A Sociocultural Analysis of Personal Practical Theorizing as an Awareness-Raising Technique in Novice and Expert Teachers’ Professional Development

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Abstract
As a part of a larger-scale research, the present study aimed to use the main tenets of sociocultural perspective; namely, mediation, internalization, zone of proximal development, and the activity theory, to analyze the novice and expert teachers’ professional development through personal practical theorizing as an awareness raising technique. Furthermore, the study attempted to identify the contextual factors hindering teachers’ pedagogical beliefs enactment. The areas of mismatches between the teachers’ beliefs and practices were identified in the previous phases of the study, and personal practical theorizing procedure was implemented in the program to help teachers converge their beliefs and practices. Within the domain of the qualitative research, a multi-case study design was utilized, employing eight novice and experienced teachers who were selected through purposive sampling. The teachers’ professional development in the proposed program was analyzed through the lens of sociocultural perspectives, and the contextual factors hindering teachers’ beliefs enactment were enumerated based on the results gleaned through interview sessions.

Keywords: Sociocultural perspective, personal practical theory, teachers’ professional development, teacher education

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INTRODUCTION

In recent years, as Skott (2009) mentioned, the mainstream research on teachers’ beliefs has witnessed challenges both “in substance and method” (p. 28). According to Feryok (2009), the literature on teacher development depicted a departure from the approaches that relied on the “imitation of expert behavior as something static, and reproductive” (p. 279) in analyzing teachers’ professional development and shifted to focus on teachers’ own knowledge and experience recognized as the perspective on teacher development. Crandall (2000), Freeman (2002), and Borg (2003) referred to this as a shift of focus from teachers’ behaviors to teachers’ cognitions. In this regard, one of the most recent approaches was what Johnson (2006) has called ‘the sociocultural turn’. According to Johnson, this includes a number of “divergent yet compatible approaches that share the belief that human cognition, including learning, is socially situated and mediated” (p. 237).

Johnson and Golombek (2003) stated that a sociocultural theoretical perspective, as “a psychological theory of mind”, can be employed to explain “the origins, mechanisms, nature, and consequences of teacher professional development at all phases of teachers’ careers and in all contexts where they live, learn, and work” (p. 732).

As Lantolf and Thorne (2006) defined, sociocultural theory (SCT) maintained that all human higher-level mental operations are mediated through artifacts, concepts and activities, which interact with each other as well as with innate psychological attributes. Sociocultural theory was inspired by the seminal works of Vygotsky (1978, 1986). Within this theoretical framework, Vygotsky (1978, 1981, 1995) explicated the human’s mental development at four levels, namely: (a) the sociocultural domain which Shi (2017) summarized as the different kinds of mediational tools adopted and valued by society; (b) the ontogenetic domain which studies the appropriation of mediational tools and how they are integrated into cognitive activity during the processes of an individual’s development; (c) the phylogenetic domain which concerns the evolutionary development of human’s mental organisms across generations; and (d) the micro-genetic
domain which focuses on the moment-to-moment co-construction of language and language learning during inter-psychological activity over a short span of time.

According to Lantolf and Thorne (2012), the main concepts within sociocultural theory includes mediation, internalization, the zone of proximal development and activity theory, which can be employed as a theoretical lens to investigate the professional development of EFL teachers from the relationship between the micro-structure of individual context and the macro-structure of sociocultural model. Shi (2017) maintained that SCT provides a unique perspective on the construction of EFL teacher's learning and professional development.

According to Lantolf (2000), it is possible to gain control over the world, others and ourselves by internalizing the means of mediation, beginning by externally regulated activity through objects to other-regulated activity to self-regulated activity. The other concept within SCT is the “zone of proximal development” which is elaborated by Vygotsky (1978) as the “space between what can be performed with assistance and independently” (p. 86). This means that the assisted performance can subsequently be achieved independently.

LITERATURE REVIEW

With regard to teacher education, Johnson (2009) and Rogoff (2003) noted that the SCT emphasizes the role of human agency in the developmental process. They believed that learning is not the straightforward transmission of skills or knowledge from the outside, but is the gradual movement from external, socially mediated activity to internal mediated control by the educated individuals. In the same vein, Grimmett (2014), Johnson and Golombek (2011) argued that this gradual movement could be feasible through the substitution of the everyday thinking of teachers with related teaching concepts that have been scientifically researched. Lave and Wenger (1991) proposed that through dialogic mediation and peripheral participation of the teachers themselves, the change of concepts becomes
possible. According to Walsh (2011), for effective replacing of everyday concepts with scientifically researched ones, raising awareness of the teachers regarding their present thinking and behavior and follow-up persistent critical reflection on their emerging practices seem to be the most effective practices.

Considering the role of context, Allahyar and Nazari (2012) believe that context plays an important role in the interaction between the novice and more experienced peers as a type of teachers’ learning. In this vein, Cross (2010) stated that “an increased awareness of the situated and socially distributed nature of learning has highlighted the need for a better understanding of the complexities of the contexts within which learning takes place, with a related focus on teachers” (p. 120). Using the word ‘situatedness’, Donato (2000) focuses on the point that “learning unfolds in different ways under different circumstances” (p. 47). The idea of situatedness is in line with Vygotsky's idea of higher mental functioning that places human consciousness and the functioning of the human brain in the external processes of social life (Blanton, Westbrook & Carter, 2005).

Based on sociocultural theory considering the classroom context, Allahyar and Nazari (2012) explained that teachers’ perceptions and beliefs could not be seen as an abstract or stable concept to be used in all contexts. As Vygotsky’s (1987) “socio-cultural theory recognizes the central role of social relationships”, cultural historical contexts affect teachers’ thinking (pp. 30-31). As Cross (2010) mentioned, teachers are viewed as “social agents, rather than mere mental processing entities that act on or react to stimuli in the teaching environment” (p. 437). In other words, as stated by Allahyar and Nazari (2012), the personal trajectory plays a mediatory role in the relationship between the micro-genetic aspect (the immediate aspect of teachers’ thought and behavior) and the broader cultural-historic context.

Teachers’ knowledge and beliefs can also be explained based on SCT. In this regard, Wells (1999) argued that knowledge emerges as it is “constructed and reconstructed between participants in specific situated activities, using the cultural artifacts at their disposal, as they work towards
the collaborative achievement of a goal” (p. 140). Likewise, Wertsch (1998 cited in Billett, 2001) stated that “knowledge, with its historical and cultural genoses, is manifested in particular ways in practice… knowledge is interpretative or co-constructed” (p. 442).

Clandinin (1992) defined personal practical knowledge as situated:

… in the person's past experience, in the person’s present mind and body and in the person’s future plans and actions. It is knowledge that reflects the individual’s prior knowledge and acknowledges the contextual nature of that teacher’s knowledge. It is a kind of knowledge carved out of, and shaped by, situations (p. 125).

According to Mayer and Marland (1997), practical knowledge is the process of reflection on and self-assessment of experience and teachers’ experience serves as a lens through which teachers interpret their behavior. Therefore, knowledge aligns with experience.

Johnson and Golombek (2002) noted that teacher knowledge is “highly interpretive, socially negotiated, and continually restructured” (pp. 1-2). Moreover, as Vygotsky’s theory claims, according to Lantolf and Appel (1994), consciousness or thinking relates knowledge to actions or practices.

As Lerman (2001) explained, teachers’ beliefs and practices are not separate and stable entities. Beliefs are related to the context in which they are elicited, and specific situations are “productive of beliefs, practices, purposes, and goals, not reflective of them” (p. 44).

According to Zheng (2015), the dialectical relationship between the teachers’ beliefs and practice is subject to the contextual issues coming from the macro-context of society, the exo-context of schools and the micro-context of classrooms. Based on the review of the related literature, Zheng mentioned that teachers’ beliefs are regarded as an open system exposed to various kinds of influences from the contexts. These contextual factors are categorized as classroom facilities, school management, and national
policies, exerted by different categories of agent, including teachers, students and parents.

Breen et al. (1998) concluded that the teachers’ beliefs systems involve certain principles which are subject to change and were affected by the characteristics of learners, contextual factors and evaluation requirements. It means that these principles are the products of a particular teaching situation. Likewise, Lacorte (2005) concluded that in addition to teachers’ personal theories and experience of both language teaching and learning as the significant factors affecting teachers’ beliefs and practices, some contextual factors such as classroom management issues, large number of students, and limited teaching resources contributed to teachers’ perceptions and practices as well.

With regard to employing a sociocultural perspective such as the activity theory, Potari (2013) noted that the activity theory has been used as a framework of analysis in teaching mathematics and teacher development. For instance, Jaworski and Potari (2009) used the AT to consider the role of the broader social frame in which classroom teaching is situated. Moreover, Engeström (2008) analyzed two teacher teams that wanted to transform the pedagogical practices of school education from within by pointing out the development of the activity through tensions that existed between the instruments and the object of the activity and the object and the rules of the school community.

PURPOSE OF THE STUDY
Considering the above-mentioned points, the present study as a part of a larger-scale research, attempted to make use of the main tenets of sociocultural perspective to analyze the novice and expert teachers’ professional development through personal practical theorizing as an awareness raising technique. In the teachers’ professional development program implemented in this study, teachers’ beliefs and practices were investigated and the areas of the mismatches between teachers’ beliefs and
practices were identified. Next, personal practical theorizing procedure was implemented to help teachers converge their beliefs and practices, become aware of their beliefs system and consequently enact their pedagogical beliefs. All in all, this study, firstly tried to analyze the teachers’ professional development program undertaken in previous steps based on the main tenets of sociocultural perspective and secondly, identify the contextual factors hindering teachers’ pedagogical beliefs enactment. Based on the mentioned objectives, the following research questions were posed.

1. How can the teachers’ professional development through personal practical theorizing be analyzed based on sociocultural perspective?
2. What are the contextual factors that hinder or facilitate the teachers’ beliefs enactment from a sociocultural perspective?

**METHOD**

**Design**

The program started with identifying the categories of pedagogical beliefs of novice and experienced EFL teachers (gleaned from the administration of ‘Importance of Pedagogical Knowledge Scale’ (IPKS) by Buehl and Beck (2015)) and their verbal reports through semi structured interviews and stimulated recall, and comparing these categories to their practices which were examined through classroom observation. The goal was to explore the possible mismatches between novice and experienced teachers’ beliefs (TB) and practices in relation to classroom management and organization, language assessment, motivation, and teachers’ knowledge including, content knowledge, pedagogical content knowledge, and pedagogical knowledge. Within the domain of the qualitative research, a multi-case study design was utilized, involving eight novice and experienced teachers who were selected through purposive sampling.
Participants
All of the participants, ranging in age from 28 to 45, were teachers of English who had graduated from English language majors, including English Translation, TEFL, and English Literature, and had completed training courses. Their teaching experience varied from 1 to more than 20 years. They worked in Fasa University Language Center (FULC) and their native language was Persian.

To categorize the participants as novice and expert, Yazdanmehr et al. (2016) model was implemented. Based on this model, eight factors including teacher’s language proficiency, pedagogical content knowledge, social recognition, cognitive skills, experience, professional development, contextual knowledge, and learner-centered teaching, are regarded as the main components of teaching expertise in language teaching. A checklist of teachers’ expertise was designed using the mentioned components by the present researchers and used in classroom observations to determine the participants’ level of expertise and categorize them into the novice and expert groups.

The program was carried out in FULC, as a language institute, teaching English, Arabic, French and German, because, firstly, the lead researcher was the administrator of the institute and was able to hold workshops, seminars, interview sessions, and class observations whenever needed. Secondly, he was familiar with the teaching behavior of teachers and their socioeconomic statuses.

Procedure
The data were analyzed using the constant comparative method around common themes and categories, which were identified as distinctive features of teachers’ beliefs; the same categories were then compared with teachers' practices. The results of the study showed that the pedagogical beliefs of novice and experienced teachers were represented differently in their practices, and except for teachers’ content knowledge, there were
mismatches between their beliefs and practices considering the other major categories, as shown in Table 1.

Table 1: *The summary of the percentages of mismatches between teachers’ beliefs and practices*

<table>
<thead>
<tr>
<th></th>
<th>Teachers’ Beliefs</th>
<th>Practices</th>
</tr>
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<tbody>
<tr>
<td>Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Novice</td>
<td>79</td>
<td>46.7</td>
</tr>
<tr>
<td>Expert</td>
<td>90.7</td>
<td>85.2</td>
</tr>
<tr>
<td>Assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Novice</td>
<td>77</td>
<td>25</td>
</tr>
<tr>
<td>Expert</td>
<td>80</td>
<td>83.7</td>
</tr>
<tr>
<td>Motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Novice</td>
<td>85.5</td>
<td>33</td>
</tr>
<tr>
<td>Expert</td>
<td>93.7</td>
<td>72</td>
</tr>
<tr>
<td>Content Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Novice</td>
<td>74</td>
<td>80</td>
</tr>
<tr>
<td>Expert</td>
<td>89.5</td>
<td>96.2</td>
</tr>
<tr>
<td>Pedagogical Content Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Novice</td>
<td>74.5</td>
<td>36.2</td>
</tr>
<tr>
<td>Expert</td>
<td>91.5</td>
<td>85.5</td>
</tr>
<tr>
<td>Pedagogical Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Novice</td>
<td>83.5</td>
<td>46.2</td>
</tr>
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<td>93.7</td>
<td>94.2</td>
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After determining the areas of mismatches between the participants’ beliefs and practices, personal practical theorizing process was employed both as a method to make teachers’ practical beliefs explicit and as a consciousness-raising technique to increase teachers’ awareness of their beliefs, thereby stimulating the teachers to convert their beliefs into actual classroom practices.

Personal practical theories (PPT), as a proxy of teachers’ beliefs, were used because they appropriately highlighted reflection on the theory-practice connection and helped teachers think about and articulate their tacit beliefs and make them explicit. Through the process, teachers were allowed to choose what they wanted to reveal about their beliefs in their own words.
As a result of this highly reflective personal theorizing process, teachers’ beliefs were made available for examination. The PPT process was applied in three steps:

In the first step, teachers attended a three-session workshop presented by the lead researcher on reflective practices and specifically personal practical theorizing. PPTs were defined and several examples of different teachers’ PPTs were presented based on the articles about PPTs by Cornett (1990a, b). In between, the discussion sessions were held.

After the presentation, teachers were asked to reflect on and list their personal beliefs and to describe them in detail, including how they see each of their beliefs actualized in practice in the classroom.

Next, they were asked to identify the source(s) of each of their PPTs and were told that there may be more than one source for each PPT. This process typically yielded between four and seven belief statements.

The second stage included data gathering and self-analysis. So teachers could evaluate whether they felt they had good evidence of actually enacting their PPTs in their teaching. Specifically, teachers were asked to provide evidence of whether they carried out their PPTs in their practices, which might be evidenced in observation feedback provided by the researcher.

The third and final stage of the personal theorizing process required the teachers to plan and carry out an action research related to one of their PPTs. In this stage, both novice and expert teachers were asked to find both empirical research and practical information related to one of their PPTs. It was suggested they could choose a PPT for which they did not have good evidence of being enacted but still believed in it strongly, or a PPT they really wanted to learn more about, especially those the researcher found discrepancy about them in putting them into practice in the first phase of the study.

After completing the theorizing process, the teachers’ practices were observed based on the observation checklist prepared and utilized in the first
phase of the study and the pedagogical practices were compared to those in the first phase of the study.

RESULTS
Through the teachers’ personal practical theorizing processes, the tentative categories underlying the participants’ beliefs system that were made explicit in the form of PPTs were extracted. These categories include disciplined and organized teaching, scientific thinking, developmental growth, the concept of language teaching, emphasis on learners’ characteristics, the role of context, fostering communicative competence, and developing learners’ autonomy.

Considering the sources of their beliefs, the novice teachers referred to their experience as learners and the training sessions they participated as the common sources of their pedagogical beliefs. However, in addition to their experience, the expert teachers pointed to their own readings of the reliable materials, their own experience in different classroom contexts, and their own deliberation over the classroom events as being much more helpful than the training programs.

However, after the theorizing process it was observed that the novice teachers’ practices on classroom management, motivation, PCK and pedagogical knowledge became more in line with their pedagogical beliefs. Therefore, it can be stated that personal practical theorizing technique was a useful method in improving novice teachers’ pedagogical beliefs enactment. The novice teachers’ progress in actualizing their pedagogical beliefs after the theorizing process is shown in Table 2.

Table 2: Novice teachers’ observed practices before and after the theorizing process

<table>
<thead>
<tr>
<th>Beliefs</th>
<th>Management</th>
<th>Motivation</th>
<th>PCK</th>
<th>Pedagogical Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre.</td>
<td>Post</td>
<td>Pre.</td>
<td>Post</td>
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To explore the teachers’ path of professional development, the starting point is the teachers’ problem awareness as Fuller (1969) and Fuller and Bown (1975) stated. Secondly, their pedagogical concerns must be detected and their development must be evaluated based on the changes in their teaching concerns. Therefore, firstly, the participants of this study became aware of the mismatches between their beliefs and practices through the procedures conducted in the first phase of the study. They became aware that they could not actualize all their beliefs into practice and that their practices were much different from those of the experts. To prove this difference between these two groups’ views before and after the theorizing process paired sample t-test was run. The mean of their views before the process was 40.52; however, the mean after the theorizing process was 86.87, which shows a significant difference (sig = .002) in their professional development.

Then, their concerns were changed during the theorizing process, as their practices were explicited regarding different aspects of their pedagogical practices in the second phase of the study, after the theorizing process.

Based on Fuller’s (1969) four-stage model of teacher development, and concerning the differences between novice and expert teachers’ professional development, it was observed that the novice teachers were initially concerned with maintaining order and the flow of activities. Through self-assessment and reflection, novice teachers were engaged in the theorizing process and became aware of their frustration in actualizing their beliefs in comparison to the expert teachers. Then, the novice teachers being oriented to the profession, made an attempt to adopt new identities as real teachers within the classroom environment which enabled them to converge their beliefs and practices, become more competent in teaching practices and step into the state of maturity in teaching. Finally, the novice teachers were overwhelmed with a feeling of confidence and security, possessing a good
command of teaching activities and focusing more on student-centered practice.

With respect to the second research question, the sources of the difference between the teachers’ classroom practices and their pedagogical beliefs were investigated based on semi-structured interviews with the novice and expert teachers. The main contextual factors were extracted from the transcribed interviews. Learners’ low background knowledge and motivation, teachers’ low teaching skill, the discrepancy between the activities cited in the teachers’ books and learners’ background knowledge, top down educational system, time limits, teachers’ motivation, and institutional facilities were identified as the factors hindering the novice teachers’ professional developments.

**DISCUSSION**

*A: Sociocultural analysis of teachers’ development*

In response to the first research question which deals with the sociocultural analysis of the teachers’ professional development (PD), firstly the main tenets of SCT, namely mediation, internalization, ZPD and the activity theory, are implemented to discuss the teachers’ professional development. Secondly, in response to the second research question, the contextual factors impeding the TB enactment are enumerated and discussed.

*Employing Mediation to Interpret Teachers’ PD*

According to Johnson (2009) and Johnson and Golombek (2011), sociocultural perspective on human learning is very promising in analyzing the L2 teacher education, since it views teacher learning as a developmental and never ending process. Based on Ebadi and Gheisari (2016), “the problem of incongruence between content knowledge and pedagogy knowledge of English language teachers” can be resolved through the elements of Vygotsky’s sociocultural theory “especially genetic law of development, and the concepts of mediation and zone of proximal development” (p. 12).
In the present study, the teachers firstly were exposed to the scientific concepts as a form of mediational tool, which included the up-to-date research on the paradigms of teacher education, pedagogical hints and techniques. Moreover, based on the classroom observations and interview sessions with the teachers, the scientific concepts that explained their concrete everyday experiences were discussed in the workshops. Through the follow up theorizing process, as explained previously, the teachers were instructed and encouraged to move beyond their everyday experiences toward more theoretically and pedagogically sound instructional practices. The theorizing process mediated the teachers to develop theories emerging from their everyday experience with the scientific concepts presented to them in workshops and the initial training courses they participated in. Therefore, as it was seen, the teachers became capable of transcending from their own context and exceeded the limitations they encountered in their beliefs enactment to function appropriately in other contexts and classes after the theorizing process. Presenting scientific concepts and attaching them to their actual practices at the beginning of the program and encouraging the teachers to theorize their practice and connecting them to the goal directed pedagogical activities mediated their professional development.

Based on the elements of SC perspective, the participants of the present study firstly went through object-regulated activities to construct their expertise by cognitive tools. Through the theorizing process, the teachers were seen to make use of books, articles, databases on English teaching, blogs and social networks to communicate and share their ideas, as the physical mediational objects. According to Shi (2017), these physical intermediaries “fully transform external knowledge of EFL teachers into internal knowledge, stimulate EFL teachers’ positive consciousness and reflection, and promote the higher quality as well as professional development in teaching practice” (p. 1060).

According to Vygotsky (1978), the other type of mediation, other-regulated, necessitated the EFL teachers to seek help from other people or
cultural artifacts. In the present study the other regulated activities involved teachers’ intra-group cooperation and discussion, sharing the professional experience of the expert teachers with the novice ones, and providing the teachers with sufficient guidance by the lead researcher as a more experienced teacher to help them construct their own theories and reflect on them. Finally, as mentioned previously, the novice teachers became capable enough to gain control of their activities through self-regulated activities. The self-regulated activities in the present study comprised the teachers’ reflection on their classroom teaching, teachers’ stimulated recall of their past experience which enabled them to figure out the areas of mismatches between their beliefs and practices and the action research they conducted to converge their beliefs and practices. The theorizing process was a process of externalization of teachers’ beliefs which enabled them to reconceptualize and reconstruct their beliefs system and, in turn, to enable them to develop their professional teaching expertise.

*Employing internalization to Interpret Teachers’ PD*

As it was explicated, the individuals’ knowledge can be developed through the process of internalizing the other or object oriented activities to self-regulated ones. In teachers’ education arena, internalization occurs as the result of the interactions between internal and external causes, which enhances teachers’ professional development.

As it was investigated in the present study, the novice teachers were scaffold to develop their internal capacities in developing their capability to enact their beliefs into practices and enhance their pedagogical practices through internalizing the pedagogical content knowledge. The abstract and decontextualized knowledge transmitted to the teachers in the initial training courses and the experience they gleaned through apprenticing as learners were changed into practical and contextual knowledge based on the process of internalization. The internalization took place based on the participants’ interactions with the lead researcher as the conductor of the program and their peer teachers in the practice community of the institute. Based on the exchange of ideas and the reflective process of theorizing, the participants
became able to reconstruct their beliefs system about classroom management, motivation and pedagogical content knowledge and enhanced the quality of their teaching practice. Moreover, it can be concluded that the type of practices observed after the theorizing process were internalized by the participants as the self-regulated activities since their practices were not a reproductive imitation of the practices recommended by the experts or the researcher.

Although according to Vygotsky (1987), imitation is “the source of instruction’s influence on development”, the participants were seen to be selective in choosing the related instructional points, and management and motivational strategies and were capable in adapting these strategies to the learners’ needs and characteristics (p. 211). As it was described previously, innovations were observed frequently in novice teachers’ classroom practices, which were indicative of internalizing the self-regulated teaching activities consciously.

Furthermore, in the present study the teachers actively participated in the theorizing process as a form of reflective practice, the follow-up action research and the group discussion in the form of expert-novice interaction which help them internalize their pedagogical knowledge. As Shi (2017) stated, the teachers’ participation in the previously mentioned activities empowers the teachers to reconstruct their teaching plans and objectives and consequently enhanced teachers’ competence and enthusiasm in regulating the other mediated activity of teaching, fostered teachers’ autonomy in decision making and developed them professionally. Therefore, internalizing the external interactional forms transformed teachers’ internal mental functions such as knowledge, self-confidence and teaching expertise.

Employing ZPD to Interpret Teachers’ PD

As described earlier, ZPD as the gap between the actual level of development and potential level of development of the individual, as defined by Vygotsky (1978), paved the way for the development of higher mental functions through the guidance of expert, peer cooperation and
collective cooperation. This notion as a fundamental core of SCT was employed to interpret novice teachers’ professional development in the present study.

With regard to novice teachers’ professional development in the present study, scaffolding in the ZPD was done by the mentor or the lead researcher as the conductor and observer of the program, and the expert teachers participating in the study. According to Shabani (2016), mentoring as a model of teacher education is closely related to Vygotsky’s concept of the ZPD. Based on the concept of ZPD, a less knowledgeable person i.e. the novice teachers get engaged in developmental changes through interaction with a more significant other which is the mentor, trainer, observer, and the expert teachers in the present study. The kind of guidance the mentor provided for the novice teachers was in the form of presenting the relevant materials and teaching strategies in the workshops and discussion sessions and the cooperation he had through giving pieces of advice and recommendations. In the same vein, Tharp and Gallimore (1988) defined the mentor's role in scaffolding reflection as modeling strategies for analyzing the lesson, offering feedback on the students' analysis, questioning to elicit reflections that the students would not produce alone, and providing a consistent structure to help students organize and explain their experience.

Moreover, the expert teachers provided content design, demonstrated their teaching experience for a specific subject matter and supported the novice peers to manage the classroom effectively, motivate the learners and achieve the leap of their actual level to the potential level of development. The novice teachers made use of the observer’s feedback to improve their teaching practices and enacted their beliefs. While the scaffolds were provided, the novices were just the consumers or the receivers of the supports; however, they were encouraged to participate actively in a reflective process to internalize the scaffolds and adapted them to their own classroom conditions. The dynamics of cooperative interaction, as Rogoff and Gardner (1984) noted, between the mentor or the expert teachers as a
significant other and the novice teachers as the less knowledgeable or capable peers led to the novice teachers’ development.

In addition to scaffolding, the novice teachers made use of the social interaction patterns to leap the ZPD. In the present study, the novice and expert teachers participated in group discussion and theorizing process to share their ideas and collaborate their teaching experience under the supervisory guidance of the lead researcher. The type of inquiry or action research and the theorizing process employed in the present study suggest that cognitive development occurs in social interactions, as Shabani (2016) mentioned. The kind of collaborative reflective practice utilized helped the novice teachers to achieve the leap of the ZPD. As Vygotsky (1978) contended, only concrete social interactions which are embedded in purposeful activities and directed at achieving specific goals result in higher social functions. The scaffold provided helped teachers internalize the mediational tools discussed earlier which resulted in their professional development. In this activity, the novice teachers teach and learn from each other. In this vein, Lantolf and Pavlenko (1995) noted that “individuals, none of whom qualifies as an expert, can often come together in a collaborative posture and jointly construct a ZPD in which each person contributes something to, and takes something away from, the interaction” (p. 116).

The other sociocultural concepts which aid in discussing teachers’ PD employing the theorizing process in the present study include intersubjectivity, communities of practice, and legitimate peripheral participation.

According to Wertsch (1985), intersubjectivity involves attending a temporary shared social world to perceive and cope with a task which causes the restructuring of the preexisting thoughts and behaviors. In the present study, the participants attended the theorizing process and the follow up discussion sessions which made them share their instructional problems and challenges with each other. This way, as Shabani (2016) mentioned, they are provided with an opportunity to reach intersubjectivity. Thus, the
novice teachers became capable of collaborating with others to link their current level of expertise to a new level. This is in line with Lave and Wegner’s (1991) concepts of communities of practice and legitimate peripheral participation.

Lave and Wenger (1991, p. 96) defined community of practice as “groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (p. 96). The participants of the present study form a community of practice which tried to reflect on their problems in enacting their pedagogical beliefs.

McCafferty, Jacobs, and Da Silvalddings (2006) defined the notion of legitimate peripheral participation as “learning which occurs as newcomers fulfill various peripheral roles alongside more experienced or competent members of the community as they gradually become able to fully participate” (p. 12). According to Shabani (2016), the novice teachers “stand in the periphery making their minor contributions at their best but by lapse of time and acquiring more expertise, they will be able to move toward the center of the community of practice and behave like more knowledgeable old-timers” (p. 8). This movement shows the teachers’ development and ZPD progression toward the expert status.

Employing Activity Theory to Interpret Teachers’ PD

In this part of the study, activity theory is employed as a useful approach for examining how personal practical theorizing could function as a mediational tool to enact teachers’ pedagogical beliefs and consequently foster their professional development. As Hung, Tan and Koh (2006) stated, AT can help understand “the activities that teachers and students are engaged in, the types of physical tools/mental models that they use in the activities, the goals and intentions of the activities and the learning outcomes, and/or the artifacts produced within the sociocultural contexts in which they operate” (p. 42).

In what follows, based on the theoretical underpinnings of AT, the different phases of the present study are explained and the practical applications of this theory are illustrated. As it was explained earlier, in the
first phase of the study, the novice and expert teachers participated in a series of workshops in which the theoretical interpretation of teachers’ development, teachers’ beliefs system, the nexus between beliefs and practices, and finally, the theorizing process as both a consciousness raising technique and a reflective practice to enact teachers’ pedagogical practices were instructed. The interpretation of AT relating to this phase is illustrated and explained as the following.

**Phase 1: The personal practical theorizing design workshop. (Illustrated in Figure 1)**

- First, the subjects who were the novice and expert EFL teachers and who had the motivation for development participated in the activity of theorizing. The participating teachers worked in their community of practice with a diverse teaching beliefs and values.
- Secondly, in this phase of the study, the object of these teachers engaged in the activity of theorizing is extracted.
- Thirdly, the subjects, i.e. the novice and expert teachers, were part of a practical community which involved the group of teachers in the micro context of the FULC and the macro context of the whole EFL teachers who tried to be professionally developed as their goal in their practices.
- Fourthly, the rules underlying the mentioned community of practice referred to the teaching rules and regulations that EFL teachers needed to comply with in the institute in the path of professional development. These rules involved the teachers’ commitment to learners’ success and achievements, institutional regulations and administrative constraints and personal commitment to promote the teachers’ professional development.
- Then, in this phase of the study, the effective mediational tools, as discussed earlier, were the workshop contents, handouts, articles, and course books as the physical tools which were presented to the novice and expert teachers. Moreover, the demonstrations of expert teaching techniques, assistance offered by the experts and the action
research done by the novice teachers were regarded as the symbolic mediational tools.

- Finally, the division of labor was related to the various roles of the lead researcher as the conductor of the program and a significant other, the expert teachers as more sophisticated colleagues, and the novice teachers as motivated individuals to develop professionally.

Figure 1: The schematic pattern of activity theory for the first phase of the study

Phase 2: Employing PPTs for teachers’ beliefs enactment: (Illustrated in Figure 2)

In the second phase of the study, as it was discussed, the researcher made use of the teachers’ PPTs and the follow-up action research to make them aware of their beliefs system. The researcher also discussed the observed areas of the discrepancies observed between their beliefs and practices to empower the teachers to converge their beliefs into practices and to help them step into the path of professional development. Therefore, to illustrate this phase using the AT, the subjects are the novice and expert teachers in the community of the EFL teachers with definite rules and regulations in the
community of practice with the specific division of labor. However, in this phase, the PPTs created in the first phase of the study and the follow up action research were employed as the mediational tools to enhance teachers’ awareness of their beliefs system, empowering them to enact their pedagogical beliefs as the object of the activity system. Therefore, this object was aimed to lead to the teachers’ professional development as the outcome of the activity system.

Figure 2: The schematic pattern of activity theory for the second phase of the study

The models depicted show a series of linked activity systems within which the knowledge and expertise of content and pedagogy possessed by the novice and experienced teachers to create a tool, namely, their PPTs, were illustrated. These tools mediate the teachers to become aware of their pedagogical beliefs system and enabled them to enact their beliefs into practices. As it was discussed, through the awareness raising technique and reflective practice in the form of action research teachers developed professionally. Therefore, this study contributed to understanding how community members involved together in activity systems around teacher development interacted.
**B: Contextual factors impeding TB enactment**

In line with the present research objectives in determining the existing contextual factors hindering or supporting teachers’ beliefs enactment, this part of the study discusses the existing contextual factors enumerated by the participants of the study which hindered their beliefs enactment. According to Kagan (1992) and Pajares (1992), TB should be studied within a framework that recognises the influence of culture. Therefore, Vygotsky’s sociocultural view made a significant contribution to teachers’ professional development with its emphasis on the role of social context. Likewise, Wenger (2007) assumed teachers’ learning as a social practice which does not occur in a social vacuum. According to Wenger, the teachers’ psychological functions, skills, competence, knowledge, and their attitudes toward students are shaped in the context in which they are teaching. Likewise, Barnes (1992), Hamilton and Richardson (1995), and Olson (1988) argued that TB and practices cannot be examined out of context and specified the constraints and opportunities which may arise from sources at various levels, such as the individual classroom, the school, the principal, the community, or the curriculum.

As discussed earlier, it was confirmed that teachers’ classroom practices were somehow different from their pedagogic beliefs even after the theorizing process. Therefore, the sources of this difference were investigated based on semi-structured interviews with the novice and expert teachers. The main contextual factors were extracted from the transcribed interviews and are explained in the following sections.

1) **Learners’ low background knowledge and motivation**

Learners’ low background knowledge, their diversity in terms of socioeconomic background, and low motivation in learning were identified as interfering factors hindering teachers’ beliefs to be actualized. Teachers emphasized that most of their learners were different in terms of their background general knowledge, which made them unable to be involved in discussions that necessitate them to talk about their opinions on topics. The teachers referred to family structure and the parents’ degree of literacy as
the determining factors for the learners’ low background knowledge. Teachers mentioned that those learners coming from families, who are literate, assist their children in their learning activities, and provide them with enough facilities such as computers or the internet services to gain more knowledge.

Moreover, teachers believed that some learners’ low level of motivation in comparison to those who pursue a definite objective in language learning makes the classes heterogeneous for the teachers to perform all the required teaching procedure in their classrooms.

2) Teachers’ low level of teaching skill

Teachers were not all equal in terms of their teaching expertise. Handling all the activities they were instructed in teacher training courses and following their teaching manual necessitate enough skill and knowledge. Some of the teachers declared in the interview that they were not familiar with all the teaching options and techniques, and they were not motivated and creative enough to search for them to manage the sort of diversities they witnessed in their classroom. They stated that the techniques presented in the training courses and those suggested in the teaching manual are kind of one-size-fit-to-all prescriptions which do not have the potential to be executed in the classroom. An example was the games presented for kids’ classes. In most cases, learners are not familiar with rules of these games or they are not part of their cultural repertoire. Replacing these activities with those with which they are acquainted needs teachers’ creativity and teaching knowledge. Many teachers expressed the desire to implement more communicative tasks, but they appeared to lack the expertise and the confidence to actualize them, fearing classroom management problems might emerge.

3) Discrepancy between the activities included in the teachers’ books and the learners’ background

Language teaching textbooks are usually authored, designed and published by European countries following the criterion of those societies and do not take into account the cultural and social circumstances of local contexts. As
mentioned above, adapting procedures to the local classroom environment needs teachers’ innovation.

4) Educational system
The educational and institutional system seems to be of top down structure. Most teachers objected to the regulations and conventions administered by the educational system which confined teachers’ freedom and innovation.

5) Time limits
Managing a learner-centered classroom and performing all the required procedures need sufficient time. Teachers made mention of lack of enough time to cover all the materials properly.

6) Teachers’ motivation
Teachers will avoid teaching positions which would demand more effort and take up more of their time. Almost all the teachers interviewed, explained that they had chosen their current teaching positions due to financial reasons. Almost all of them already had at least one other teaching position. Some of the teachers were holding three teaching positions in three different institutions as well as handling private teaching, which meant teaching from morning until midnight, seven days a week. Being tired of such heavy workload and the corresponding low payment cause them not to have sufficient motivation for offering innovative, energetic and satisfactory teaching practices. This relates to what Crookes (1997) refers to as the psychological separation between teachers as human beings and teachers in their working environments. When teachers have to “work in conditions in which they cannot maintain professional standards, and are unable to derive...satisfaction and opportunities for personal growth”, it is hardly surprising that their professional practice is not at the optimum; and that for these teachers, survival rather than pedagogic concerns are the priority (p. 74).

7) Institutional facilities
The teachers mentioned that the institutions do not provide enough teaching facilities for teachers. Teachers complained about lack of facilities such as CDs, computer, copies, and CD players when they are needed. When
teachers wanted to do their own activities that they believe to be suitable for that context, lack of access to the above-mentioned teaching aids impeded their beliefs to be actualized.

The mismatches between teachers’ stated beliefs and their observed classroom behaviors confirms Pajares’ (1992) view according to which beliefs are somehow an unreliable indicator of actual practice. In line with the results of the present study, Paraje referred to several factors such as conflicting beliefs, the degree of teachers’ professional motivation, teachers’ personalities and other unavoidable situational factors to be responsible for the mentioned mismatches. In the same vein, Solomon, Battistich and Hom (1996) enumerated school contextual variables such as the socio-economic level of the school as an affective factor influencing teachers’ instructional practices. They mentioned that TB do not exist in isolation; however, they are partly moderated by contextual school factors and personal characteristics. Likewise, in a study conducted by Deemer (2004) in secondary classrooms, it was found that the instructional practices of teachers were strongly determined by the culture of the school.

The results of the present study shed light on what Borg, Riding and Falzon (1991) concluded. They referred to work overload, time restraints, and problems with child behavior, working conditions, relationships with colleagues, lack of resources, and the physical demands of teaching as the stresses that affect teachers’ performances. Likewise, Kelly and Berthelsen (1995) identified similar sources of constraints for teaching practices such as time pressure, children’s needs, non-teaching tasks, personal needs, parents’ expectations, and interpersonal relationships. Blase (1986) emphasized time constraint as one of the most important hindrances in enacting TB. Furthermore, Pedretti and Hodson (1995) found the structure of the school system, lack of time, an over-crowded syllabus, and inadequate facilities as some of the hindrances for TB enactment. Similarly, Cornbleth (2001) tend that a bureaucratic school climate with an administrative emphasis can constrain meaningful teaching and learning.
Some of the mediating factors, mentioned in the literature, which hinder teachers’ beliefs enactment are end-of-the-course tests, and class size (Goelz, 2004); student characteristics, teacher characteristics, school environment characteristics, and conditions of service (Okebukola & Jegede, 1992); external factors such as life experiences, educational experiences, classroom events, school curriculum requirements, administrative demands, teachers’ theoretical knowledge, educational policy, family and peers and internal factors such as personal practical knowledge, culture, values, and personality (Maxion, 1996); bureaucratic school climate with an administrative emphasis on law and order (Cornbleth, 2001). The involvement of the large categories of the factors mentioned above in teachers’ beliefs enactment lends support to the findings of the present study.

CONCLUSION AND IMPLICATIONS
As described in detail, the main tenets of the sociocultural perspective were employed to analyze the teachers’ professional development through a theorizing process. To sum up, the novice and experienced teachers were the subjects who participated in professional development activity mediated by workshop materials, PPTs, action research and other mediational means to develop their professional development under the constraints of institutional rules and other norms. In this process, the participants of this study, i.e. novice and expert teachers, researchers, institute environment, students and other members of the community of practice are involved in the division of labor. The external recognition of the mismatches between teachers’ beliefs and practices transforms into individual awareness of one’s beliefs and practices through internalizing their personal practical theories to achieve the cross of the ZPD. This improved the EFL teacher’s professional development by raising teachers’ awareness in enacting their pedagogical beliefs.

Considering the contextual factors hindering teachers’ beliefs enactment, learners’ low background knowledge and motivation, teachers’ low teaching
skill, the discrepancy between the activities cited in the teachers’ books and learners’ background knowledge, top down educational system, time limits, teachers’ motivation, and institutional facilities were enumerated.

The results of this study imply that, the teacher preparation programs should provide suitable chances for pre-service and in-service teachers to examine their beliefs through sharing their beliefs with others in a sort of reflective practice, explained in this study, to become aware of the discrepancies between their belief systems and their actual classroom practices. The mentioned theorizing process as an awareness raising technique can be a good example of engaging the teachers in the process of life-long learning, reflecting and developing professionally.

References


