

## **INTERNALIZING LINGUISTIC FEATURES THROUGH EXPERT SCAFFOLDING: A CASE OF IRANIAN EFL LEARNERS**

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### **ABSTRACT**

The study aims to explore the effect of expert scaffolding on the internalization of linguistic features by Iranian EFL elementary learners. Two groups of elementary (n=10) and advanced (n=6) learners of English were invited to participate in this study. A picture description task was administered to the elementary participants as their pretest and posttest. The participants' oral presentations of the pictures were audio-recorded and transcribed. Two weeks after the pretesting session, they were given another picture description task as the treatment. In the next stage, each elementary learner was assigned with an advanced learner forming an expert-novice pair to work on the transcripts of their oral presentations. The results indicated that the advanced learners employed several scaffolding techniques to make the novice notice the linguistic gaps and consequently internalize the co-constructed knowledge during the treatment session. Following Van Lier's (1996) framework, some features of scaffolding were observed in the dialogic process of expert-novice interaction. The study may shed light on how expert-novice learners jointly create learning opportunities.

**Keywords:** Sociocultural theory, Scaffolding, Internalization, Zone of Proximal Development, Expert-Novice

## **Introduction**

In traditional language classrooms, students usually do not receive sufficient feedback from their teachers. One way to unravel this problem is to engage them in activities which involve collaboration and to provide feedback through a more 'knowledgeable' person. The more knowledgeable person, as Donato (1994) argued, does not have to be a teacher, but learners jointly constructing learning opportunities can also be considered knowledgeable persons. Wells (1999) also contends that people can help and learn from each other whenever they collaborate in an activity without the presence or assistance of a designated teacher (cited in Baleghizadeh et al., 2010). Therefore, the more knowledgeable member or 'expert' is believed to help the 'novice' to internalize the co-constructed knowledge and attain a higher level of development (Vygotsky, 1978). Following the Vygotskian sociocultural framework, it can be assumed that expert learners in language classrooms may provide scaffolding assistance in learning new L2 features and strengthening their classmates' understanding of the target language.

Although theoretical arguments in favor of scaffolding have been developed concerning various aspects of L2 learning, language teachers may have reservations about its application in their classrooms. In addition, empirical studies on the nature and influence of scaffolding in SLA have exclusively focused on how language teachers provide individual scaffolding to their learners (Ellis, 1998). Several studies can now be found in the form of peer-peer dialogue or tutor-student collaboration (Aljaafreh & Lantolf, 1994; Guerrero & Villamil, 2000; Nassaji & Swain, 2000). However, considering practical circumstances, language teachers are more interested in designing activities and implementation of techniques to encourage whole-class scaffolding (Mercer & Fisher, 1997, cited in Baleghizadeh, et al., 2010). The purpose of this study is to explore the scaffolding opportunities created in the dialogic interaction of the expert-novice learners coming from different proficiency levels. The study provides microgenetic analysis of the participants' interactions while editing the transcriptions of their oral production on a picture description task. A further aim of the study is to examine the learning benefits of scaffolding, that is, whether scaffolding of the expert learners already trained in how to work within their peers' ZPDs has any effect on the internalization of linguistic features and successful completion of the task by the novice learners.

## **Literature Review**

### ***Conceptual Framework***

According to Vygotsky (1978), human development does not happen in isolation and cognitive development arises as a result of interaction between a novice and a more capable member of the society such as a parent, teacher, or peer. It is during

this interaction that a novice learner can achieve a higher level of cognitive development. Several studies in L1 interaction have indicated that for successful development, the help provided by the more knowledgeable member has to be finely attuned to the needs of the novice (e.g., Wertsch & Hickmann, 1987; Wood, et al., 1976). This attuned assistance, referred to as ‘scaffolding’, is defined as a process in which the expert helps the novice in a task by assuming the responsibility of that part of the task which is beyond the learners’ current level of attainment, allowing them to attend to the parts within their range of ability (Wood et al., 1976). In their view, “scaffolding is a metaphor for ‘graduated’ assistance provided to the novice, akin to the carpenter’s scaffold” (John-Steiner & Holbrook, 1996, p.193).

The concept of scaffolding is closely associated with the *Zone of Proximal Development* (ZPD) within the Vygotskian framework of sociocultural theory. Vygotsky (1978) defined 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 capable peers” (p. 86). In other words, ZPD is the distance between what learners can do with and without the support of a more capable other (Lantolf, 2000). Many scholars in the field of second language acquisition (SLA) have suggested that L2 learners can achieve higher levels of linguistic knowledge if they receive appropriate scaffolding within their ZPDs (e.g., Aljaafreh & Lantolf, 1994; Donato, 2000; Nassaji & Swain, 2000; Ohta, 2000). Within this perspective, learning is viewed as participation rather than acquisition. The concepts of ZPD and scaffolding have many implications for L2 learning and may provide useful frameworks for language teachers to improve learners’ linguistic and interactive skills.

### ***Principles of Scaffolding***

The term scaffolding, originated in the work of Wood et al. (1976), was defined by Donato (1994) as a “situation where a knowledgeable participant can create supportive conditions in which the novice can participate, and extend his or her current skills and knowledge to higher levels of competence” (p. 40). Scaffolding serves as a metaphor for the interaction involving an expert who takes control of the difficult portions of a task beyond the current level of the novice, and allowing the novice to attend to those sections within his or her range of ability (Wood et al. 1976). In the field of SLA, scaffolding involves providing linguistic support for students and gradually reducing the support when students become more independent (Schumm, 2006). Therefore, scaffolding would be closed whenever the learner is able to solve a problem without the guidance of an expert, which will lead to the *internalization* of the problem solving process by the learner. The concept of internalization is inseparable from ZPD and scaffolding. Lantolf and

Thorne (2006) defined internalization as the “means of developing the capacity to perform complex cognitive and motor functions with increasingly less reliance on externally provided mediation” (pp. 23-24). Lantolf (2000) stated that internalization presumes that the source of consciousness is in the social activity. At first, the activity of individuals is mediated by others, but subsequently, in normal development, “we regulate our own mental and physical activity through the appropriation of the regulatory means employed by others” (p. 13).

Van Lier (1996) proposed a framework for pedagogical scaffolding in terms of six principles. As Buenner (2013) has clearly explained, these features include:

- 1) Intersubjectivity: This principle involves mutual engagement and support of the learners in the course of interaction
- 2) Contingency: The scaffolding support depends on learner’s reactions, elements can be added, changed, deleted, repeated, etc;
- 3) Hand over/ take over: There is an increasing role for the learner when skills and confidence increase; this occurs when the novice shows his/her readiness in solving the problem independently in which the ZPD would be closed.
- 4) Flow: Communication between participants is not forced, but flows in a natural way without inserting any kinds of force.
- 5) Continuity: This feature refers to the repeated provision of scaffolding over a course of interaction time involving repetition of various strategies to guide the learners.
- 6) Contextual support: This principle refers to the safe but challenging environment in which errors are expected and tolerated as part of the learning process.

### ***Empirical Studies on the ZPD and Scaffolding***

Nassaji and Swain (2000) compared the effectiveness of negotiated help provided within the learner’s ZPD and the help provided randomly with no regard to the learner’s ZPD. Applying one of the two types of error treatment in learning English articles in an intensive writing class, a ZPD and a non-ZPD for each student, the teacher provided help using the regulatory scale developed by Aljaafreh and Lantolf (1994). In the ZPD treatment, the result suggested that the help received in the first writing was effective in helping the student move along her ZPD because in the following compositions, when a similar error was encountered, she corrected it with less help. Exploring the extent to which random help was effective in eliciting the appropriate response from the non-ZPD student, it was revealed that random help was less effective in eliciting the suitable answer as compared to the ZPD help. Specifying the number of obligatory occasions for the use of articles, it was shown that the non-ZPD student, in the first composition, produced more correct instances of articles than the ZPD student. However, in the subsequent compositions, the ZPD student outperformed the non-ZPD. Furthermore, the final cloze test showed that the

mean percentage of correct responses of the ZPD student on the tests was approximately two times of the non-ZPD student's. Therefore, they confirmed a progressive trend in the ZPD student's performance but a converse trend in the non-ZPD student's performance.

To find out the effectiveness of peer collaboration on revisions in the ESL writing class, Guerrero and Villamil (2000) conducted a research in which they based their study on the ZPD in conjunction with scaffolding. Unlike typical studies in peer-peer collaboration in which a novice-expert scaffolding was investigated, in this study two novice learners' behavior in revision task was studied. The study aimed at examining the mechanisms by which strategies of revision is shaped and developed in the interpsychological space created when L2 learners are working in their ZPDs. A microgenetic approach was used to analyze the interaction in revising a narrative text composed by two intermediate ESL students. Results indicated that both learners were active during text revision and throughout the interaction, suggesting that scaffolding is mutual and reciprocal.

Conducting a case study, Barnard and Campbell (2005) investigated the ways by which the sociocultural theory was put into practice during an EAP writing course. In groups of five, the participants were asked to complete different writing assignments in a dialogic process through co-constructing texts with varying lengths in face-to-face or online dialogic process. Since one of the central concepts of the sociocultural theory is scaffolding, the teachers tried to apply it based on its main features suggested by Van Lier (1996). The interactions between the peers were examined through online exchanges and negotiations for co-constructing different parts of academic writing and the features of scaffolding were subsequently explored and discussed. Their data suggested that in the ZPD, understanding was not just transmitted but shared and created. They found that the learning of students within the ZPD mainly depended on the nature and quality of the dialogic intersubjectivity and also the potential limit of personal ability within the demands of the task.

In another study, Baleghizadeh et al. (2010) explored the effect of high-structured scaffolding (HSS), low-structured scaffolding (LSS) and non-scaffolding on the writing ability of EFL learners attending a writing course. In their research, scaffolding emerged in various kinds of supportive writing templates from a very high-structured (guided) one to a very low-structured one by which guidance was offered to the whole class. The students in the HSS group were provided with the topic plus high-structured template including the whole frame of the passage in which they could complete the writing activity by just writing their own paragraphs in the determined lines. The students in the LSS group, on the other hand, were given a complete passage on a topic similar to the given topic plus a list of key

words and the original writing tasks of their course-book served as a non-structured help for the control group. Analyzing the pre- and post-tests, it was shown that the LSS group significantly outperformed the two groups of HSS and control; however, there was no significant difference between the HSS group and control group. They suggested that the students should not be provided with too many hints and guidance; instead, they should have the opportunity for free exploration in a guided way while performing a task. This suggests the importance of contingent and gradual help within the students' ZPDs.

Applying the concept of scaffolding to the context of written corrective feedback, Amirghassemi, et al. (2013) explored the impacts of scaffolded and unscaffolded written feedback on EFL learners' written accuracy. They reported that no feedback type was significantly better than others in improving the students' written use of articles. However, regarding past tense, the impact of feedback type was significant, that is, the scaffolded feedback group significantly performed better than the direct feedback and control groups. They concluded that the kind of linguistic error influences the effectiveness of the correction practice since no group improved significantly in articles whereas the scaffolded feedback group was significantly successful in using the past tense.

In another recent study, Buenner (2013) investigated the work of five teachers who scaffolded their students in an EFL classroom. Through video-tape recording, she explored the concept of scaffolding in Thai classrooms. Eighteen recordings of their teaching were transcribed to be analyzed in terms of scaffolding features suggested by Van Lier (1996) and Wood et al. (1976). It was reported that in the form-focused activities, scaffolding reveals long sequentiality, less contingency, and less contextual support in teachers' interaction with their students, whereas in the meaning-focused activities, scaffolding consists of short sequentiality, more contingency, and contextual support. The study suggested that the teachers who use scaffolding should be aware of its effectiveness by integrating the strengths of form-focused and meaning-focused activities and most importantly, scaffolding features should be gradually applied so that low proficiency learners can engage in interaction with the teachers.

One fruitful area of research, according to Donato (2004), is to investigate and understand under what conditions scaffolding arise and how the concept of scaffolding differs from other forms of interaction. The main question tackled in the current study is whether working within the ZPD and scaffolding during expert-novice collaboration result in the internalization of linguistic knowledge.

## **Aim of the Study**

The present research aims to investigate the effectiveness of scaffolding in internalization of new information. To achieve this goal, the following research questions were addressed:

1. Does scaffolding of the advanced learners of English (expert) help the elementary learners (novice) internalize the linguistic features discussed during the dialogic process?
2. What features of scaffolding are evident in the dialogic interaction of the expert-novice pairs?

Based on the overall purpose of the study and the identified research questions, a qualitative design was employed. The study involved a pretest, two treatment sessions and a posttest. In order to provide detailed in-depth analytical description of the expert-novice talk, all scaffolding sessions as well as pre-test and post-test sessions were tape-recorded. Finally, the tape-recorded presentations of the novice learners and expert-novice interactions (5 hours) obtained from the scaffolding sessions were transcribed.

## **Methodology**

### ***Participants***

Based on convenience sampling, one intact class of Iranian elementary learners of English consisting of 10 students was invited to participate in this study. The advanced learners' class consisted of seven students, in which one of the students did not agree to participate in the study. As a result, a total of 16 female students participated in this study. They were studying English as a foreign language in a private language institute in the Mazandaran province, Iran. The elementary students' ages ranged from 11 to 16 years old and the advanced students' ranged from 18 to 23. The elementary students formed the group of novice learners and the advanced students were considered as experts. It should be mentioned that because all of the participants at the elementary level had already been administered a placement test by the institute's manager and were studying at the same level, there was no need for a test to determine their proficiency level. All participants were initially informed of the general purpose of the study. The advanced learners and the parents of students who were under 16 signed the consent forms indicating their consent to participate in the study.

### ***Instrument***

Two picture description tasks (adopted from Chabot, 2006) were employed in this study. The picture description task has been frequently used to elicit narrative discourse samples from ESL and EFL learners since it provides the researcher with a flexible and convenient tool to assess many linguistic features in terms of grammatical use, amount, type, and efficiency of information conveyed (Mackenzie et al., 2007). Besides, it allows for performance comparison within and across groups. A picture description task consisting of 12 pictures was employed for the pretest and posttest sessions. These pictures depicted two stories about a typical day of a student at school (Appendix A) and the routine activities of a person (Appendix B).

Another picture description task comprising 12 pictures was used for the treatment session. These pictures described two stories about a woman having a haircut (Appendix C) and steps in sending a letter (Appendix D). It should be mentioned that the pictures chosen for testing and treatment sessions were already piloted before the beginning of the study with 10 other students at the elementary level. Since it was observed that the pilot students' production did not provide sufficient data for the purpose of analysis, it was decided that in each treatment or testing session two picture stories be used. As Mackey and Gass (2005) pointed out, 'in order to draw reliable conclusions from these data, there needs to be enough examples (p.139). Thus two picture stories were employed in the pretest and posttest phases of the research and another two were used in the treatment sessions.

### ***Data Collection Procedures***

The data reported here were collected during the summer of 2013 when the participants did not have any school syllabi to follow for the duration of the study. A training session was provided for all the participants on how to tell a story based on a set of pictures. During the pretest, they were asked to tell the stories based on 12 pictures. Their oral presentations were audio-recorded one at a time. In the first treatment session, the elementary learners were asked to tell two stories based on a picture description task; their production was also audio-recorded.

The methodology for the current study was inspired by the study of Aljaafreh and Lantolf (1994) who documented L2 development in the ZPD. They conducted a microgenetic analysis on the dialogue of three learners (Japanese, Spanish and Portuguese) during their tutorials with one of the researchers in order to investigate how the negotiation of corrective feedback in the ZPD promotes L2 learning. They used written texts as their unit of analysis, assuming that they would facilitate the interaction between the expert (researcher) and the learners. Before the start of the collaborative phase of each tutorial, the learner was asked to read her essay, underline whatever errors she could find and correct whatever she could while the



tutor was busy with other tasks in his office. When the learner had completed the private reading, the tutor joined her and collaborative correction began. At first, the tutor asked the learner if she found any errors during her private reading of the essay. If the learner identified any mistakes but could not correct them, or did erroneously, they considered each sentence together. Whenever, a target error was identified or whenever the learner asked a question about some aspects of the essay, the process of reading stopped and the correction process began. The tutor directed the learner's attention to a specific sentence with an error and asked a general question: "Is there anything wrong in this sentence?" (Aljaafreh & Lantolf, 1994, p.469). If this method failed to provide an appropriate response, the learner's attention was narrowed down to the line or phrase in which the error occurred by using an utterance like: "Is there anything wrong in this line or segment?" (Aljaafreh & Lantolf, 1994, p.470). If this utterance failed to produce a response, a more explicit strategy was used. If the narrowing method also failed, a more specific utterance indicating the nature of the error was offered, for example, by requesting the novice to pay attention to the verb tense. If the learner was unable to identify the error, the tutor recognized it and asked the learner to correct it. If the learner failed again, the tutor used more direct forms of regulation such as commenting the use of the 'past participle' form of the verb. If this strategy did not work again, clues about the right answer were provided. Finally, if this produced no answer from the learner, the tutor gave the correct answer.

Following this procedure, i.e., the regulatory scale of the ZPD developed by Aljaafreh and Lantolf (1994), a training session was provided for the members of the advanced group on how scaffolding should be conducted in two steps of modeling and practice (Oxford, 1990). In the second treatment session (in the time interval of about two weeks), the novice students were asked to read the transcriptions of their recorded speech and edit their errors. Then, they were assigned with expert participants to work on the transcriptions during this session. Following previous studies, a two-week interval was considered appropriate between the first treatment and the second one (scaffolding session). In this way, the expert students helped the learners to find their mistakes and guided them to self-correct. Thus, there were 10 pairs of participants, each pair consisting of one elementary and one advanced member. These pair-work sessions were also tape-recorded and transcribed later. Since the number of expert students ( $n=6$ ) was not the same as the novice group's ( $n=10$ ), three expert students voluntarily worked with two novice learners. The conversations between them were in Persian since it was assumed that the native language works better in lowering the possible tension and also removing any misunderstanding between pair members (Swain & Lapkin, 2000). After about two weeks, the novice participants were unexpectedly asked to do the same task carried out in the pretest session. That is, they retold the same story

based on the pictures presented in the pretest session. Their presentations were audio-recorded again in order to investigate the possible effects of expert scaffolding on their subsequent oral production. That is, we examined whether the points noticed by the elementary students – with the help of expert students – were observed in the posttest data.

## Results

The purpose of this study was to investigate the possible effects of scaffolding on EFL learners' noticing and internalization of linguistic features. This section presents some samples of the students' production during the pretest and posttest sessions and segments of conversation between the expert and novice in the process of scaffolding. The conversation between the expert and novice which was in Persian language was transcribed and for the purpose of the study, translated into English. To investigate internalization of the co-constructed knowledge, four linguistic features, namely, verb form, preposition, pronoun and subject-verb agreement were taken into account. The rationale behind choosing these features was that in the piloting session they were recognized as being the most frequent problematic features in the students' oral performance.

### *Subject verb agreement*

One of the important English grammar rules that learners are struggling to acquire is subject-verb agreement. This rule indicates that there should be an agreement between the subject and verb of a clause both in person and number. Observing this kind of agreement is a very challenging task for language learners, particularly, elementary learners. The excerpt below is the transcription of one of the novice participants' oral production during the picture description task (N and E stand for novice and expert, respectively).

Excerpt 1: Pretest session (N6)

*In the morning she get up at 7:00 o'clock. She don't want get up and she wear clothes and eating breakfast. She comb she's hair and brush she's teeth and with she's car go out.*

As it is clear from the above extract, the elementary learner (N6) made several subject-verb agreement errors in an attempt to describe the picture during the pretesting session. In the next session, the expert student tried to help the novice to correct her mistakes that occurred during the treatment session while describing another picture. Now let us examine in some detail a fragment of their interaction during the scaffolding session. It is to be mentioned that the participants' speech was in Persian language, for the convenience of the readers, we translated it into

English (The bold utterances in italics are the participants' original sentences produced in English).

Excerpt 2: Scaffolding session (N6)

- 1 E: Read your next sentence please.
- 2 N: *Put on this paper in the post card.*
- 3 E: Here, what do you mean by 'post card'?
- 4 N: *[Hesitation]..... Aha ...envelope.*
- 5 E: Yes, that's right, this is an *envelope*. You said *put on.....* so, who puts this paper in the envelope?
- 6 N: *She*
- 7 E: So, when we have 'she' in the sentence, do we use 'put' as the verb?
- 8 N: *Aha, she puts....*
- 9 E: Ok, now, read your sentence again.
- 10 N: *She puts this paper in the envelope.*

In the above excerpt, the expert began the interaction by requesting the novice to read her transcribed sentence. It can be seen that the expert tried to guide the novice to produce the intended structure but she did not immediately provide the novice with the answer. For instance, by posing some questions in Turns (3, 5 and 7), she made the novice think (note hesitation in Turn 4) about the suitable words (*envelope* in Turn 3, the pronoun 'she' in Turn 5) and the correct grammatical rule (subject-verb agreement in Turn 7). Exploring the scaffolding features (Van Lier, 1996), *intersubjectivity* can be traced in the above excerpt since the expert made attempts to engage the novice in the interaction by posing several questions. Furthermore, we can observe *continuity* when the expert provides the novice with repeated scaffolding and assistance to guide her to produce the desired response. Below we can now consider N6's production on the posttest.

Excerpt 3: Posttest session (N6)

*She gets up at 7:30 and she cleaning her bed and wears clothes and she eats breakfast and brush.....brushes her teeth and combs her hair. She go ..... goes out with her car.*

Comparing this sample to its corresponding pretest data in Excerpt 1, it can be suggested that the student observed the subject-verb agreement rule (gets up, wears, eats, ...) in most of the cases. In two cases, however, N6 self-corrects her production (brush and go). This may indicate that she has noticed the error in her production immediately after verbalizing the verb form. Therefore, it can be inferred that the scaffolding of the expert may have played an effective role in moving the learner one step forward in the regulatory scale (Aljaafreh & Lantolf, 1994) and

making her notice the gaps in her production. As can be seen, the verb forms produced in the posttest are different from those produced in the treatment session, so the correct use of subject-verb agreement cannot be obtained as a result of memorization. Therefore, it seems that the scaffolding of the expert on this linguistic feature has led to the partial internalization of this feature by the novice since she could produce it correctly in six out of seven obligatory occasions (80% accuracy rate). Since the student produced the posttest without receiving any assistance from the expert, this can be an evidence of transformation of social property to personal property (Vygotsky, 1978).

### ***Preposition***

A common feature of English language is the combination of verbs or nouns with prepositions. The following sample is the transcription of some parts of the production of another novice student (N9) in the picture description task conducted in the pretest session. She describes the picture related to a typical day of a woman:

Excerpt 4: Pretest session (N9)

*She's sleeping and get up 7:30 o'clock at morning. She's morattab kardan your bed. She's putting ...nah ... mipusheh.... her dress and eat breakfast, tea, egg and read their newspaper. She is washing your face and shuneh mikoneh her hair and she is with the car go out.*

Considering the use of prepositions, in this excerpt, N9 failed to include the preposition (at) with the time (get up 7:30). She also used 'at' for 'morning' and finally in the last line, instead of 'by', she employed the preposition 'with' for vehicles. Therefore, since N9 had many problems in producing prepositions during the treatment session, the expert tried to guide her to notice these gaps and correct them. The following excerpt illustrates this point:

Excerpt 5: Scaffolding session (N9)

- 1 E: Say the last one, what is he doing here?
- 2 N: *And put the letter at the post office.* Should we say 'post office'?
- 3 E: *Post office* means an office for posting, now, what's this here?
- 4 N: Post box
- 5 E: Ok, how do we say post box in English?
- 6 N: I don't know.
- 7 E: That's a *post box*. Ok, who does this job?
- 8 N: *He, he, he puts the letter at the post box.*
- 9 E: Why *at the*? What is he doing?
- 10 N: At post box
- 11 E: Why do you say *at the*? How about *on the*? *Under the*? *In the*?
- 12 N: *Aha, in the post box*

- 13 E: Well done! Read your next sentence please.  
14 N: *She is a girl and go arayeshgah* (hair salon)  
15 E: Ok, in your opinion what's wrong with this sentence?  
16 N: I don't know how to say 'Arayeshgah' in English?  
17 E: No, I mean before that,  
18 N: I don't know.  
19 E: Didn't you miss something after 'go'?  
20 N: *Aha goES* (*Rising intonation*)  
21 E: Ok, that's right, but I didn't mean this, another thing is missing from the sentence.  
22 N: (*Hesitation*)..... *Aha, goes TO* (*Rising intonation*) ...  
23 E: Well done!

In Turn 7, after struggling for a couple of minutes, the expert knows that N9 is not able to notice or correct her error, so she assumes full responsibility for correcting the error and providing the intended vocabulary (*post box*) in Turn 7. But later in Turn 11, she offers a number of vocabulary options for N9 to choose from. This procedure is repeated with questioning to elicit the correct responses (Turn 19). Finally in Turn 22, the novice produces the correct form of the preposition. As it can be seen from the data, the expert guides the novice to find her problems specifically in preposition and correct them herself. The above long excerpt demonstrates many scaffolding attributes (Van Lier, 1996). In Turn 15, the expert intends to address the problematic prepositions and guides her to the desired answer; however, along the way, the novice corrects another part of her language (Turn 20, goes) not intended by the expert. In addition, the expert employs a variety of strategies in her scaffolding (questioning, Turns 3, 5, 9, 15; providing options to be chosen from, Turn 11). This variation and repetition indicate the feature of *continuity* in scaffolding, and in general, engagement of both members features the *flow* of interaction during the scaffolding session. The posttest data produced by N9 is presented below.

Excerpt 6: Posttest session (N9)

*She get up at 7:30 o'clock in the morning. She's cleaning her bed. She cleaning the dresser. She make her breakfast. She washing the teeth and combing her hair. She going out with her car.*

In the above sample, out of five obligatory occasions there is only one prepositional mistake; the same incorrect preposition ('with' for car) used in the pretest, is again repeated in the posttest session. However, compared to the pretest, she managed to correctly use the other two prepositions ('in' the morning; goes 'out'). Although the usage of preposition in the treatment and posttest were different, it can be tentatively

said that the scaffolding may have raised the student's awareness of her problems in this feature.

### **Verb Form**

Verb form is another feature being investigated in the participants' production. Inconsistencies in the verb tense and aspect were frequently observed in the data. The following sample is related to a student's (N2) pretest data while describing the picture of a typical day at school:

Excerpt 7: Pretest session (N2)

*It's school. She's draw a picture, they're playing slide. He is eat juice and sandwich. She point dog. He is go house.*

The most significant errors in Excerpt 7 deal with present progressive tense (is draw, is eat, is go), indicating that N2 does not use a present participle where necessary. Therefore, in the scaffolding session, the expert tries to address the problems related to this feature. The following transcription is a part of conversation between the novice (N2) and the expert during the scaffolding session:

Excerpt 8: Scaffolding session (N2)

- 1 E: Ok, read your sentence once.
- 2 N: *He is write the letter.*
- 3 E: Ok, don't you think there is a problem in your sentence?
- 4 N: No.
- 5 E: Think about it a little more.
- 6 N: *He is write letter?*
- 7 E: No, pay attention to the verb form.
- 8 N: *Aha he is writing a letter.*
- 9 E: That's right, read your next sentence.
- 10 N: *He put the letter in pocket.*
- 11 E: How about this?
- 12 N: *He putting the letter in the pocket.*
- 13 E: *He PUTTING? (Rising intonation)*
- 14 N: Yes,
- 15 E: Don't you think that you have missed something?
- 16 N: *(Hesitation) Aha he IS putting. (Emphatic)*

The expert here opens the interaction with a request from N2 to read the sentence. It can be seen that although N2 knows the grammatical rules about the tense and aspect of the verbs, she could not recognize her mistakes (Turn 12). Therefore, the expert guides her to locate the problems by rising intonation in Turn 13 and formulating a question in Turn 15. After hesitating for a moment, N2 finally

provides the auxiliary verb. By employing several strategies such as providing clues (Turn7), rising intonation (Turn 13) and formulating questions (Turn 15), the expert tries to engage the novice in the process of interaction, which features the *intersubjectivity* of her scaffolding (Van Lier, 1996). It can be inferred that using these strategies by the expert is followed by successful *handover* demonstrated in Turns 8 and 16. Now, let us consider the transcription of N2's posttest data to find out if she has demonstrated relevant understanding.

Excerpt 9: Posttest session (N2)

*It is school. She is drawing. They are playing with slide. He is eating lunch. She is point the dog. He is go to home.*

Comparing the performance of N2 in pre- and posttest sessions, it can be seen that she has correctly provided some of the verbs in terms of aspect; however, there are some fluctuations in the correct use of the present participle, indicating that she has partially internalized this feature. Nonetheless, compared to the pretest, she managed to produce more correct verb forms in her posttest (4 out of 6 obligatory occasions; 66 % accuracy rate).

### **Pronoun**

One of the problematic features of learners' language was English pronouns. For example, instead of using the possessive adjective 'her', some students used 'she's'. The most obvious sample is presented in Excerpt 10, where the underlined sections illustrate the case.

Excerpt 10: Pretest session (N6)

*In the morning she get up at 7:00 o'clock. She don't want get up and she wear clothes and eating breakfast. She comb she's hair and brush she's teeth and with she's car go out.*

Since this problematic feature was observed during N6's treatment session, the expert decided to help her to notice this problem and correct it accordingly. The following sample shows her endeavor to achieve this goal.

Excerpt 11: Scaffolding session (N6)

- 1 E: Read you next sentence.
- 2 N: *She puts she's stamp on the envelope.*
- 3 E: Is there anything wrong with this sentence?
- 4 N: I don't know.
- 5 E: I mean, why did you use 'she's' here?
- 6 N: *She's stamp [Contemplation]*

- 7 E: What is the possessive adjective for ‘she’?  
 8 N: [*Hesitation*]  
 9 E: For *I*, we use *my*; for ‘you’ we use *your*; for ‘he’ we use ‘*his*’; for *she*?  
 What do we use for *SHE*? (*Rising intonation*)  
 10 N: *Her stamp?*(*Rising intonation, requesting confirmation*)  
 11 E: uhm, well done!

In the above sample, after formulating two questions in Turns 3 and 5 and receiving no response from N6, the expert reformulates her question in a different way using metalinguistic terminology in Turn 7 (*‘possessive adjective’*). However, when she realizes that N6 is unable to notice the error (Turn 8) she provides some explicit metalinguistic explanations (Turn 9), until N6 could provide the intended answer (Turn 10) with a request for confirmation. Focusing on the scaffolding principles stated by Van Lier (1996), the feature of *continuity* can be traced in this sample since the expert’s attempts in employing various strategies such as asking questions (Turns 3 and 5) using metalinguistic explanations (Turns 7 & 9) as well as giving hints and modeling (Turn 9), and finally, confirmation (Turn 11) guides the novice to produce the correct response (*her stamp*) in Turn 11. We can now examine the posttest data to find out whether N6 has internalized the co-constructed knowledge with her tutor.

Excerpt 12: Posttest session (N6)

*She gets up at 7:30 and she cleaning her bed and wears clothes and she eats breakfast and brush.....brushes her teeth and combs her hair. She go ..... goes out with her car.*

It can be seen that the expert’s scaffolding was effective in making the novice notice her problems regarding this feature since in all obligatory occasions N6 supplied the correct form of the pronoun. It seems that N6 has started to develop using the correct pronoun form consistently. Therefore, it can be suggested that the use of the correct target form has been internalized in most cases without any intervention from the expert and the constructed knowledge is now a part of this individual’s intramental properties.

**Discussion**

This study which was based on the sociocultural theoretical framework examined the role of scaffolding in the process of internalization of linguistic knowledge. Investigating the transcripts of interaction between the novice and expert pairs as well as their production in pre- and posttest sessions, we found that scaffolding can



be regarded as an effective technique in making students notice the linguistic gaps in their knowledge and making endeavors to correct them subsequently.

In all of the samples, the process of scaffolding began by the experts' comments to the novice to read or find the problematic areas. In this process, the experts' task was to bring the target language feature into the attention of the novice. In some instances, the novice learners were able to notice the errors and correct them, which was evident when they used such exclamation marks as *aha* in their utterances (see for example Excerpt 5, Turns 12, 20 & 22 and Excerpt 8 Turns 8 & 16). However, the expert assumed full responsibility in the provision of intended structures when the novice was unable to notice the error or correct it.

We observed that the experts used several strategies to probe for what the novice learners knew and understood so that they could make their next turns contingent on that and attempt to scaffold within their zone of proximal development. To name a few, the features of continuity, intersubjectivity and flow were frequently observed in the data when experts employed various strategies such as asking questions requiring active linguistic and cognitive answers, using metalinguistic terminology and detailed explanations, modeling and finally confirmation. By employing such strategies as continued feedback, giving hints, providing clues and suggestions but deliberately not including the intended answer, rising intonation and dialogue with questions and answers, the experts tried to engage the novices in the process of interaction, which featured the intersubjectivity of their scaffolding (Van Lier, 1996). Therefore, exploring the six principles of scaffolding proposed by Van Lier (1996), some traces of intersubjectivity, continuity and flow were evidenced in the dialogic interaction of expert-novice pairs. Moreover, it was found that the novice learners experienced a higher level of competence and to some extent transferred the attained knowledge to the new context. This was supported by the findings in the posttest data when they were able to produce more accurate linguistic features independently, indicating some degree of hand over.

Generally, the findings of this study are in line with previous studies; for instance, Yule and Macdonald's study (1990) indicated that the lower proficiency students who were paired with higher proficiency students had more opportunities to focus on form and notice the resolution of the language related episode than the lower proficiency learners who were paired with other lower proficiency learners. The present study lends support to Wigglesworth and Storch's (2009) finding, which indicated that the joint activity provides learners with more opportunities to pool their knowledge. The results are also in agreement with the results of the study conducted by Baleghizadeh et al. (2010) exploring the effectiveness of scaffolding. They reported that instead of too many hints and guidance, the students should be

provided with the opportunity for free explorations; the point that is observed by the experts of our study since they tried to provide gradual help to novices and in a guided way through their ZPDs and encouraged the novice participants to provide the correct answers. Generally, the findings of this study confirm those obtained in previous research.

### **Conclusion and Implications for Future Research**

The current study found that EFL learners coming from two different proficiency levels could provide scaffolding opportunities when engaged in editing the transcripts of their oral production. The low proficiency learners in this study showed improved production of target linguistic forms. While these findings are illuminating, further research focusing on more linguistic features is required to have a thorough analysis and understanding of the learning process. Additional research might explore the written performance of EFL learners, such as diary writing, which allows more freedom in meaningful production of language. Further studies may also explore the participants' perceptions about the usefulness of such activities since many EFL learners may prefer teacher-fronted activities.

As mentioned in the literature, attention should be paid to select pair members in a way that the interaction leads to learning. Clearly, various factors are involved in successful expert-novice interaction and it can be challenging to find a way to adjust to the learners' ZPDs and anticipate the errors that learners are likely to commit. In this study, using a picture-description task in the pretest session made it possible to anticipate the errors. However, due to a small sample size and short duration of the study, the conclusions are tentative. Moreover, the picture-description task employed as the method of measurement in this study may not be sensitive enough to draw firm conclusions; therefore, more sophisticated methods may be required in future studies.

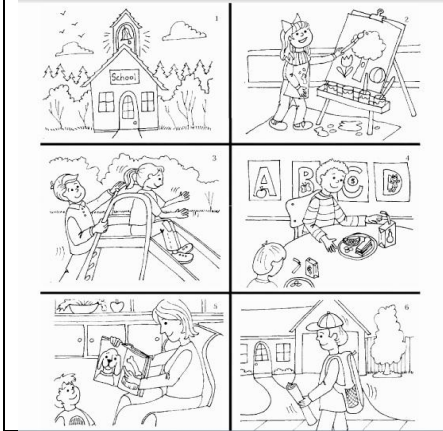
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## Appendices

**Appendix A:** Typical day of a student at school (employed in pre- and post test sessions)



**Appendix B:** Routine activities of a person (employed in pre- and posttest sessions)



**Appendix C:** Haircut (employed in treatment session)



**Appendix D:** Sending a letter (employed in treatment session)

