The Influence of Strategic Mediation on Novice EFL Teachers' Pedagogical Knowledge

Shiva Kaivanpanah*
Associate Professor, University of Tehran
Abbas Ali Rezaee
Associate Professor, University of Tehran
Morteza Neamatollahi
Ph.D. in TEFL, University of Tehran

Abstract

Different from one-way provision of knowledge in transmission-based approaches, recent approaches to teacher education consider learning as a consequence of teachers' active engagement in social practices. Prior studies have provided important insights into how sociocultural theory (SCT) works in L2 teacher education. However, issues remain about the content and effectiveness of teacher education programs informed by the tenets of SCT on novice teachers' learning. Addressing this gap, the present study set out to investigate the microgentic development of four novice EFL teachers during dialogic mediations with a teacher educator in some one-to-one development sessions based on samples of their actual teaching practices. Mediations were dialogic, graduated, and tailored to the needs of the teachers (i.e., from implicit to explicit) within each individual's zone of proximal teacher development (ZPTD). A total of four hours of video-recorded teacher-teacher educator post-observation talk was analyzed. Results proposed a highly dialogic interaction with an approximately equal participatory role. Findings demonstrated that novice teachers' agency and externalization of their thoughts in a supportive and interactive environment can result in their development. Finally, teacher educators were asked to include strategic mediation in teacher education programs and provide teachers with graduated assistance within their ZPTD.

Key words: Strategic mediation; principled grammar teaching; novice EFL teacher; microgenetic analysis; zone of proximal teacher development

1. Introduction

Following an epistemological shift in second language teacher education (SLTE), the post-transformative approaches advocate the socialization of teacher cognition and propose that knowledge is socially co-constructed. A socio-cultural perspective on SLTE views teachers' learning as a gradual movement from externally mediated to internally controlled activity and considers what teachers bring to the learning context (Johnson, 2009). Within this perspective, teachers are viewed as 'reflective practitioners' rather than 'passive technicians' (Kumaravadivelu, 2003) and teacher educators are facilitators rather than holders of knowledge. Therefore, learning opportunities are created for teachers to help the movement toward internally controlled activities through strategic mediation (SM) which is a need-based cognitive assistance, moving from the most implicit to the most explicit (Wertsch, 1985) provided in an interactive, gradual and supportive manner. This type of mediation, is provided according to teachers' emerging needs and during dialogic interaction (Aljaafreh & Lantolf, 1994); thus, it is deemed to have the potential to reshape their thoughts and activities.

Besides the sociocultural aspects of teaching and learning, the new approach to SLTE focuses on the process of pedagogical knowledge or how to teach (e.g., Freeman & Johnson, 1998; Johnson, 2006; Wright, 2010). Pedagogical knowledge is the knowledge of effective instruction (König, Blömeke, Klein, Suhl, Busse & Kaiser, 2014); what novice language teachers need. In fact, learning specific pedagogical knowledge about classroom teaching, in practical terms, is at the priority of novice EFL teachers' needs (Xu, 2015) since they face problematic situations more frequently than their experienced colleagues. Providing novice teachers with theories on how to manage the class and plan a lesson along with imparting pre-packed sets of teaching techniques without any consideration of the classroom situation cannot equip novice teachers with the means to meet the actual classroom needs (Chiang, 2008). To this end, there should be more urgent attention to novice teachers and their needs for professional development (Xu, 2015). Teacher education programs (TEP) should focus on novice EFL teachers' pedagogical knowledge (Xu, 2013) and the content of educational programs (Farrell, 2015) which have been less addressed in the related literature. Accordingly, this study is an attempt to investigate a TEP informed by the tenets of SCT and to shed light on how SM can affect novice EFL teachers' pedagogical knowledge. Transmission-based teacher education suffers from a number of weaknesses.

2. Literature Review

In conjunction with the shift in language pedagogy, language teacher education has witnessed a switch in its focus from a behaviorist to a constructivist model

(Freeman & Johnson, 1998). Earlier in the field, language teachers received content knowledge and skills (i.e., what to teach) during theory-based lectures and were expected to use them in their real classrooms without a consideration of their own teaching context. However, with the arrival of critical orientations in teacher education, Pennycook (1990, 2001) and Freire (1998) called for highly context-based, political, ethical, and emancipatory approaches to engage learners in concrete social practices. Teacher educators need to start from teachers' belief systems (teachers' cognition), their experiences, and their existing situation and try to turn them into critical beings who question the status quo and are agents of change in the society. The movements toward a constructivist and critical teacher education along with the application of a SCT view to the field (Johnson, 2009) have positioned teachers' processes of learning under the spotlight.

With over three decades of empirical studies on teacher professional development, teacher development has been conceptualized as a process emerging out of participation in social practices. SCT, as a psychological theory of mind, was then claimed to present tremendous explanatory power to capture this process and formulate comprehensive ways to develop and support teacher development in SLTE programs (Johnson & Golombek, 2011).

Anchored in Vygotskyan genetic law of development, every function first appears in inter-psychological level through collaboration with others, and then in intra-psychological level inside an individual's mind (Vygotsky, 1987). It is built on the assumption that the prerequisite of any cognitive change in an individual is being socially mediated through which s/he receives feedback on his/her actual performance from more knowledgeable ones such as parents, teachers, or from those in his/her rank like peers. Although, Vygotsky's genetic law of development was proposed for children, this law can be applied to all humans' cognitive development such as L2 teacher/teaching domain (Johnson & Golombek, 2016). In this respect, to make further development, teachers also need to get genuine feedback on their teaching practices to push their development. One of the key concepts of SCT is the zone of proximal development which has been applied in teacher education by Warford (2011) as the zone of proximal teacher development (ZPTD) which is "the distance between what teaching candidates can do on their own without assistance and a proximal level they might attain through strategically mediated support from more capable others (i.e., methods instructor or supervisor)" (p. 253). In addition, the central notion in the concept of mediation is intersubjectivity, which is a mutual understanding that is established between the educator and the learner (Wertsch, 1985, 1998). Demonstrating signs of transforming external mediation and controlling over the task, learners gain a new level of cognition, what Vygotsky dubbed as internalization.

Like L2 learners, teachers also benefit from mediation of others (Johnson & Golombek, 2016) such as colleagues (Zoshak, 2016) or teacher educators

(e.g., Blumenfeld et al., 1994; Moodie, 2015). Teacher educators regulate teachers' mental processes by engaging them in proper SLTE programs, providing them with scientific concepts dressed in practical activities and exposing them to the psychological tools which are required for effective accomplishment of the activities. The process of SM follows a regulatory scale classified by Aljaafreh and Lantolf (1994) in which the educator's assistance moves from implicit to explicit. Based on this scale, the educator initially attempts to imply the problematic part to the teacher by indirect feedback and hints, such as prompts, suggestions, and questions (e.g., 'what is wrong here?' or 'what else you could do in this situation?') and finally explicitly explains the issue. Moreover, the process of mediation is regulated and is attuned to the teacher responsiveness since too much help reduces agency whereas too little support may promote frustration (Johnson & Golombek, 2016). Finally, the process of mediation is dialogic in nature which entails teacher's active engagement.

A number of researchers in SLTE have recently used the principles of SCT and mediated teachers through interactionist approaches (e.g., Golombek, 2011; Moradian, Miri, & Qassemi, 2015) or SM (e.g., Johnson & Arshavskaya, 2011; Johnson & Dellagnello, 2013; Johnson & Golombek, 2016; Yoshida, 2011) within teachers' ZPTD. During developmental courses held by the researchers, the educator moved the mediation by posing implicit questions and/or statements to assist the teachers to reorient their everyday concepts toward more scientific concepts. This process continued to reach intersubjectivity in which knowledge was co-built. At the final levels, the mediation changed into a more explicit format. Yoshida (2011) argued that with strategic combination of practices, setting, and mediation during a TEP, teachers are likely to engage in their own learning and gradually internalize the scientific concepts. Johnson (2009) argued that "learning is not development; however, properly organized instruction (teaching/learning) can result in cognitive development and can set in motion a variety of developmental processes that would be impossible apart from learning." (p. 76). The implication is that, through 'properly organized instruction', providing teachers space for participating in activities associated with their actual teaching and, as Johnson and Golombek (2016) mentioned, by explicit presentation of psychological tools, teacher educator can set the ground for a strategically designed type of mediation aligned with teachers' needs and wants.

In a study of close relevance, rested on SCT of learning, Engin (2015) investigated trainer-trainee talk and support in a post-observation feedback session. In doing so, she tried to describe the scaffolding process by means of six features of scaffolding (Maybin, Mercer & Stierer, 1992) as a basic framework. The assisted performance was popularized as 'scaffolding' by Bruner and his colleagues (Wood, Bruner & Ross, 1976). Scaffolding allows learners to achieve a higher level than they can get alone and stands for 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" (Donato, 1994, p. 40). Therefore, it can be said that scaffolding is a sort of expert-novice assisted performance. On the other hand, unlike ZPD that focuses on quality and fluctuations in quality of mediation which is negotiated between mentor and novice, scaffolding is about the amount of expert-novice mediation (Stetsenko, 1999). However, what is meant by mediation within ZPD differs from formal instruction and help. Johnson and Golombek (2011) averred that "development emerges over time and depends on the agency of the learner and the affordances and constraints of the learning environment" (p. 4). To this end, mediation is supreme (Johnson & Golombek, 2011) and should be discriminated from scaffolding. The distinction matters since one of the key tenets of Vygotsky's theory is the dialogic interaction between trainee and trainer, which requires a deep understanding of the ZPDs of learners. Thus, further studies need to be conducted within the interactionist model.

Prior studies (e.g., Freeman & Johnson, 1998; Johnson, 2006; Wright, 2010) have evidenced the adaption of constructivist approaches in SLTE programs in many western/ESL settings to underscore sociocultural aspects of teaching and learning, as well as the processes of how to teach. In spite of the paradigm shift in SLTE programs, and in turn, a call for a change in the focus of teacher education, recent studies conducted in the context of Iran (e.g., Moghaddas & Zakeri, 2012; Moradian et al., 2015; Nezakat-Alhossaini & Ketabi, 2012; Safari & Rashidi, 2015; Shahmohammadi, 2012) have still found inadequacies in TEP. Evaluating teacher education in Iran, Moghaddas and Zakeri (2012) stated that "there is little, if any, opportunity for student teachers to practice what they have been told in books. Therefore, they do not know the potential of each methodology and come across a reality shock as they enter the real world of teaching" (p. 28). Another criticism leveled at TEP in Iran is the lack of feedback from teacher educators on the actual teaching experiences of novice teachers.

With respect to novice teachers, Johnson and Dellagnelo (2013) pinpointed that they need to be exposed to several actual teaching opportunities to make sense of academic/scientific concepts in order to push their cognitive development. Likewise, in another study, Moradian et al, (2015) mediated both novice and experienced teachers through interactionist approach to dynamic assessment (DA). They concluded that novice teachers, empty of already-established teaching experience, confronted with challenges regarding confidence, socialization, and professional identity (Farrell, 2006), were more open to receive mediation.

The studies reviewed above have provided important insight into how SCT works in SLTE and what effects it can have on teacher development. However, there are a number of shortcomings that can be considered. First of

all, the effectiveness of TEPs in preparing teachers for real conditions in language classrooms is still under question (Faez & Vaelo, 2012; Farrell, 2015; Wright, 2010). In addition, "relatively little has been published which examines what actually happens in formal instruction-based training sessions" (Wright, 2010, p.277) and the content of recent approaches to TEPs need to be further investigated (Farrell, 2015). To the best knowledge of the researchers, only few studies (Golombek, 2011; Moradian et al., 2015) demonstrated what actually occur in a mediational course informed by principals of SCT. Therefore, the present study was conducted to investigate how strategic mediation can support novice EFL teachers' ZPTD and in what ways a teacher educator can support the development of novice teachers' principled grammar teaching through strategic mediation.

3. Method

The study is qualitative in nature and provides case studies of four novice EFL teachers who participated in mediational sessions with one of the researchers. A case study method was used since it can facilitate the construction of detailed and in-depth understanding of what is to be studied. Likewise, the methodology is influenced by an overall conceptual framework of SCT where, as Johnson and Golombek (2011) have noted, "human cognition originates in and emerges out of participation in social activities" (p. 1).

3.1. Participants and Setting

Four female EFL novice English language teachers teaching in a private language institute in Qom volunteered to participate in the study as an opportunity for their professional development. All participating teachers had less than three years of teaching experience and were considered to be inexperienced (Phipps & Borg, 2009). Their teaching experience ranged from 1 to 2 years at the time of study. Their experience of participating in teacher training courses (TTC) was limited to participation in theory-based lectures or seminars. Pseudonyms were assigned to participants to maintain their anonymity. The biographical data of teachers are presented in the Table 1.

The second researcher, a Ph.D. candidate in Teaching English as a Foreign Language (TEFL), served as the teacher educator (TE hereafter). He has been teaching English in language institutes and universities for about 10 years. He met teacher participants off-site prior to data collection in order to establish rapport with them as their feelings and attitude toward the educator could affect their responsiveness and performance (Davin, 2011) in a mediational course.

Table 1
Participating Teachers' Biographical Data

Pseudonym	Age	Academic Major	Teaching Experience (in years)	Language Teaching & Learning Experience	Students	Students' level of Proficiency
T-A	25	English Translation	2	……	8	Low intermediate
T-B	32	English Translation	1	……	9	Low intermediate
T-C	20	English Translation	1	TTC	8	Low intermediate
T-D	20	English Translation	1	…….	10	Low intermediate

3.2. Instruments

3.2.1. Video-Stimulated Recall

Stimulated recall (Calderhead, 1981), a type of retrospective research methodology, has been widely deployed to investigate teacher cognition (Polio, Gass & Chaplin, 2006). Gass and Mackey (2000), and Borg (2003) suggest using stimulated recalls as a technique to investigate teachers' cognition. Since "the cognitive structures and processes underlying teacher activity are unobservable, watching the replaying of their instructions generates a recall of conscious thoughts, which can then be verbalized" (Golombek 2011, p. 125). It also has notably been advocated in SLTE research studies as a tool for gathering data on teachers' cognitive processes (Borg, 2003) and mediating within ZPTD (Golombek 2011; Moradian et al., 2015). During stimulated recall, the teacher verbalizes his/her cognition retrospectively by assistance of a stimulus (e.g., video-recordings of her/his authentic teaching samples), as a source of support to help the participants to more vividly recall and comment on what has happened.

Therefore, video stimulated recall (VSR) was deployed in the present study to assist teacher participants in recalling classroom events and to facilitate the process of SM by setting a real situation. A number of episodes were selected from recorded films of each participant on the basis of problematic moments of teaching in which a teacher's action was not in line with the three principled steps of grammar teaching proposed by Batstone and Ellis (2009). According to these steps, grammar learning involves three interrelated principles:

The first is the Given-to-New Principle" where "existing world knowledge is exploited as a resource for connecting known or 'given' meaning with new form-meaning mappings. The second is the Awareness Principle, which states that discovering new mappings between form and meaning is a

process which necessarily involves awareness. The third is the Real-Operating Conditions Principle, whereby the processing acquiring form-meaning mappings is not complete until learners are able to practice them in a communicative context and through a primary focus on meaning rather than form (Batstone & Ellis, 2009, p. 194).

Based on these three steps, the overall design of SM and every teacher educator move aimed at providing teacher participants with hints on how to adapt principled grammar teaching in their classroom activities. In the present study, mediations were presented on problematic moments of grammar teaching since they represent "an opportunity to create a ZPD, in which the teacher educator would provide mediation depending on how the mediator-learner dialogue unfolded" (Golombek, 2011, p. 126). At VSR sessions, the video-recorded teaching samples of each teacher participant were collaboratively reviewed, during which the educator interacted with the teacher to identify and remedy her problems in grammar teaching using SM principles. As the time interval between actual classroom practices and VSR sessions is a critical issue and a long time gap can increase the potential for memory decay (Gass & Mackey, 2000), immediately after the observations (an average of 4 to 7 days after observations), VSR sessions were held with each teacher individually at their own workplaces. Each VSR session, lasting between 45 and 60 minutes, was video-recorded for further microgenetic analysis which is "the moment-to-moment co-construction of language and language learning" (Guttierrez, 2007, p. 2).

All in all, SM aims at promoting teachers' internalization of pedagogical knowledge of a given point so as to draw upon it in self-regulation attempts (Poehner & Lantolf, 2010). In the present study, any teachers' signs of self-regulation or transfer which is "applying newly formed abilities to novel problems" (Poehner & Lantolf, 2010, p.316) were detected to track teachers' development.

4. Results and Discussion

4.1. Results

Transcribed data of all four cases demonstrated an equal role in co-construction of knowledge in the post-observation sessions with teacher educator's backseat in more than half initial parts of each sequences to provide space for teachers to externalize their cognitions. Whatever was produced individually during their initial statement prior to any mediation was considered to be "the actual developmental level" (Vygotsky, 1978, p. 85) of the participants because it could be an indicator of what they were able to do on their own. Mediations were given based on teachers' actual level and during interactions. In what follows, the main analytical results of this study are presented and supported using examples from the recorded data.

The educators silence or deployment of acknowledgments such as 'uhm' coupled with nodding during SM signposted the educator allowance of more autonomy to the teachers either opening or directing the flow of interaction. This level of freedom in expressing inner beliefs and absence of the educator's tight control or allocation of turns resulted in a shift from default teacher-initiation, learner-response, and teacher-feedback (IRF) cycle in some particular occasions to more (teacher-)learner's initiation and teacher educator minimal responses (e.g., Moradian et. al., 2015; Waring 2008, 2009). Transcribed data evidenced that one of the contributions of SM was the provision of space for teachers to externalize their thoughts and move beyond the default IRF cycle of educational contexts. Teacher participants' initiation of the turns are of key importance since, "learner-initiated questions play a crucial role in generating learning opportunities" (Waring, 2009, p. 816). In what follows, some extracts from, microgenetic moves have been taken to demonstrate the mentioned findings.

The case of T-A: *A microgenetic move*

The following extract demonstrates how teacher A (T-A hereafter) and educator (E henceforth) collaboratively negotiated to re-establish intersubjectivity. The focus of SM here is on T-A's ignorance of the first step in principled grammar teaching in teaching comparative adjectives.

All post-observation sessions were held in Persian (interactants' native tongue). L1 was used to guarantee maximum intelligibility and mitigate the language barrier. In extracts verbatim translation into English is given for readers' convenience. It also should be noted that a period in parentheses shows a short pause of less than 2 second and double parentheses demonstrate non-speech activity or the analyst's comment translation.

Extract 1

1	E:	What do you think about this action?
2	T-A:	uhh I meant to teach comparative adjectives (.) I think elaborations in L1 make learners understand (.) Am I right?
3	E:	Sure (.) but (.) Does it work? ((rewinds the film again))
4	T-A:	Yes (.) I suppose it did uhhh you see (.) even students are answering my questions correctly
5	E:	uhm…uh how about making their mind ready
6	T-A:	well…. I could (0.6) before starting the new grammar lesson, I could ask a few questions or (0.3) Yes I should not go through the grammar before setting the ground (.) maybe questions were helpful here
7	E:	yeah (.)

8	T-A:	And you see here I am describing ((student's name)) by this I meant to mention what the adjective in general is.
9	E:	Uhmm ((nodding))
10	T-A:	uh… it was a sorta elaboration but I suppose it could help them to remember the adjectives
11	E:	yeah (.) they did
12	T-A:	uh: (0.8)
13	E:	How about preparing their mind for comparatives? Any idea?
14	T-A:	Well I said a few sentences in Persian as you see
15	E:	((nodding))
16	T-A:	I meant to make them ready by means of tangible examples and what they already know
17	E:	Uhaaa (.) you mean activate their prior knowledge
18	T-A:	Exactly in fact I wanted to warm up before instructing comparatives but I suppose I shifted to the teaching the formula very fast. Didn't I?
19	E:	Yeah (.) what else you could do instead?
20	T-A:	Some questions maybe (0.6) asking for example… uh asking two of the students to stand up and ask students to describe them in Persian and make some comparisons
21	E:	uhmm (.) that's right. Good idea (.) in this way you could activate their prior knowledge before explicit instruction of the new grammar point

The educator begins with a wh-question so as to stimulate the teacher to explain about her action of teaching which can determine her actual ability. From Vygotsky's point of view, this level includes what learners are able to achieve independently before any treatment (Vygotsky, 1978). As it is clear from the above episode, T-A failed to disambiguate the first step of basic grammar teaching, this inability is inferred from her statements in turn 2 and 4. Confirmation questions in turn 2 and 18 also demonstrates her doubts and she asked for expert's assistance what Poehner (2008) pinpoints as to use "the mediator as resource". In order to support her understanding and move her to higher levels of development that is self-regulation, the educator made use of another helpful hint, in turn 5, by suggesting another option. During an elaborated response (turn 6), the teacher showed the first sings of development by proposing some alternative actions she could do instead. Showing signs of understanding the educator took a backseat (turns, 7, 9, 11, 15) and allowed T-A to externalize her thoughts.

Learners' reciprocity showed their willingness to receive assistance (Lidz, 1987) as well as the extent to which s/he is open to mediation (Lidz, 1991). Within the present extract, from the type of responsiveness that moves on the part of the teacher in collaboration, questions aiming at seeking the educator's support, it can be inferred that T-A is open and willing to receive mediation. Moreover, in above extract, in few occasions, by asking open-end

questions (turns 13, 19) the educator tries to guide T-A's understanding. Prevalence of Wh-questions which frequently resulted in T-A seizing the floor (justifying, questioning, and elaborating on her actions) is evident in the above extract.

The microgenetic moves can be traced as the interaction continues. The extract demonstrates how the educator's hints (1, 3, 5, 7, 9, 11, etc.) moving from the most implicit to most explicit assisted the teacher to move from justifying (which was the case in the turns 2 and 4) to arguing the reasons behind using some teaching strategies as the help has been provided, thus moving from the interpersonal plane to the intrapersonal plane (turns 18, 20), as Vygotsky (1978) puts it.

The case of T-B: A microgenetic move

At SM, T-B interprets her actions in teaching present continuous in the second step wherein she should direct students' attention to notice the form. She stops the film to highlight the correctness of her actions. Meanwhile the educator tries to mediate her understanding of the strategies which could be used to direct students' attention the new grammatical form.

Extract 2

1	E:	look here…any problem?
2	T-B:	you mean with teaching ing form (.) uh
3	E:	Uhm
4	T-B:	Well (.) I wanted to teach present continuous and it entailed students to know what is ing and where they should add it
5	E:	Uha ((nodding))
6	T-B:	So (.) I started writing the verbs on the whiteboard to help them in understanding this tense (.)
7	E:	OK (0.4) I see but did they know what verb is?
8	T-B:	Yes they know
9	E:	Uha
10	T-B:	They already know what verb is and here I am explaining the ing position for them (.) But I do not know what is wrong here
11	E:	May be it is with students' understanding. Did they get the point?
12	T-B:	Let's replay it
13	E:	Sure
14	T-B:	Aha (.) you mean here when ((a student's name)) says a wrong example? They are happing (.) That is odd
15	E:	yeah… but it may imply that he has not got the form properly

16	T-B:	Uhh then what should I do to make them deeply understand it?
17	E:	May be writing the tense formula on the whiteboard
18	T-B:	((nodding)) I did not. I only explained it orally and wrote verb plus ing on the board (0.5)
19	E:	Yeah…any other way to take their attention to the new form?
20	T-B:	Writing the formula on the board and underling or using other colours for highlighting the new form uhhh as well as questions
21	E:	Good ideas (.) you could use colour codes for highlighting the point
22	T-B:	((nodding)) That's right

In the initial turns, the educator takes a backseat and provides more space for teacher to contribute. The educator presents some form of support to the teacher, ranging from prompts and leading questions (turns 1, 7) to hints and then further explanations (19). Poehner (2007) maintained that in this way the educator can recognize not only the learner's actual abilities and understanding of the situation but also his potential future abilities. The educator starts with a sentence to prompt her implicitly to understand something is wrong. Through a minimal response (turn 7) he aims at eliciting T-B's situational definition of the current issue. However, T-B displays non-understanding of the educator's prompt. Thus, she continues with justifying her action. This time, recognizing that his earlier mediation has been implicit and beyond teacher's current abilities, the educator offers a more explicit suggestion (turn 11). He even reformulates the question in the same turn to clarify the meaning by asking '*Did they get the point?*' Successively, after rewinding the film, the T-B gets the point (turn 14) and this is manifested through expressing "*aha*". T-B shows the first signs of a more self-regulated ZPD in turn 18 and then 20 wherein she proposes some alternative strategies to attract students' attention to the form. In final turn (21), the educator mediates explicitly through an elaborated turn.

The case of T-C: *A microgenetic move*

In the following instructional extract, the teacher educator initiates with a relatively implicit form of mediation and tries to orient the teacher attention to deficiency in awareness-raising. The movement beyond IRF cycle is evidenced in this episode as well as equal participatory role between interactants.

Extract 3

1	E:	Here (0.6) ((stops the film)) what do you think?
2	T-C:	That's all about the new grammar lesson. Isn't it?
3	E:	Yeah ((nodding))
4	T-C:	Yes (.) and I am teaching the formula (.) since students have to know it (0.3) uh and using it, they can produce further sentences
5	E:	Uhm
6	T-C:	I suppose (.) it can help them to use the new tense more easily
7	E:	Yeah… How about other strategies
8	T-C:	In grammar teaching?
9	E:	Yes
10	T-C:	Such as writing the formula or something?
11	E:	Yes (.) I mean (.) any purposeful action to direct students' attention to the Form
12	T-C:	yeah (0.6) you see with raising and falling my voice I attempted to direct them to a specific part in the sentence (.) But I also could write it for them then they could get the point
13	E:	yeah…I see your focus here is on form. Through these actions a teacher can aware students on the new form in a very middle stage of grammar teaching
14	T-C:	((nodding)) (0.6) how about using different markers? I mean various colours to highlight the point

Through a leading question, the educator begins to direct the teacher's attention to a problem in her grammar teaching. In order to support new levels of understanding, the educator needs to know what the teacher perception of the situation is. Hence, during the first turns (2-4), a mutual endeavor is made to attain a level of intersubjectivity. Yet, the T-C's utterances evidences that she has not noticed the problem (lines 2-6) and shows a need for more explicit and different types of mediation. The educator provides a more explicit level of mediation in turn 7. Following two turns (8, 10) seeking for expert assistance (Poehner, 2008), T-C shows sign of development in turn 12. Not justifying or asking any more questions in final turns, the teacher shows his acceptance of mediation through the nodding (14) and proposing another strategy.

The pervasiveness of IRF exchange is evidenced in the present extract. That is, it is not the teacher educator who initiates every cycle and 'less known information' (Mehan, 1979) rather T-C initiates the exchanges in some occasions such as turn 14. From appearance of such turns, it can be inferred that SM can provide a dialogic atmosphere so that interlocutors contribute freely and go beyond the traditional cycle of institutional talk (i.e., IRF).

The case of T-D: *A microgenetic move*

The following extract illustrates how a meditative dialogic interaction moves to reach intersubjectivity. T-D did ignore the third step in Batstone and Ellis (2009) in her teaching activities and in this episode the educator aims to direct her attention to add practice-enhancing conditions in her grammar teaching to help students connect form to meaning.

Extract 4

1	E:	There's something wrong (.) Here (.)
2	T-D:	Wrong?
3	E:	Yes
4	T-D:	He ((pointing to a student)) uh (0.5)
5	E:	What should you do here after teaching the new grammar lesson
6	T-D:	I don't know (.) You mean I should ask more questions?
7	E:	Uhh sorta
8	T-D:	But I already asked some
9	E:	Yes, you did (.) but some different questions maybe in this stage are required
10	T-D:	Different? What do you mean? uh (0.6)
11	E:	Some questions that students need to use the new form in more tangible examples
12	T-D:	Yeah (.) talking about their feelings and ideas or (.) maybe their own life
13	E:	Exactly
14	T-D:	((nodding)) I needed to ask some or (.) maybe ask them to write them.

In the first turn, pausing the recorded-video, the educator tries to implicitly state that there is something wrong with the Teacher's style of teaching present continues. The educator's aim is to elicit the teacher explanation of the situation definition. Therefore, through a minimal response he answers T-D's question (turn 3). Nevertheless, the T-D does not demonstrate signs of the ability to identify the problematic point in turn 4 and 6. Through an unfinished cognitive statement '*I don't*' (turn 6) and a follow-up question, she attempts to get expert assistance. The educator in the next turn, through a new level of mediation, in response to the teacher's question tries to encourage her to think about an alternative or another form of question (turn 9). In turn 10, the T-D through a, may think aloud, statement tries to say the answer. It can be inferred that she is trying to make sense of the situation. Once the teacher is not able to identify an alternative action, in turn 11 the educator narrows down the teacher's concentration and proposes the correct type of questions allowing the students participate in their own learning by using the target language structure in effective communication. After the educator's mediation, a shift in the T-D's statement from questions to

acceptance of her performance occurs in turn 12 wherein she states '*Yeah (.) talking about their feelings and ideas or maybe their own life'*. This T-D's delivery of a cognitive statement is significant and it can be inferred that microgenetic development has occurred.

4.2. Discussion

In this study, the teaching actions of four novice EFL teachers were observed and then through some post-observation feedback sessions, the teachers were provided with SM based on Aljaafreh and Lantolf's (1994) regulatory scale. That is, mediations were graduated (presented little by little and initiated from the most implicit prompts to the most explicit ones depending on the current actual development level of a given teacher participant), contingent (assistance was offered only when it was needed and withdrawn as soon as the teacher displayed signs of self-control over the issue), and dialogic.

The first research question concerned the potentials of SM to support and remedy problems related to teachers' principled grammar teaching. To this end, the dialogic episodes between the educator and the participants were examined to determine how such mediation helped novice teachers to discover and improve their problems. Analyses revealed that all four teacher participants had a number of pedagogical knowledge problems (misunderstandings of students' prior knowledge, awareness raising, and function of grammar). However, the gradual pace of mediation, tailored to teachers' emerging needs and responsiveness during dialogic interactions, assisted teachers to deal with some of the problems.

Additionally, the data presented some illuminating evidence on the development of novice teachers regarding principled teaching grammar. As demonstrated in the above extracts, the educator started with highly strategic, or implicit, prompts and progressively developed into more specific and explicit hints. Based on the procedure, more explicit and implicit prompts are respectively an indication of less and more control over the task at hand. Mediations should aim at boosting learners' internalization of conceptual knowledge of a given point so as to draw upon it in self-regulation attempts (Poehner & Lantolf, 2010). Novice teachers' development across moment-by-moment of interaction was tracked through signs of self-control and functioning independently. The findings of the study are particularly similar to the findings of Golombek (2011), Moradian et al. (2015), since the study could demonstrate teacher development as a result of participation in a TEP informed by tenets of SCT.

The findings question the status quo of transmission-based FL/SL teacher education by proposing that integrating SCT principals in teacher education is promising for promoting teacher learning. Hinged on evidence, space for participation was maximized through a particular type of dialogic, graduated, contingent (Aljafreh & Lantolf, 1994) feedback aligned with teacher-learners'

emerging needs in their ZPTD. In fact, the dialogic nature of TEP, use of actual samples of teacher-learners' own teaching practices (i.e., use of technology), and encouraging teachers' agency allowed them to externalize stories under their actions which could be traced in their schooling as learners (Lortie, 1975) or years of teaching experiences (Moradian et. al., 2015). Results resonates the findings of Golombek (2011) and Moradian et. al. (2015) in that mediation informed by tents of SCT and a pedagogical application of ZPD, has the potential to promote teachers, novice teachers in the current study, to a higher level of functioning.

Based on Lantolf and Poehner's (2007) assertion, different ZPDs may be shown by learners. The findings of the current study also showed that different individual novice teachers needed different amounts and types of help with their ZPTD for the development. SM, on the other hand, supported teachers' emerging needs during an interactive atmosphere. It can demonstrate the potential of SM to help novice EFL teachers.

5. Conclusion and Implications

It can be inferred from the results of this study that the individuals' abilities are emergent and should be increased through interaction in the social context (Vygotsky, 1978). Accordingly, the teachers' current abilities should not be considered as their mental development. Rather, teacher educators should particularly focus on those teachers' abilities which are on the edge of emergence and assist teachers to extend their current competence by equipping them with the assistance which is in tune with their ZPTDs (Aljaafreh & Lantolf, 1994).

Microgenetic analysis of SM in post-observation feedback sessions highlighted the importance of novice teachers' active participation in co-construction of knowledge. Post-observation discourse within an interactionist approach is unpredictable since it is subject to the emerging questions, thoughts, and talk taking place in moment-to-moment interaction. Results demonstrated that SM can narrow down the knowledge gap between teachers and teacher educator. That is, engaging novice teachers in their own process of learning through actual samples of their classroom teaching set the ground for teacher to play an active role in the development. Additionally, from their active participation, it can be inferred that they all showed positive attitude toward mediation and innovations in grammar teaching.

Although, the present study does not aim to offer prescriptive hints for both teachers and teacher educators, a more effective language teacher education on principled grammar teaching by SLTE programs is recommended. Moreover, this study tends to lend credence to the literature on the effectiveness of the mediation anchored in SCT in facilitating learner' (teachers) development. Therefore, the implications for practitioners and

teacher educators come more to light when the teachers' actual abilities are kept in mind. Teacher educators should include SM in TEPs and provide teachers with graduated assistance within their ZPTD. That is, they should engage teachers in their own process of learning to make the interventions as contingent as possible (Aljaafreh & Lantolf, 1994).

In the light of findings of this study, there are a number of directions for future research. First, a continuing professional development program might be needed rather than a single session TEP in which participants are engaged in a chain series of SM, future empirical studies need to investigate it to see when an ideal plane of development can be attained. Second, in order to link microgenetic development to ontogenetic development (Markee, 2008), further longitudinal studies are required to trace teachers' development over a more expanded time. As it can be seen in the data analysis, novice teachers showed signs of development while engaging in SM. Yet, it is still under the shadow of doubt how and to what extent they can apply the gained understanding in another different situation in future with more time intervals of about months or years (i.e., transcendence).

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