Peer Scaffolding in an EFL Writing Classroom: An Investigation of Writing Accuracy and Scaffolding Behaviors

Parastou Gholami Pasand* Department of English Language and Literature, Faculty of Arts and Humanities, Arak University, Iran parastou_gholami@yahoo.com

Abdorreza Tahriri Department of English Language and Literature, Faculty of Arts and Humanities, University of Guilan, Iran atahriri@gmail.com

Abstract

Considering the tenets of Sociocultural Theory with its emphasis on co-construction of knowledge, L2 writing can be regarded as a co-writing practice whereby assistance is provided to struggling writers. To date, most studies have dealt with peer scaffolding in the revision phase of writing, as such planning and drafting are remained untouched. The present study examines the impact of peer scaffolding on writing accuracy of a group of intermediate EFL learners, and explores scaffolding behaviors employed by them in planning and drafting phases of writing. To these ends, 40 freshmen majoring in English Language and Literature in the University of Guilan were randomly divided into a control group and an experimental group consisting of dyads in which a competent writer provided scaffolding to a less competent one using the process approach to writing. Results of independent samples t-tests revealed that learners in the experimental group produced more accurate essays. Microgenetic analysis of one dyad's talks showed that scaffolding behaviors used in planning and drafting phases of writing were more or less the same as those identified in the revision phase. These findings can be used to inform peer intervention in L2 writing classes, and assist L2 learners in conducting successful peer scaffolding in the planning and drafting phases of writing.

Keywords: Academic Writing, Interaction, Microgenetic Analysis, Peer Scaffolding, Writing Accuracy.

* Corresponding Author

1. Introduction

In spite of many studies done in English as a Second or Foreign Language (ESL/EFL) writing pedagogy, it is still one of the most difficult areas for language learners. Nowadays, writing is viewed as a social process rather than an individual accomplishment. As Young and Miller (2004) indicate, by incorporating the principles of Sociocultural Theory (SCT) with its emphasis on co-construction of knowledge, L2 writing can be regarded as a collaborative practice whereby all participants engaged in a discursive practice can change their patterns of social participation within their Zone of Proximal Development (ZPD), and the supportive interaction in peer writing can provide the ground for the further development in individual writing skills.

Recently, scaffolding and ZPD have turned out to become two of the main concepts in L2 learning studies. Scaffolding was initially used by Wood, Bruner and Ross (1976) in an analysis of children-tutor interaction. It was then associated with Vygotsky's notion of ZPD. The origin of the concept of scaffolding is in cognitive psychology and research in L1. Scaffolding refers to those supportive conditions which are made by a knowledgeable participant in a social interaction (Donato, 1994). It has also been applied in the context of tutorial interaction where a tutor helps a less skilled person to solve a problem (Hekamäki, 2005).

There have been various ways of interpretation and operationalization of the term scaffolding since its emergence. As Neguyen (2013) pointed out, varied interpretations of the concept of scaffolding have expanded its significance to the extent that nowadays who provides scaffolding is not a question and there has been a shift in the focus from "expert" to "expertise". As a matter of fact, the use of scaffolding has been widened and it is no longer restricted to the interactions between experts and novices. There are many researchers who have considered peer collaboration (e.g. Barnard, 2002; de Guerrero & Villamil, 2000; Riazi & Rezaei, 2011; Van Lier, 2004; Walqui, 2006) in addition to interactions between a teacher and students in a classroom (e.g. Davis & Miyake, 2004; Many, Dewberry, Taylor, & Coady, 2009) as scaffolding.

2. Literature Review

There are a number of studies which focus on student-to-student interactions or peer scaffolding within the context of Vygotskian (1978, 1981, 1987) Sociocultural Theory. Lidz in his study in 1991 identified twelve components of adult mediating instruction including: 1)

Intentionality: attempting to influence the learner's actions through interaction, engagement of attention and goals, 2) *Meaning*: promoting understanding by highlighting important aspects, marking relevant differences, and elaborating detailed information, 3) *Transcendence*: helping the learners to make associations with past experiences and potential future ones, 4) *Joint regard*: visualizing the learner's work to him or her, using "we" to talk about the experience, 5) *Sharing of experiences*: telling the learners about an experience that the mediator had and of which the learner is not aware in order to stimulate new ideas, 6) *Task regulation*: manipulating the task to facilitate problem-solving and induce strategic thinking, 7) *Praise/Encouragement*: encouraging the learner that he or she has done something good in order to increase the learner's self-esteem, 8) *Challenge*: challenging the learner within but not beyond his or her ZPD, 9) *Psychological differentiation*: avoiding competitiveness with the learner, 10) *Contingent responsivity*: being familiar with the learner a sense of caring and enjoyment in the task, and 12) *Change*: communicating to the learner that he or she has made some changes or has improved.

Donato (1994) in a study involving three third semester university students of French sought to find how students co-construct their L2 learning experiences in a school setting and also how social interactions in the classroom facilitates the internalization of new linguistic knowledge by an L2 learner. The results of the analysis of the interactions between the students in a one-hour planning session indicated that the learners provided guided assistance to their peers during collaborative L2 activity in the same way as experts provide scaffolding. The learners were also able to widen their own knowledge and that of their peers.

De Guerrero and Villamil (1994) conducted another study with the aim of finding the types of interaction occurring between members of a dyad in a peer revision session in the writing process. Fifty-four intermediate college students participated in this study and their interactions during the revision phase of the writing was audio and video-taped. The results showed that the peer revision sessions were complex and productive. Also, the subjects working in pair benefited from the peer revision sessions and could add to their knowledge of English language.

Moreover, in another study conducted by de Guerrero and Villamil (2000) on peer scaffolding in ESL writing classroom, the researchers found that effects of scaffolding were mutual and learners were all the time co-constructing their own system of meaning making.

In the Iranian EFL context, Mirzaee, Domakani and Roshani (2010) examined the effects of the ZPD-based discourse scaffolding on EFL learners' co-construction of L2 metadiscourse while performing collaborative writing tasks. Four different treatment conditions were assigned to the participants of the study including: 1) formal teaching, 2) input enhancement, 3) non-ZPD interaction, and 4) ZPD-based L2 discourse scaffolding. In addition, the social interactions of students in the ZPD-based group when they were working on their writing tasks were audio-recorded. The results of this study showed that ZPD participants used a substantial amount of English metadiscourse and the discourse construction among learners was mutual. However, this study did not consider the effect of ZPD-based writing on the writing performance of the learners.

Baradaran and Sarfarazi (2011) conducted another study through which university students were guided by the use of scaffolding according to Vygotskian SCT to write their first academic essay in English. The students in this study were taught how to generate ideas, draft, edit and revise their essays within the scaffolding principles such as modeling, contextualizing, negotiation, etc. This study made use of two groups, one control group and one experimental group. The experimental group received teacher scaffolding and the results of the post-test of writing showed that the experimental group outperformed the control group. In other words, the results revealed that the subjects who received scaffolding wrote better than the students who did not receive any scaffolding.

Finally, Rezaei (2012) tried to identify the scaffolding behaviors applied by both teacher and peers in helping the learners move to independent writing, and she also compared the scaffolding behaviors used by teacher and students. For this purpose, two groups of students were asked to take part in the study. One group received teacher scaffolding while the other one received peer scaffolding. The researcher also made use of Lidz's Mediated Learning Experience Rating Scale in order to identify and rate the scaffolding behaviors. The outcomes of the study revealed that the teacher used more scaffolding behaviors than peers, but the difference between the behaviors as used by the teacher or peers was shown not to be significant. This study did not aim at finding out the impact of teacher or peer scaffolding on the writing performance of individual learners.

Although there are some studies whose concern is the effect of peer collaboration on the writing performance of L2 learners, those studies did not focus on peer scaffolding while a competent writer scaffolds a less competent one. For instance, Storch (2005) investigated the

writing performance of 23 ESL students with a focus on peer collaboration and writing accuracy. The results of comparing texts produced by pairs with those composed by individuals indicated that the pairs produced less fluent but better texts with reference to task fulfillment, complexity, and also accuracy.

In another study, Wigglesworth and Storch (2009) explored the effect of collaborative writing on a group of ESL students' writing ability regarding their writing accuracy, fluency and complexity. Although it was shown that collaborative writing has a significant effect on the learners' writing accuracy, the results did not reveal a significant positive influence on the learners' complexity and fluency of writing.

In spite of the existence of a body of knowledge around peer scaffolding, the investigation of EFL writing accuracy through peer scaffolding while a competent writer scaffolds a less competent one has been underestimated and many of the afore-mentioned studies have been concerned with the scaffolding behaviors of peers during the revision phase of the writing process.

The present study aims at investigating the impact of peer scaffolding on the writing accuracy of intermediate EFL learners and also exploring scaffolding behaviors used by EFL learners during the planning and drafting phases of writing. To achieve these goals, the following research questions were proposed:

- 1. What is the impact of peer scaffolding on the writing accuracy of Iranian intermediate EFL learners?
- 2. What scaffolding behaviors are used by Iranian intermediate EFL learners during the planning and drafting phases of argumentative writing process?

Based on the first research question the following null hypothesis was formulated:

 H_0 . Peer scaffolding has no impact on writing accuracy of Iranian intermediate EFL learners.

3. Methodology

3.1. Participants

The participants of this study were 40 university students (20 males and 20 females) all freshmen studying English Language and Literature at the University of Guilan. They were all at Intermediate level of English language proficiency. Participant selection was done based on convenient sampling. The age of the participants ranged from 17 to 32, with average age of 18.5 years old, and they were all native speakers of Persian.

3.2. Instruments

Nelson Proficiency Test (section 300D) was first used to explore the homogeneity of the participants. We also made use of two argumentative writing prompts, one as the pre-test and the other as the post-test. The writing prompt used in the pre-test was: "To what extent do you agree or disagree that parents should have access to their children's Facebook accounts?" Also the prompt for the post-test was: "Universities are principally social forums and not academic forums. Do you agree or disagree?". These prompts were based on students' interests, and they were selected from among several ones introduced to them.

The control group was taught using the product approach to writing, in which model writings are used. Some argumentative essay samples were also utilized during the teaching. Moreover, both experimental and control groups were provided with some pamphlets about argumentative essay writing out of the books Essentials of Writing by Taylor (1989) and Write Ideas, an Intermediate Course in Writing Skills by Glendining and Mantell (1991).

A further instrument used in the present study for the identification of scaffolding behaviors is Lidz's (1991) Mediated Learning Rating Scale.

3.3. Procedures

After ensuring about the homogeneity of the participants through Nelson proficiency test, they were randomly assigned to experimental and control groups in the first week, the first instruction session in each group dealt with making the students familiar with the format of argumentative essay writing by lecturing and using pamphlets and handouts. Then, the students were required to write an argumentative essay on a prompt provided by their teacher for homework to be submitted in the next session. It should be mentioned that the researcher was the teacher in both groups.

In the third week, a pre-test of writing was given to both groups in the time limit of 45 minutes with the objectives of enabling the researcher to compare students' writing performance at the end of the treatment, and also helping her in determining competent and less competent writers in the experimental group so that the more competent writers could be paired with the less competent ones. Considering the objectives of the present study, competent writers were those who could produce more accurate and fluent texts in the limited classroom time.

The next four weeks (weeks 4, 5, 6 and 7) were spent having the control group to write argumentative essays on topics provided and models given to them, based on the product

approach and those in the experimental group to write on the basis of process approach to writing while each competent learner scaffolded his/her partner.

The experimental group was taught incorporating process approach to writing with the steps delineated by Seow (2002, as cited in Richards & Renandya, 2002) including 1) planning, 2) drafting, 3) revising, and 4) editing during which the students produced joint argumentative essays. Based on the performance of the learners in the pre-test, 10 dyads were formed in the experimental group in which comeptent writers were paired with less competent ones. In every session, first the students were given a time of about 10 minutes to plan what stance they are going to take in the argumentation, then they were asked to start drafting their papers which lasted approximately 25 minutes. At this phase, the less competent writer wrote down what the dyad have agreed on in the planning section while the competent writer scaffolded him or her through remarks about sentence structure, organization of ideas, accuracy, and mechanical aspects of writing. Then, the students were asked to exchange their papers with their peer classmates next to them and provide and receive feedback on their essays using a peer feedback sheet, adopted from the book Refining Composition Skills by Smalley, Ruetten, and Kozyrev (2001). Finally, they were given time to edit and revise their essays based on the peer feedback they have received. As in the control group, the students in the experimental group were also provided with teacher feedback on their writings. It should be stated that for collecting data about scaffolding behaviors, the members of the dyads in the experimental group were asked to record their voice in the penultimate session using their cell-phones so that the scaffolding behaviors could be later analyzed by the researcher. The recordings were done in the penultimate sesion, so as to give the students enough opportunity to practice peer scaffolding.

Since the ultimate goal of scaffolding is reaching an independent level of performance and also to compare the groups performance after the treatment, the last week, i.e., week 8 was considered for administering a post-test. In the posttest the students in each group were asked to individually write an argumentative essay within the same time limit of 45 minutes, as in the pre-test.

4. Results

4.1. Quantitative Analysis

To measure writing accuracy, we followed Wigglesworth and Storch's (2009) approach including the ratio of Error-free T-units to T-units and Error-free clauses to clauses. The

students essays were rated by the researchers at two poits of time. The intra-rator reliability was checked using Pearson Product-moment Correlation and a strong positive relationship between the calculations both at the pre-test (r=.88, p<.05), and the post-test (r=.89.5, p<.05) was reported.

Table1 shows the descriptive statistics for the two measures of accuracy. It should be mentioned that due to the absence of one of the participants in the control group at the time of pre-test, the data from that learners was excluded in the final analysis. Accordingly, there was a reduction in the number of participants in the control group from 20 to 19.

Table 1.

clauses to

clauses

19			
19	.697	.212	.048
tal 20	.736	.173	.038
	tal 20	tal 20 .736	

.778

.758

.138

.132

19

20

Descriptive Statistics for Writing Accuracy in Pre-test

control

experimental

As the main aim of the study was to compare two means obtained from the two independent groups of EFL learners after ensuring the normality assumption, independent samples t-test was run for the purpose of data analysis. Table 2 illustrates the results of the t-test for the accuracy of the essays produced by the leaners in each group in the pre-test.

.031

.029

Table 2.

The Results of Independent Samples T-test for Pre-test of Writing Accuracy

		Levene's Test for Equality of Variances			t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Differe nce	Std. Error Differe nce	95% Con Interval o Differenc Lower	of the	
Error-free T- units to T- units	Equal variances assumed	.816	.37	63	37	.532	038	.061	164	.086	
Error-free clauses to clauses	Equal variances assumed	.004	.95	.44	37	.658	.0193	.043	068	.107	

As indicated in the table, the p-value for both measures of writing accuracy is greater than the selected level of significance which was .05. More specifically, the level of significance for the ratio of error-free T-units to T-units is (p= .532, df= 37) and for error-free clauses to clauses it is (p=.658, df= 37). Therefore, there was not a significant difference between control and experimental groups in terms of their writing accuracy in the outset of the study.

Table 3 shows the descriptive statistics for the two measures of writing accuracy in the post-test.

Table 3.

Descriptive statistics for Writing Accuracy in Post-test

	groups	N	Mean	Std.	Std. Error	
				Deviation	Mean	
Error-free	control	19	.658	.113	.026	
T-units to						
T-units	experimental	20	.797	.156	.034	
Error-free						
clauses to	control	19	.684	.087	.020	
clauses						
	experimental	20	.862	.105	.023	

Table 4 is illustrative of the results of independent sample t-test for mean comparison of the post-test results.

Table 4.

The Results of Independent Samples T-test for Post-test of Writing Accuracy

		Te Equa	vene's st for ality of iances	t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2- tailed)	Mean Differ ence	Std. Error Differ ence	Interval	95% Confidence nterval of the Difference Lower Upper	
Error-free T-units to T-units	Equal variances assumed	.55	.46	-3.15	37	.003	138	.043	227	049	
Error-free clauses to clauses	Equal variances assumed	.90	.34	-5.68	37	.000	.177	.031	240	114	

As is shown in Table 4, considering significance level of .05, the *p*-value for the ratio of error-free T-units to T-units produced by the learners is (p= .003, df= 37) which is less than .05. This indicates that there is a significant difference between experimental and control groups in this regard. The same is true about the ratio of error-free clauses to (p=.000, df= 37). Therefore, since both indicators of writing accuracy showed a significant improvement, our null hypothesis is rejected.

4.2. Qualitative analysis

In the following section, the interaction between learners in one dyad which has been selected among the pairs in the experimental group will be presented using microgenetic analysis, which is conducted for the purpose of studying moment-to- moment changes in the participants' behavior. The analysis is done in order to find out which scaffolding behaviors are used by them during the planning and drafting phases of writing argumentative essays. The dyad consisted of two males who collaborated in writing their essay. The recordings were done in the penultimate session of instruction. The reason for choosing this particular dyad is the richness of scaffolding behaviors used by them.

The following notation system is used in the transcripts:

Italics: Italics were employed to cite a letter, word, or phrase as linguistic example, including Persian words.

[brackets]:brackets enclose actual Persian words said by students.

(parentheses): explanation by authors

... :sequence of dots indicate pause .

Boldface: words which were said in Persian and translated into English for transcription.

A: less competent writer

B: competent writer

{sic}: erroneous sentences or structures used by the learners

The learners started planning about the essay on the topic "many people dismiss fantasy or science-fiction as an escape from reality. Do you agree or disagree." by having initial metatalks such as "so do you agree or disagree? Is it an escape from reality?". These metatalks indicate that they wanted to make their stance clear from the outset of the writing task. This also shows that the members were trying to gain control over the task. At the beginning of the writing, the less competent writer asked the mediator about his opinion regarding the topic of the essay at hand. As the following episode illustrates, both of the learners tried to *engage* themselves in the task.

Episode 1

- 1. A: What do you think? When people read or watch fantasy they want to escape from reality.
- 2. B: Ok, when we say fantasy, it is meant fantasy as an escape from reality. But human itself is a being which fantasizes all the time, and... What's your point about that?
- 3. A: umm..., I'm absolutely for that, because fantasy...actually... as you just mentioned...is some part of our character, we just...in everyday life, umm..., we fantasize about our future...our next five minutes...what's gonna happen, what's not gonna happen or...
- 4. B: I can say that someone like Mat Groeny is a genius, because in most of his movies, like Futurama, he fantasizes about future all the time and, umm..., he brings the news that he encounters everyday into his series. So if we consider fantasy as an escape from reality...someone like Mat Groeny is not going to do that...
- 5. A: so would you agree or disagree? {sic}
- 6. B: I disagree that it is an escape from reality...
- 7. A: I'm totally on the same shoes that you are,
- 8. B: ok.

The above excerpt clearly shows how the learners involved themselves in the task by inquiring each other's' opinions and point of view as in *what do you think?* (line1) or *What's your point about that?* (line 2).

Episode 2

- A: shall we keep on going? I don't know. We were disagree that it is an escape from reality. {sic}
- 10. B: in the introduction we will give an example that human nature itself is in a way that fantasizes, yeah?
- 11. A: yeah, and we are gonna use facts and...
- 12. B: Futurama (the name of a fantasy movie). F u t u r a m a.

In episode2, a number of scaffolding behaviors can be observed. Joint regard (Lidz, 1991) is seen when the learners consulted each other and made a decision about what to write as the thesis statement in the introduction or how to write different body paragraphs and the conclusion section of their argumentative essay and also used "we" while talking. The above episode is also illustrative of another scaffolding behavior which is named "directing" by the researcher, when the competent writer tries to direct the negotiation in a path which leads to what is expected up to the end of the writing (e.g. line 10). A further scaffolding behavior which was observed in the interaction between these students in the above episode was named simplification. This was done when the mediator, i.e. the more competent writer tried to make the writing task easier at times by spelling the unknown words especially the name of people or places an instance of which can be seen in the last lines of episode 2 above. In addition, episode two shows that the participants tried to establish and maintain intersubjectivity (Rommetveit, 1985) as they shared a common perspective and used "we" in their interaction. There were also several instances of laughing in the middle of planning and drafting the essay which "helps the interlocutors consolidate intersubjectivity" (de Guerrero & Villamil, 2000, p.59). Intersubjectivity is accounted as an essential component of work within ZPD, since it "signals a state of mutual cognition propitious for the attainment of self-regulation" (ibid.).

Episode 3

- 13. A: now...what do you think we should write for the thesis statement?
- 14. B: well...in the thesis statement we will show our disagreement that fantasy or sciencefiction is an escape from reality...
- 15. A: and then in the body...
- 16. B: in the body we will provide pros and cons. First we will write two pros and then one con. That'll be fine, yeah?
- 17. A: yep, **I agree**.

Intentionality (Lidz, 1991) is when the competent writer takes the role of the tutor and provides some clues and points out the critical features of the text with the main goal of promoting self-regulation in the other. This was illustrated in episode 3 above when the mediator tried to conclude what the "thesis statement" is or whether the written thesis statement is appropriate or not. This was also true when the learners were engaged in writing pros or cons for supporting their argument. It can also be implied from the above episode that

the writer or scaffoldee has accepted his partner's role as a mediator since he resorts to him and asks his opinion with regard to the ingredients of their assigned argumentative essay and shows his agreement by the end of the episode.

The *use of L1* as another scaffolding behavior is also evident in episode 4 (line17). It needs to be pointed out that using L1 in the interactions was not totally prohibited in the classroom, since as de Guerrero and Villamil (2000) indicated, avoiding the use of L1 during collaborative tasks may not be a wise pedagogical practice as learners use their mother tongue to think critically and achieve understanding.

Episode 4

- 18. B: in the course of history, throughout...
- 19. A: is that right?
- 20. B: no, course. Ok. Course. dot. Actually...
- 21. A: no, no, no, don't use actually.
- 22. B: part of our past, present,
- 23. A: and future.
- 24. B: right?

Episode 4 illustrates instances of *negotiation for meaning* (Lidz, 1991) moves aimed at promoting understanding. The students truly collaborated on building the minute details of their essays such as punctuation (line 20) or using words which complements other phrases. For instance, what student B told in line 22 was completed by student A in line 23.

Episode 5

- 25. B: Groeny is a creator of animation.
- 26. A: animated movie
- 27. B: animation, not animated movie
- 28. A: why not animated movie?
- 29. B: this is the right word. We use animation. He's the creator of two famous and successful television series.
- 30. A: TV series, right?
- 31. B: of animated pictures, which are first...?
- 32. A: first of all

- 33. B: no, not *first of all*, remember our previous essay? We shouldn't use first of all at the beginning of the paragraph.
- 34. A: yeah, I know.

In episode 5, the mediator tried to *extend the scope of the immediate situation* (Bruner, 1978) to alternative situation for which an earlier solution would work as in *no*, *not first of all*, *remember our previous essay?...we shouldn't use first of all at the beginning of the paragraph...*(line 33).This is also equivalent to *transcendence* (Lidz, 1991). Transcendence is achieved as the competent learner helps the less competent one make association to the related past experience.

Episode 6

- 35. B: that happened in the future.
- 36. A: that'll happen. That will happen.
- 37. B: that will happen
- 38. A: we'll seriously revise this.
- 39. B: why? We can do it right now. Because I choose that... {sic}
- 40. A: no, no, no, because it is formal and that kind of stuff. I understand it that you have a right to say what you think...
- 41. B: so... that will happen...right?
- 42. A. yes, [definitely right].

Episode 6 demonstrates *contingent responsivity* which is as Lidz (1991) defines "the ability to read the [tutee]'s cues and signals related to learning, affective and motivational needs, and then respond in a timely and appropriate way" (p. 109). When the mediator confronted with the tutee's remark as his ideas being disregarded, he tried to respond in a way that does not make any offense to his partner or make him feel inferior by saying *no*, *no*, *no*, *because it is formal and that kind of stuff. I understand it that you have a right to say what you think... (line 40) and then approved his point showing strong acceptance yes, definitely right (line 42).*

Episode 7

43. B: it has been always an important part of our lives' improvement.

44. A: *lives*?

45. B: *lives*. (The plural form of life).Life is the singular form and for making it plural we change it to lives.

Instructing or giving minilessons is a type of scaffolding behavior "by means of which students exteriorize their expertise and offer each other knowledge about language" (de Guerrero & Villamil, 2000, p. 57). In episode 7, the mediator or more competent writer tries to clarify how we make the plural form of the word *life* by changing its form.

In this study, it was also evident that not only the competent writer provided scaffolding, but also the less competent one showed some scaffolding behaviors. This is in line with what Donato (1994) has called *mutual scaffolding*. For instance, in the following episode the less capable writer resorts to *meaning* (Lidz, 1991) by asking the mediator to clarify his remark. He had also used *praise or encouragement* (ibid.).

Episode 8

46. B: fantasy and in some cases fiction are two issues...

47. A: tell me first what you're gonna say.

48. B: are two issues that have affected human throughout...

49. A: cool! Good idea...

The scaffolding behavior "meaning" (Lidz,1991) is when the writer asks the mediator to clarify his point in line 47, *tell me first what you're gonna say* and in this way forcing the mediator to elaborate on his intended meaning. Additionally, praise or encouragement is seen in the scafoldee's behavior as he asserts *cool! Good idea*... (line 49) after the mediator explains what he means.

Episode 9

50. A: the introduction is short,

51. B: we can add to it, ok? Just give me this...paper...

52. A: I'm the writer. I'm the writer.

Psychological differentiation (Lidz, 1991) is when the members of a dyad keep a clear distinction between their role as scaffolder or facilitator and scaffoldee. It should be noted that in the case of our study the scafoldee's role is defined as the writer. The short episode above points out that the writer had a clear understanding of his role and explicitly shows it by repeating the sentence *I'm the writer*, two times in line 52.

In spite of the positive aspects of peer scaffolding, there are also some drawbacks in it, and the value of the scaffolding metaphor as a mechanism for learning has been put under question. For instance, Tudge (1990, as cited in Rezaei, 2012, p. 88) states: "There is no guarantee that the meaning that is created when two peers interact will be at a higher level, even if one child is more competent than another and is providing information within the less competent peers' zone of proximal development".

In the present study, there were also some cases which illustrated that Tudge (1990) was to some extent right. For example, in this study a disadvantage of peers writing together while one of them who wrote better assumed the role of the tutor was that, in rare cases the mediator did not accept the points made by the less capable writer even if they were true. The following episode clearly shows this as the less competent writer suggests that they should provide a topic sentence or some background information at the beginning of the body paragraph, but the mediator rejects it and continues in his own way. Episode 10 shows this aspect of peer scaffolding which is also named *regression* (de Guerrero & Villamil, 2000).

Episode 10

- 53. B: Sympson and Fturama, we say Mat Groeny...
- 54. A: just right now? At the beginning?
- 55. B: that's the body, that's the body.
- 56. A: isn't it that we have some kind of introduction?
- 57. B: it's the introduction.
- 58. A: it's the introduction of the whole essay.
- 59. B: I know that; just trust me with the body. Right?
- 60. A: Mat Groeny...

In episode 10, it is shown that finally it was the competent writer or the mediator who could win the discussion and the writer had to give up and continue the composing as the mediator dictated. The use of the word "trust me" was witnessed in two other occasions in the interaction between the learners whose interactions were discussed. This matter shows that the mediator dominated the task and tried to control the flow of communication and writing. Although, in many cases he made the right decision and led the task in the right path, there were some cases which he dismissed the points made by the writer or the tutee even if they were true.

5. Discussion and Conclusion

Referring to the first objective of the study, that is investigating the impact of peer scaffolding through process approach on writing accuracy of EFL learners, it can be concluded from the results of independent samples t-test that students in the experimental group, who have practiced peer scaffolding, have been more successful than those in the control in producing more accurate argumentative essays. This result is in line with the study of Wigglesworth and Storch (2009), based on which pairs have shown more accuracy in their writings compared to those who have written individually. However, the main difference between the present study and that of Wigglesworth and Storch (2009) is that in their study the researchers did not pair the learners as it was done in the present study with having competent writers paired with less competent ones.

With regard to the second objective of the study, namely exploring which scaffolding behaviors are used by intermediate EFL learners during the planning and drafting phases of the writing process, it can be argued that in the present study, many of the scaffolding behaviors observed are more or less the same as those, which were identified in the earlier studies (such as, de Guerrero and Villamil, 1994; Rezaei, 2012) in the revision phase of the writing These scaffolding behaviors include, 1)Engagement in task, process. 2)Intersubjectivity, 3)Joint regard, 4)Negotiation for meaning, 5)Sharing experience, 6)Situation extension, 7)Transcendence, 8)Simplification, 9)Contingent responsivity, 10)Instructing or giving minilessons, 11)Meaning, 12)Psychological differentiation, 13)Using L1, 14) Intentionality, 15)Directing, and 16)Praise or Encouragement. Among these scaffolding behaviors, there were two behaviors found to be new namely Simplification and *Directing.* Moreover, the competent writer in this study displayed a crucial role as mediator during the planning and drafting phases of writing process by displaying several supportive behaviors that in the majority of cases facilitated the advancement through writing a joint argumentative essay. Some of the supportive behaviors identified in the present study included (a) instructing or giving minilessons, (b) simplifying the act of writing by referring to mechanics or grammar, (c) directing the process of writing argumentative essay by covering all the required sections. In addition, the following scaffolding behaviors were also found in the peers' interactions. 1)Engagement in task, 2)Intersubjectivity, 3)Joint regard, 4)Negotiation for meaning, 5)Transcendence, 6)Situation extension, , 7)Simplification, 8)Contingent responsivity, 9)Instructing or giving minilessons, 10)Meaning . 11)Psychological differentiation, 12)Praise, 13)Using L1, 14)Intentionality, and 15)Directing.

Furthermore, the present study also demonstrated that the scaffold is bilaterally constructed by both participants in the dyad. In other words, although the mediator provided scaffolding in the majority of cases, the less competent writer also tried to contribute to the text construction at some occasions and provided some scaffolding behaviors already mentioned in the last episode in the results section.

The results of the present study can have implications for both EFL learners and writing teachers. As writing accurately is one of the important requirements of students in an academic context, and since there are a great number of students in the classes, involving the students in dyadic interactions can assist the teachers in dealing with large classrooms which are surely comprised of learners with different writing skills, some of whom are more competent writers than the others.

Furthermore, the findings of this study in line with other ones conducted earlier (e.g. Rezaei, 2012; Storch, 2005; Villamil & Guerrero, 1996) may be used to inform peer intervention in L2 writing classes. The scaffolding behaviors exhibited in the present study during the planning and drafting stages of writing process as de Guerrero & Villamil (2000) suggested can be analyzed and promoted in peer training sessions. Successful peer scaffolding largely depends on how well the students are involved in the task, consequently, raising students' consciousness about the types of scaffolding behaviors can assist them in conducting successful peer scaffolding.

Further research is needed to explore the probable impacts that peer scaffolding can have on the development of other language skills such as listening, speaking and reading. In addition, as the present study was conducted in an academic context, further research is needed to be done in other learning contexts like language institutions and with other proficiency levels.

References

Baradaran, A., & Sarfarazi, B. (2011). The impact of scaffolding on the Iranian EFL learners' English academic writing. *Australian Journal of Basic and Applied Sciences*, 5(12), 2265-2273.

- Barnard, R. (2002). Peer tutoring in the primary classroom: A sociocultural interpretation of classroom interaction. *New Zealand Journal of Educational Studies*, *37*(1), 57-72.
- Bruner, J. (1978). The role of dialogue in language acquisition. In A. Sinclair, R. J. Jarvella & W. Levelt (Eds.), *The child's concept of language* (pp. 241-255). New York: Springer-Verlag.
- Davis, E. A., & Miyake, N. (2004). Explorations of scaffolding in complex classroom systems. *The Journal of the Learning Sciences*, 13(3), 265-272.
- Donato, R. (1994). Collective scaffolding in second language learning. In: J.P. Lantolf & G., Appel (Eds.), *Vygotskian approaches to second language research*. (pp. 33-56).Norwood, NJ: Albex.
- Glendinnig, E. & Mantell, H. (1991). Write ideas, intermediate course in writing skills. Singapore: Longman.
- Guerrero, M. C. M. de, Villamil, O. S. (1994). Social cognitive dimensions of interaction in L2 peer revision. *Modern Language Journal*, 78, 484-496.
- Guerrero, M. C. M. de, Villamil, O. S. (2000). Activating the ZPD: Mutual scaffolding in the L2 peer revision. *The Modern Language Journal*, 84, 51-58.
- Hekamäki, L. (2005). Scaffolded assistance provided by EFL teacher during whole class interaction. (Unpublished doctoral dissertation). University of Jyväskyalä, Jyväskyalä.
- Lidz, C. S. (1991). Practitioner's guide to dynamic assessment. New York: Guilford Press.
- Many, J. E., Dewberry, D., Taylor, D. L., & Coady, K. (2009).Profiles of three preservice ESOL teachers' development of instructional scaffolding.*Reading Psychology*, 30(2), 148-174.doi:10.1080/02702710802275256.
- Mirzaee, A., Domakani, M. R. & Roshani, N. (2010). L2 discourse co-construction within the learner's ZPD. *The Journal of Teaching Language Skills*, *2*, 91-115.
- Neguyen, M. H. (2013). EFL students' reflections on peer scaffolding in making a collaborative oral presentation. *English Language Teaching*, 6(4), 64-73.
- Rezaei, M. (2012).Mediated learning experience: Teacher vs. peer scaffolding modes in L2 writing classes. *Iranian EFL Journal*, *8*, 71-96.
- Riazi, M. & Rezaei, M. (2011). Teacher- and peer-scaffolding behaviors: Effects on EFL students' writing improvement. In A. Feryok (Ed.) CLESOL 2010: Proceedings of the 12th National Conference for Community Language and ESOL. (pp. 55-63)

- Richards, J.C. & Renandya, W.A. (2002).*Methodology in language teaching.An analogy of current practice*. Cambridge: Cambridge University Press.
- Rommetveit, R.(1985). Language acquisition as increasing linguistic structuring of experience and symbolic behavior control. In J. Wertsch (Ed.), *culture, communication and cognition: Vygotsyan perspectives* (pp. 183-204). Cambridge: Cambridge University Press.
- Smalley, R. L., Ruetten, M. K., & Kozyrev, J. R. (2001). *Refining composition skills*. Boston, Massachusetts: Heinle & Heinle publishers.
- Storch, N. (2005). Collaborative writing: Product, process, and students' reflections. *Journal* of Second Language Writing, 14, 153-173.
- Taylor, P.A. (1989). Essentials of writing. Canada: Prentice-Hall.
- Villamil, O. S. & Guerrero, M. C. M. de (1996). Peer revision in the L2 classroom: Socialcognitive activities, mediating strategies, and aspects of social behavior. *Journal of Second Language Writing*, 5, 51-75.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological process*. Cambridge: Harvard University Press.
- Vygotsky, L. S. (1981). The genesis of higher mental functions. In J.V. Werstch (Ed.), *The concept of activity in Soviet psychology*. (pp. 144-188). Armonk, NY: M.E. Sharpe.
- Vygotsky, L. S. (1987). Thinking and speech. In L. S. Vygotsky, *Collected works* (pp. 39-285), R. Rieber & A. Carton (Ed.), New York: Plenum.
- Walqui, A. (2006). Scaffolding instruction for English language learners: A conceptual framework. *The International Journal of Bilingual Education and Bilingualism*. 9(2), 159-180.
- Wigglesworth, G. & Storch, N. (2009). Pair versus individual writing: Effects on fluency, complexity and accuracy. *Language Testing*, *26*(3), 445-466.
- Wood, D., Bruner, J.S. & Ross, G. (1976). The role of tutoring in problem solving. *Child Psychology*, *17*, 89-100.
- Young, R. F. & Miller, E. R. (2004). Learning as changing participation: Discourse roles in ESL writing conference. *Modern Language Journal*, 88, 519-535.