A comparartive analysis of teachers' scaffolding practices

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Abstract: Despite a seemingly infinite variety of classifications, there is no generally-accepted instrument for the scrutiny of EFL teachers' scaffolding practices. This study endeavored to provide a sound model based on which teachers' SFs (i.e. Scaffolding Functions) and SSs (i.e. Scaffolding Strategies) could be collated. To this end, a mixed approach was employed and earlier models along with teachers' practices were investigated. The result was a checklist comprising 55 SS items classified into linguistic, cognitive, metacognitive, social, cultural, and affective SFs. To develop a comparative analysis, 90 instruction hours of 30 teachers were recorded and transcribed. Short-Focused Conversations (SFCs) formed the basic unit of analysis according to which teachers' qualification, high-support and low-support scaffolding, and negotiation type were examined. The findings of the study strongly supported the notion of fading and the timely withdrawing of assistance to enhance learners' growth of autonomy.

Keywords: Scaffolding Strategies, Scaffolding Functions, Short-Focused Conversations, Fading

1. Introduction

Socio-cultural theory (SCT) has provided an invaluable framework for the scrutiny of language interaction in the classroom. Accordingly, individuals are not isolated entities but indispensible members of their sociocultural community where the fusing robust inter-relation between the members and the community culminates in a reciprocal and complementary configuration of one another. Within language classrooms, as an instance of this community, learning happens as a result of the teacher and the learners' goal-directed interactions where the pivotal role of scaffolding comes to light.

The merits of employing qualitatively and quantitatively appropriate scaffolding strategies in the process of language learning is what different scholars agree on (e.g. Anton, 1999; Forman, 2008; Fotos and Hinkel, 2007; Kozulin, 2003). Improving peer interaction, meaningful communication, enhancing learners' confidence, risk-taking, problem-solving ability, and critical thinking are a few advantages among numerous highlighted ones. Nevertheless, there is no generally accepted operational definition of the scaffolding construct as it has been a matter of debate for many years (Kim and Hannafin, 2010; Pol, Volman, and Beishuizen, 2010).

Through a close inquiry into the earlier studies, Pol, et al (2010) conclude that there is no consensus with respect to the definition and nature of scaffolding despite myriad proposed valuable classifications. Such rich literature makes it feasible to take the theoretically and empirically-studied factors into account, and thus, to develop a robust and reliable framework which can be comprehensive as well as informative. Such a framework would result in a more profound grasp of classroom discourse and interaction based on which teachers' scaffolding practices and their relative efficacy in the learners' co-construction of knowledge can be carefully examined and assessed. In this regard, Perry, Hutchinson, and Thauberger (2008) assert that increasing awareness of such strategies enables the teachers to incorporate them in all aspects of their teaching and learning environment and become more flexible and sensitive to learners' needs.

2. Review of Research Literature

2.1. What Is Scaffolding

Scaffolding is a commonly used construct which can be traced back to sociocultural theory. Generally speaking, it refers to various kinds of support learners receive from the teachers, peers, materials, and the learning context to acquire and expand their knowledge and abilities. For learning to be most effective, Vygotsky (1987) highlights the crucial role of the Zone of Proximal Development (ZPD); that is, "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). One of the early interpreters of Vygotsky's work, as Lantolf and Thorne (2006) assert, was Bruner who coined the term scaffolding according to the ZPD construct and the required interaction and assisted performance for the psychological development. He defines scaffolding in first language acquisition as "a process of *setting up* the situation to make the child's entry easy and successful and then gradually pulling back and handling the role to the child as he becomes skilled enough to manage it" (1983, p. 60). Following Bruner's work, Wood and Ross (2006) refer to scaffolding as the process through which the teachers support and provide assistance at a higher level of the learner's current capacity within his or her ZPD. Similarly, Yu (2004) states that "[The teacher] provides a scaffold to assure that the [learners'] ineptitudes can be rescued or rectified by appropriate intervention, and then removes the scaffold part by part as the reciprocal structure can stand on its own" (p. 60).

The crucial features of scaffolding, classified by Puntambekar and Hubscher (2005) and Pol, et al (2010) are summarized in what follows. 1) Diagnostic strategies: The first step for the teacher is to diagnose learners' needs. 2) Contingency: Through communicative interactions, a shared common understanding or intersubjectivity will be built which, in turn, creates the foundation for the ongoing assessment and adaptation of the required support through which learning happens. 3) Transfer: The gradual transfer of learning responsibility to the learners happens as they become more independent. 4) Fading: The teachers' adjusted support gradually fades as the learners become autonomous. 5) Prolepsis: The proleptic feature, inherent in the core of scaffolding, refers to the process of leaving implicit some information that may be provided subsequently (Daniels, 2007).

In addition to the aforementioned definitions and features, the main functions of scaffolding have also been scrutinized through the socio-cultural lens. Wood and Ross (2006, p. 206) classify six different functions of the support provided by the teacher as 1) recruitment: enlisting the learner's interest in the task, 2) reduction in degrees of freedom: simplifying the task, 3) direction maintenance: keeping the learner motivated and in pursuit of the goal, 4) marking critical features: highlighting and accentuating certain relevant features, 5) frustration control: reducing stress and frustration during problem solving, and 6) demonstration: demonstrating and modeling a solution to a task. (p. 206)

Due to the inseparable and pivotal role of scaffolding in learning contexts, numerous studies have been conducted the result of which are miscellaneous classifications and interpretations. Nevertheless, pertinent to this study is the degree of teachers' scaffolds dynamicity according to which Saye and Brush (2002) categorize scaffolds into hard and soft types. The former refers to "static supports that can be anticipated and planned in advance based on typical learner difficulties with a task" (p.2). The latter, on the other hand, is

quite dynamic and encompasses the moment to moment contextual support provided by teachers and peers. In other words, teachers should continuously diagnose learners' realm of ZPD and provide the adjusted support. Accordingly, the complementary roles of these scaffolding types are underscored and soft scaffolds guide the learners in the application of hard scaffolds. In the same line, Daniels (2007, p. 318) asserts that a 'rigid scaffold' which is similar to a task analysis provided through teaching differs to a great extent with the 'negotiated scaffold' which arises out of collaborative activities. Equivalent notions are named as fixed and adaptive scaffolding respectively by Li and Lim (2008).

As it is crystal clear, the teacher's role as the facilitator and mediator in the provision and efficacy of soft scaffolding is noteworthy.

2.2. Teacher as the Mediator

Among different types of other regulation, teachers' role is of great significance as s/he plans, provides, directs, and manipulates qualitatively and quantitatively proper support. With this end in view, Puntambekar and Hubscher (2005) argue that the teacher should be a domain expert as well as a facilitator to deliver effective scaffolding. As a result, the teachers' role in SCT differs to a great extent from that of a conventional one, a distinction Feuerstein (2000) elaborates on. In a conventional class, the learner is exposed to a stimulus (e.g. a question) and his follow up response forms the basis for the teacher-student interaction with the mere aim of problem-solving. Within mediated learning experience, conversely, a supportive person intervenes the process of receiving the stimulus and producing the response with the purpose of supporting learner's thinking process and how s/he approaches the problem at hand. For the learner to have a successful thinking process, the mediator should pay heed to the following indispensable key features: 1) intentionality and reciprocity which refers to the mediator's purposeful intervention in an interaction where no one is a superior; 2) mediation of meaning according to which the how of problem-solving and the reflection on such a process is underscored in order to enhance learners' autonomy; and 3) transcendence which indicates the generalization of the acquired knowledge to other settings (p. 558). Most importantly, the mediator's thorough reflection and attention to affective dimension of learning and factors such as behavior regulation, goal setting, awareness enhancement, and a sense of belonging, establishes a robust contrast with the earlier conventional approaches.

Along the same lines, in the provision of a framework for SCT-based teaching practice, Watson (2007, pp. 35-44) offers a general guideline subsuming five macro-strategies within which teachers innovate and recreate their own context-based micro-strategies. The proposed macro-strategies are: 1) fostering learners' self-awareness and autonomy through goal-setting and motivation enhancement; 2) underscoring individual differences; 3) Providing learning affordances or a variety of linguistic as well as social, historical, and cultural opportunities where

individualized learning is possible; 4) facilitating collaborative problem-solving through scaffolding or the expert-novice interaction within the learners' ZPDs; and 5) promoting multidimensional language awareness in regard to cultural, historical, ideological, linguistic, and genre -specific aspects.

Closely related to the notion of teachers' meditational practice is the concept of pedagogical knowledge. Shulman (1986, p.9) introduced the term teachers' 'Pedagogical Content Knowledge (PCK)' which refers to the intersection between teachers' content knowledge and the numerous means and techniques employed to make it comprehensible. SSs, as Pawan (2008) reiterates, is a form of PCK. In other words, teachers' choice of SSs depends on their practical knowledge of how to teach, which emerges from teachers' prior experiences including teacher education, life experiences, interaction with colleagues and learners, perceived values and constraints operating within the school and classroom environment, as well as the teacher interpretations of the particular instructional context.

Germane to the appropriate choice of SSs, is the right degree or quantity of strategy provision. Ohta (2000) pinpoints the underlying causes of development hindrance in instructional settings and ascribes it to too easy tasks or too much assistance. Similarly, Johnson (2003) asserts that too much accommodation can hinder the learner's progression from other-regulation to self-regulation, the result of which is fossilization. Hence, interactional cues are of great significance in the appreciation of learners' actual and potential level, and consequently, in the appropriate degree of scaffolding provision.

In sum, teacher's awareness and knowledge of the process of scaffolding can be altered via teachers' awareness of diagnostic strategies, contingency, transfer, fading, fossilization and feedback provision.

3. Purpose of the Study

The present study was conducted to provide a framework for the scrutiny of EFL teachers' moment to moment scaffolding practices. To this end, a mixed approach (i.e. top down and bottom up) was employed to shed brighter lights on the previously conducted studies in the field. Furthermore, to investigate the practicality of the tentative model, teachers SFs and SSs were compared and contrasted according to the model. Consequently, the following research questions were addressed.

1) What SSs do Iranian EFL teachers employ in their teaching practices?
2) Is there a statistically significant relationship between the teachers' qualification and their scaffolding practices?
3) Is there a statistically significant relationship between SFC negotiation type and the teachers' scaffolding practices?
4) Is there a statistically significant relationship between high-support and low-support scaffolding and the teachers' scaffolding practices?

4. Methodology

4.1. Participants

The participants in this study fell into two distinct categories. The first category formed the sample for the interview and the second category was employed for the recording and close scrutiny of their actual scaffolding practices. Heterogeneity of the teachers for the first stage of data collection was essential in order to come up with a broad range of SSs. As a result, a team of 30 volunteer teachers from eight EFL institutes with heterogeneous demographic information were randomly selected.

With regard to the second stage of data collection (i.e. recording the classes), a different group of participants was required as the formerly mentioned group was consciously familiarized with the notion of scaffolding and consequently the focus of the present study. Therefore, thirty participants were equally selected from two English institutes.   Table 2 illustrates their main characteristics.

Table 1. The participants' demographic information in the interview.

Age	no.	Education	no.	Experience	no.	Level	no.
20-29	13	Relevant	19	≤ 6 years	12	Elementary	3
30-39	9	Irrelevant	11	≥ 6 years	18	Intermediate	11
Over40	8					Advanced	16

Table 2. The participants' demographic information in the recordings.

Age	no.	Education	no.	Experience	no.	Level	no.
20-29	7	Relevant	20	≤ 6 years	18	Elementary	15
30-39	19	Irrelevant	10	≥ 6 years	12	Intermediate	15
Over40	3						

4.2. Instruments

In order to provide a robust and sound basis for the quantitative and qualitative scrutiny of the employed SSs in the language classrooms, a tentative model was proposed.

With this end in view, top-down and bottom-up approaches were consecutively employed. Following a top-down approach, the previously proposed functions and strategies were inquired, extracted, compared and contrasted in the earlier researches (e.g. Beatty and Nunan, 2004; Diaz, 2009;

Li and Lim, 2008; Ge and Land, 2004; Kim and Hannafin, 2010; Molenaar, Boxtel, and Sleegers, 2010; Panselinas and Komis, 2009; Pawan, 2008; Pentimonti and Justice, 2010; Perry, et al, 2008; Rojas-Drummond, Sharma and Hannafin, 2005; Villamil and De Guerrero, 1996; and Yelland and Masters, 2007). On the basis of the commonalities, the researchers came up with a tentative model. To verify the alignment of theory and practice, a cardinal procedure accentuated by Dornyei (2003), a bottom-up approach was applied according to which teachers' actual practice of SFs and SSs were collated. The result was a checklist embracing 55 items (i.e. SSs) classified into six SFs presented in what follows.

a) Linguistic scaffolding (9 items): The simplification of instructional language via various means such as form-based descriptions, feedback provision and Consciousness Raising (CR). (Pawan, 2008, p. 1454)
b) Cognitive scaffolding (20 items): The enhancement of comprehension via 1) conceptual scaffolding (i.e. supportive frameworks for meaning such as charts), and 2) Procedural scaffolding (i.e. supportive framework for learning procedures). (Molennar et al., 2010 and Yelland and Masters, 2007)
c) Metacognitive scaffolding (11 items): The improvement of the structure and regulation of cognitive processes, the co-construction of knowledge, and the monitoring and control of learning processes (Molenaar et al., 2010).
d) Social scaffolding (8 items): The employment of social interaction (e.g., group work). (Pawan, 2008, p. 1454)
e) Cultural scaffolding (2 items): The employment of culturally and historically familiar artifacts, tools and informational sources. (Pawan, 2008, p. 1454)
f) Affective/Emotive scaffolding (4 items): The provision of emotional support via encouragement and approval. (Yelland & Masters, 2007, p. 367)

This checklist encompasses the key indicators of the complex construct of scaffolding and forms the basis for the procedure of data collection and the follow up analysis. First, it was employed in the construction of the structured interview with 27 items categorized into three sections through which the employment of scaffolding in general, the use of specific SFs, and scaffolding in various teaching practices (e.g. error correction, problems in communication, tasks accomplishment, learning strategies, and critical thinking) were scrutinized. And second, it served as the coding scheme for the SFCs transcription analysis.

4.3. Procedure

As mentioned earlier, a top-down approach was first employed based on which a tentative model was proposed. In order to offer a more valid framework, the model went through revision by three domain experts according to which some re-specifications were made. Afterwards, extrapolating a bottom-up approach, the structured interview was conducted to examine the harmony between the literature-based SFs and SSs and the teachers' actual

practice in the real context. Due to the teachers' unfamiliarity with the construct of scaffolding, at least consciously, an introduction was given to the participants. The time of the interview ranged from 20 minutes to an hour and it was conducted in Persian (i.e. teachers' L1) to provide a more secure atmosphere where they could express themselves with no barriers. The recorded sessions went through careful transcription and analysis.

The final step of the data collection was to record and transcribe the SFCs. With the official permission of two institutes, three sessions of thirty teachers' classes were audio-recorded. Thus, 90 hours of their teaching were examined to select the SFCs which is a type of instructional conversation coined by Panselinas and Komis (2009). This term refers to the dialogues in which negotiation for meaning and the co-construction of knowledge in the pursuit of the learning goal occur. In order to provide a solid foundation for the SFCs selection in the study, the following empirical features of SFCs were also employed.

1) Spiral/distributed turn taking
2) A goal-directed conversation in which the goal is accomplished
3) Unpredictable utterances of either the teacher or the learner
4) Teacher-fronted conversation
5) Main features of scaffolding (discussed in the literature review)

After the SFCs selection procedure, they were transcribed carefully for further analysis. A general transcription convention was used as there is no generally accepted standardized transcription system for discourse analysis. According to Johnstone (2008), transcriptions cannot include everything; therefore, the researchers had to select what was fruitful for this specific study. In sum, 500 conversations were selected and the SFCs duration ranged from 15 seconds to 3 minutes and 45 seconds.

5. Data Analysis and Results

Prior to the analysis of the obtained data according to the research questions, the reliability of the checklist was estimated and Cronbach's alpha proved to be high (.84) with 55 items. Afterwards, the data were analyzed, a summary of which is presented in what follows. Worth noting is the fact that teachers' scaffolding practices were analyzed at three levels of STAU (Scaffolding Total Average Use), SFs, and SSs.

5.1. Teachers' Employed SSs in Their Teaching Practices

Through a detailed analysis of the transcribed interviews, some neglected SSs including form-based CR and meaning-based CR strategies, creating fun to provide an attractive atmosphere and disagreeing with learner's opinion or creating doubt to improve critical thinking were traced. Hence, the above-mentioned SSs were added to the model as the previously selected strategies proved to be verifiable.

5.2. Teachers' Qualification and Their Scaffolding Practices

In order to delve into the relationship between teachers' qualification and their SSs, three major subcategories of their demographic information including teaching level, teaching experience, and educational major were taken into account to classify them into more-qualified and less-qualified teachers. Consequently, those with intermediate classes, relevant teaching major, and six years of teaching experience or more were labeled as more-qualified teachers. Due to the non-normality of the sample, a Mann Whitney U test was conducted the result of which revealed a significant difference (U = 22193, Z = -5.591, p = .000) between more qualified (N = 258, M = 42.85) and less qualified (N = 242, M = 54.69) teachers in their STAUs and less-qualified teachers outperformed more-qualified ones. To narrow down the difference to SFs, the result of Mann Whitney Test and mean comparison showed that social (U = 18262.50, Z = -8.029, p = .000) and cognitive functions (U = 23773.50, Z = -4.616, p = .000) were the source of this variance. For further scrutiny, the SSs were studied and Less-qualified teachers outdid in 13 items including showing instead of explaining, meaning-based CR, meaning-based prediction, simplifying tasks, visual prompts, meaning-based feedback, meaning-based negotiation, participation prompt, offering suggestion, soliciting suggestion, signaling interest, pausing for students' response, and repeating a previously spoken utterance.

5.3. SFC's Negotiation Type and Teachers' Scaffolding Practices

According to the dichotomy of form and meaning, the SFCs were classified into two categories. This research question aimed at investigating any possible relationship between these two negotiation types and the quantity and quality of EFL teachers' SSs. A Mann Whitney U Test was utilized to compare the STAUs in both negotiation types. The result displayed a significant difference (U = 27200.500, Z = -2.245, p = .025) of the dominant use of meaning-based STAUs (N = 220, M = 50.93) in comparison with the form-based STAUs (N = 280, M = 46.74). Consequently, the difference among the SFs and SSs were also examined to create a comprehensive picture of the whole.

Excluding affective SF, the difference proved to be significant in all functions (Table 3). Taking the SSs into account, 12 of the significant mean differences were in favor of form-based SSs, whereas 20 others won favor with meaning-based SSs (Table 4). As it is clear, the rest of the items were discarded due to the insignificant mean difference.

5.4. High-Support and Low-Support Scaffolding and Teachers' Scaffolding Practices

Kostouli (2005) and Pentimonti and Justice (2010) provide a practical basis for the distinction between high-support and low-support scaffolding. Pursuing their practice, the SFCs and the applied SSs were organized into high-support and low-support according to the cut-off numbers of teacher's words (70), students' words (30), and turns (14) in each SFC. If the total fell below these cut-off numbers obtained from data collation, the conversation was named as low-support and if the number exceeded the proposed criteria, the SFCs were regarded as high-support.

As the difference among the SFCs length is of great significance, 101 conversations with a time range of 15 seconds to 3 minutes and 45 seconds were included. Afterwards, Mann-Whitney Test was run to scrutinize their statistical difference in the STAUs. The result illustrated a significant difference (U = 436, Z = -5.65, p = .000, N =55) according to which the high-support SFCs (median = 1.19; mean rank = 69.02, N = 46) statistically exceeded the low-support category (median = .67; mean rank = 35.93) in their STAUs. In other words, high-support SFCs included more SSs. To further analyze the difference, a follow up Mann Whitney Test was employed (Table5).

As it is illustrated in the table, the teachers in high-support SFCs outperformed those in low support conversations in all the categories with the exception of cultural function.

Further analysis revealed that the teachers significantly outperformed in their strategy use in high-support SFCs with regard to seventeen SSs including simplified language, direct instruction of form/FoFS, example provision, reducing the available choices, simplifying tasks, in and out of the class connections, elaboration prompt, completing students' utterances, participation prompts, offering suggestions, soliciting suggestions, signaling interests, pausing for students' response, repeating, encouraging, helping students reflect on learning, and finally helping students think about thinking.

Table 3. A comparison among different scaffolding functions with regard to the negotiation types.

	Linguistic	Cognitive	Metacognitive	Social	Cultural	Affective
M R of form-based negotiation	354.35	181.56	239.33	230.90	235.19	239.80
M R of meaning-based negotiation	118.33	338.25	264.72	275.45	269.99	264.12
Mann-Whitney U	1721.500	11496.00	27671.500	25312.00	26512.00	27804.400
Z	-18.171	-12.050	-1.968	-3.424	-4.674	-1.896
Asymo.Sig. (2-tailed)	.000	.000	.049	.001	.000	.058

+ M R (Mean Rank)

Table 4. Frequently employed SSs in meaning-based and form-based SFCs.

Form-based SSs	Meaning-based SSs
Read aloud	Simplified language
Slow pace	Example provision
Direct instruction of form (FOFS)	Meaning-based CR
Primary focus on meaning and secondary focus on form (FOF)	Meaning prediction
Form-based feedback	In and out of class connection
Form-based negotiation	Elaboration prompt
Form-based CR	Meaning-based feedback
Form-based prediction	Completing students' utterances
Modeling	Meaning-based negotiation
	Participation prompt

6. Discussion

6.1. Teachers' Employed SSs in Their Teaching Practices

The data analysis of the structured interview led to the addition of five scaffolding strategies including form-based CR and meaning-based CR strategies, creating fun via language play to provide an attractive atmosphere and disagreeing with learner's opinion or creating doubt to improve critical thinking to the model.

The notion of CR and its efficacy in language acquisition have given rise to numerous studies in the field of SLA. Schmidt (1990, 2010) defines the term consciousness from three main perspectives: 1) Consciousness as intention: The distinction between incidental versus intentional or goal-directed learning illustrates the vital role of intention in language learning, 2) consciousness as attention: Regardless of the degree of intentionality, consciousness as attention encompasses different kinds of subcategories such as alertness, detection, orientation, and etc. Their commonality lies in the function of directing information processing despite insufficient skills. 3) Consciousness as awareness: Three levels of awareness have been proposed including perception, noticing, and understanding. Perception is not necessarily conscious whereas noticing is the focal and conscious attention. Understanding, with a greater degree of awareness, involves conscious analysis of

previously encountered points and consequent generalization. Metalinguistic awareness and explicit knowledge of language fit in with this category. Further, he proposes the noticing hypothesis according to which consciousness raising and noticing is the fundamental key to learning. In addition, he elaborates on conscious learning and presents its main features as noticing, having intention and effort, understanding language principles, planned studying, and verbalizing the acquired knowledge. This hypothesis, as Fotos (2001) reiterates, has given rise to various consciousness raising tasks and methods the benefits of which are highlighted in various studies (e.g. Dekeyser, 1998; Nassaji and Swain, 2000). In addition, due to the learners' limited capability of simultaneous processing of from and meaning, a viewpoint highlighted by some scholars such as Skehan (1998) and Tomasselo (1998), the strategies in the present study are classified into form-based and meaning-based categories.

Creating fun through language play, as another neglected strategy, has been in the spotlight for many years. Cook (1997) defines language play with reference to formal level (i.e. playing with sounds and grammatical structures) and the semantic level (i.e. playing with units of meaning to create fiction). The link between language play and language learning can be presented via theoretical and practical standpoints. The former refers to the overt role of metalingual and the covert role of poetic function of language (Jakobson, 1960). The latter, on the other hand, reiterates the practical merits of such discourse in language learning such as learners' enriched affective engagement and thus a soared sense of belonging to the classroom community, more noticeable and memorable lessons, expansion of vocabulary knowledge, practice of authentic language use, extension of interactions, enhancement of collaborative attention to a specific linguistic form, and pushed output (Cekaite and Aronsson, 2005; Cook, 1997; Sullivan, 2000; Swain, 2000). As pointed out in the above-mentioned studies, the affective function of this strategy is self-evident.

Table 5. Mann-whitney U test for the SF comparison of high and low support SFCs.

	Linguistic	Cognitive	Metacognitive	Social	Cultural	Affective
M R of form-based negotiation	44.00	40.17	43.95	38.72	49.19	41.39
M R of meaning-based negotiation	59.37	63.95	59.43	65.68	53.16	62.49
Mann-Whitney U	880.000	669.500	877.000	589.500	1165.500	736.500
Z	-2.633	-4.065	-2.669	-4.610	-1.167	-3.655
Asymo.Sig. (2-tailed)	.008	.000	.000	.000	.243	.008

The final category of newly-mentioned strategies, namely disagreeing with learner's opinion or creating doubt to improve critical thinking, can be located within problematizing strategies as one subsection of metacognitive function. In an attempt to elaborate on the nature of problematizing strategies, Reiser (2004) asserts that the provision of such scaffolding happens via the

increased difficulty level of the task at a certain stage which, in turn, enhances learners' creative production. With regard to Wood, Bruner, and Ross (1976) classification of scaffolding functions, problematizing is inter-related with highlighting critical features and direction maintenance (Reiser, 2004). In an experimental study conducted by Molenaar, et al (2010), the efficacy of such strategies in

language acquisition became apparent.

In sum, the newly-mentioned strategies by the teachers were perceived as noteworthy items and thus added to the model.

6.2. Teachers' Qualification and Their Scaffolding Practices

The findings of the study revealed the more frequent employment of cognitive and social SFs by Less qualified teachers which can be discussed form two principal viewpoints: learners and teachers.

6.2.1. L earners

The choice of SSs largely depends on the social context where one of the most determining factors is the learners' ZPDs. More frequent use of SSs by less-qualified teachers might be due to the fact that their learners are at the elementary level, and hence, a lot of high-support scaffolding might be required which in turn results in a distinguishable growth in their quantity of SSs. Taking the dominant SFs (i.e. cognitive and social) into account, it can be stated that such learners are incapable of simultaneous form and meaning processing (Skehan, 1998); furthermore, meaning is of paramount significance in comparison with form (Kramsch, 2004); and consequently, a great deal of meaning-based support are required prior to focusing on language form.

With regard to the more frequent use of social strategies, it could be inferred that the probability of getting frustrated due to the massive cognitive load of new information at the elementary level is high, as proposed by Sweller and Chandler (1994) via cognitive load theory. As a result, the requirements of social support in such context could be predictable.

6.2.2. Teachers

It should be noted that effective teaching is the outcome of hard and soft scaffolding amalgamation (Hammonds and Gibbons, 2005; Maggioli, 2013; and Van Lier, 1996). Therefore, the pre-planning is regarded as crucial as the moment-to moment support. It might be concluded that more qualified teachers are more-experienced in designing the lesson plans and tasks; therefore, less soft scaffolding will be required as the challenges are predictable, and thus, preventable for them.

The findings are also consistent with Speer and Wagner (2009) argument according to which teachers' pedagogical knowledge is one among many influential factors in scaffolding provision. Contextualization and paying attention to intricate contextual factors, for instance, is mentioned by Sharkey (2004) as a pivotal factor. In addition, pedagogical content knowledge, as Gatbonton (2008) stresses, can be acquired in a short period of training, and consequently, veils the difference between the novice and the experienced. As a result, it can be implied that teachers' knowledge and experience are not the mere source of scaffolding choice variation and other factors are involved as well.

6.3. SFC's Negotiation Type and Teachers' Scaffolding Practices

The importance of comprehension and meaning construction in language learning especially at early stages of language acquisition might be accounted for the obtained findings. This noted standpoint is accentuated by Olson and Land (2007) in the realm of literacy development. Along the same lines, 'Message abundancy' is what Gibbons (2003, p. 267) has coined to refer to simultaneous access to a variety of meaning-based sources via different language modes and semiotic systems to support students' learning. Furthermore, Kramsch (2004) voices her support for the importance of meaning over form and invites teachers to go beyond form and discuss different kinds of meaning including grammatical, social, cultural, political, and etc. In conclusion, Buenner (2013) stresses that meaning-based strategies contain more contextual support and contingency in comparison with form-based ones. Therefore, it can be confirmed that the scaffolding features are more conspicuous in meaning-based strategies, hence, more frequently employed in the SFCs.

6.4. High-Support and Low-Support Scaffolding and Teachers' Scaffolding Practices

The findings revealed that the teachers in high-support SFCs outperformed those in low support conversations in all the categories with the exception of cultural function. This fact is similarly observed by Pawan (2008), as the teachers in his study have a low average in their knowledge and therefore usage of cultural scaffolding. Consequently, training and awareness enhancement are required to overcome this deficiency.

The distinction between high and low support is a matter of challenge and support balance in SFCs. This balance can be achieved by the appropriate quantity and quality of moment-to-moment scaffolding which will finally result in learner's autonomy (Van Lier, 1996). Similarly, the notion of fading (i.e. gradual removal of high support) which is closely related to the shift from other-regulation to self-regulation is stressed by many scholars such as Proctor, Dalton, and Grisham (2007) and Puntambekar and Hubscher (2005). As the learners are at the early stages of learning, the dominant frequency of high support strategies is eminently reasonable.

In addition, as Mariani (1997) points out, the best learning environment is created by high challenge and high support. He adds that other types of combination between these two factors culminate in defective learning contexts. Frustration is the result of high challenge and low support, long-term dependence and little learning is the outcome of low challenge and high support, and finally, boredom is created due to low challenge and low support. Thus, the efficacy and significance of high support SSs endorses the obtained results.

From a holistic perspective, the findings of this study allude to the notion of fading which refers to the gradual

removal of support as the learner becomes more autonomous and take on more responsibility for learning. The term is coined by Collins, Brown, and Newman (1989) and defined as 'Once the learner has a grasp of the target skill, the master reduces (or fades) his participation, providing only limited hints, refinements, and feedback to the learner, who practices successively approximating smooth execution of the whole skill'(p. 456). Furthermore, fading is a gradual process accompanied by less frequent and less detailed strategies. With reference to this definition, Pea (2004) infers that fading is an indispensable feature of scaffolding without which this support develops distributed intelligence, a concept drastically different from scaffolding. He contrasts distributed intelligence with scaffold-with-fading and adds that this 'intelligence is distributed across people, environments including designed artifacts, and situations' (p. 431). In this respect, assistance such as availability of tools amplifies intelligence and unassisted performance is unnecessary. In other words, there is no scaffolding without fading.

In sum, the obtained results and the notion of fading alluded in the model can be employed to confirm the practicality of the model for the analysis and comparison of EFL teachers' actual practice of scaffolding.

7. Conclusion

The development of an enriched model of scaffolding for a comparative analysis of EFL teachers' practices was the main aim of the study. A model with 6 SFs and 55 SSs was proposed the appeal of which lies in the amalgamation of a bottom-up (research-based) and top-down (literature--based) and top-down (literature-based) approaches in order to appreciate the complexity of the construct. It became apparent that less-qualified teachers outperformed the more-qualified ones with regard to the cognitive and social SFs; high-support scaffolding required more frequent use of SSs; and meaning-based support was more dominant. Interestingly, all the results can be discussed via the lens of fading notion, a vital feature of scaffolding, without which fossilization and the prolonged dependence on other-regulated assistance occur, and thus, learners' autonomy in self-discovery is hindered.

The pedagogical implications of the study can be presented from two main perspectives. First, the mastery of a set of pre-determined SSs does not alter teachers' qualifications and the SSs efficacy is largely reliant on countless contextual factors as it is illustrated in the studies conducted on teacher-learner relationship (e.g. language learning strategies). Nevertheless, increasing teachers' awareness of different SSs and enriching their pedagogical content knowledge can be entirely influential in their practice. Second, fading is an indispensable element of scaffolding and teachers should pay heed to individuals' ZPDs for the timely removal of the assistance.

Needless to say, further studies in different social contexts are required to prove the efficacy and practicality of the model.

Appendix

The Proposed Model of Scaffolding

Linguistic scaffolding
- Using simpler language forms
- Reading out loud
- Slowing your pace
- Providing direct instruction of language (FOFS)
- Paying primary focus on meaning and secondary focus on form (FOF)
- Providing form-based feedback (input providing)
- Negotiating the form (output prompting)
- Form-based consciousness raising (e.g. stressing a word)
- Predicting the form the learner is going to say

Cognitive scaffolding
- Providing a model as an example (by talking about it or performing it)
- Talking about mental processes and strategies used to solve a problem
- Showing instead of explaining
- Using examples
- Reviewing
- Activating prior knowledge
- Meaning-based consciousness raising (e.g. asking confirmation checks and comprehension checks)
- Predicting the meaning the learner is going to say
- Prompting students to describe what might happen next or at the end
- Reducing the number of available choices to learners to choose from
- Simplifying the task by breaking it into parts
- Using explicit connections between in-class and out of class experiences
- Making your expectations explicit
- Using real objects
- Using visuals such as charts, posters, pictures, concept maps and alike
- Using elaboration prompts (to help learners with the articulation of thought and expression)
- Using procedural prompts (to help learners complete a specific task, e.g. an example of this is…, another reason is that…)
- Using generalization prompts (to prompt transfer from specific to general)
- Providing meaning-based feedback (input providing)
- Completing what learners said incompletely
- Meaning-based negotiation of content (output prompting)

Metacognitive scaffolding
- Problematizing (creating doubt to improve critical thinking)
- Problematizing (disagreeing with the learner)
- Orienting learners' attention to their feelings
- Orienting learners' attention to the point
- Orienting learners' attention to the task demands
- Helping learners with the identification of the effects of

thinking on learning

o Helping learners with the planning of their learning process
o Helping learners with monitoring of their progress
o Helping learners with the evaluation of the content of an activity
o Helping learners with the reflection on their learning process
o Giving guidelines to learners for thinking about thinking

  Social scaffolding

o Prompting active participation
o Offering suggestion
o Soliciting suggestion
o Signaling interest
o Pausing so that learners can have time to respond
o Repeating a previously spoken utterance
o Using content-free space-holders of feedback (e.g. uh, yeah, my God)
o Giving directives (getting the students to do something such as requests or commands)

  Cultural scaffolding

o Using L1
o Referring to familiar cultural knowledge

  Affective scaffolding

o Encouraging learners
o Controlling their frustration
o Making evaluative comments
o Creating fun

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