

The Impact of Collaborative Writing on the Text Information Structure of Iranian Intermediate EFL Learners

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Abstract - The present study was an attempt to investigate the effect of EFL learners' collaboration on the text information structure in writing. To achieve the goal of the study 25 persons were pooled out from among the 38 persons who were learning English at Hiran institute in Ahwaz. The researchers used Oxford Placement Test in order to sample the homogenous group. The sampled participants were divided into five groups of five. Each group had a leader who supervised her members while writing. The participants had non-collaborative writing for six sessions and six other sessions of writing with collaboration supervised by the researchers and leaders. At the end of each phase the participants took a test. The results of the tests were compared using the SPSS software. The obtained results showed that collaboration and sharing the ideas had a significant effect on the text information structure of the writings produced by the participants.

Keywords: Collaborative Writing, Cooperative Learning, Cooperation/Collaboration, Collaborative Learning, Text Information Structure

1. INTRODUCTION

As we know, learning English needs an integration of the four skills: listening, speaking, reading, and writing. The latter is a necessary skill that has to be developed because it is an indicator of the learners' performance in a foreign language. Therefore, teachers have been always in search of active methods and approaches to teach writing so that learners' written production could be improved.

Therefore, foreign language learners are attempting to write properly since they encounter with many problems in writing. Moreover, writing necessitates a basic knowledge of grammar, lexis and vocabulary, and the ability to express ideas in an appropriate English language unaffected by the mother tongue interference. What the learners have to achieve in writing is proficiency, which is used by some writers to replace "competency" or what to "do with the language" (David Nunan, 1988: p. 34).

2. LITERATURE REVIEW

2.1. Definition of Writing

According to Byrne (1988), when we write, we use graphic symbols letters or combination of letters as we make use of sounds when we speak. On one level, writing can be said the act of forming these symbols, that is making marks on a flat some kind. By contrast, writing is much

more than the production of graphic symbol, just as speech is more than the production of sounds. The symbols have to be arranged, according to certain conventions, to form words, and words have to be arranged to form sentences. Zamel (1998; p.197) stated that, "writing is a process of exploring ones thought and learning from the act of writing itself what these thought are". On the other hand, writing is as a skill of medium of communication is beyond producing graphic symbols; it also involves meaningful arrangement of symbols, words and phrases, sentences in accordance with certain language convection (Zamel, 1998).

Individuals produce a sequence of sentences arranged in a particular order and linked together in certain various ways. The sequence may be very short- perhaps only two or three sentences but, because of the way the sentences have been put in order and linked together, they form coherent whole. As a rule, we don't write just one sentence or even a number of unrelated sentences. It is obvious that unrelated ideas cannot be together consistently written down on paper to carry meaning to the reader. Furthermore, you need to know that writing is usually neither an easy nor a spontaneous activity. It also requires some conscious mental effort, that is we need to think out how to write the sentence consider various ways of combining and arranging them.

2.2. Cooperative Learning

Cooperative learning is one strategy for group instruction which is under the learner-centered approach. Many educators define differently. According to Slavin (1995), cooperative learning is an instructional program, where the students work in small groups to help one another master academic content" (Slavin, 1995). Also, Brown (1994) believed that cooperative learning involves students working together in pairs or groups, and they share information. They are a team whose players must work together so as to achieve goals successfully. In addition, Kessler (1992, p.25) proposes the definition of cooperative learning particularly in language learning context and states that cooperative learning is a within-class grouping of students usually of differing levels of second language proficiency, who learn to work together on specific tasks or projects in such a way that all students in the group benefit from the interactive experience

According to Johnson (2005), cooperation is not assigning a job to a group of students where one student does all the work and the others put their names on the paper. It is not having students sit side by side at the same table to talk with each other as they do their individual assignments as well. It is not having students do a task individually with instructions that the ones who finish first are to help the slower students. On the contrary, cooperative learning is a teaching strategy in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject. Each member of a team is responsible not only for learning what is being taught but also for helping teammates learn, thus creating an atmosphere of achievement. Students work through the assignment until all group members successfully understand and complete it.

The most important goal of cooperative learning is to provide students with the knowledge, concept, skills, and understanding they need to become happy and contributing members of the society (Slavin, 2001; p. 15). Cooperative learning focuses on achievement and is goal oriented.

2.2.1. Cooperative Learning (CL) Methods

Cooperative learning has variety of methods to available for the teachers' use, ranging from very concrete and prescribed to very conceptual and flexible. According to Johnson, Johnson and Stanne (2000), "cooperative learning is actually a generic term that refers to numerous methods for organizing and conducting classroom instruction. Almost any teacher could find a way to use cooperative learning which is congruent with his or her philosophies and practices" (p. 13).

2.2.1.1. Jigsaw

The jigsaw classroom, or jigsaw structure, belongs to a set of innovative cooperative forms of learning; it is set apart from loose, unstructured group work by the following features (Johnson & Johnson, as cited in Hanze, 1990):

- **Positive interdependence:** each member has to contribute to the group task. As in a jigsaw puzzle, each piece, each student's part, is essential for completion of the task;
- **Individual accountability:** all group members understand they are required to make their own contribution to the group;
- **Students actively promote each other's learning.** The jigsaw learning technique was first developed and implemented by Elliot Aronson (as cited in Hanze, 2007). In the jigsaw classroom, the day's lesson is divided into several segments, and each student, who is in one of several jigsaw groups (of three to five students each), is assigned to learn about one segment of the written material. Before reporting on their topic to their jigsaw groups, students meet first with other students who have been assigned the same segment (one from each jigsaw group) in a temporary "expert" group. Together, the experts research their segment, discuss, and clear up questions with each other. Finally, the jigsaw groups reconvene, and each student in each group acts as a tutor to the group on his or her specialty topic.

2.2.1.2. Think-Pair-Share

Think-Pair-Share is a cooperative discussion strategy developed and coined by Frank Lyman (1981) and his colleagues in Maryland. In this activity, the instructor poses a question, preferably one demanding analysis, evaluation, or synthesis, and gives students thirty seconds or more to think through an appropriate response (Think). In addition, this time can also be spent writing the response. After this "wait-time," students then turn to partners and share their responses, thus allowing time for both rehearsal and immediate feedback on their ideas (Pair). During the third and the last stage, student responses can be shared within learning teams, with larger groups, or with the entire class during a follow-up discussion (Share).

2.3. Studies on Collaborative Learning

There are many studies that focus on the impacts of collaboration on teaching and learning.

These researchers concluded that collaborative learning is a method which involves learners in the teaching and learning process through giving active roles to learners in groups which leads learners to communicate and interact with each other and with the teacher. The interaction

socializes learners in groups and has an important role in offering effective class intervention, motivation, building trust and self-esteem, and activating learners' awareness. Moreover, learners develop their interpersonal skills by interacting with each other in groups. One of these studies was Bejarano (1987) that compared small-group and whole-class activities in terms of academic achievement in EFL. Observation and special achievement tests were used as instruments. The study was conducted during 4.5 months and the achievement test was given twice as pre and post-tests. His study results show that the participants taught in collaborative mode were much more successful than the ones who worked in the whole-class method. Observation results display that, in addition to success, collaborative learning was effective in increasing participation, interaction, motivation and enrichment of linguistic competence. Therefore, in this study, collaboration had positive effects on learning when compared with a whole class method.

3. METHODOLOGY

3.1. Research Question and Hypothesis:

The purpose of the present study was to answer the following research question:

Question:

This study is an attempt to answer the following question:

Does collaboration have any significant effect on the text information structure of writings developed by intermediate Iranian female EFL learners?

Based on the mentioned research question, the following hypothesis was formulated:

Hypothesis:

In order to investigate the mentioned research question, the following research null hypothesis is formulated:

H₀: Collaboration does not have any significant effect on the text information structure of writings developed by intermediate Iranian female EFL learners

3.2. Participants

The participants of the present study were selected from the population of Iranian EFL students studying English in Hiran institute in Ahwaz (Iran). Oxford Placement Test (OPT) was administered to choose 25 homogenous participants with an intermediate level of proficiency. The reason for selecting intermediate students was that they were required to write essays of 250 words and it was believed that students of elementary with low level of L2 proficiency cannot write scripts with significant difference. On the other hand, advanced students were so developed that may not provide a clear picture of the effect of pair versus individual writing. These learners were able to develop various genres of writing such as descriptive and argumentative styles. They had also been instructed how to develop letters in various formats such as business, formal and informal letters. They were all native speakers of Persian who were learning English as a foreign language. The other issue about the participants was that they were selected from among the female learners since the researchers had definitely easier

access to this type of population. Their age range was between 19 and 25 years and all were females.

3.3. Procedures

In order to answer the research question presented in this study, the researchers followed these procedures. First, 25 intermediate EFL learners who were studying at Hiran institute in Ahvaz were selected. The participants were familiar with writing paragraphs since they were practicing writing paragraphs using various genres of writing. The sampling was based on their scores on the proficiency test they had taken. The learners whose scores fell between one SD below and one SD above the group mean were selected as the main participants of the study.

Next, the researchers introduced a topic to them to develop the topics into paragraphs. The topic was a causal one. The writings were corrected and the five top ones were chosen as the leader for each group since the researchers would divide the participants in five groups later. The five leaders took part in a training course conducted by the researchers. In the training course which lasted for one session, the researchers taught them how to control and supervise their group members. Naturally, it has to be mentioned that at the end of training course, these leaders achieved to the qualitative level which there was no significant difference among sample groups.

In the first phase of the main study, the participants had to write without any collaboration for six weeks. In the first six sessions of the study, the researchers just introduced the topic and the topic was to be developed into a paragraph by each participant individually. After this phase the participants took a test as a non-collaborative one, they were asked to write about following topics: “social lesions”, “population development”, “good friend specifications”, “doing exercises”, and “peace in the family environment” in thirty minutes, the researchers assessed their writings based on the TEEP criteria the results of which were recorded for the comparison purposes. The next six sessions were devoted to collaborative writing. The leaders were responsible for implementing collaboration in each group and the researchers introduced them topics. The topics varied and were of different genres as “specifications of choosing job”, “culture and tradition”, “weekend holidays”, “second language learning”, and “self-confidence”. The participants had to develop the topics into paragraphs and asked them to write a composition based on their favorite subject in thirty minutes. They shared their ideas and collaborated with each other. The researchers controlled both the participants and the leaders while they were collaborating and writing. Next, the researchers assessed their writings and recorded the results for later analysis.

3.4. Research Design and Analyzing the Data

In the present study each participant took two tests under two various conditions, the statistical procedure used for the study was paired samples t-test. In a study in which the participants are measured at the beginning of the study, given a treatment, and measured again. Thus, each participant has two measures, often called before and after measures. An alternative design for which this test is used is a matched-pairs or case-control study. In this study, the participants took part in non-collaborative writing first. The same participants had different performances

either in collaborative writing or in writing without collaboration. Thus each participant achieved more than one score. These scores were compared using the SPSS software. The results of the SPSS procedures or the output of statistical procedures with their interpretations are given in the following chapter of this thesis.

3.5. Instrumentation

The instruments which were used for this study could be divided into two major ones. First, the OPT was administered to choose 25 EFL learners at an intermediate level of proficiency. The subjects were chosen on the basis of their scores on the OPT, that is, those participants whose scores fell between one standard deviation below and one standard deviation above the mean were chosen as the participants of the study. The other instrument which was used for the sessions of writing was Passages volume one which is written by Jack C. Richards. The prompts and topics used in this book were chosen for the writing practice of the two groups since the book included interesting topics. Of course, the researchers themselves managed to select those topics which were interesting enough and introduced them to the participants to write on.

4. STATISTICAL CALCULATION

The researchers' main goal is to give the results for the quantitative data, to infer them and then to discuss the results. To do this, the researchers will present the statistical procedure results summarized in a series of tables. The tables report the results of the matched t-tests regarding the probable causal relationships the variables of the study. Then the inferences will be made from the data. Based on the drawn inferences, the suggested hypotheses will be either accepted or rejected.

In this study the dependent variable used was text information structure where the emphasis was directed towards the accuracy, fluency, formality and the style of the participants' writings and also collaboration writing was independent variable.

The participants had no collaboration in their writings for the first phase while they had collaboration in their writing during the following six sessions of sessions they had. Then they took a test of writing the results of which were recorded for statistical analysis. The text information structure was assessed according to the rubric provided by the TEEP guidelines. At the end of the collaborative writing sessions which lasted for six weeks, the participants took a test of writing. The results of these tests have been brought in the following sections.

4.1. Testing the Hypothesis and Answering the Research Question

As it was explained in the first chapter of the present study, the following two research questions were posed:

Does collaboration have any significant effect on the text information structure of writings developed by intermediate Iranian EFL learners?

Based on the above research question, a hypothesis was posed. To verify the hypothesis, the obtained information was tabulated in the tables which are brought in the subsequent sections of the study.

4.2. The Results of the Proficiency Test

As it was explained in the previous sections, a proficiency test was administered to a population of 38 language learners in order to sample a homogenized statistical sample for the study. The table 1 shows the results of descriptive statistics which is obtained from the proficiency test administration.

Table 1. The Results of the Proficiency Test Administered to the Groups

	N	Minimum	Maximum	Mean	Std. Deviation
Proficiency	38	24.00	89.00	52.2632	19.24899
Valid N (listwise)	38				

Based on the information mentioned in the table, the mean of the scores obtained by thirty eight participants in the study was 52.2632 and the standard deviation is 19.24889. Thus, those whose scores fell one SD below the mean and those whose scores fell one SD above the mean were eliminated in order to form a homogenized group of learners to participate in the study. Based on this explanation, 25 participants were sampled.

4.3. The Results of the Non-Collaborative Tests

The twenty five participants, who had been assigned to five groups, first experienced a non-collaborative writing. It must be said that the grouping was done only to control the activities of the members in an easier way. They were all females. In the following section, the results of the tests before conducting the collaboration are brought.

Table 2. The Results of Descriptive Statistics for Noncollaboration Phase

	N	Minimum	Maximum	Mean	Std. Deviation
Noncollaborative	25	12.00	16.25	14.2000	1.26037
Valid N (listwise)	25				

Based on the provided information in table 2, the mean of the participants is 14.20, the standard deviation is 1.26. The standard deviation is a number that indicates the extent to which a set of numbers lie apart. Comparing the tables 2 and 3, it seems that the scores have been similar before the collaborating process. On the other hand, there were no significant differences between the five participating groups of the study at the beginning of the study.

The mean of the group performance is 14.20 as the table shows. The minimum and maximum scores obtained in the first phase of the study were 12.00 and 16.25 respectively. To sum up, the table shows that the participants had been similar as far as their writing skills are considered.

Table 3. The Results of Descriptive Statistics for Collaboration Phase

	N	Minimum	Maximum	Mean	Std. Deviation
Collaborative	25	14.00	18.00	15.9900	1.20433
Valid N (listwise)	25				

Table 3 shows the results of descriptive statistics for the collaborative phase of the study. As the information given in the table shows, the minimum and maximum scores in this phase have been 14 and 18 respectively. It seems that compared with the non-collaboration phase of the study the learners have progressed. The group mean of the participants is also 15.99, while in the previous phase it is 14.20. These differences eluded the researchers to conclude that the collaboration is effective in writing skills of language learners. Since more statistical procedures are needed to come to a logical conclusion, the researchers will have to compare the results of the statistical analyses in the first phase of the study and then compare it with the second phase ones. In the following section, the researchers has provided the results of the comparative study between these two phases of the study.

4.4. The Results of the Statistical Procedures for the Matched T-test

In the following table, the results of the statistical procedures of the matched t-test have been brought. Paired sample t-test is a statistical technique that is used to compare two population means in the case of two samples that are correlated. Paired sample t-test is used in 'before-after' studies, or when the samples are the matched pairs, or when it is a case-control study.

Table 4. The Results of Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Noncollaboration	14.2000	25	1.26037	.25207
	Collaboration	15.9900	25	1.20433	.24087

As it can be seen in table 4, the means of non-collaboration and collaboration phases are 14.20 and 15.99 respectively. It seems that the participants have had a better performance on their collaboration based tasks. The standard deviations are 1.25 and 1.20. In the following table the results of the correlations between the samples have been brought

Table 5. The Results of Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Noncollaboration & Collaboration	25	.621	.001

As it is evident, in table 5 there is a positive correlations between the samples obtained in the study. In other words, the performances of the participants under two different conditions are correlated. The correlation coefficient is 0.62 and the p value is 0.001 which shows a strong relationship between the performances of the participants in two phases of the study. But whether the differences are significant or not caused the researchers to run a paired or matched samples T-test the results of which can be seen in the following section.

4.5. The Results of the Paired Samples T-test

The differences observed under the two various conditions were examined using a paired samples t-test analysis. The results of this analysis can be seen in the table 6 which is brought in the following part.

Table 6. The Results of Paired Samples Test

		Paired Differences								
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)	
					Lower	Upper				
Pair 1	Noncollaboration – Collaboration	-1.79000	1.07452	.21490	-2.23354	-1.34646	-8.329	24	.000	

In this table, the p-value is 0.000 based on which it can be inferred that the difference between the performances of the participants in two phases of the study have been statistically significant. According to the information given in this table, the mean is -1.79; the standard deviation is 1.07. The t-value is 8.32. It can be interpreted that collaboration positively affects the performance of learners in the enrichment of the text information structure of their writings. The following section gives a further explanation of the results using a plot created by the SPSS software.

In the following table 7, the processing summary of the collaboration and non-collaboration phases of the study can be seen.

Table 7. he Results of Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Collaboration	25	100.0%	0	.0%	25	100.0%
Noncollaboration	25	100.0%	0	.0%	25	100.0%

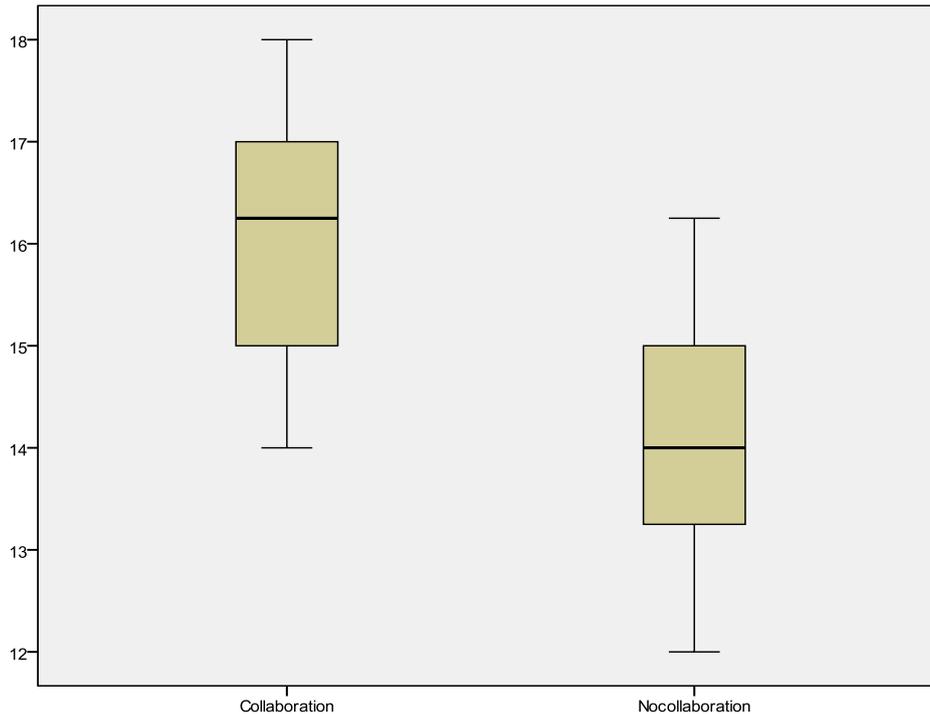


Figure 1. The Boxplot for the Two Conditions under Study

In the figure 1 the performances of the participants have been depicted. It can be seen that the learners in collaborative condition of writing have outperformed the non-collaborative condition.

5. CONCLUSIONS AND IMPLICATIONS

It was lastly concluded that collaborative writing positively affects the text information structure of Iranian intermediate EFL learners since the purpose of this study has been to examine the effect of collaboration on learning text information structure of writings developed by Iranian EFL learners. As a result the research demonstrates some main implications regarding the effect of collaboration on EFL learners' writing and also states some operant suggestions for further studies in terms of improving their writing quality. One important implication of the findings regards second language instructors' attention to learning styles that will promote positive learners beliefs about learning English. The participants did note an overall preference for learning in a collaborative environment, remarking that a collaborative

learning experience would have positive effect on their writing ability when the researchers asked them about their experience in learning in the second phase of the study. Participant preference for collaborative learning claim that work with a partner- trigger[s] interaction and meaningful communication in the L2, which spark positive learner attitudes towards the content. Through the creation of--- shared meaning and in the exchange of information, knowledge and expertise amongst group members, collaborative environments from empowering social contexts that are—mediated by personal relationships that develop from decision making and negotiation processes in collaborative learning environments help to establish lasting motivation for future explorations of the content in the TL, in addition to enhancing students' communicative competencies.

When selecting learning styles that fit the students and the curriculum, foreign language instructors should inquire about their learner's preferred learning environments. Through administration of a survey, individual or class discussion, or other means, determining learner's preferred learning styles, then attempting to incorporate these styles appropriately into in-class and at-home activities will not only serve to boost students engagement with the curriculum, but also show the students that the second language instructor is equally invested in the learners' success in language learning.

Another implication that can be drawn involves selection of an appropriate learning style to yield increased development of writing ability. The data from this study show that the difference in reported growth in writing ability was statistically significant based on the learning style in which the participants collaborated with each other under their leaders' supervision. Because the collaboration phase showed a significantly higher amount of growth in writing compared to the non-collaboration one, foreign language instructors should consider making use of collaborative techniques to enhance their own student's development in areas of language learning especially writing.

As a consequence, instructors using collaboration in the classroom should create activities that are multi-layered, have higher expectations and which allow the second language learners to push the limits of their comfort zone in the L2. Through the specific implications from this study will be best applied to higher educational ESL settings with advanced language learners, these suggestions could be implemented in other English language learning contexts as well. Adaptations could be made to suit the needs of learners of varying levels of English language proficiency, native language background, ages and environments of study (ESL or EFL) to effectively promote development of collaborative activities in writing skills. The results of data analysis indicated the significant relationship between these two variables effectively.

In fact the present study aimed at finding new ways to develop writing and to teach writing skill in a better way. The best way based on the results obtained from this study was incorporating collaboration as a task and engaging the class members and even assigning leaders to the groups so that the group members felt security while being guided by other members and their leaders.

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