

Journal of English Language
Teaching and Learning
No. 15, 2015

Cognitive Aspects of Teacher Expertise in ELT

Elham Yazdanmehr

Ph.D. Candidate of TEFL, Tarbiat Modares University of Tehran
(Corresponding author)

Ramin Akbari

Associate Professor, Tarbiat Modares University of Tehran

Abstract

The present paper seeks to investigate the cognitive abilities of expert EFL teachers. To this aim, the existing literature was examined and ten cognitive themes were derived which were further investigated through interviews conducted with ten academics, teacher trainers and exemplary teachers of the field in the Iranian context. The ten extracted themes were attested by interviewees' comments. They include: fast pattern recognition, selective attention, holistic perception, superior memory, fast information encoding, anticipation power, perception of teacher's role, awareness of situation-specific class events, and awareness of their knowledge, linking prior and new knowledge. These themes are further explained and discussed along with extracts of the actual interviews. It is recurrently reminded that these cognitive issues are just one aspect of teaching expertise in ELT and the whole idea is part of a model of expertise being constructed which consists of n factors only one of which is teacher cognition.

Keywords: Teacher expertise, ELT, Cognition, Cognitive abilities

تاریخ وصول: ۹۳/۱۰/۲۴ تأیید نهایی: ۹۴/۱/۱۷

E-mail: e.yazdanmehr@modares.ac.ir

E-mail: akbari_ram@yahoo.com

Introduction

Differentiating experts from non-experts in the realm of teaching appears to be a perplexing and controversial job. Its perplexity lies in the multidimensionality of issue. In applied linguistics the task seems to be even more demanding as no comprehensive research has been conducted so far to deal with the topic of expertise in teaching English as a second or foreign language. Overall, this notion of expertise in teaching can be contrived as two domains: a mental/knowledge-based domain and a practical one. Each of these two domains can be comprised of sub-aspects. The former, for instance, can be comprised of teacher cognition, teacher reflection on teaching, teacher assessment of learning, decision making, etc. the latter could be further examined as class management, discipline control, task management, content representation and so on. This major categorization does not imply a non-overlapping division but instead is very well aware of the interrelationship and mutual effects of all such aspects. However, firstly and most importantly, we need to know each aspect on its own before we can take a further step and delve into their interrelationship. The present paper intends to be narrowed down to the cognitive aspect of teacher expertise in the field of English language teaching.

Following Borg (2006), teacher cognition is defined as an amalgam of what teachers know, believe, and think, which has been traditionally described by constructs such as knowledge, belief, attitude, value, perception, and rationale. Teacher cognition, on the other hand, is an overarching term that is able, in Borg's (2006) words, "to embrace the complexity of teachers' mental lives". Furthermore, the term is beginning to be used more as a common frame of reference as the research domain has developed. Teacher's cognitive ability guides teachers' instructional practice. In the case of expert teachers, it opens up ways to see what they observe when they are in class. The assumption is that an expert teacher's perception of a class, its students and the whole instructional context diverges from that of a novice. An expert's schemata, mental power and memory are assumed to be different from those of a novice. The major assumption

is the fact that their expert performance is for sure influenced by their special perceptual and cognitive ability.

Background

Researchers in teacher cognition have inquired into teachers' mental world as opposed to their instructional actions, asserting that teaching is a complex act and should be recognized as such (e.g. Clandinin, 1985; Elbaz, 1981), and that studying teacher cognition can contribute to teacher education (e.g. Almarza, 1996; Borg, 1998; Freeman & Johnson, 1998; Johnson, 1994; Woods, 1996). Most of the studies in this research domain have approached teacher cognition via examinations of instructional practice in general (e.g. Almarza, 1996; Freeman, 1993; Gatbonton, 1999; Golombek, 1998; Johnson, 1999; Numrich, 1996; Woods, 1996) or specific pedagogical fields of inquiry such as grammar teaching (e.g. Basturkmen, Loewen, & Ellis, 2004; Borg, 1998; Johnston & Goettsch, 2000), literacy instruction (e.g. Diab, 2005; Johnson, 1992), and decision-making processes (Johnson, 1992; Smith, 1996; Tsang, 2004).

What distinguishes the present research from the previous body of research on the notion of cognition is exploring this issue among *expert* teachers of *English* as a foreign or second language. The long-lasting portrayal of teachers as passive recipients of research findings, and practitioners of others' ideas and suggestions is refuted in this study. The main assumptions of this study centered on expert teacher's cognitive ability include the following:

1. The term expertise in teaching not only involves superior performance, but also superior and particular mental/perceptual capabilities.
2. Expert superior cognitive abilities influence and are influenced by their outstanding performance.
3. Expertise in teaching is not a state to reach once and for ever. It is a developing process which is characterized by dynamicity, change and growth.
4. Since expertise in teaching especially in applied linguistics has been scantily explored, what is presented here as different aspects of expert teachers' cognition are by no means all the delicate aspects

with their idiosyncrasies. There are, for sure, hidden aspects yet undiscovered, which by no means imply that they are undiscoverable.

What we sought for in this study was the peculiarities of expert teachers of English' perception of what actually takes place in class. We believe that the delicacies noticed by exemplary teachers of English language are different from what novice colleagues perceive. With this concern a myriad of questions occur some of which can be:

- What is their perception of their role in class?
- What is their perception of classroom events?
- How do they recall classroom episodes (events)?
- What is their perception of students' reactions in class?

The majority of previous studies have focused on the superior performance of exemplary teachers, those who have obtained a social recognition in their community of practice; those who are nominated by the school or institute they work for as an exemplary and outstanding teacher; those who have been rewarded occasionally for their noticeable success in teaching; those who are necessarily experienced, motivated and interested in their job; those who are known to be knowledgeable in the realm of English; and finally those who are occasionally chosen to act as mentor teachers or even supervisors to guide or observe other colleagues. In this study, we hope to find out the perceptual world of such teachers and elaborate on them.

Methodology

Our data gathering was done primarily in two steps. Initially, we reviewed prior research concerning all studies in ELT which investigated some aspect of expertise in teaching. The term 'expertise' is what we prefer to use in this study and we intentionally do so, as this paper is actually part of a more comprehensive research work (a Ph.D. dissertation) which aims to define expertise in teaching English language. The model of expertise being portrayed in that greater work is a multi-dimensional one, inclusive of knowledge base, personality traits, cognition, experience, reflection, problem solving and so on. As you can observe, cognition is merely one dimension of expertise in

teaching, though a basic and determining one. We perused the existent literature on different aspects of language teaching of novice versus experienced teachers. A variety of terms with a common core were used to characterize what we here call 'expert' teacher including 'outstanding', 'exemplary', 'model', 'mentor' or 'experienced' teacher. We sought for any mention of their cognitive, perceptual and schema-based cues. As it can be seen, this investigation is basically of an exploratory type.

The second step was to conduct interviews with 10 individuals who were either teacher educators, university professors of applied linguistics, mentor teachers or supervisors of well-known private language institutes as well highly recognized and experienced EFL teachers. Their demographic information is presented below:

Table 1
Demographic information of interviewees

Feature	AGE		SEX		EDUCATION		EXPERINECE	
	30-40	>40	MALE	FEMALE	B.A.	M.A./Ph.D.	6-10 ys.	>10
n.	6	4	8	2	2	8	5	5

We aimed to see whether the themes we extracted from previous studies could be confirmed or completed by the views of people who were professional in the realm of teaching English or not. As formerly mentioned, some of the interviews were teacher educators who were highly educated as well as experienced in the field. The study was set in Iran. All the interviewees were Iranian; their first language was Persian and they taught English as a foreign language. The university professors taught applied linguistics to M.A. and Ph.D. students of TEFL. They were very experienced as well as knowledgeable in their job. Mentor teachers worked at private language institutes. They were both experienced and highly observant of other teachers. They were more like walking checklists! Observing every teacher nominated as an expert teacher was doomed to be impossible for us. Obtaining

mentor teachers' and teacher educators' perspectives who were permanently dealing with teachers of varying skill and prominence sounded to be more fruitful and sensible.

Interview sessions were pre-scheduled and conducted as planned during work-day time and in face-to-face meeting. The purpose of inquiry was initially revealed to subjects and subsequently, and just then the questions were presented. All questions and answers were in Persian (the native language of interviewer and interviewees) and were also tape-recorded for prospective content analysis. The whole session could be summarized as:

1. Revealing the purpose of inquiry
2. Inquiry about the interviewee's background
3. General questions about characteristics of an effective and efficient teacher of English
4. More specific questions

It was attempted not to direct their responses in any desired way. However, when necessary they were asked about details. Interviews took between 15-20 minutes.

The review of previous studies and the responses made to interviews were then analyzed for their content. Particularly in the former case, we came across a number of recurrent themes which were pinpointed several times, in different words, in different studies. Salient enough, they became our main findings and most of them were further attested to by interviewees. Interviews were brief and they mainly turned out to confirm what we construed from other studies, rather than adding to them.

Result and Discussion

As concerning the cognition, schemata and perception of expert teachers of English, a perusal of previous studies and models on efficient, successful and exemplary language teaching guided us to 10 main themes:

- Fast recognition of patterns and meaningful interpretation of them

- Selective attention to class events
- A holistic perception of class events
- Superior long-term and short-term memory
- Fast encoding of new information
- High anticipation power of decisions made and students' reactions
- Perception of one's role as a professional and a facilitator of learning
- Awareness of the situation-specificity and context-dependence of class events
- Awareness of what they know and what they do not know
- Forming connections between prior and new knowledge

Mind you that all these factors are under the main theme of an expert English language teacher's cognition and schemata. They can be, therefore, related to each other. Each theme is, though, discussed individually in the following:

Fast Pattern Recognition

According to Gruber (2001) and Berliner (2004) expert teachers have quick and accurate pattern recognition capabilities. Because of their experience as teachers, experts are able to identify meaningful and recurrent patterns in classroom events and can interpret them meaningfully (Tsui, 2003 & 2009). Their cognitive schemata are, therefore, more elaborate, interconnected and accessible than the novices' and their pedagogical reasoning skills are more developed (Borko & Livingstone, 1989). Their pattern recognition occurs fast and automatically and effortless as a result of extensive practice (Hattie, 2003).

With this regard, here are some comments of the interviewees:

“ I do witness, when I observe an old hand's class, a kind of dominance in teacher's perception, how he looks at students, how he gets what they feel, whether they have got the point or not without even saying. From how they sit and how they look, it's as if the teacher gets a total meaning”
(mentor teacher)

“Even sometimes some scenarios are quite predictable since they have happened before or that we have seen them happening so frequently that they seem very familiar. Then we know how students feel, either they agree with us or not; even whether they like us or not. We seem to be capable of understanding and interpreting these events” (experienced teacher)

“It all resides in their mind and is not achievable if not for years of experience...and attention of course. When an event is recurrent enough, the whole schema is strengthened and its retrieval gets faster and easier and even as you say effortless. An expert teacher seems to see things that a novice might see but not salient enough to be even noticed or interpreted. In the case of an expert, however, it’s certainly the other way round” (university professor of applied linguistics)

Though not mentioned by the interviews, this pattern recognition which is mainly a cognitive ability is also linked to metacognitive and motivational abilities, as maintained by Opre, Calbaza-Ormenisan, & Opre (2011). A demotivated teacher who has taught for years would not recognize patterns in students’ behavior or class events as fast and meaningfully as a motivated, well-satisfied and careful teacher who taught for the same number of years.

Selective Attention

According to Shanteau (1992), expert teachers have highly-developed perceptual/attentional abilities. As Tsui (2003, 2009) maintains, expert teachers are more selective about what they attend to in the classroom. They know which class event is worth attending to and which is not intuitively. So, not all class events are of the same value of attention to them. Concerning this matter, here are part of the comments made by the interviewees:

“A novice usually takes a great care about every movement in class and every single word students say that may be because they want to get a feedback about their own teaching. Learning scenarios are new to them, and they mostly

do not have the slightest idea how things would turn out to be. So they take everything as important and ponder upon it. If you wasn't to know my stance, I guess that is the right thing to do for a true novice. But in the case of a professional teacher, things seem to be less complicated. For me as an instance, not everything seems to be of the same value in class. Sometimes you know that a little fact if not taken seriously would lead to a big chaos. I always advise teachers to pay enough attention to what goes on in their class, though I know not everything is worth being concerned about. The fact is, I just want to be on the safe side" (institute supervisor and class observer)

"I try to be careful in class. I want my students to know I care about them. At least I listen to them, even to their complaints about irrelevant things. I know most of what they nag about is out of my control and even not worth wasting time listening to, but I just want them to see me in their boat and feel more comfortable with". (experienced teacher)

"To me it seems that a successful teacher is very well aware of the limited time of the class and is adept at managing his/her time and attention. Sometimes, especially at the outset of one's job, they care too much attention to everything. Condemn it? That would be the last thing I would ever do. In our training courses, we keep telling them to notice this and that, take care of this and that and then how can we expect them to be selective in budgeting their attention? I think, it only takes time for them; I mean it is something they need to learn through practice and personal experience. So I let this time pass; I do observe their classes and guide them all throughout. But finally it is them and their students during a whole term when I am absent and they decide as their experience and logic guides them". (teacher educator)

It appears that field specialists are well aware of the role of attention in class as a characteristic of an expert teacher. However

whether this attention should be all inclusive or selective was more open to controversy.

Holistic Perception

According to Hogan and Rabinowitz (2003), novices and advanced beginners perceive classroom events through actions of a teacher, whereas experts realize the importance of scanning both student and teacher actions to represent the classroom dynamics. Expert teachers are capable of scanning an entire room simultaneously to better understand how classroom events are unfolding. This is also referred to as multidimensionality (Hattie, 2003). Expert teachers are more effective scanners of classroom behavior. They make greater references to the language of instruction and learning of students, whereas non-expert experienced teachers concentrate more on what the teacher is doing and saying to the class. Novices, concentrate more on student behavior (Hattie, 2003).

Some of the comments made by the interviewees with this concern are presented here:

“Unconsciously new teachers focus more on themselves. They are self-conscious about the consequences of every single word they say or action they take. It is common and not far from expectation. On the other hand, more experienced teachers and especially exemplary ones tend to have a more inclusive perspective. Maybe through years of practice they learnt how to take multiple facets of the class into account together, students’ reactions, the atmosphere of class, time limitation, facilities and any other related source” (a mentor teacher)

“In our training courses we teach them not to rush into conclusion. We keep telling them to think twice before blaming any single individual or factor responsible for a fault. They are advised to take into account the context and all related features to a particular event. As a rehearsal we expose them to samples of problematic class scenarios and ask them to analyze them and think of the underlying reasons

involved. Then they share their comments and learn how to be aware the multiple interactions and correlation of several variables and consider them all in their decisions. This is what efficient and experienced teachers do almost all". (ateacher educator)

It can be inferred that, as also confirmed by Cellier, Eyrolle, & Marine, (1997), taking into account contextual variations and accessing a rich repertoire of strategies and appropriate mechanisms for assessing and applying them are central to experts' decision making.

Superior Memory

As Glaser and Chi (1988) maintain, expert teachers have a superior memory for information in their domain. They have a better short-term and long-term memory. Experts showed, by Hogan and Rabinowitz (2003), to exhibit a consistent and easy ability to recall both specific and general events. They were able to specify student instances that influenced their chosen instructional or management strategies.

Concerning expert teachers' memory, part of the interviewees' perspective is presented here:

"As in my own experience, I remember my best English teachers; they are one or two. The fact that I remember them is not surprising, but after years when I saw one to my surprise he could know even my first name. It felt good; it had a message for me. He was not only very knowledgeable and outstanding, but his sharp memory was on the top. I wish to be like him". (ayoung model teacher)

"It takes time and practice to learn that you need to have a history with your students. It includes an awareness of their conditions, interests, personal strategies and the like. If you keep forgetting this background, it's as if you meet them anew every session. When I remember particular learning situations, I remember all details possible. If the case was a problematic one, I tend to remember it longer, learn from it

and prevent it from happening again”. (highly experienced teacher)

“The power of recalling events is for sure facilitative for effective teaching. Mental alertness is a relevant issue too. On the whole, an effective teacher, I think, should be mentally prepared for class”. (a university professor)

Memory power seems to be generally a privilege for all professions including teaching. A myriad of variables are involved in creating class events which are interconnected and continuous in nature. Having a superior power of memory can help to discover these underlying links and get a more sound perception of what actually takes place in class. Retrospection which requires powerful memory is also considered as an effective evaluation tool. The wash-back effect it can have on the quality of teaching should not be undermined.

Fast Information Encoding

Another cognitive ability often attributed to expert teachers is their fast encoding of new information (Cellier et al., 1997). This is evidently a highly distinguishing characteristic largely lacking in novices. How this ability is created and developed can be widely discussed. Meanwhile, care should be taken not to mix this issue with inference-making and diagnosis strategies associated with decoding ability.

The general questions did not lead the interviewees to refer to this cognitive ability as possessed by expert teachers. However, once they were directly asked what they would think of an expert teacher’s capability of encoding new information and how it differed from that of a novice, part of their responses were as the following:

“I think this makes a big difference between an inexperienced teacher and an expert. This is not part of what I could train them to do in the training course, I know. It is closely linked to their other cognitive strengths such as alertness or attention. Years of experience is the key factor, as well” (a teacher trainer)

“You were right to notice it now that I think about it. There is little time wasted thinking about how to say what I want to say or teach. There are times when students abruptly ask you questions totally irrelevant to what you expect. It is not easy to improvise. Your brain immediately gets alert and looks for the right information. I am sometimes surprised how it takes place rather miraculously, but it does. And you find the right way, if not the best way, to present that piece of information”. (an expert teacher)

“It can have to do with the well-grounded and comprehensive schema they develop during years of practice. It is the matter of making connections between old and new information and in fact neurons know how to do it better than us and even before we can imagine how. There is no such a thing as a totally new piece of information. It is just that the links are weaker. For an expert, there are many of those similar questions or teaching scenarios over there in mind. And once there is a need to present a so-called new material, answer or information, they summon up these links faster than one can imagine and then the whole episode seems to take place miraculously fast”. (a university professor)

Although the interviewees did not mention this cognitive ability before they were directly asked about, it appeared that they all agreed with the superiority of this function among expert teachers over non-experts.

Anticipation Power

Experts have a more global and functional view of a situation and take a wider range of data into account in diagnosis. They operate through a limited number of assumptions that include the most relevant information, and account for possible side or spin-off effects through inference and anticipation (Cellier et al. this anticipation power also guides them through class management. As maintained by Lewis and Sugai (1999) expert teacher take a more advantage of preventive rather than reactive procedures in class to establish a positive class

atmosphere where the teacher focuses on students who behave appropriately.

Now let's consider some of the interviewees' comments with this regard:

“The way they are in control of their class attests to their efficient manipulative power. But when you think about what lies beyond that power, you again trace it back to their experience. On many occasions they seem to know what is gonna happen, what is gonna be said. This is part of what novices lack”. (a mentor teacher)

“Experts know their students better. This knowledge helps them to predict their actions. When you already know about the context, handling the class becomes easier”. (a class observer)

“My students sometimes notice it too and wonder how I can already know what they are about to ask about. A little glance at them tells me a lot. I always have alternatives in mind like flashlights, one of which starts glimmering in each particular situation”. (an experienced teacher)

“I agree with it too, with this feeling of intuition that develops in practice. You come to know who you work with, their obsessions, their proficiency and their background. It does not develop overnight of course”. (a university professor)

Evidently, our participants viewed professional experience and practice as the origin of expert teachers' superior anticipation power. According to the literature, novice teachers are more reactive in class whereas experts are more preventive even in discipline control.

Perception of Teacher's Role

A very important issue is teacher's cognition of his/her role in class. An efficient teacher, according to Moallem (1998), has a good sense of who she is and who she wants to be. She takes her role as a teacher very seriously and looks upon themselves as a professional. They

think teaching is a complex and intellectually demanding task even under the best circumstances. They believe that a teacher should not be a mere disseminator of information, but as a facilitator instead who helps students find the information. They view teachers as the creator of learning environment and the student as a person who learns as a result of that environment (Moallem, 1998).

All the interviewees showed an interest in this issue and viewed it as an important factor in teacher's life. Some of their comments are:

“It does matter how the teacher sees himself in class. I see myself responsible for a group of students' learning. They are different and I know this difference makes it difficult. But I know it is my job to make them learn and if there is a failure it means I missed a point”. (an experienced teacher)

“Many colleagues see themselves as a whole box of knowledge and learners as an empty container to be filled with. But the reality is different. I myself favor the humanistic approach. Teacher should view himself and students as whole persons. He is not the knower of all and the students are not like blank slates to write on”. (a university lecturer)

“I see my role as a facilitator of learning. I am not to tell them everything in class. They should learn to take control of their learning. They are to feel responsible for their own learning. I will just guide them through the way”. (an expert teacher and mentor teacher)

“I even think how a teacher sees himself is more important than how he sees students. If students can sense the teacher is backing them up, they get motivated and confident. So I view teacher's role as a supporter, as a companion in students' learning”. (an experienced teacher)

“A good teacher is like a good friend, and sometimes even becomes really close. If this distance between teacher and learners is not reduced, students do not even feel comfortable sharing their problems and questions. Most of

these problems remain unsolved forever”. (an exemplary teacher)

What we inferred from interviewees’ accounts was that they focused more on affective and personality traits of a good teacher such as feeling responsible, friendly, committed, etc. They were dismissive of the mere transmission of knowledge as teacher’s role and approved, instead, of facilitation of learning and guiding students along their apprenticeship as the main job of an effective teacher’s.

Awareness of Situation-specific Class Events

As Hattie (2003) puts it, expert teachers are more context-dependent and have high situation cognition. That is when experts classify learning scenarios, the categories they create are more dependent on existing context, surrounding setting, or embedded in particular circumstances. Experts are more dependent on context than experienced non-experts. As also described by NBPTS (2012) expert teachers show more context-sensitivity in their problem-solving. They are careful in generalization and consider exceptions and easily adapt themselves and their decisions to them. According to Hardreand Chen (2005), expert teachers respond flexibly to the expressed needs of a particular situation rather than merely delivering pre-planned instruction verbatim.

On this issue, parts of the interviewees’ accounts are presented as follows:

“I observed my teachers’ classes and asked them questions. I see them in different situations. I see how they sometimes act differently from what I expect. Once I ask them why, they explain it was necessary on that particular occasion. It shows that they pay attention to every little thing and do not just follow what they always do”. (a mentor teacher)

“It is somehow related to creativity too. In new situations, experts do new things proper to the situation. Sometimes they crack jokes to soften the climate or to buy more time. They

think very fast. Maybe their experience helps them too and tells them what to do now". (a teacher trainer)

"Every time you go to class it's as if it is the first time. You can never feel there is a fit-to-all prescription. New students, new terms, new schools, new materials all need new thoughts and plans. Every time you should be alert. Expectations are different. Sometimes I see myself as an elastic band, you know". (an experienced teacher)

Interviewees agreed that a conspicuous cognitive ability of an expert English language teacher is an awareness of idiosyncrasies of classroom. Such cognition leads to a professional, context-sensitive performance based on a productive needs analysis and a promising learning outcome.

Awareness of their Knowledge

On the one hand, there is the notion of knowledge, its types including subject matter knowledge, curricular knowledge, pedagogical content knowledge, etc. while on the other hand there lies the awareness of one's knowledge. The literature is fraught with the former while the latter is as important. As described by Moallem (1998), a good teacher has a good sense of who she is, what she knows and what she hopes to achieve. Glaser and Chi (1988) also pinpoint this characteristic that expert teachers possess a better awareness of what they do and what they do not know. Interviewees did not mention this ability up until they were asked about it, and just then their remarks were scanty:

"They don't pretend, I feel. I mean the best teaches are modest too and confess they do not know the thing they really have no information about. They are honest to themselves and their students. They seldom make mistakes. And once they do so, they accept it, admit it and try to make up for it". (a university instructor)

"I think an expert teacher cares about how much he knows. He wants to improve his knowledge...knows his strengths and weaknesses of whatever sort they are. He is not afraid of admitting them". (a supervisor)

“Yes I think that’s a good point. After years of experience experts develop good knowledge. And I think that’s very conscious. They know what they need to learn more and how to do it”. (a teacher trainer)

Why the interviewees did not self-initiatedly refer to this ability in response to the general question “What cognitive abilities do you think an expert teacher of English language possess?” could be the same reason why the literature is also meager with this concern. Upon hearing the concept of an expert teacher the first image which sparks up is of an astonishingly knowledgeable person. The extent to which one is aware of the depth and quality of this knowledge is tapped on less.

Linking Prior and New Knowledge

Experts’ enhanced understanding and behavior are assumed to stem from their highly developed schemata, defined as abstract knowledge structures that summarize information about many particular cases and the relationships among them. These advanced schemata enable experts to process classroom events and to understand them in ways that are more elaborate, interrelated, and accessible as compared to novices (Rich, 1993). Advanced schemata are especially important to facilitate what Shulman (1987) calls “pedagogical content knowledge”, the blending of subject matter and pedagogy into an understanding of how knowledge is organized and adapted to meet the needs of diverse students.

As Hogan and Rabinowitz (2003) found out in their study, their expert teacher subjects perceived the leaning process through a cognitive lens, explicitly creating connections between prior and new knowledge. With this concern our interviewees remarked:

“Expert teachers are full of experience. They know a lot. They learned them in years. Their mind is sort of ready to face new things and find similarities between them and what they know already. I don’t think novices are very skillful in this because their experience and knowledge is limited. What can they link their new challenges to?” (a supervisor)

“In connectionism theory we have it too. New information is associated or accommodated to pre-existing knowledge. Nothing is left in a vacuum in mind. Experts have a rich pool of prior knowledge that they achieved through years of experience. This knowledge is ready to accept new loads of knowledge. And when new information appears it very fast gets linked to them”. (a university professor)

“Hardly ever now do I face a totally new situation. You are right. My mind gets activated automatically. It looks for similarities often. It is done very fast. I don’t even think about it. My mind finds its way”. (an experienced teacher)

“I teach them, when they want to make any decisions to think about it deeply. To remember similar contexts and try to make connections between or among them. This is what an expert teacher does on his or her own...of course unconsciously. New teachers should gradually learn to do so too”. (a teacher trainer)

This cognitive ability is presumably a key characteristic of an expert teacher. Links of previous and new information are made in one’s brain and these links are not strengthened if not through a considerable length of experience and deliberate practice. The strength and weight of these mental links appear to be a primary divergence between novices and expert teachers.

Conclusion

This study was in fact part of a Ph.D. dissertation entitled as “Defining and operationalizing the construct of expertise in ELT”. A model was contrived which consists of \wedge primary dimensions (factors) one of which is cognitive abilities. The present study actually delved into an expert EFL teacher’s cognition first through a perusal of related literature and then through interviews with academics, teacher trainers and exemplary teachers of the field in Iran. 10 themes were derived from the literature as pertaining to an expert teacher of English language’s cognition including: fast pattern recognition,

selective attention, holistic perception, superior memory, fast information encoding, anticipation power, perception of teacher's role, awareness of situation-specific class events, awareness of their knowledge, linking prior and new knowledge.

As attested by the existing literature and interviewees' comments, an expert EFL teacher is capable of recognizing meaningful and recurrent patterns in class quickly and react appropriately to them. This is one quality that distinguishes experts from novices. The other distinguishing cognitive ability is experts' ability to focus their attention on what is worth attending to. Their experience guides them to realize which event is salient enough and is worth considering or worrying about and which is not. In decision making, problem solving and any class-based judgment they make, experts take into account a myriad of factors related to the specific situation. When they recall a particular class episode, they remember both the student(s)' behavior as well as their own behavior along with all other relevant issues.

Another cognitive ability that characterizes expert teachers was found to be their superior short term and long term memory. In retrospection, they can recall both general and specific features of class episodes, students' behavior and other instructional events. Their brain activity is rapid and efficient in encoding new information. Their rich and growing schema allows for this rapid functioning as well as a potential for anticipating students' behavior. Experts' years of experience along with their encounter with many real class events strengthens their schema and permits this amazing power of anticipation.

With regard to teacher's role in class, both the literature and interviewees' remarks indicated that experts take their role serious and perceive themselves as real professionals. They show interest in their responsibilities and perceive themselves as beyond the mere transmitter of knowledge and instead as a true companion to students all along the path of learning.

Expert teachers are also differentiated from non-experts in terms of their view of the idiosyncrasies of class episodes. They show awareness of the context-specific nature of class events and take a

great care in generalizing over particular learning circumstances. They show a deep awareness of what they know and what they do not know. They are the best judges of their own knowledge and take any required step to improve it. Their comprehensive schema allows for great many links of new information to preexisting one. Hardly ever do they face a totally new and unprecedented event. They have this cognitive ability of finding similarities between new and prior knowledge and create the required links.

All these cognitive functions are part of the aforementioned greater model of expertise in ELT. They can be in fact the root of expert performance in teaching. We are yet aware of the mutual effect of cognition and action. Years of teaching practice promotes teacher's cognition. Similarly, an advanced teacher's cognition manifests itself in expert performance. Further investigations of these interlinks are suggested to be conducted in near future.

Acknowledgement

Authors wish to express their gratitude to Dr. Reza Kiany and Dr. Reza Ghaffarsamar for their thoughtful advice on the conduction of the Ph.D. dissertation of TEFL at Tarbiat Modares University of Tehran in Iran which is the main source (yet unfinished and unpublished) of the present study.

References

- Almarza, G.G. (1996). Student foreign language teacher's knowledge growth. In D. Freeman & J. Richards (Eds.), *Teacher learning in language teaching* (pp. 50-78). Cambridge, UK: Cambridge University Press.
- Basturkmen, H., Loewen, S., & Ellis, R. (2004). Teachers' stated beliefs about incidental focus on form and their classroom practices. *Applied Linguistics*, 25, 243-272.
- Berliner, D. C. (2004). Describing the behavior and documenting the accomplishments of expert teachers. *Bulletin of Science Technology and Society*, 24(200), 200-212.
- Borg, S. (1998). Teachers' pedagogical systems and grammar teaching: a qualitative study. *TESOL Quarterly*, 32, 9-38.
- Borg, S. (2006). *Teacher cognition and language education*. London: Continuum.
- Borko, H., & Livingston, C. (1989). Cognition and improvisation: Differences in mathematics instruction by expert and novice teachers. *American Educational Research Journal*, 26(4), 473-498.
- Cellier, J., Eyrolle, H., & Marine, C. (1997). Expertise in dynamic environments. *Ergonomics*, 40, 28-50.
- Clandinin, D.J. (1985). Personal practical knowledge: a study of teachers' classroom images. *Curriculum Inquiry*, 15, 361-385.
- Diab, R.L. (2005). Teachers' and students' beliefs about responding to ESL writing: A case study. *TESL Canada Journal*, 23, 28-43.
- Elbaz, F. (1981). The teacher's "practical knowledge": report of a case study. *Curriculum Inquiry*, 11, 43-71.
- Freeman, D. (1993). Renaming experience/reconstructing practice: Developing new understandings of teaching. *Teaching and Teacher Education*, 9, 485-497.
- Freeman, D., & Johnson, K. (1998). Reconceptualizing the knowledge-base of language teacher education. *TESOL Quarterly*, 32, 397-417.

- Gatbonton, E. (1999). Investigating experienced ESL teachers' pedagogical knowledge. *Modern Language Journal*, 83, 35-50.
- Glaser, R., & Chi, M. (1988). Overview. In M. Chi, R. Glaser, & M. Farr (Eds.), *The nature of expertise*. NJ: Lawrence Erlbaum.
- Golombek, P. (1998). A study of language teachers' personal practical knowledge. *TESOL Quarterly*, 32, 447-464.
- Gruber, H. (2001). Acquisition of expertise. *International Encyclopedia of the Social & Behavioral Sciences*, 5145-5150.
- Hardre, P. L., & Chen, C-H. (2005). A case study analysis of the role of instructional design in the development of teaching expertise. *Performance Improvement Quarterly*, 18(1), 34-58.
- Hattie, J. (2003). Teachers make a difference: What is the research evidence? *Australian Council for Educational Research*, 1-17.
- Hogan, T., & Rabinowitz, M. (2003). Problem representation in teaching: inferences from research of expert and novice teachers. *Educational Psychologist*, 38(4), 235-247.
- Johnson, K. (1992). The relationship between teachers' beliefs and practices during literacy instruction for non-native speakers of English. *Journal of Reading Behavior*, 24, 83-108.
- Johnson, K. (1994). The emerging beliefs and instructional practices of pre service English as a second language teachers. *Teaching and Teacher Education*, 10, 439-452.
- Johnson, K. (1999). *Understanding language teaching: Reasoning in action*. Boston: Heinle & Heinle.
- Johnston, B., & Goettsch, K. (2000). In search of the knowledge base of language teaching: explanations by experienced teachers. *Canadian Modern Language Review*, 56, 437-468.
- Lewis, T. J., & Sugai, G. (1999). Effective behavior support: A systems approach to proactive schoolwide management. *Focus on Exceptional Children*, 31, 1-24.

- Moallem, M. (1998). An expert teacher' thinking and teaching and instructional design models and principles: an ethnographic study. *ETR&D*, 46(2), 37-64.
- NBPTS (2012). English language arts standards. Retrieved from <http://www.nbpts.org/english-language-arts-ear>
- Numrich, C. (1996). On becoming a language teacher: insights from diary studies. *TESOL Quarterly*, 30, 131-151.
- Opre, D., Calbaza-Ormenisan, M., & Opre, A. (2011). University teaching: didactic expertise reflected by metacognitive abilities and emotional control. *Procedia - Social and Behavioral Sciences*, 29, 670-677.
- Rich, Y. (1993). Stability and change in teacher expertise. *Teacher and Teacher Education*, 9(2), 137-146.
- Shanteau, J. (1992). The psychology of experts: an alternative view. In G. Wright & F. Bolger (Eds.), *Expertise and decision support* (pp. 11-23). New York: Plenum Press.
- Shulman, L. (1987). Knowledge and teaching: foundations of the new reform. *Harvard Educational Review*, 57, 1-22.
- Smith, D.B. (1996). Teacher decision making in the adult ESL classroom. In D. Freeman & J. Richards (Eds.), *Teacher learning in language teaching* (pp. 197-216). Cambridge, UK: Cambridge University Press.
- Tsang, W.K. (2004). Teachers' personal practical knowledge and interactive decisions. *Language Teaching Research*, 8, 163-198.
- Tsui, A. B. M. (2003). *Understanding expertise in teaching: Case studies of ESL teachers*. Cambridge: Cambridge University Press.
- Tsui, A. B. (2009). Teaching expertise: Approaches, perspectives, and characterization. In A. Burns & J. Richards (Eds.), *Cambridge guide to second language teacher education*. Cambridge: Cambridge University Press.
- Woods, D. (1996). *Teacher cognition in language teaching*. New York: Cambridge University Press.