Peer scaffolding behaviors emerging in revising a written task: A microgenetic analysis

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A B S T R A C T

Vygotsky's writings on Sociocultural Theory (SCT) of mind, his concept of Zone of Proximal Development (ZPD) and its related metaphor, scaffolding, serve as the theoretical basis for the study of peer collaboration. This paper aimed at examining the effects of peer-scaffolding on EFL writing ability and finding out how revising techniques are constructed and expanded when two learners are working in their ZPDs. Two intermediate EFL university students (a "reader" and a "writer") collaboratively revised a cause and effect composition written by one of them. A microgenetic approach was applied for analyzing the interactions. Results showed that even though the role of the reader was more significant as mediator at first, both reader and writer actively took part in revising the text with assistance transferring mutually between them at the end of the session. Results also indicated that peer scaffolding could be reciprocal rather than unidirectional. As a concluding remark, it was noted that teachers can enhance the quality of collaborative writing processes by helping students to work together and take into account joint efforts in the writing tasks. Learners can also take more participation, learn evaluative feedback strategies, and benefit from their co-mediators.

Keywords: peer scaffolding; collaborative writing; microgenetic approach.

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Introduction

Sociocultural Theory (SCT) of mind is a system of ideas on the origin and development of the mind. Within this theory learning is a social phenomenon embedded in the cultural context. It emphasizes the influence of culture, peers and adults on the children and other learners' linguistic and cognitive development (Vygotsky, 1978). In Vygotskian SCT, an individual's cognition mediated by symbolic and physical tools is examined within a social context (Azabdaftari, 2013 a). SCT and the concept of Zone of Proximal Development (ZPD) are the theoretical bases for the study of peer collaboration in the English as a foreign language (EFL) writing classroom (de Guerrero & Villamil, 2000). Scaffolding as another well-known term with regard to SCT and ZPD is a process of setting up situations to make novice's entry into the task easy and successful. When novice learners entered the task, scaffolders can gradually pull back and handle the role to the learners themselves, which make them become skilled enough to manage the task (Bruner, 1983, cited in Walqui, 2006).

Vygotsky (1978) defines ZPD as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more peers" (p. 86) and Dynamic Assessment (DA) looks at cognitive development within the context of social interactions with others who are more proficient. ZPD is a co-mediation between a more capable and knowledgeable person who can reach a goal and someone unable to achieve that end (Lantolf, 2009). As Vygotsky (1978) puts it, "what the person can do with assistance today, he or she can do tomorrow alone" (p. 78). According to Ellis (2009), to understand ZPD, it is helpful to distinguish three levels of development. Vygotsky distinguishes the actual developmental level and a level of potential development. The third level not commonly mentioned by sociocultural theories is the level that lies beyond the learner, that is, the learner is unable to perform the task even if assistance is provided. ZPD is thus the second of these levels, to borrow Vygotsky's own metaphor; it is the bud rather than the fruit of development.

While Johnson (2009) explained that any form of aid that supports development has been nominated as ZPD by some in the educational community, Vygotskian sociocultural theory characterizes ZPD as an area of potentiality; a metaphoric space where individual cognition originates in the social collective mind and emerges in and through engagement in social activity (Johnson & Dellagenlo, 2013). Feuerstein, Rand, and Rynders (1988) propose that testing practitioners do not take into account the fact that abilities can be changed. Consequently, they are "all too eager to accept an individual's present level of functioning as an absolute indicator of her potential future abilities" (p. 83). In many ways, Feuerstein et al. may have had Vygotsky's concept of ZPD in mind when they proffered this criticism, since Vygotsky understood the future in a radically different way from how it is seen in most approaches to assessment. Therefore, mediation is integral to scaffolding that provides a chance for the individual's potential development. In other words, any human activity (i.e., higher mental function) is mediated by objects (e.g., computer), psychological tools (e.g., texts) or another human being (Kozulin, 2003; Wertsch, 2007).

Recently, there has been a great deal of attention toward SCT and its related components of ZPD and scaffolding in educational contexts. Since the aim of scaffolding is to move learners through stages of other-regulation to self-regulation (de Guerrero & Villamil, 2000), it can lead the way for learner's self-regulation and autonomy. Clark and Graves (2004, p.571) argue," what makes scaffolding so effective is that it enables a teacher to keep a task whole, while students learn to understand and manage the parts, and presents the learner with just the right challenge." In fact, they motivate teachers to include scaffolding in their instructional repertoire. Storch (2007) asserts that even at the time of working in small groups or pairs, scaffolding can take place. Verbal dialogue of the ZPD during the efficient scaffolding can co-construct understanding.

Vygotsky (1978) argued that mediating in the ZPD is not limited to that of teachers or adults but, peer mediation is also a vital means for internalization and progress. As he claimed, when a child is in interaction with people and in cooperation with his peers, learning causes a variety of internal developmental processes to be awakened. The role of interaction and peer collaboration was also being highlighted in SCT. Novice learners improve the level of their knowledge in collaboration with experts who are more competent. It is worth mentioning that since learners can take action as both novices and experts, they are able to have a positive influence on each other's growth (e.g., Antó′n & DiCamilla, 1998; Donato, 1994; Ohta, 2000, 2001; Storch, 2002; Swain & Lapkin, 1998). Since no two learners can be found with the same strong and weak points, they can supply scaffolded assistance while working jointly (Ohta, 2001). By pooling their different resources, they can reach a level of performance beyond their level as well (Dobao, 2012).

Swain (2001) states that collaborative tasks are communicative since they involve "learners in comprehending, manipulating, producing or interacting in the target language while their attention is principally focused on meaning rather than form" (Nunan, 1989, p.10). As a sort of collaborative tasks, collaborative writing widely recognizes knowledge as a social construction and writing as a social process (Ede and Lunsford, 1990). Moreover, since the collaborative nature of development occurring through interaction among members of a society has been emphasized in sociocultural perspective, interaction within the collaborative writing tasks can gain support from SCT as well. Besides, Zamel (1983) asserts that writing is a "non-linear, exploratory, and generative process whereby writers discover and reformulate their ideas as they attempt to approximate meaning" (p. 165). Collaborative writing ability stimulates learners to ponder on language, discuss the language they are utilizing, and help each other to find solution to the linguistic problems they face. Thus, peer collaboration is compatible with the process approach in writing (Hyland & Hyland, 2006) in which the production of multiple drafts of a composition and the reception of responses midway through the writing can be helpful (Hanjani & Li, 2014). This emphasis on audience, feedback, and revision (Raimes, 1985) supports an increased use of peer collaboration in L2 writing classrooms (Ferris, 2003). It is also advised to invite other students to perform error corrections (Ellis, 2013). Taking all these into account, we can thus gain a better understanding of the cognitive development occurred in the process of a collaborative writing tasks by means of SCT of mind.

Related to the present study, Li and Kim (2016) investigated two ESL groups' interactions during collaborative writing tasks in which, by examining the dynamics of peer interaction, they concluded that small groups take different approaches to both task negotiation and text co-construction when working on writing tasks. In a similar study, Shrestha and Coffin (2012) examined the dynamic interactions between a tutor-researcher and two students across various writing drafts. Their findings showed that mediation helped to identify the participants' emerging writing abilities, different from their actual abilities. More importantly, each participant required different levels of assistance due to their ZPDs. In the Iranian setting, Hanjani and Li (2014) explored EFL students' interactional dynamics during a collaborative revision activity. The authors found that their participants adopted a range of functions in their negotiations including scaffolding. Additionally, their findings suggest that collaborative revision can be incorporated in EFL writing pedagogy as a method to improve writing and revision skills.

The Theoretical Framework Adopted

Recently some studies have focused on learner-learner interactions which are presented in the form of episodes. These episodes are defined as "any part of a dialogue where the students talk

about the language they are producing, question their language use, or correct themselves or others"(Swain & Lapkin, 1998, p. 326). In episodes, learners try to cooperate with each other to solve grammatical and lexical problems. The collaborative dialogue in episodes is a case of languaging (Swain & Watanabe, 2012), what Swain defines as: "the process of making meaning and shaping knowledge and experience through language" (Swain, 2006, p. 89). The analysis of episodes verifies that learners are on numerous occasions able to achieve proper solutions to their language-related problems and co-construct new language knowledge by pooling their individual resources (e.g., Leeser, 2004; Storch, 2007; Swain & Lapkin, 1998, 2002; Williams, 2001). Furthermore, some other examinations validate that the collaborative dialogue we observe in episodes embodies language learning in progress (see, among others, Kim, 2008; Storch, 2002; Swain, Brooks, & Tocalli-Beller, 2002; Swain & Lapkin, 1998, 2002; Watanabe & Swain, 2007; Williams, 2001).

Lidz (1991) has constructed a scale for measuring mediated instruction as a representation of scaffolding based on Vygotsky's notion of ZPD and Feuerstein's work on Dynamic Assessment. Lidz (1991) defined scaffolding as: "the mediator's adjusting the complexity and maturity of the teaching interaction to facilitate the child mastery of the task; providing support when necessary and providing encouragements and prompts to the child to move ahead when ready" (p. 80). Lidz's (1991) scale contains 12 components to identify and evaluate adults' mediating behavior while actively interacting with a child in a learning experience. To observe peer interaction in the writing classroom in this study, the researchers employed Lidz's terms because a potential function of this scale is to examine any type of mediated teacher-learner or learner-learner interaction (de Guerrero & Villamil, 2000).

Table 1
Lidz's (1991) Twelve Component Behaviors of Adult Mediating Instruction

1. *Intentionality*: Consciously attempting to influence the child's actions. This involves making efforts to keep the interaction going, engage the child's attention, inhibit impulsive behavior, and maintain goal orientation.
2. *Meaning*: Promoting understanding by highlighting for the child what is important to notice, marking relevant differences, elaborating detail, and providing related information.
3. *Transcendence*: Helping the child make associations to related past experiences and project himself or herself into the future.
4. *Joint regard*: Trying to see the activity through the child's eyes; looking at an object that has been brought into focus by the child; using "we" to talk about the experience.
5. *Sharing of experiences*: Telling the child about an experience or thought that the mediator had and of which the child is not aware.
6. *Task regulation*: Manipulating the task to facilitate problem solving; stating a principle of solution or inducing strategic thinking in the child.
7. *Praise/Encouragement*: Communicating to the child, verbally or nonverbally, that he or she has done something good; keeping high the child's self-esteem.
8. *Challenge*: Maintaining the activity within the limits of the child's ZPD. This implies challenging the child to reach beyond his or her current level of functioning, but not so much that the child will feel overwhelmed and get discouraged.
9. *Psychological differentiation*: Keeping in mind that the task is the child's and not the mediator's; that the goal is for the child to have a learning experience, not the adult. Avoiding competitiveness with the child.
10. *Contingent responsivity*: The ability to read the child's behavior and to respond appropriately. It can be compared to a well-coordinated dance between two partners who are very much in tune to one another.
11. *Affective involvement*: Expressing warmth to the child; giving the child a sense of caring and enjoyment in the task.
12. *Change*: Communicating to the child that he or she has made some change or improved in some way.

Note. This table represents a synthesis of information from *Practitioner's Guide to Dynamic Assessment*, by Carol S. Lidz, 1991, New York: Guilford Press. Copyright 1991 by The Guilford Press (Source: de Guerrero & Villamil, 2000, p.53)

It can be argued that this scale is not sensitive to the first, second or foreign language since the acts in the given typology are not predetermined to be applicable only to the first language. Taking each of the behaviors mentioned in the framework into account (praise or change, for example), we can see that they may not be affected by the context and the language, but what is important is the nature of scaffolding which can gradually improve an scaffoldee's level of functioning. Studies conducted using Lidz' scaffolding behaviors (Li & Kim, 2016; Shrestha & Coffin, 2012; de Guerrero & Villamil, 2000) can lend support to the application of the framework to the context of the present study.

To further the understanding of the scaffolding behaviors that emerged in the interactions, some functions of language in the taxonomies suggested by Li and Kim (2016) were also utilized which can shed more light on the analysis of the data. Their main taxonomy is divided into two categories: *initiating* (in which new ideas are proposed) and *responding* (reacting to other's ideas). *Eliciting, greeting, justifying, requesting, stating*, and *suggesting* are the components of *initiating* and *acknowledging, agreeing, elaborating*, and *suggesting* are the subcomponents of *responding*. It is worth mentioning that many of these scaffolding behaviors are similar to and some are relabeled in the other taxonomy.

In spite of the progress made to determine the communicative mechanisms characterizing scaffolding, further research is needed to unfold other aspects of mediated learning within the ZPD scope and to pinpoint what specific behaviors make scaffolding efficient. Hence, the present study sought to provide answers for the following questions:

      1. How do a pair involve in the collaborative revision of a writing task?

      2. What kinds of scaffolding behaviors emerge in peer-scaffolding revision?

Method

The data for the present study are part of a larger research project in English on Dynamic assessment in EFL process writing. Twenty-four Persian native speakers who were studying English were included in the project to examine the effects of symmetrical and asymmetrical scaffolding behaviors on their writing ability. They were homogenized based on their scores obtained from a TOEFL test and all of them had passed paragraph writing as a compulsory course at the same university and were randomly assigned to two groups of 12. Different stages of process writing framework proposed by Seow (2002) - brainstorming, spidergram, outlining, drafting, revising, and editing- were explained to the participants of both groups. In one class pairs of 2 were formed randomly and the class was provided with teacher and peer scaffolding, while the other class was provided with non-dynamic instruction. The treatment lasted for 16 sessions. This study consisted of both quantitative and qualitative parts. Data were obtained from learners' writings on the given topics before and following the treatment. Both peer and teacher-learner interactions were audio recorded and transcribed. Scores obtained from pretest and posttest were the main sources of quantitative data while transcriptions of the recorded interactions and results of interviews were examined qualitatively.

Participants

This study was carried out with two native speakers of Persian language both of whom were studying English Translation at the department of English language and translation studies of a university in Iran. They were both 22-year-old male students who were chosen from the

experimental group of the study. They had gone through the essay writing course in advance. This pair was selected mainly since their interaction was satisfactorily rich and varied to provide us with the opportunity of observing a wide range of scaffolding behaviors.

Procedure

As a part of activities, the learners were to take part in a revision session in which both of them were revising a composition written by one of them. The topic of this composition was "*The effects of computers on our everyday lives*" as selected by the learners themselves from a gamut of various topics with different genres within the first sessions of the course. Since in the main project pairs were selected randomly, two external raters examined the composition before the revision session to specify which of the learners in dyads would take the role of reader and which one would take the role of writer (The learner whose composition required more revision would take the role of writer). Without knowing their roles as writer and reader, they were asked to revise the draft and record whatever they said (whether in English or Persian). Moreover, they were given some sheets of paper for taking notes or making written comments. They were supposed to read the composition aloud and then begin the revision process by concentrating on content and organization rather than mechanics. Following the revision session, the writer was assumed to ponder at home on the ultimate draft of his composition and submit it by the next session.

Data Collection and Analysis

The main source of information for the analysis contained the transcription of peers' conversation which was audio-recorded during the revision session. Another source of information was the learners' first drafts, which were examined by two external experts prior to the revision session and specified the reader and writer roles. Besides, the writer was to make necessary changes to his first draft following the revision session and return it to the teacher by the next session. The researchers had a copy of the writer's first draft so that they could compare it with the writer's final draft.

In order to analyze the data, the transcription was divided into units of discourse in which the learners were discussing task procedures, deficits, errors, and problems in the text. The interaction was split up into six sections in order to be analyzed through microgenetic analysis, that is, they were examined carefully to find a) moment-to-moment behavioral changes that may indicate development of revision skills through mediation and b) the scaffolding techniques employed by the learners to assist their peers in revising the composition (de Guerrero & Villamil, 2000). Belz and Kinginger (2003, p. 594) discuss the microgenetic method as "the observation of skill acquisition during a learning event" enabling researchers "to examine specific instances of the development".

It should be noted that, except for some parts of reading or referring to various sections of the written text, for the most part, the learners' interaction was in Persian. Here, to speed up the understanding by the readers, an English version of the sections was generated and is presented below. In the transcription of the data the following notation system was utilized:

Table 2
The Notation System Utilized in the Transcriptions

Italics	(Parentheses)	…………	**Boldface**	"Quotation marks"
Used to cite a letter, word or phrase as a linguistic example, including Persian words.	Clarification by authors	Indication of pauses	Words said in English	When participants are reading from the text

Microgenesis Analysis of the Data

Episode 1

1. R (Reader): **"One of the important inventions which utilizes in modern society is computer**." You have to indent your sentence when you start a new paragraph. You need to leave a space from the margin.

2. W (Writer): Oh, yes. You're right. I totally forgot about it.

3. R: You know, it's better to use *most* before the word **"important"** to emphasize, I think.

4. W: No, I think there's no problem.

5. R: But in **comparative adjectives**, if the adjective has more than one **syllable**, except for some cases, to show the dominance you need to bring *the most* before the adjective.

6. W: Ok.

7. R: And I think something is wrong with the second part of your sentence, don't you? What is the subject?

8. W: **Computer**.

9. R: You mean **computer utilizes**?

10. W: No, I mean people use computers.

11. R: So, you have to use a passive form.

12. W: Uh hmm…..Got the point.

In this episode, the reader, to affect the structure of the text, reveals *intentionality* by saying "you have to indent your sentence". The reader leaves no option for the writer to choose. Lidz (1991) defines *intentionality* as: "consciously attempting to influence the learner's actions". In addition to line 1, in line 11 the reader uses this behavior again but not immediately this time. It can also be called *requesting* in the taxonomy proposed by Li and Kim (2016) which is a component of *initiating*. This behavior is answered in line 2 by approving that the reader's *suggestion* was correct. This *agreement* is another component of *responding* category in Li and Kim's taxonomy which is also evident in lines 6 and 12. In line 3, the reader provides other-regulation by *instructing* or giving a *minilesson*. He makes use of his own familiarity with learned rules to guide the writer. The reader's statement does not impose something since he does not speak surely by using "I think"

at the end of his sentence. The writer is not convinced at first which can be considered as *disagreement* in the responding category of Li and Kim, but after providing the instruction (line 5) which can be considered as a sort of *justification*, he appears to be persuaded. At the end of this episode, the reader seeks the writer's opinion through making use of *questions* (line 9). In fact, the reader *challenges* the writer to reach beyond his current knowledge of grammar. Based on what Lidz (1991) mentions, the reader is trying to activate the writer's ZPD.

Episode 2

13. R: **"People used simple tools like abacus for calculating before computers were invented"**. Could you revise your sentence? **People who**………….

14. W: You mean...…, **people who have lived**?

15. R: Hmm……., look. We are talking about a time before another time in the past.

16. W: I usually have problems with tenses. Could you explain more? I got confused.

17. R: Don't worry. That's nothing. You should just keep in mind that when we are talking about an event before another in the past, we need to replace **have** with **had**. So, we say: **People who**……..

18. W: **Had lived**

19. R: Exactly.

In this episode, the reader tries to provide the writer with implicit hints in order to activate the writer's ZPD and to associate his previous knowledge and what he is supposed to project. This behavior is named *transcendence* which helps the learner to make associations to related past experiences and project him/herself into the future (Lidz, 1991). In line 13, by asking *question*, the reader asks for a revision and applies *recasting* to *elicit* the writer's knowledge. After the writer's first attempt to edit his sentence in line 14 by means of a *question*, which is not successful, the reader is expected to explicitly correct him but he *elaborates* on the issue and provides the writer with a bit more explicit hint which is *acknowledged* by the writer. The reader then tries to calm down the writer in line 17 by inviting him not to be worried. As he finds out the danger of confusion, he stops challenging the writer and explicitly explains the rule by giving a *minilesson*. In line 15, the reader uses pronoun "we" instead of "you" to reduce the distance between them and transfer a sense of collaboration. This behavior is called *joint regard* that has been incorporated in Lidz's scale and is defined as: "trying to see the activity through the learner's eyes". At the end of this episode, the reader checks the writer's understanding by asking a *question* again.

Episode 3

20. R: **" Those who think of shopping as a bored activity**……..?"

21. W: Yes, some people don't like **shopping**.

22. R: What do you mean by **"a bored activity"**?

23. W: I mean something you don't like to do.

24. R: Uh hmm. Like ***time-consuming*** activities or ***badgering*** ones?

25. W: Yes, exactly.

26. R: Ok. Do you know the difference between ***present and past participle adjectives***?

27. W: As far as I know for *animate* we use **past participle** and for *inanimate* we use **present participle**.

28. R: Very good. So, now………., what do you think about your sentence?

29. W: Hmm, **"Those who think of shopping as a boring activity**…"

30. R: Excellent, that's it.

In this interaction, the reader *initiates* the interaction and employs *meaning* (Lidz, 1991) by asking "what do you mean?" in line 22. Raising this *question*, he intends to direct the writer's attention to a wrong structure that influences the meaning of the sentence (the incorrect use of present participle). The reader utilizes some examples as mediation tools to teach the structure. This exemplifying could be regarded as an *inductive instruction* or *elaboration (line 24)*. In line 26, by asking a *question* and giving some key words, the reader intends to remind some already known points to the writer. In this part, although the writer has the knowledge of some rules, he is unable to utilize them in practice. The reader artfully carries out the responsibility of activating this knowledge by presenting several prompts. Line 27 and 29 are *statements* about what has been discussed earlier. Based on what Lidz (1991) states, *praise or encouragement* is a communication to the learner, verbally or non-verbally, that he/she has done something well. In lines 28 and 30 the reader employs this behavior in order to improve the writer's self-esteem.

Episode 4

31. R: Ok, here it would be **on.**

32. W: No, before internet **in** must be used. **"Companies put their advertisement in the internet"**.

33. R: **In the internet**? No, **on** should be used, or **over**.

34. W: Also **in** and **from**.

35. R: No, **in** can't be used, I think.

36. W: Are you sure about that?

37. R: Not completely, but I think it is in this way.

38. W: **Ok**.

Here, the writer tries to gain authorship by insisting on the proposition he has used in his writing. Since the proposition he has utilized may be a resort to his first language (L1), it can be regarded as a kind of transfer in which second language (L2) learners benefit from their L1 to compensate for the lacks in the L2 knowledge (Karim & Nassaji, 2013). The reader has a good command of the issue but due to lack of certainty he runs a gamut of prepositions. A hot discussion could be observed in this interaction which represents more involvement on the part of writer. *Disagreements* can be observed in lines 32, 33, 34, and 35. In line 31 and 33, the reader *suggests* the proper propositions. He makes efforts to correct the writer's resources but ultimately his hesitation leads the writer to use his own words in the final draft (the writer used *in* as the proposition in the submitted version). This episode is a good example of *psychological differentiation* (Lidz, 1991) in which the mediator needs to keep in mind that the task is the writer's and not his. Thus, mediators should avoid competitiveness with the learners and allow them freedom to express their own views.

Episode 5

39. R: **"Computer as the most amazing phenomena invented in 1833"**…..

40. W: Oh, I had to use *passive form* in this sentence.

41. R: Exactly, so it should be…….

42. W: **Computer as the most amazing phenomena was invented in 1833**.

43. R: Very good, but do you know the *singula*r form of **phenomena**?

44. W: *Singular* form? It's not *plural.*

 45. R: Hmm…… So what is the *plural* form of it?

46. W: I don't know. I think there is no difference between the *plural* and the *singular* form of it.

47. R: Yes, we have that rule in English, but this is not the case.

48. W: Then, what is the *singular* form?

49. R: It's *phenomenon. P-h-e-n-o-m-e-n-o-n.*

50. W: *P-h-e-n-o-m-e-n-o-n.* **Computer as the most amazing phenomenon was invented in 1833.**

In this episode (line 40), the writer *acknowledges* his fault and the revision made by him in line 42 can be considered as a kind of self-regulation. In Episode 1, there was a *minilesson* about the passive form and here we can observe the behavior of *change* (Lidz, 1991). In line 41, we can observe an *elicitation* by stating an unfinished sentence. Following that in line 43, the reader, by giving *encouragement,* attempts to communicate to the writer that he has made some improvements. In this interaction a gap can be seen between peers, which leads the writer to ask directly about what he does not know (line 45). By providing scaffolding, the reader *initiates* repairing trouble-sources and the writer adopts the correct form in his final draft. Some *questions* are being asked in lines 43, 45, and 48 and we can see *agreement* behaviors in lines 41 and 47.

Episode 6

51. W: In this paragraph I wanted to write about **the application of computers**.

52. R: Yes, good. What are those in your opinion?

53. W: **Playing games, calculating, watching movies, listening to music.**

54. R: What else?

55. W: **Storing data, typing texts, recording voice**.

56. R: What is your idea about **the Internet**?

57. W: Hmm, I totally forgot about it. There is a great deal of things that can be done through the internet.

58. R: Exactly, such as **sending emails, playing games online**.

59. W: Hmm, **net shopping, video-conferencing**.

60. R: Do you download any file from the internet?

61. W: That's a great point. I always download my favorite kinds of music from websites. We can mention **online educating** and **doing research** as well.

62. R: **Computers and internet made the world faster**.

63. W: We can put them in different categories.

64. R: That's a great idea.

This episode manifests a mutual collaboration between peers. In comparison to the initial episodes, the role of writer has been increased to a large extent in these last ones. In the last episode, by actively participating in the interaction, the writer shows a high degree of self-esteem. Even there are some cases in which the writer provides scaffolding to the reader (line 63, for example). In lines 53, 55, 58, 59, and 62 we can observe *elaborations* on the discussed issue.

Questions (lines 52, 54, 56, and 60) and expressions of *agreement* (52, 58, and 63) are also evident in the interaction.

As we move forward in the revision session, an improvement in the warmth of the relationship between peers is palpable. At first, they were behaving formally and trying to impose their dominance to the other side of the interaction, but the last episode is a manifestation of friendliness and *contingent responsivity* , what Lidz (1991) defines as the ability to read the child's behavior and to respond appropriately. Here, in order to maintain the conversation, the reader sticks to gambits by asking questions and expressing encouragement (line 52, 54, 64, for example).

Discussion

The researchers achieved some fascinating results in this study. In some cases, the reader taught some lessons which were necessary in his opinion. These are called *instruction or minilessons* by Villamil and De Guerrero (1996). When one side of the interaction felt that there was a need to some more instruction and explanation, he supplied them. By giving examples and making use of *semiotic mediation*, the reader tried to mediate his peer not in an explicit way, but to *challenge* the writer and present instruction in harmony with his level.

If we spot the episodes sequentially, a movement from *intentionality* and authorship to friendliness and *joint regard* is observable. At first, both dyads were trying to keep a distance from each other and impose their authority to the other side. This trend gradually became weak and a sense of collaboration and friendliness was replaced. At the end of this trend by sharing ideas and moving in one direction, they were following the same aims. Instead of forcing their opinions to each other, asking questions to get information and seeking help from their peer collaborator were evident at the end of the revision. Undeniably, the passage of time also played an important part in this dyadic relationship. As both learners got to know each other more and more, mutual trust, respect, and understanding could be developed between them.

Motivation has always been considered as an important factor in teaching and learning process in the literature. Here in this interaction, by providing opportunities for the writer to present himself, the reader in fact aimed at motivating the writer and keeping him involved in the task artfully. *Praise or encouragement* is another behavior in Lidz's (1991) scale that was utilized frequently in different stages of the interaction. Another strategy that was employed in this revising session was making gaps by asking questions.

It is worth mentioning that contingent use of L1 made the interaction easy, assisted the peers attain their goal, decreased the difficulty of the task, and let peers share their ideas without trouble. There can be found two almost contradictory vantage points regarding the use of L1 in interactions among learners. Some scholars such as Anton and DiCamilla (1998) consider the use of L1 as an obstacle to learning. However, the researchers preferred to take Wells' (1998) idea that the value of exploiting L1 in L2 interactive setting needs to be evaluated in light of the nature of the collaborative task involved.

One of the major aims of education is to improve students' self-confidence and self-esteem in order for them not to be passive learners, but to be sources of knowledge. In this interaction, the quantity of the writer's comments increased stage by stage. At first, we witnessed a somewhat passive person, mainly other-regulated on the part of the writer. Little by little, his gradual assumption of accountability, his willingness to offer and reject suggestions for change, and his

taking a more active role as reviser by commencing the repair of trouble-sources could be accounted as a growth toward a more independent writer and reviser. The writer's growth as a more independent learner and reviser could be considered as a sign of self-regulation.

Concerning the mutuality of the interactions, the results of our study are in line with those of Hanjani and Li (2014) and de Guerrero and Villamil (2000) arguing that scaffolding is a mutual process and both peers profit by revising a task jointly regardless of their level of L2 writing proficiency. Put it simply, both partners engaged in a scaffolding process may benefit from the negotiations exchanged between them. Referring to the last episode, for instance, the writer explicitly expressed his opinion about categorizing computers' applications and the reader responded positively to the idea. We might therefore consider this part of the last excerpt as a sort of mediation offered from the less proficient learner to the more proficient one in which even the reader took on the role of learner.

What we discussed in this study has investigated the dynamics of scaffolding as it happens in L2 peer revision. As previously mentioned, the purpose of the current research was to clarify some aspects of mediated learning within the ZPD scope. In this interaction the reader by employing *transcendence* (Lidz, 1991), at first monitored the writer, then he challenged the writer, next, he trained the writer by providing hints and employing inductive instruction. In fact, the reader attempted to awaken his peer's ZPD. He also showed traces of *psychological differentiation* (Lidz, 1991) by allowing the writer enough freedom to express his views. One important feature in this interaction that was obvious on the part of both peers was a kind of shared concentration and intention. Although the reader took an important role especially at the beginning of the revision session, we cannot ignore the writer's openness to be mindful of his partner's suggestions and his readiness to receive assistance. Litowitz (1993) points out that learner's resistance to being helped is a major obstacle to growth in the ZPD which may take place in the process of collaboration.

It was the microgenetic approach that allowed us to observe the writer's gradual improvement and his taking a more active role in revising and even repairing trouble-sources. Vygotsky (1978) himself sophisticatedly asserted that through microgenesis it is feasible to "grasp the process in flight" (p. 68). As the most important issue, we observed the development of the writer's self-regulation and his progress as a more independent writer and reviser. Besides, we can note that since both the reader and the writer were able to make their knowledge explicit to the benefit of each other, the effects of scaffolding were mutual in this interaction. The final draft in which the writer performed the task without assistance was also an evidence of movement within the ZPD. Not only were the majority of the problems which were explained to the writer modified, but also some other changes based on his knowledge were incorporated into the final draft.

Conclusion

In the present study the typical novice-expert ZPD scenario was changed by bringing two intermediate EFL learners in a revision task. The researchers examined the influences of scaffolding on EFL writing ability particularly peer revision. The interaction gained from the revision session was scrutinized after transcription. A microgenetic approach was utilized to find modifications in the participants' behavior and the scaffolding mechanism used by them. The selected revision was analyzed based on Lidz's (1991) scale (Twelve Component Behaviors of Adult Mediating Instruction) since it was strong enough to detect and examine any type of scaffolding behavior.

Our study suggested that peer collaboration in revising a writing task can offer learners opportunities for purposefully meaningful communication. Moreover, this peer collaborative engagement may promote writing quality of the learners. As Hanjani and Li (2014) point out:

> Collaborative revision can be treated as an interim stage on a continuum from sole teacher feedback/evaluation to sole peer feedback/evaluation in EFL writing classrooms as it can help and prepare both teachers and students to transform teacher-fronted, product-based writing pedagogy to student-fronted, process-based approach to composition instruction efficiently (p. 112).

Hence, it is suggested that the technique can function as a complementary activity that helps teachers to solve students' problems which may lead to lesser responsibilities on the part of teachers.

As a concluding remark, teachers can enhance the quality of collaborative writing processes by helping students to work together and take into account joint efforts in the writing tasks. Learners can also take more participation, learn evaluative feedback strategies, and benefit from their mediators. Further research can be conducted with regard to different genres of writing to see whether the interactions are under the influence of genre of writing or not. The learners in this study were intermediate EFL learners. Other research can find out the effects of proficiency level and the context of the study on the collaborative tasks. Since two male students took part in this study, the involvement of gender or the arrangement by sex can be investigated through other research. It is hoped that this study will culminate in more enlightenment on decision-making on the subject of scaffolding and scaffolded learning.

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