

## **The Effects of Metacognitive Prompting and Structured Peer Interaction on Intermediate EFL learners' Collaborative Writing**

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### **Abstract**

This research was designed to investigate the effects of two different types of learning modalities, namely Meta-cognitive Prompting and structured peer interaction on intermediate EFL learners' collaborative writing. For this purpose, 90 learners of total number of 120 intermediate learners studying at Kish English language school were chosen first for homogenization prior to the study. In order to homogenize the subjects Preliminary English Test (PET) was administered and 90 students were selected. A pre-test writing was administered among all of them. They were divided in two groups, one in which Students were contributing in their writing samples with each other and the other groups based on their individual efforts and outcomes. each group was exposed to the treatment for 24 sessions in seven weeks. At the end of the instruction, post-test with Analytic rating scale was applied and one-way ANOVA was run to test and the two hypotheses raised in the study. The results showed that while learners benefited from structured peer interaction setting compared to metacognitive prompting one, they were better off receiving writing instruction and more improved in their writing skill.

**Keywords:** Writing, Collaborative Writing, Structured Peer Interaction, Metacognitive Prompting.

### **Introduction**

In recent years, many attempts have been made to improve the methods and techniques that enable learners to achieve their goal which is to communicate accurately and appropriately in a foreign language. In order to achieve this goal, the learners must obtain the skills which are necessary to communicate effectively. These skills are, listening, speaking, reading and writing.

Among these four skills, writing is very important, because it is the way we make our thinking visible to the world and actually we document our sayings by it. Also it has taken an important place in most language classes, since "writing is an extremely complex cognitive activity in which the writer is required to demonstrate control of a number of variables simultaneously"(Ziahosseiny & Marashi, 2000, p. 112). Moreover, writing is often used as a testing device for teachers and sometimes a way of memorizing and learning for learners.

In conversation, verbal and nonverbal signals from a partner constantly stimulate and modify further thought and language production, but in the case of writing language production usually has to be sustained by internal processes. Researchers and educationalists have addressed

difficulties with writing by providing metacognitive training or support, or by making arrangements for student dialogue with the teacher or other children (e.g., Graves, 1983; McCarthey & McMahan, 1992), but both might be needed. Scardamalia and Bereiter (1986) suggested direct teaching of metacognitive strategies can suffer from problems of generalization and maintenance, and proposed coupling strategy instruction (such as considering audience, goals and relevant prior knowledge at the planning stage) with procedural facilitation or cueing, and also with self-monitoring and product-oriented feedback in relation to the goals of the writing. The research literature provides strong evidence of the effectiveness of peer tutoring (e.g., Cohen, Kulik, & Kulik, 1982). There is also some evidence of beneficial effects of collaboration during writing, especially at college level (e.g., O'Donnell, Dansereau, Rocklin, Lambiotte, Hythecker, & Larson, 1985). Official advice schools on the teaching of writing often recommend arrangements to allow peer interaction (e.g., Scottish Office Education Department, 1991). Flower (1989) emphasized the complexity of the writing process and the multiple and simultaneous information processing demands it makes on the writer. Insofar as peer tutors relieve tutees of the need to deal with all the various aspects of writing at once, the benefits to tutees may be explained in information processing terms. The tutor's assistance might leave more processing capacity available for the parts of the task undertaken by the tutee. There might also be information processing benefits for tutors, whose role could facilitate a focus on their own higher level functioning.

Many possible mediating factors for the cognitive benefits of peer-assisted learning have been outlined (Topping & Ehly, 1998; Topping, 2001a). Among those of particular relevance to collaborative writing are: increased engagement and time spent on-task, immediacy and individualization of help, goal specification, explaining, and prevention of information processing overload, prompting, modeling and reinforcement. Some of these factors applied equally to both partners in the peer tutoring context, while others applied more to one or other role. Tutors could be expected to 'learn by teaching', since explaining, clarifying and exemplifying are intellectually challenging activities and likely to lead to cognitive gains. Collaborative writing might also lead to affective enhancement, through increased: variety and interest, activity and interactivity, encouragement and motivation, modeling of enthusiasm and coping, self-confidence and self-efficacy.

However, there is relatively little evidence that peer interaction during writing actually does lead to improved writing by children in school. Much of the literature on collaborative writing by schoolchildren is descriptive rather than evaluative (Louth, McAllister, & McAllister, 1993). Furthermore, many different models and methods exist, so making general conclusions about the effects of 'collaborative writing' is problematic. Schultz's (1997) study of third and fourth grade schoolchildren highlighted different usage of the term 'collaborative writing', as she described the variety of ways in which children spontaneously participated in writing together. Some wrote independently, but sought peer responses and used peers as sources of ideas and characters; some wrote their own stories in the company of others and shared ideas; others worked in groups,

contributing to a single product. Dale (1993) compared a 'model' collaborative group of ninth grade students with a 'typical' and a 'problem' group, and found that successful collaboration was characterized by more talk and greater engagement with each other's ideas. Talk in the model group was focused on planning and composing the writing rather than on task representation. The model group showed the highest levels of cognitive conflict.

### **Models of the writing process and the Paired Writing system**

Flower (1989) asserted that the way people actually write is not adequately described by a model which suggests movement through discrete stages in a linear fashion, but rather suggested a metaphor of writers as switchboard operators, juggling a number of different demands on their attention and various constraints on their behavior. Any component of the writing process might thus overlap with, link to, or incorporate any other. For example, planning may be reconsidered at the editing stage, and the reviewing process may be involved in organizational decisions at the planning stage. Scardamalia and Bereiter (1986) contrast this recursive quality to the linearity of models of composition commonly used in schools. As Schultz (1997) and others have noted, some children, given the opportunity but no training, spontaneously engage in collaborative interaction of various sorts while writing. However, while some relatively experienced writers in a conducive classroom ethos might indeed proceed recursively, novice or weak writers in less favorable contexts might be unable to cope with this level of complexity. For the teacher, the problem of how to instruct such learners in such complexity is substantial, as is that of monitoring subsequent implementation integrity. This might account for the linearity of models of composition often found in schools, the problem being not so much linearity at the point of introduction but a failure to move children on to anything more complex and recursive. Thus the Paired Writing system at first sight the process might seem very linear, and perhaps in conflict with more holistic and recursive models of the writing process, and with hyper textual rather than textual models of literacy. However, teachers have to start somewhere a particular issue with younger or less able children, with teachers inexperienced in collaborative methods, and with teachers under other stresses. The structure is also intended to help children successfully complete more pieces of writing, and thus experience the later stages of the process as frequently and fully as the earlier ones.

Paired Writing is a structured but flexible collaborative writing system which combines metacognitive and social interactive approaches to supporting children's writing development. Designed for parent or peer tutoring or co composition, it addresses the need identified in research for children to be trained in a clear process (Cohen et al., 1982). Its theoretical underpinnings and design parameters are discussed in Topping (1995, 2001b). The published research literature on outcome is modest as yet (Nixon & Topping, 2001; Sutherland & Topping, 1999; Topping, 1995, 2001b). The pair's interaction at each stage of the writing process is supported by a framework presented in the form of a flowchart. Self and peer assessment are incorporated.

### **Significance of the study**

In line with what has been discussed so far, one of the major skills which learners need to gain and constantly improve is writing. "Being able to write is a vital skill for speaker of a foreign language as much as for everyone using their own first language. Training students to write thus demands the care and attention of language teachers" (Harmer, 2004, p. 3) .

Paired Writing is a clearly defined, structured and replicable system for peer assisted learning in writing (Topping, 1995, 2001b). It incorporates both metacognitive prompting and scaffolding for the interactive process. This study sought to evaluate the relative contribution of these two components to student gain in quality of writing and attitudes to writing, both during collaborative writing and in subsequent individual writing.

comparing same age and cross age Paired Writing, Sutherland and Topping (1999) found that the quality of children' s collaborative writing was significantly higher than that of their individual writing, and that positive effects of collaboration were generalized to subsequent individual writing. The researcher of this study hopes that the results of this research might be beneficial for teachers to understand how much knowing students' cooperation and peer interaction is crucial for choosing the appropriate way of teaching and also to take into consideration that not all learners benefit from the same modality of teaching. The researcher of this study hopes that the findings of this research would be beneficial mainly for teachers to understand the necessity of students' different cognitive styles, awareness for choosing the appropriate way of teaching and also to take into consideration that not all learners benefit from the same modality of teaching.

### **Statement of the problem**

Writing skill is getting more and more importance nowadays. "Becoming a proficient writer, is one of the major objectives for many students, especially for those who want to become members of international business, administrative or academic communities" (Tribble, 1997, p. 8). Also with the rapid expansion of information and communication media, such as computers and cell-phones, exchanges among people are not restricted to the oral form of language; accordingly people need more to use written forms through emails and text messages to communicate alongside the spoken channel.

Another aspect of significance of writing is related to its assisting role; writing can help students learn and memorize materials. According to Raimes (1983), "as writers struggle with what to put down next or how to put it down on paper, they often discover something new to write or a new way of expressing their ideas"(p.3). It also helps teachers and it is often used as a testing device for teachers.

In addition to the importance of learning writing skill, it has been usually described as a complex skill in comparison to the other skills such as reading, listening and speaking (Hyland,

2003; Kroll, 1990). According to Norrish (1983), "writing is of course, not easy and in some way, more difficult than speaking" (p. 63). In line with Norrish (1983), Liu and Brain (2005) posed that, writing is a complex skill in that it tests a person's ability to use a language and to express ideas. As a result, a person needs to write not only accurately, but also coherently which requires more time and effort.

Stariba, Walburg and Wallace (2004) also point to the difficulty of writing skill and claim that, "writing is the final product of several separate acts that are hugely challenging to learn simultaneously" (p. 12).

Accordingly, these two types of instruction, namely, metacognitive prompting writing and Structured peer interaction learning and their effects on the writing ability of learners were compared to see which one is more effective on EFL learners' writing achievement. Due to the lack of enough pair working activities specially collaborative writing in Iran, which affects learners' writing, results of present study can be fruitful for Iranian teachers and learners. And also the results of this study can assist teachers to use new information in their teaching program.

### **Statement of the Research Questions and hypothesis**

In order to fulfill the purpose of the study, the following research questions are proposed:

- Is there any significance difference between the effect of metacognitive prompting and structured peer interaction on EFL learners' collaborative writing?
  - Does peer interaction during writing actually lead to improved writing by EFL learners?
- H01: There is no significant difference between the effect of metacognitive prompting and structured peer interaction on EFL learners' collaborative writing.

H02: Peer interaction during writing does not have a significantly different effect on improving EFL learners' writing.

### **Participants**

To fulfill the objectives of this study, 12 female intermediate EFL learners with the age range of 15-25, studying in Tehran's kish language institute participated. These candidates were selected randomly from the learners whose scores on the Preliminary English Test (PET) fell one standard deviation above and one standard deviation below the sample mean. The participants of this study were homogenized through administering PET from total number of 100 learners in the same language school.

It is worth mentioning that the sample PET was run to all of students in the same language school with similar characteristics to the participants of this study first, and after doing item analysis and also calculating the reliability of the test, PET was administered to the main candidates.

Since the treatments were conducted in two terms, the participant selection procedures were done at the beginning of each term; meaning that, the PET was administered to learners at the outset of the first term, through which those learners whose scores fell one standard deviation above and one standard deviation below the mean were selected. All of these learners sat in 2 classes, underwent exactly the same treatment.

### **Instrumentation**

To fulfill the purpose of this study, the researcher used the treatment and assessment materials described below.

### **Preliminary English Test (PET)**

The Preliminary English Test was administered for homogenizing the subjects at the beginning of the study. It is intermediate level Cambridge ESOL exam which is appropriate for those who deal with everyday written and spoken communications (e.g., read simple books and articles, write simple personal letters make notes during a meeting). It covers the four main language skills, reading, and writing, listening and speaking and using material from real life situation. Reading section has five parts and 35 reading comprehension questions while writing section consists of three parts and seven questions. The candidates are expected to comprehend the main points from journals, signs, newspapers and be able to use vocabulary and structures correctly in one hour and 30 minutes. In listening section which lasts 30 minutes, the learners are required to be able to follow and understand a range of spoken materials including announcements and discussion about everyday life. Speaking section includes four parts and takes 10-12 minutes. Learners take part in conversation, ask and answer the questions and talk freely.

In this study, the researcher administered all the four parts of PET, listening, speaking, reading and writing to make sure that all the candidates are in the same level of language proficiency; but first, PET piloted among 120 learners with similar characteristics to the participants of this study, and after doing item analysis and calculating item facility, item discrimination and choice distribution, five items were shown to be malfunctioning. Thus they were discarded from the test and consequently the reliability of the test exceeded from 0.79 to 0.82.

### **Writing Posttest**

Part three of the writing section of a PET was used as the posttest of this study. This part consists of two questions in which the learners were supposed to write about two paragraphs which were scored according to the rating scale used in this study. In this investigation, two classes of ninth-grade general science students participated in a collaborative report-writing intervention. The purpose of this portion of the study was to evaluate students' collaboratively written laboratory reports for evidence of the use of scientific reasoning skills and to document qualitative changes in reasoning skill use over time. The participants in the study were ninth-grade students,

representing three collaborative writing pairs. The participants in the study were 6 ninth-grade students, representing three collaborative writing pairs. During the intervention, students wrote 10 laboratory reports over a 2.5-month period. The author and classroom teacher designed report guideline prompts to scaffold students in the use of relevant scientific reasoning skills. The results indicated that students used reasoning skills to assess their current models of scientific understanding, make observations, interpret the meaning of results, and generate new models based on their data and relevant information. Participants showed the most improvement in writing that reflected the reasoning skills of (a) selecting and processing textbook passages, (b) drawing conclusions and formulating models, and (c) comparing/contrasting. Over time, participants improved their ability to compose explanations that represented a synthesis of prior knowledge, activity observations, and other sources of information. Collaborative writing encouraged students to construct their own understandings of science concepts by creating an environment in which thinking, reasoning, and discussion were valued.

### **Writing rating Scale**

An analytic rating scale was used in this study. In analytic scoring according to Weigle (2002), writing pieces are rated on several aspects or criteria rather than they are given a single score. Analytic scoring schemes thus provide more detailed information about a student writing performance and they are preferred over holistic schemes for this reason by many writing specialists.

So in order to rate all the writings used in this study, the researcher used *the Analytic rating scale* selected from what has been designed in Akef and Hajhashemi (2012, p. 243). This rating scale was applied to evaluate learners' general writing ability through assessing different aspects of written scripts such as fluency, structural accuracy, vocabulary (range and appropriateness of vocabulary choices), coherence, cohesion, relevance, organization, and mechanics of writing. It's worth noting that Akef and Hajhashemi's (2012) scale descriptors well represent all of these features.

To ensure the accuracy of scoring, the researcher asked one of her colleagues, who is MA holders in TEFL with five years of teaching experience, to join her in rating the students' writings. The inter-rater reliability of the two raters was of course established earlier.

### **Speaking Rating Scale**

The rating scale used to (evaluate/assess) rate the oral proficiency of the subjects was the predetermined official Cambridge General Mark Schemes for speaking. The rating was done on the basis of the criteria stated in the rating scale including the range of scores from 0 to 5.

### **Material**

The following materials were used in the process of the treatment for all the 185 participants in two terms.

### **American English File student book 3**

The main textbook in this study was "*American English File*" by Clive Oxenden and Christina Latham-Koenig. This book consists of seven files each of them is divided into three lessons of A, B and C and containing different tasks and exercises for all the four skills of listening, speaking, reading and writing.

Four-skill American English book with a communicative methodology, engaging texts, and a strong pronunciation syllabus - designed for students. All the levels of this book, as its writers claims, have materials that learners will enjoy reading and will want to speak and write about. Having created the desire, American English File helps learners develop their communication skills. One way it does this is with a strong focus on pronunciation.

This book integrates pronunciation into every lesson and includes Sounds Charts which put a picture to each sound in the phonetic alphabet, so learners find it easier to remember the sounds and, ultimately, improve their pronunciation.

American English File 3 has one writing lesson per file, where students study a model before doing the writing exercises. These writing exercises focus on both "electronic" and "traditional" text types, and provide consolidation of grammar and lexis taught in the file; also there is always a focus on writing "micro skills", for example, punctuation, spelling, or connecting expressions.

In this study, in each term, the first two chapters of this book were covered and covering each chapter lasted about six to seven sessions.

### **Oxford Word Skills Book**

Oxford Word Skills by Ruth Gairns and Stuart Redman was used in Kish language school. Oxford Word Skills is a series of three books for students to learn, practice, and revise new vocabularies in basic, intermediate, and advanced level. Each book contains 80 units of vocabulary presentation and practice. At the intermediate level, the vocabulary includes:

- A wide range of common topics, e.g., money, health issues, relationships;
- Words and phrases needed in social interaction, e.g., giving opinions and making arrangements to meet; and
- Areas of lexical grammar, e.g., affixes and linking words.

In this book there is an emphasis on high-frequency vocabularies in everyday spoken English, but also vocabularies from different types of written text, e.g., job advertisements, magazine articles, web pages, and warning signs. In this study, eight units of this book were covered during one term in each class.



### **Story book**

Oxford Bookworms Story books are the story-telling series used in Kish language institution language school. These books include original and adapted texts in seven carefully graded language stages, which take learners from beginner to advanced level using the syllabus devised by Tricia Hedge, the founding editor of the series. Each book of the Oxford Bookworms Library contains an introduction to the story, notes about the author, a glossary and activities and vocabulary, syntax, structure, and information load are carefully controlled in this series.

In this study, "*Robinson Crusoe*" story book was used. This story book contains nine sub-titles, which the teacher and the learners usually worked on each section every two sessions.

### **Procedure**

Before conducting this study, the researcher ran a sample PET to 30 students studying in the same language school with similar characteristics to the participants of this study. After calculating the reliability of the test which was 0.79, according to cronbach alfa doing item analysis, calculating item facility, item discrimination and choice distribution, the researcher omitted 5 items which were malfunctioned and again calculated the reliability of the test. Consequently, this time the test showed the acceptable reliability of 0.82

Then, the researcher administered the already piloted PET to 90 intermediate EFL learners

### **.Collaborative Group**

In the Collaborative classes, the teacher made the students familiar with each other at the beginning, and she tried to set up a very friendly atmosphere all the time. She used different ways in order to achieve this goal. For example, in the first session, she asked the students to introduce themselves and tell their classmates what they like to be called (by).

While the students were introducing themselves, the teacher asked them to pay attention to maintain eye contact with their classmates. They were supposed to look at each other instead of the teacher while speaking to others. It seemed rather hard at first but gradually they got used to it.

After the students became familiar with each other, the first grouping was done. Depending on the number of the students, they were arranged in groups of three or four and each group member knew that all of the correct or incorrect answers were of great importance for all the rest of the members of the same group.

The students also experienced being in different groups during one term, and even sometimes the group members were changed in one single session in order for the students to learn to work collaboratively with different individuals rather than a specific group. During the whole term, in the first phase, group work was encouraged while competitiveness was de-emphasized.

Every session, about two pages of the book were taught in each class. It normally took seven sessions for a unit to be covered. Each file or chapter of American English File book, contains three lessons of A, B, and C, and each lesson has different parts of reading, speaking, grammar, vocabulary, pronunciation and listening; but the main writing part of this book goes to the drills and exercises at the end of each chapter; however, since the dependent variable of this study was writing skill, and the researcher's goal was to see the amount of the students' progress on writing skill under the two modalities of collaborative and individual learning, the teacher allocated a part of each session's time into practicing and working on the learners' writing (of course she used collaborative methods for the collaborative groups and individual methods for the individuals) in addition to teaching of the two pages of the book in each session.

In each lesson of the chapters of American English File book, a new grammatical point is introduced, and accordingly, the other parts of the lesson directly or indirectly emphasize on that specific grammatical point. The teacher presented new grammatical rules by jotting them down on the board, explaining them and making some examples of them; also she asked the students to pay attention to the presented rule or structure in the other parts of the lesson.

In collaborative classes, the teacher asked the learners to check their group members' answers of the grammar part questions and drills after they answered the questions by themselves. The students had to check their group members' answers and correct them if necessary, and finally present a single answer for each question or exercise as the common response of the whole group members.

Listening part in American English File book is consisted of (is comprised of) different sections. Before starting the listening parts, the teacher usually prepared the students by asking some warm up questions and relating the main subject of the listening to the personal life of the students. The listening was always played two times for the students. After the first time, they were asked to answer the first half of the listening questions and once it was done, the learners checked their answers in their groups and from each group one student, as the representative of others, read the accepted answer and this duty changed by each question or exercise.

In the second time, the learners were asked to listen to the CD again and answer the rest of the questions; when it was done, again they checked their answers in group and read them out. It is worth mentioning that, since the teacher made the characteristics and features of the collaborative method clear to the students in the first session, no one wanted to prove to be the best in the process of answering the questions; rather, they helped each other all the time to have a satisfactory group outcome.

The listening section usually followed by the speaking part. The main concern of the speaking part of this book is to indirectly make learners use the new presented grammatical point with designing interesting topics which are mostly related to the listening part. In speaking section,

also some useful patterns of English language conversations (like: for example, I agree, I don't agree and etc...) are suggested to students to use.

In the collaborative classes, the students worked in groups of three or four and spoke about the suggested topics to their group members. They were asked to justify their specific points of view about the title till their group members were convinced. These discussions were under the teacher's supervision.

In the reading part, the teacher usually gave the students a few minutes and drew their attention to the title and questions of the text. She also asked the students to pay attention to the pictures of each text and think of them. Then, she posed some questions about the learners' general understanding of the pictures and text and wrote their ideas on the board. Afterward, she started reading the text and after finishing it, she made the learners answer the questions of that part in group.

Again all of the members of the groups cooperatively answered the questions and corrected each other if it was necessary, and when they were in agreement with all the answers, one of the members, who herself was volunteer, read the answers.

After answering the questions, the teacher asked the students to finish the reading with a different ending. And since the grammatical points of the lessons are used dominantly in the reading texts, the students were indirectly compelled to use them and this was a good practice for them. Before this activity, the teacher changed the group members with (while) considering the quality of their group work in the first part of the reading section.

For rewriting the ending of the texts, each member of the group had to jot down every idea comes to her mind first, and then, read them to her group members. Considering the attractiveness and appropriateness of the ideas, all of the members reached to an agreement that whose idea is the best one for rewriting the ending of the articles or reading texts; and then, they started to continue the text based on the selected idea cooperatively.

With teacher's clarifications and explanations, all of the learners clearly knew that, the target of this task is not competing against each other in group in order for their own ideas to be selected by other members; rather, they did their best to be creative in brainstorming to have an acceptable group outcome. Also, after a few sessions, they were trained how to consider the time limitation to have the task finished.

After they finished writing, they gave one copy of their writing piece to the teacher, as their group work. The teacher then, gave feedback on their writings (especially on the vocabularies and grammar rules application, and not on the whole ideas) and returned the texts to the groups next session.

As mentioned before, each chapter of American English File book has one writing part at the end of it, in the pages of review. The students were asked to read the model of writing individually first, and then, answer the writing questions cooperatively and in the groups. Questions of the writing parts of this book are centralized on different aspects of writing, like vocabulary, grammar, structure and also some micro skills as punctuation, spelling and connecting expressions.

Writing sections of this book also present some boxes in the name of *Useful (English)* which include some useful patterns of English language for writing. The students had to use these suggested patterns in doing the writing exercises which were actually the last part of writing sections. In this part, the teacher gave some minutes to the students to write according to the book instructions in pair.

After they finished writing, like some of the other activities, the pairs gave their writings (one piece of writing for each pair, as the both students' activity) to the teacher and positive or negative scores went to the both members of each pair.

Throughout American English File book, there is a regular focus on the learners' pronunciation. In this study, for teaching and practicing pronunciation, the teacher taught phonetic symbols to the students and warned them to be careful with the irregular relationship between sound and spelling of some English words, stress patterns in English and other important points about learners' pronunciation. After explaining the necessary points, the teacher gave the students more practice by asking them to repeat the examples after her, and answer the questions of this part in pairs or in groups.

For teaching new vocabularies, the teacher first prepared the learners by asking some warm up questions which answering them entailed the vocabularies and expressions to be taught. After jotting down the new words and expressions on the board and clarifying the meaning of them, the teacher made the students do the first exercise of the vocabulary section of the book in pairs or in small groups; then she asked the students to go to the related *Vocabulary Bank* at the end of the book and answer the rest of the questions with cooperating with their group members.

Each group representative read the answers and while the teacher corrected or verified them, she added extra explanations about the new words, like synonyms and antonyms of them, to make the meanings more clear.

The Oxford Word Skills, as discussed earlier, was the vocabulary book used in this study. Most of the units of this book include two short readings and all of them consist of *Glossary* part which explains the new words. The teacher first read the reading parts and drew the students' attention to the *Spotlight* parts which contain short explanations about the important words of the text; then, she asked the learners to answer the questions of this part with cooperating and assisting each other in their groups. The teacher also helped the students with doing exercises

and changed the group members if she felt the members' performances and cooperation were not satisfactory.

After the drills of this book were finished, the teacher asked each group to choose a topic for two paragraphs writing; and then, she gave a number to each group member randomly and asked the groups to write about two paragraphs with using the new presented vocabularies accompanied with the grammar focus of the day. Among the members of each group, the student who was assigned as number one, started the writing with posing the first sentence then number two continued by adding the second sentence and this process repeated until the writing piece were finished.

During writing with the above mentioned method, each member's turn repeated many times and other members of the group helped or corrected the student who was trying to add a sentence. Once their writing was finished, all of the members read and revised it and then submitted it to the teacher. The teacher read the writings for the next session and after giving necessary feedbacks return them to the groups.

Usually every two sessions, the participants were asked to study one or two sections of their story book at home, and write a brief summary of those parts; next session that they came to the class, they were given some minutes to give their summaries to their pairs to correct their mistakes or change the anomalous or ill-formed sentences, if it was necessary. Then, they submitted their papers to the teacher, and the scores they were given, went to both the writer and her pair as the corrector.

Immediately after this treatment, the first group of this study which was practicing English in a cooperative way underwent the posttest.

### **Meta-cognitive group**

In the subsequent term, the same participant selection procedure was conducted again with another 90 learners undergoing the PET.

Again these students were under this study for 24 sessions, each lasting 90 minutes. All of these learners were exposed to the same amount of instructions and the same materials. Like the previous term, the participants knew that they were under study but they were not informed about their psychological traits being studied.

These students knew that they would be assessed based on their individual efforts and outcomes. Comparing to the previous treatment, this treatment included less group works.

The teacher's instruction method did not change at all; instead, the way the students practiced every single part changed in comparison with the previous treatment. For example, after the grammar was taught, the extra questions of the teacher and the exercises of the book were done

individually; they could answer only when they were called; and the teacher chose the person to answer the questions and not the students themselves.

The same as the last term, the listening was played two times for the learners. The first time, the students were asked to answer the first half of the listening questions and after they were finished, they listened it again and answered the rest of the questions or corrected their first part answers. This activity was not done in group and the students only paid attention to their own answers and were asked about them later by their names being called and not voluntarily.

In the speaking section of the second group of this study, the learners did not discuss the issues in specified groups but in an open discussion. One of them started responding to the questions of the speaking part and the other students expressed their own ideas.

For teaching reading in the metacognitive group, like the cooperative group, the teacher usually gave a few minutes to the students to take a quick look at the reading text, its questions and pictures; and afterward, she started reading the text and asking the questions of this part; but this time, the students were not allowed to consult with each other, and the teacher asked them about their individual understanding of the text.

Again like the previous group, in the competitive group, the students were asked to finish the articles or readings of each file in a different way; but this time, they rewrote the readings end individually and not in the group. They were trained to write the new ideas which came to their minds first, and next, each student herself, without asking her friends about the appropriateness of her ideas, selected one of them. Then, she started rewriting and after finishing, she corrected her own errors or mistakes and then submitted her writing to the teacher. The teacher read the papers for the next session and gave the necessary feedbacks and returned them to the students.

For teaching writing, the teacher asked the students to read the provided models of the book and then answer the questions of this section individually. Then she asked the learners to do the last exercise of this section, which was actually writing a piece according to the book instructions. All of the students had to do this activity individually at home and bring their papers for the next session. The teacher read the papers, gave feedback on them and returned them to the students.

The teacher presented the new vocabularies in the second group almost the same as the first group; it differed just in the way of answering the questions by the learners, which they had to answer the questions individually and they were not allowed to consult or assist each other.

The same as the previous group, usually every two sessions, the learners were required to study one or two sections of their story book at home, write a brief summary of those parts, and submit their summaries to the teacher next session; but this time, in the metacognitive group the learners were not allowed to ask their classmates to check their summaries and correct their mistakes.

In all of the activities of the metacognitive classes, each student was only responsible for her own activities and assignments even if she worked in the group, or asked for assistance from her group members.

This group also underwent the posttest of the study at the end of the 24th session of metacognitive learning. It is worth noting that the learners in both groups received the same amount of writing practice and they differed only in the manner of practicing. Two writing tests were administered in this study and each was rated based on the rating scale provided for the test. The rating for both groups was done by two raters (once the inter-rater reliability had been established).

### Data analysis

The 90 participants who were selected for the study grouped in two classes in treatment sessions. This mentioned earlier in Methodology section. The data analysis that was used to find out the difference between those two groups constituted one- way ANNOVA one - way test, Paired samples test. In order to the aim of the study which was investigating whether there would be significance difference between Pre and post test as statistically significant, the Paired samples test was applied. If the Significance value is greater than .05 ( $\alpha > .05$ ) the data is normally distributed.

Normal distribution of data means that most of the participants' scores are close to the average.

Table 1. Collaborative and Meta-cognitive pre-test marks

	TRT	N	Mean	Std. Deviation	Std. Error Mean
Mark	Metacognitive	45	29.73	1.388	.207
	Peer structured	45	30.02	1.865	.278

The first task was calculating the means and standard deviations of the two groups in pre-test. Table 1, illustrates the mean scores of the two groups. In pre-test, to start the investigation statistically, the results were first put under a series of statistical analysis. As it was observed, the mean scores gained by peer structured group was 29/73+<sub>1</sub>/38, and Metacognitive group was 30/02+<sub>1</sub>/86 and as standard Deviation which is a measurement of the variability of data about the mean .In following Table standard deviation was according to 95/.confidence interval that shows the data in other way.

Table2. Pre-test Variances analysis of tests of Between-Subjects Effects

	Mark	Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
M a r k	Equal variances assumed	1.251	.266	-.834	88	.407	-.289	.347	-.978	.400
	Equal variances not assumed			-.834	81.315	.407	-.289	.347	-.978	.401

The data mentioned in table one was illustrated in table 2 according to the analysis of variance of participants in pre-test. According to table 2 and T- test applying, pre-test variance marks were rather the same. So it was assumed that the sameness of variance was to interpret Results. It showed that as  $p < 0/05$  with the degree of freedom of 88. So there was not any remarkable difference between means. The results also were illustrated in figure One that support the idea of table 2 with its standard bar over a.



Table 3. Post-test Means scores

Group Statistics					
	TRT	N	Mean	Std. Deviation	Std. Error Mean
<b>Mark</b>	individual	45	45.62	3.651	.544
	collaborative	45	60.91	1.917	.286

As it was shown in Table 3. the post test marks were shown significantly, which mean scores of collaborative Group in pre-test was 30 and changed dramatically to 60/91 in post-test. As a result, in regard to effect of Meta-cognitive Prompting on intermediate EFL learners' collaborative writing and negotiating of topic With each other in friendly situation it differed significantly ( $p < 0/0001$ ). In order to have better understanding of this significance, standard of deviation according to 95% confidence interval was run. In Meta cognitive group the mean scores were 45/62.

Table 4 .Post -test Variances analysis of tests of Between-Subjects Effects Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
<b>Mark</b>	<b>Equal variances assumed</b>	27.616	.000	-24.871	88	.000	-15.289	.615	-16.511	-14.067
	<b>Equal variances not assumed</b>			-24.871	66.539	.000	-15.289	.615	-16.516	-14.062

Table 5.Pre and post test marks

<b>Paired Samples Statistics</b>					
		Mean	N	Std. Deviation	Std. Error Mean
<b>Pair 1</b>	<b>Pre-test individual</b>	29.73	45	1.388	.207
	<b>Post-test individual</b>	45.62	45	3.651	.544

As it was observed, the table 5 shows that the mean scores in pre-test gained by Collaborative group was 29/73+\_ 1/38, and changed to 45/62+\_3/651

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
<b>Pair 1</b>	<b>Pre and post individual</b>	-15.889	3.663	.546	-16.989	-14.788	-29.096	44	.000

Table 6. Paired sample test

Table 7.

		Mean	N	Std. Deviation	Std. Error Mean
<b>Pair 1</b>	<b>Pre-test C</b>	30.02	45	1.865	.278
	<b>Post-test c</b>	60.91	45	1.917	.286

The table 7 showed that the paired samples t-test was applied to display dramatically change in the mean scores between pre-test and post-test. Collaborative group with degree of freedom of 44 and (T=201/68, p<0/0001)

Showed that group working of the students had a big impact on post test marks as the mean scores on pre-test Was 30/02 but changed to 60/91. Thus a conclusion may be drawn here is that the null hypothesis Number one was rejected.

Table 8.

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
<b>Pair 1</b>	<b>Pre and post-collaborative</b>	-30.889	1.027	.153	-31.198	-30.580	-201.682	44	.000

### Inferential Analysis of the Data

In recent years, the sense of collaborative learning has been well respected and has occupied a vital place among language learning strategies. The term collaborative learning refers to an instructional method in which students at various performance levels work together in small groups toward a common goal (Bruner, 1985).

The one which was investigated in this study was providing participants with enough specific group work than individual to see whether it has an effect on their performance that the results were consistent with previous study Johanson (1994), Topping (1995) Cohen (1994). The result of this study also backs those of Storch (2005) which was completely in tune in that her participants in pair group produced the text more accurate and more complex texts in comparison to those who produced the text individually. The mean score 60/91 for collaborative group proved this. Although some deny any role for collaboration in teaching English. This was in line with of Nelson and Murphy (1993), who did not believe any success in

collaborative writing Projects due to inexperience, interpersonal conflict, and also the fact that students ultimately view the process of writing as a private act.

### **Results of Hypothesis Testing**

Writing as a holistic and challenging skill not only is cognitive and affective but also social and Meta-cognitive domain.

This complexity is rather in EFL classes in which linguistic background, culture sense and audience expectation would be of complete difference as White (2000) believes that in order not to be in wrong way, teacher role should change from knowledge provider to consultant, facilitator and sensitive responder. In this study the researcher acted as a consultant more than the only domain controller of the students' activity. In order to have better result the researchers was in tune with Blanton(1987),Crandall(1999) that in collaborative group students were not passive receptors of knowledge but also collaborators and reflectors and the other group was visa versa.

Due to the fact that in this study and generally EFL students do not have the implicit knowledge of plans, genre form during some treatment sessions, students were taught the materials in order not to be in lack of grammatical knowledge and vocabulary choices, although the PET test, their same level of intermediate in language institute and also the same teaching materials for both groups caused better understanding of the fact that collaborative won the battle over individual and meta-cognitive prompting. The results showed that the higher mean score in the post-test was remarkably different at  $p < 0.01$ . This significant improvement in the post-test was Attributed to knowledge that the participants acquired from the treatment lessons and negotiating of writing materials.

As discussed earlier in table 7 Collaborative group with degree of freedom of 44 and ( $T=201/68$  , $p < 0/0001$ ) showed that group working of the students had a big impact on post test marks as the mean scores on pre-test was 30/02 but changed to 60/91. The null hypothesis number one states that there is no relation between meta-cognitive prompting and structured peer interaction on EFL learners' collaborative writing the result of the study contradicted that. Thus the null hypothesis Number one was rejected.

According to the null hypothesis number two, Peer interaction during writing does not have a significantly different effect on improving EFL learners 'writing do not have any significance on listening comprehension. As the result showed,F.ratio was bigger than 1and ( $p < 0/0001$ ) so the hypothesis was rejected.

## General discussion

In this study, an attempt has been made to find out whether Meta-cognitive prompting and structured Peer Interaction had an effect on intermediate EFL learners' collaborative writing

The finding showed that experimental group was more and more superior in performance compared with the control group. This better performance was due to the collaborative working of the subjects. However, those who advocate the use of group working and benefits of peer-assisted learning are in balanced with the result of study and with this view that collaborative writing might lead to enhancement, motivation and self-efficacy. The study showed that even though the students are in the same proficiency level, it does not merely help them to act in the same.

Moreover, as Raimes(1983) believes the ability to produce and correct sentences is not the mere aim of successful writing but it should pave way for communication, to link and developed information, ideas or arguments for specific reader or readers. In fact there is a relationship between writing and thinking which makes it a diamond for part of any language syllabus.

To agree with Johnsons'belief,(1994)as it was observed, the mean scores gained by collaborative group was 29/73. But in post-test of this study the high mean marks of Collaborative groups which changed to 60/91 proved his idea that there is persuasive evidence that collaborative terms achieve at higher levels of thought and retain information longer than students who work individually with the help of treatment sessions they made a significant change in post-test. Research question number one attempted to answer the question of whether meta-cognitive prompting had an effect on collaborative writing.

During the period of the treatment, the participants in the experimental group were encouraged to acquire the specific cultural materials. After using t-test to compare the results of the post-tests there was a big difference between the pre and post-test at the end of the study. The second research question of this study tried to probe if peer interaction during writing actually lead to improve writing by comparing the results of the post- tests; it was found out that there was dramatically significant difference between those peer structured group and metacognitive ones.

Based on the result of the study, the following conclusions may be drawn:

1-writing is considered as a support skill for speaking, and thus skill getting

Activity in which students engage a variety of activities in order to reinforce

Their growing knowledge of the linguistic system that is collaborative work

2-Although the teaching materials for both meta-cognitive and cooperative group was the same, the post-test mean scores showed the remarkable difference in individual and group work. This proved Storch(2005) idea that both in L1 and L2 collaborative has been

recognized as contributing to a higher quality of writing in which social interaction between pair workers would be high

### **Pedagogical Implications**

Writing skill like other language skills depends on various factors and conditions. There are factors such as interest, background knowledge, and the ability to make connection between the ideas in writing materials are highly significant. According to the results of study, what should be taken in to consideration is to provide Iranian EFL course books for an intercultural communication since they focus on immoderately language forms, not having enough diverse social issues and do not fulfil student's awareness of the target language. Therefore, as Cohen(1994) believes, language teaching will be enhanced provided that explicit teaching of small group, social skills and other aspects such as grammar and vocabulary are intertwined with each other one way is having simple group product; another is to allocate roles for each student; providing a group reward also fosters positive interdependences. Although we cannot claim that factors such as good knowledge of vocabulary and grammar have the final say, their vital rule in writing cannot be ignored. Apart from the above mentioned factors, factor such as cooperating peers with each other is a big element that should not be forsaken by teachers.

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Apart from the above mentioned factors, factor such as cooperating peers with each other is a big element that should not be forsaken by teachers. There is no doubt that peer response in the writing classroom is a time-consuming activity. However, it may not be time wasted. As Bartholomae(1980) points out, it is easier to teach students (as readers) an editing procedure than it is to teach students (as writers) to write correctly at the point of transcription. Consequently, by giving the students practice in becoming critical readers, we are at the same time helping them towards becoming more self-reliant writers, who are both self-critical and who have the skills to self-edit and revise their writing. This may in the end be a more achievable pedagogical objective than getting them to do it right first time.

However, only if the class is adequately set-up and trained can the benefits of the peer feedback activity be fully realized, and even so there are considerations of age, cultural background, class size, and interlanguage level which may significantly influence overall outcomes.

Nevertheless, for the teacher who perhaps wishes to escape from the tyranny of the red pen (if only temporarily) and explore an activity that can complement her own feedback to her students' writing, collaborative peer group response is a potentially rewarding option.

How ever, in order to have better results of collaboration works there are some points that teachers in EFL classes ignore these days and should take in to account. First and the most is that as the peer response process itself is a lengthy one, reading a draft (probably more than once), making notes, then either collaborating with another reader to reach a consensus and write the comments, or engaging orally with the writer in a feedback circle, will consume a significant amount of time and teachers should be patient enough. Second, according to studied carried out by Carson and Nelson's (1996), the teacher may find it not easy to hand over a remarkable degree of responsibility to the students, since he or she will not be able to oversee each group simultaneously, particularly if the response groups are providing oral feedback. In addition, the teacher may find it difficult not to interfere by providing feedback in addition to that of the student readers, which might well reduce the students' motivation and commitment to their own responding.

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