a common goal. Through collaboration, students and teachers are in a state of dynamic interaction in the classroom. When students interact in
collaborative groups, they learn to give and receive information, develop new understandings and perspectives, and communicate in a socially acceptable manner. Collaborative learning relies on the instructional use of small groups of students working together to maximize each other’s learning potential (See Freire, 1970; Wells, 1990; Kramsch, 2000, Storch 2005).

 Collaborative Writing differs from Interactive Writing in that in the latter every student has to complete his/her own assignment while in the former every team produces its unique assignment. According to Hossein and Quinn (2013) Collaborative Writing pedagogy allows students to see different sides of issues being assigned and point out interesting details that may have otherwise been unnoticed by the inner group members. Jake (2010) stressed that in Collaborative Writing learners have an in-depth conversation that hits on all key points, and even gives them a better opportunity to ask questions about things that they do not understand. Therefore, this pedagogy permits learners to talk to each other in conversation and look to each other for answers instead of just relying solely on the teacher.

The value of Collaborative Writing as a means to develop the linguistic and writing conventions of a second language has also been underpinned from a sociocultural perspective. In a collaborative situation writers are forced, first unwillingly and, later, willingly, to make decisions about the language needed to express their ideas, and thus to find the structure in which to express those ideas as they produce a text together. As Wells (2000) aptly put it "knowledge is created and re-created in the discourse between people doing things together" (p. 71). He added that:

Knowledge is situated in a particular activity setting and it involves individuals working together to achieve a common goal, or overlapping goals, to which they direct their efforts. Knowledge building thus happens in the course of collaborative meaning-making through discourse; learners progress towards their own understanding through the constructive and creative effort involved in saying and in responding to what was said. .. [I]t is the joint attempt to construct common understandings that is superior to individual understandings. (p.74)

In this view "learning as increasing participation in communities of practice concerns the whole person acting in the world" (Lave & Wenger, 1991, p. 49). The individual participates and relates with others in an ongoing, social and interactional process; that is, members interact, "do things together, negotiate new meanings, and learn from each other" in communities of practice (Wenger, 1998, p. 102). In this learning context, as Freire (1970) asserted,

the instructor is no longer viewed as the only active agent of learning, the one who 'deposits' knowledge into the learners; nor are learners seen as the 'depositories' of knowledge.... Rather, the classroom
per se is considered as a site where new knowledge, grounded in the meaningful experiences of learners and teacher alike, is produced through dynamic interactions (p. 121).

Both interactive and collaborative methods are innovative methods that offer students space for innovation and exploration. This being the case, it is still unknown whether or how much they are effective in practice or what their merits and demerits are. According to Banerjee (2000), in the collaborative learning process, a learner must formulate ideas about the material assigned to him, test his assumptions, clarify them, come to a conclusion and then assimilate that material within himself. Once he feels that he “owns” the material, he must explain it to his group so that his knowledge can be pooled together and shared among all his group members. Each learner, thus, is a dynamic contributor to both the learning and the teaching process. When questions are raised, different learners will have a variety of responses. Each of them can help the group create a product that reflects a wide range of perspectives and is thus more complete and comprehensive.

In interactive writing (Herrell, 2000), teacher and learners create a text together. This strategy provides effective modeling and scaffolding as learners learn about the writing process. Learners learn to brainstorm ideas, plan writing, draft, revise, edit, and produce a final version. They can also learn to distinguish the “schema” or plan of various types of writing and to assess their writing as they create it. Interactive writing differs from shared writing in two important ways. First, children take an active role in the writing process by actually holding the pen and doing the writing.

This study aimed at exploring the effect of interaction and collaboration on promoting writing skills, with a focus on improving the mechanics and content (unity, coherence, and style) of essay writing of Iranian EFL college students. To achieve this end, the study tried to find answers to the following questions:

1. Does Interactive Writing pedagogy have any significant effect on Iranian EFL learners’ writing ability in terms of the mechanics and content (unity, coherence, and style) of essay writing?

2. Does Collaborative Writing pedagogy have any significant effect on Iranian EFL learners’ writing ability in terms of the mechanics and content (unity, coherence, and style) of essay writing?

3. Method

The study adopted pretest-posttest control group quasi-experimental design with two experimental and one control groups as detailed below:
3.1. Participants

The participants of the study were 90 male and female sophomore Iranian EFL students, 19 to 24 years of age, and at nearly the same level of language proficiency (Intermediate Level) confirmed by administering Oxford Placement Test (OPT) (2004), and writing ability, based on the writing test. The learners had already completed two courses in Grammar and Writing I and II and Conversation I and II; besides, they had all passed similar courses, and had the same courses when the study was being carried out. All groups (both control and experimental ones) attended a writing class two hours a week, for 13 weeks. The classes met once a week for 13 weeks in fall and winter of 2013. The course book selected was Refining Composition Skills: Rhetoric and Grammar (SamIly, Ruetten, & Kozyrev, 2001). First, for three consecutive weeks, all groups covered the first chapters of their textbook, Refining Composition Skills: Rhetoric and Grammar on grammar and essay writing. All groups received a brief review of compound and complex sentences and of verbals (participles, gerunds, and infinitives). In addition, the participants were provided with the definition of some key concepts such as the topic and supporting sentences, unity, cohesion, and coherence. This was done to refresh their minds, re-teach these for those who had not covered them, or had a vague and unclear mind about them. It also helped the researcher to break the ice and attract the participants' confidence by teaching some familiar, and yet, problematic and/or confusing structures (e.g. gerunds look very similar to present participles). Then, the Experimental Groups underwent the specific treatments designed for each of them.

3.2. Instruments

The first data collection tool was Oxford Placement Test (OPT) (2004) as a standard proficiency test of grammar, writing ability, and vocabulary was given to the control group and experimental groups one (receiving treatment in interactive writing), and two (receiving treatment in collaborative writing) to ensure that they were at the same level of proficiency. The second data collection tool was a writing task for both pre-test and post-test across all three groups.

3.3. Treatment Packages

This study used a factorial design with one control and two experimental groups. The Control Group (CG) received the usual traditional class. Experimental Group One (EG 1) received treatment in Interactive Writing for 13 weeks. Likewise, Experimental group two (EG2) received treatment in Collaborative Writing. Details are given below.
3.3.1. Control Group
The Control Group (CG) received the usual traditional classes (See Chuppa-Cornell, 1996). They had a textbook and the teacher was the authority in the class. They covered the topics in the book and listened to the teacher's explanations and sometimes asked some questions individually and the teacher provided the answers. They wrote some essays and the teacher corrected them. This approach, in fact, follows the standard modes of writing, i.e., narration, process analysis, cause and effect, description, definition, analysis, classification, exemplification, comparison and analogy. The instructor explained what these types of writing were. Then, the students were asked to write on topics given by the instructor. There wasn't any interaction or collaboration among students, or between students and the teacher, nor did the students have any opportunity to see examples of different types of writing other than the ones included in the book. What the students did after the instructor's explanation was to write an essay on the given topic. The teacher corrected what the students had written and gave back their assignments. They were not provided with any vocabulary and any discussion about the topics either.

3.3.2. Experimental Groups
The Experimental Groups received the same instructions for writing essays as the Control Group, and the same textbook Refining Composition Skills: Rhetoric and Grammar, for the first three weeks. However, they differed on the treatments starting from the fourth session. First, the learners and the instructor discussed the given topic and the organization and structure of the particular essays together in class. After brainstorming ideas, learners, either in pairs or individually, had time to complete a draft of one of the assignments. The instructor then provided feedback regarding content (creation, elaboration and deletion of ideas), structure (genre general features), organization (order and flow of ideas within an essay) and form (error correction). During the following sessions, the instructor and learners looked at a few anonymous examples of student writing to discuss and revise key points about content, structure, organization and form. After this, class learners revised and completed the assignment, draft two, during the following week. This procedure continued till the end of the semester.

3.3.3. Experimental Group One (EG1)
Experimental Group one (EG1) underwent Interactive Writing activities and instruction. In other words, in addition to typical instructions given to the control group, the participants were to peer-review one another's writing. After the instructor's explanation, the students had to write their essays and exchange what they had written with their friends' and comment on one
another's writings. The teacher was also present to guide them on how to give comments. These comments included comments on the content, organization, language (grammar, diction, punctuation, etc.), unity and coherence. Based on their friends' comments, the learners revised their writings and submitted the final draft to the teacher. The teacher also corrected the students' writings and provided them with the required information. The instruction was, of course, sometimes given through small groups. That is, the learners were divided into groups of three and four, and each group commented on the writings of the other groups and finally everyone had to write the final draft by himself/herself based on the comments given by his/her friends in the small group. Sometimes, each group's analyses and comments were shared with the entire class to give all learners a chance to participate.

3.3.4. Experimental Group Two (EG2)

Experimental group two (EG2) had Collaborative Writing sessions through small group collaborative writings instructions, later expanded to collaborative class performance. This group also received the typical instruction as in the other groups. In this group, however, the learners were divided into six small groups, each with five members. Each group had to discuss the given topics and collaboratively write one essay on the topic. Then, the essay written by each group was discussed in the class. Everybody commented on it and after that each group revised its writing and submitted the final draft. The difference between this group and the previous experimental group was in that in EG1, every student wrote his/her final essay individually but in EG2 five students together and collaboratively wrote one essay. Here, again after the submission of the final draft, the instructor corrected the groups' writings and provided them with the required information.

3.4. Data Collection Procedure

The research was carried out in three phases: pre-treatment stage, treatment stage and post-treatment stage as detailed below:

3.4.1. Pre-Treatment Stage

The class teachers were instructed as to the nature of the three treatment packages of the study. As the researcher's aides, they taught the students in the control and treatment groups. They were taught on how to create the right type of environment for the experimental and control groups for effective treatment to follow suit. In addition, the pre- test was administered to all the the two experimental groups and one control group.
3.4.2. Treatment Phase

The third week of the semester was used for the pre-test to establish the baseline on EFL learners performance on writing ability. The treatment period took ten weeks in each of the universities. This involved the use of the Interactive Writing pedagogy for EFL learners in the experimental group one, the use of the Collaborative Writing pedagogy for those in the experimental group two and the use of the conventional method of teaching writing ability to the EFL learners in the control group.

3.4.3 Post-Treatment Phase

The thirteenth week of the semester was used for the post-test, which comprised of the administration of an essay writing test similar to the one used in the pre-test for the experimental and control groups.

4. Results and Discussion

4.1 Results

Research questions had to do with the effect of Interactive writing and Collaborative Writing pedagogies on Iranian EFL learners' writing quality. To answer the research questions, the performance of a group of second-year students, the control group, who received instruction in traditional method was compared with the performance of two groups of second year students, who received instruction in Interactive and collaborative Writing. The following consists of the rationale, the procedure, the results obtained, and the interpretations of the findings.

In order to answer the first research question, the researcher had to compare the post-test writing scores of the students exposed to Collaborative Writing and the scores of the students exposed to the traditional approach in essay writing. Therefore, an independent sample t-test between the mean of the students in the control group, namely, the traditional approach and that of the students in experiment group one, namely, interactive writing was run. Table one depicts the results:

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>30</td>
<td>10.62</td>
<td>2.918</td>
<td>-7.603</td>
<td>58</td>
<td>.000</td>
</tr>
<tr>
<td>Exp. Group 2</td>
<td>30</td>
<td>15.16</td>
<td>2.793</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As table one shows a significant difference was found between the scores of the EFL learners exposed to Interactive Writing pedagogy and those exposed to the traditional approach (the control group) in writing ability at p
= 0.000; p < 0.05 in the post-test performance mean scores. The results simply mean that the students in Interactive Writing group did significantly better than those in the control group, namely, traditional approach in the post-test performance mean scores. This implies that Interactive Writing has resulted in improvements in the performance of students in writing. The results, however, are tentative until the differences existing at the pre-test scores are taken care of through ANCOVA procedure.

In order to answer the second research question, the researcher had to compare the post-test writing scores of the students exposed to Collaborative Writing and those of the students exposed to the traditional approach in essay writing. Therefore, an independent sample t-test between the mean of the students in the control group, namely, the traditional approach and that of the students in experiment group three, namely, Collaborative Writing was run. Table two depicts the results:

Table 2
Independent Sample t-test between Collaborative Writing and the Traditional Approach

<table>
<thead>
<tr>
<th>Students School</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>T</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative Writing</td>
<td>30</td>
<td>16.73</td>
<td>2.016</td>
<td>11.560</td>
<td>58</td>
<td>.000</td>
</tr>
<tr>
<td>Traditional Approach</td>
<td>30</td>
<td>10.62</td>
<td>2.918</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As table two shows a significant difference was found between the scores of the EFL learners exposed to Collaborative Writing pedagogy and those exposed to the traditional approach (the Control Group) in writing ability at p = 0.000; p < 0.05 in the post test performance mean scores. The result simply that the students exposed to Collaborative Writing, namely, experimental group two, outperformed significantly those in the control group, namely, the traditional approach in the post test. This implies that Interactive Writing has been an effective instructional pedagogy. The results, however, are tentative until the existing differences at the pre-test scores are taken care of through ANCOVA procedure.

The ANCOVA design was used to control statistically any initial differences present at the time of pre-test. The covariate was the scores on the essay writing achievement pre-test. The dependent measure, namely, the scores on the writing achievement post-test, was adjusted on the basis of the covariate. After checking all possible two-way interactions, the model was reduced to include significant variables. The results of this analysis are given in tables three to seven. The post-test writing achievement scores reject the hypothesis that there is not any significant difference in the mean performance of subjects among the groups as detailed bellow.

The experimental groups were treated as independent variables (factors), pre-test scores as covariates, and post-test scores as dependent variable. The three main assumptions of ANCOVA were tested (i.e.
normality, Levene’s test of equality and homogeneity-of-slopes test). The third assumption was checked before conducting the ANCOVA. This test evaluated the interaction between the covariate (pre-test) and the factors (training) in the prediction of the dependent variable (academic performance in essay writing or post-test). As shown in Table three below, there were not any significant interactions between the covariate and the factors, which means that the homogeneity-of-slopes assumption is validated.

Table 3
Results of the Test of Homogeneity of Slopes

<table>
<thead>
<tr>
<th>Group* Pre-test score</th>
<th>Df</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>1.419</td>
<td>0.246</td>
</tr>
</tbody>
</table>

As indicated, the F results of the interaction term (product term) training and pre-test are not significant at the alpha level (0.05). Based on the assumption that homogeneity is not violated, the researcher assessed the effect of the treatment (interactive and collaborative writing) on the respondents’ writing scores as shown in tables one and two above.

Levene’s Test of Equality (first assumption of ANCOVA) was used to determine the equality of variance assumption. As table four indicates, the error variance of the dependent variable is equal across groups.

Table 4
Levene’s Test of Equality of Error Variance

<table>
<thead>
<tr>
<th>Writing Performance</th>
<th>F</th>
<th>Df1</th>
<th>Df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.358</td>
<td>2</td>
<td>102</td>
<td>0.103</td>
</tr>
</tbody>
</table>

Table 5
Descriptive Statistics for Post-test Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>Observed Mean</th>
<th>Standard Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive Writing</td>
<td>15.20</td>
<td>2.793</td>
</tr>
<tr>
<td>Collaborative Writing</td>
<td>16.73</td>
<td>2.016</td>
</tr>
<tr>
<td>Traditional writing (Control group)</td>
<td>10.62</td>
<td>2.918</td>
</tr>
<tr>
<td>Total</td>
<td>14.19</td>
<td>3.672</td>
</tr>
</tbody>
</table>

As a measure of association, Omega squared was calculated to be 51%, indicating an acceptable level of association. A one-way analysis of covariance (ANCOVA) was conducted. The independent variable was the type of training (i.e. interactive and collaborative control groups). The dependent variable was the students’ post-test academic performance scores in writing ability and the covariate was the EFL learners’ pre-test scores in writing ability. A preliminary analysis evaluating the homogeneity-of-regression (slopes) assumption indicated that the relationship between the covariate and the dependent variable did not differ significantly as a function of the independent variable F(3,247) = 2.358 p = 0.103. The ANCOVA was significant, F (1,135) = 192.9, p = 0.000 (See Table 5). However, 51 % ( w2 =
0.51) of the total variance in the posttest academic performance in essay writing scores was accounted for by the treatment groups controlling for the effect of the students' pre-test scores. The result of the analysis of covariate (ANCOVA) is presented in table six as shown below:

Table 6
**Analysis of Covariance (ANCOVA) for Post-Test Scores**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test scores</td>
<td>533.963</td>
<td>1</td>
<td>533.963</td>
<td>192.902</td>
<td>0.000</td>
</tr>
<tr>
<td>Type of training</td>
<td>923.536</td>
<td>2</td>
<td>461.768</td>
<td>166.821</td>
<td>0.000</td>
</tr>
<tr>
<td>Error</td>
<td>362.615</td>
<td>101</td>
<td>2.768</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>28971.000</td>
<td>135</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result shown above indicates that the population-adjusted means are equal. Based on the significant difference on the type of training (i.e. alpha = 0.000) follow-up tests were conducted to evaluate pairwise differences among the adjusted means for the training groups. The Bonferroni procedure was used to control for Type I error across the two pairwise comparisons (alpha = 0.05/3 = 0.017). The results showed that EFL learners under Collaborative Writing (M = 16.207) had significantly higher post-test scores, controlling for the effect of their Pre-test, than EFL learners under Interactive Writing (M = 15.864). The control group reported the lowest post-test scores (M = 10.484).

Table 7
**Descriptive Statistics for Posttest Scores**

<table>
<thead>
<tr>
<th>Source</th>
<th>Estimated Marginal Means</th>
<th>STD Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative Writing group</td>
<td>16.207</td>
<td>0.258</td>
</tr>
<tr>
<td>Interactive Writing group</td>
<td>15.864</td>
<td>0.256</td>
</tr>
<tr>
<td>Control Group</td>
<td>10.484</td>
<td>0.248</td>
</tr>
<tr>
<td>Total</td>
<td>42.555</td>
<td>0.762</td>
</tr>
</tbody>
</table>

The multiple comparisons show not all of the treatment groups differ statistically in the students’ post-test writing performance in writing ability. The statistical significant difference was found between interactive treatment group and the control group. While the observed means indicates that Collaborative Writing group was the best; the adjusted means shows that interactive group performed best, followed by collaborative group and lastly, the students from control group. The results are presented in the Table eight below:
Table 8  
**Pairwise Comparisons of Post-Test Scores**

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Difference</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>3.343</td>
<td>4.325</td>
<td>6.201</td>
<td>0.000</td>
</tr>
<tr>
<td>1-3</td>
<td>5.724*</td>
<td>4.852</td>
<td>6.595</td>
<td>0.000</td>
</tr>
<tr>
<td>2-3</td>
<td>5.381*</td>
<td>4.523</td>
<td>6.239</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on estimated marginal means  

a. Adjustment for multiple comparisons: Sidak  

*. The mean difference is significant at the .05 level.

4.2 Discussion  

The major findings are summarized here as follows. The study revealed that the post-test performance means scores of the pupils exposed to Interactive and Collaborative treatment conditions are highly significant. In other words, the study revealed that pupils exposed to the Interactive strategy differ significantly at \( P = 0.000; p< 0.5 \) in the post test performance mean scores from the Traditional approach. This implies that the Interactive Strategy has improved upon the performance of pupils in writing ability than the Traditional approach. The study also revealed that pupils exposed to the Collaborative strategy differ significantly at \( p = 0.000; p< 0.05 \) in the post test performance mean scores from the Traditional approach. This implies that the Collaborative Strategy has improved upon the performance of pupils in writing ability than the Traditional approach. Furthermore, ANCOVA procedures allowed the researchers to confirm a statistically significant difference between pupils’ writing performance (post- test) and treatment packages when the effect of pupils’ pre- test results was controlled; the study revealed that not all of the treatment groups differ statistically in the pupils’ post-test writing ability. The statistical significant difference was found between Interactive treatment group and the control group. Although the observed means indicates that Collaborative group was the best; the adjusted means show that the Interactive group performed best, followed by collaborative group and lastly, the pupils from control group. This implies that the interactive group (\( M =16.207 \)) had significantly higher post-test scores, controlling for the effect of their Pre-test, than pupils under collaborative (\( M = 15.864 \)). The control group reported the lowest post-test scores (\( M= 10.484 \)).

The obtained findings of a study by Al Ajmi and Holi Ali (2014) entitled Collaborative writing in group assignments in an EFL/ESL classroom showed that the vast majority of teachers and learners had positive views about the current CW (Collaborative Writing) practices, which concurs with the findings of this research. Further, the study indicated that both learners and teachers can play a significant role in improving CW practice by following certain strategies, such as those involving clarifying CW task
learning outcomes, fair assessment, monitoring, solving CW group conflicts, CW group management and clear division of CW group work. Based on the teachers’ and learners’ views, and the findings from the literature, some suggestions for improving CW are proposed which may help to enhance CW practice. According to Sagban (2015) the experimental group subjects’ performance in writing has been found to be better than that of the control group subjects on the writing composition post-test. On the basis of the results obtained, it has been found that collaborative writing is effective in developing writing ability of Iraqi EFL learners. The findings for the study by Fabela, (2013) indicated that participants in ESC Region 2 defined interactive writing as being an instructional writing method where the teacher and the students work together in the writing process while sharing the pen. In addition, the findings suggested that participants implemented interactive writing at least three times a week or whenever they are able to fit it into their curricular schedule. Furthermore, the findings of the current study by El-Salahat (2014) agree with the findings of Craig’s (2006) study, which revealed statistically significant differences between the two groups on word identification, passage comprehension, and word reading development measures, with the adapted interactive writing group demonstrating greater achievement.

The results show that the students who received Interactive Writing treatment (group1) had the highest level of writing performance. The students who received Collaborative Writing treatment (group 2) outperformed the participants in the control group but they did not do as well as the participants in the interactive group. The students in the control group received the lowest mean.

What distinguishes Interactive Writing Pedagogy from any other writing pedagogies is the fact that in IWP every student's writing is situated within the writings of others rather than written in isolation. This feature makes writing a real-time activity, which incorporates features of both speech and writing, as if there are no clear boundaries between speech and writing. Far from the prescriptive and error-seeking pedagogies, Interactive Writing pedagogy is in sharp contrast with the hierarchy asserted by the educational institutions so far, which either imposes top-down (teacher-directed) or a bottom up (individualistic) approach toward writing. Rather, it is interactive in the sense that a steam of unpredictable ideas is created through an open-ended process. As Farr and Danials (1986) observed it "increases students' sense of authorship, and insures that dialogue is a main activity of the composition class" (p. 49). The ideas move forward and shape a discourse. Writing is proceeded dialogically in the sense the text defies reaching a conclusion prematurely, as Berthoff (1984) urged teachers to promote "the value of keeping things tentative" (p. 30).
5. Conclusion and Implication

The current research studied the effects of interactive and collaborative instructional pedagogies on Iranian EFL learners' writing development and it came to two main conclusions. First, both interactive and collaborative instructional pedagogies could enhance learners’ writing skill. Second, interactive pedagogy befitted students more than collaborative instruction, i.e., students who received interactive pedagogy had developed their L2 writing skill in more effective ways compared with those counterparts who had received collaborative pedagogy. The study findings have some pedagogical implications for those who are involved in L2 learning and teaching. Teachers specifically can use interactive and collaborative instructional perspectives to foster their learners’ writing performance. Learners can also take advantage from these two types of pedagogy to promote L2 writing.

References


Fabela, R. (2013). *The use and implementation of interactive writing as an instructional method for primary teachers in Texas educational service center.* A Dissertation of Curriculum and Instruction, Texas A&M University-Corpus Christi Corpus Christi, Texas.


