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EFL TEACHERS' CONCEPTUALIZATIONS AND INSTRUCTIONAL PRACTICES OF CRITICAL THINKING[*]

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Abstract

The structure of societies has been changing with the rapid progress of science and technology in the 21st century. In this new structuring era, education is the only valid method to raise individuals who are able to make effective decisions, solve problems and take responsibility for learning and thinking critically. For this reason, learning to think rationally and critically are the keys to educational reforms in a number of educational settings worldwide. In the literature about teaching critical thinking, teacher behaviors are regarded as the most influential variables for the development of critical thinking among students. However, teachers can implement instruction geared towards critical thinking only when they develop a conception of critical thinking. This qualitative study, conducted with five EFL teachers at a high school, aims at investigating in-service EFL teachers' conceptualizations of critical thinking as well as the strategies they use to infuse critical thinking into their EFL courses. The findings indicate that participating teachers have adequate knowledge about critical thinking and they incorporate certain techniques to cultivate critical thinking among language learners. We recommend that there should be more focus on exploring critical thinking conceptions and practice among EFL teachers working at different levels.

Keywords: critical thinking, problem solving, EFL teachers, EFL instruction

1. Introduction

The fact that the structure of societies has been changing with the rapid progress of science and technology in the 21st century requires innovations in the education systems of all countries. The change in the world order from industrial age to information age has altered the priorities of certain concepts such as conformity and sameness and replaced them with open-mindedness and flexibility. Instead of the ability to "fit in", think inside the box and perform as directed, there is a higher priority on creative thinking and problem solving (Bluestein, 2012). In this new structuring era, education is the only valid method and tool to raise individuals who know how to access, process and reproduce information, make effective decisions, solve problems and take responsibility for learning and thinking critically (Alkın-Şahin, Tunca, & Oğuz, 2015). These new understandings necessitate establishing critical thinking a central aim of education and not viewing it as a paradigm shift in academic discourse. As Connor-Greene and Greene (2002, p. 324) state "critical thinking is not an academic fad; it is an essential skill for living in the information age". For this reason, learning to think rationally and critically are the keys to educational reforms in a number of educational settings worldwide.

Turkey is one of the countries that has been striving to become a contemporary society and respond to the changing needs of people of this information age. Among these efforts, we see education in the center. The development of information society and relations with the European Union countries created a need to restructure education in Turkey in 2003.

Accordingly, a new curriculum change movement began. The pervasive interest in critical thinking and the importance of integrating critical thinking into Turkish curriculum was recognized by the Ministry of National Education (MONE) at policy level and curricula were developed with a constructivist and learner-centered approach that aims to foster students' higher order thinking skills (MONE, 2006).

Critical thinking has been emphasized in the teaching competencies developed by MONE as well. The competencies teachers are expected to have are defined in an approved Generic Teacher Competencies document under three main categories described as instructional competencies, general social knowledge and skills and field-specific knowledge and skills. It is seen that critical thinking has been included as an instructional competence with the indication that the teacher "should be able to develop and effectively use his/her critical thinking, problem solving, communication skills and aesthetic understanding" (MONE, 2006, p.17).

Despite the integration of critical thinking into the curriculum and competencies, a close inspection of the programs in terms of critical thinking reveals that the programs are limited to description of teacher roles and responsibilities that support ideal learning environment within the context of constructivist philosophy (Alkın-Şahin & Gözütok, 2013). They seem to offer certain roles for teachers such as teacher as guide and a facilitator; however, they do provide explanations related to educational environment and teacher behaviors that support thinking (Alkın-Şahin & Gözütok, 2013). In the literature about teaching critical thinking, it is emphasized that teacher behaviors are the most important variables influencing the development of critical thinking in students (Innabi, 2003). It seems clear that it is difficult to cultivate critical-minded individuals and achieve the transformation projected within the learning programs unless teacher behaviors support critical thinking in classroom environment. In this context, it is necessary to evaluate teachers, who are practitioners of the curriculum, in terms of their understanding and supporting behaviors of critical thinking.

There are two schools of thought recommended for diffusion of critical thinking skills. While some researchers claim that critical thinking skills do not vary across different contexts and therefore they should be emphasized explicitly in a generic sense, some suggest embedding critical thinking into specific contents (Lai, 2011). Patrick (1986) stated that instructions that focus only on critical thinking distinctively are inadequate interventions for developing these skills. He argued that domain-specific teaching of critical thinking is an effective means to ensure that the skills gained in classes will be transferred to similar subjects and situations outside school.

People learn and think through language. Correspondingly, language teaching and learning English as a foreign language is one of the areas where development of critical thinking skills can generate beneficial outcomes. Therefore, teaching these skills should be an integral part of English as a Foreign Language (EFL) curriculum and learners should get the opportunity to express their full potential in the new language they are in the process of learning. Nonetheless, teaching critical thinking skill requires having sufficient knowledge about what the term entails. Teachers can implement instruction geared towards critical thinking only when they develop a conception of critical thinking. It is asserted that the educators should capture the core meaning of the concept of critical thinking in order to be concerned with developing critical thinking among learners (Bailin, Case , Coombs & Daniels, 1999). In a similar vein, previous research reports that teachers may not know how to incorporate critical thinking into their lessons (Lauer, 2005) due to their inability to identify it or distinguish it from other kinds of thinking.

The current study aims at investigating English language teachers' knowledge about critical thinking as well as how they diffuse critical thinking skills in actual teaching settings. Understanding how teachers understand and define the concept of critical thinking and how these conceptualizations are put into practice in classroom settings will provide insights to the limited literature on EFL teachers' understanding and implementation of critical thinking.

2. Conceptual Framework and Literature Review

Despite the emphasis on critical thinking in recent years, critical thinking has its roots back to ancient times. Greek scholar Socrates (470-399 BC) is the first philosopher to establish a form of philosophical enquiry through probing questioning (Rule, 2015). Socratic questioning as it is known is based on the importance of asking "deep" questions. In 1605, Francis Bacon, wrote the first book on critical thinking, *The Advancement of Learning*, in which he documented the need to form new habits of thought through education. Dewey (1933) in the 20th century promoted reflective thinking and claimed that thinking should be considered as an educational matter. Often regarded as a pioneer in critical thinking, in 1956 Benjamin Bloom developed a Taxonomy of Educational Objectives, which outlined the following categories: knowledge, comprehension, application, analysis, synthesis, and evaluation as levels of thinking (Duron, Limbach, & Waugh, 2006). The hierarchical levels in the taxonomy depict the requirement of thinking levels for each cognitive domain.

As critical thinking is linked to several different disciplines, we find plethora of definitions regarding the term. Most of the definitions project critical thinking as representations of cognitive processes and strategies used while making decisions or solving problems and the terms such as "higher-order thinking", "logical thinking", "complex thinking", "reflective thinking" are used interchangeably to refer to critical thinking. According to Ennis (1985, p. 45), "critical thinking is reflective and reasonable thinking that is focused on deciding what to believe or do". This definition underlines "product" and "process" dimensions of critical thinking in which product is the decision made and action taken while process involves reflection or questioning. The definition made by Scriven and Paul (1987) encapsulates most of the aspects pivotal to critical thinking: "Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action". These definitions suggest that critical thinking is not merely thinking, it consists of reflecting upon, questioning and analyzing. As a result of developing critical thinking skills an individual can "understand the information, think out of the box, break a set, and transform the known patterns into the unknown new ones" (Russ & Fiorelli, 2010, p. 236). In her study, Kanik (2010) listed an overview of 27 definitions of critical thinking in a chronological order. The frequency count of definitions revealed that the words repeated most frequently in these descriptions are "process, cognitive, purposeful, reflective/reflection, thoughtful, reasonable/reason/reasoning, organized, judgment, criteria, applying and analyzing." These terms encompass the multiple dimensions of critical thinking and its constituents.

The literature on foreign language teaching echoes the need to incorporate critical thinking into English language pedagogy (Davidson & Dunham, 1997; Tung & Chang, 2009). Chamot (1995) argued that EFL/ESL teachers should promote higher-order thinking and turn the classroom into a community of thinkers. Likewise, Brown (2004) suggested that the objectives of language curricula should not be limited to developing learners' linguistic competence only, but should also include improvement of critical thinking skills among language learners. Since the most important factor in teaching critical thinking skills is "teacher" with whose knowledge and skills schools can be improved (Kennedy, Fisher, &

Ennis, 1991), language teachers can have a crucial role in developing critical thinking skills among learners (Asgharheidari & Tahriri, 2015).

Even though research on critical thinking highlights the importance of teachers who can enhance students' critical thinking skills (Choy & Cheah, 2009; Stapleton, 2011), little attention has been given to how EFL teachers conceptualize and integrate critical thinking. We see studies on EFL teachers' conceptualizations of critical thinking mostly in Iranian context. Asghatheidari and Tahriri (2015) investigated 30 EFL teachers' attitudes towards critical thinking instruction in Iran using an attitude questionnaire. They reported that the participating teachers had a rather clear idea of critical thinking. The teachers hold the belief that developing critical thinking among learners is an essential task of teachers. Nonetheless, most of the participant expressed their need for more training in how to teach these skills. In their study limited to only one teacher who was a non-native speaker of English with an M.A degree in Teaching as a Foreign Language (TEFL), Mahmoodi-Shahrebabaki and Yaghoubi-Notash (2015) traced the potential changes after inclusion of activities concerned with critical thinking skills during two successive academic semesters. Eighteen unstructured interviews with the teacher revealed that even though the teacher was satisfied with the new proceedings initially and he supported autonomous learning, enhancing critical thinking skills of learners, and continuous assessment; gradually, he felt himself under pressure and expressed negative feelings towards the inclusion of critical thinking exercises into the syllabus. He found his new responsibilities more challenging than his previous roles as a traditional instructor. Lack of time was another concern for the teacher in adapting himself with the new classroom practices. Yet, the results should be interpreted considering that there were no classroom observations accompanying the interviews. Ketabi, Zabihi, and Ghadiri (2013) worked with 106 Iranian EFL teachers at six Iranian universities and tried to explore language teachers' in-depth understanding about the necessity of including critical thinking as an essential skill in the ELT curriculum. It was reported that language teachers in Iran view critical thinking as a pedagogical goal in English language classes. Nevertheless, they had vague and limited conceptions of critical thinking.

An extensive search for research on EFL teachers' knowledgebase and perceptions about critical thinking skills as well as their integration of critical thinking into their instructional practices in Turkish context yielded unfruitful results. What's more, when the studies that focus on teachers' critical thinking dispositions are excluded (Korkmaz, 2009; Koç-Erdamar & Bangir-Alpan, 2017, it is observed that there is limited research on how teachers from different subjects support critical thinking (Alkın, 2012; Gelen, 2002; Kanık, 2010; Yağcı, 2008). The common finding resulting from these studies is that teachers do not possess the competence required by the teaching profession in terms of teaching critical thinking skills. The purpose of the study by Korkmaz (2009) was to examine critical thinking levels and dispositions of teachers and lecturers. The findings revealed that the participating teachers' critical thinking levels were at a medium level. Depending on the results, it was reported that the teachers' critical thinking tendencies and levels were insufficient. Likewise, in their study, Koç-Erdamar and Bangir-Alpan (2017) examined critical thinking levels of teachers from various branches such as Science, Turkish, Mathematics, Social Sciences, Foreign Language, Physical Education, and Arts. They found that the total score of teachers' critical thinking dispositions reflects a low level of critical thinking.

Regarding how teachers foster students' critical thinking in Turkish context, Gelen (2002) investigated the competencies of 4th grade primary school teachers in problem solving, decision making, asking questions, and enabling the learners to gain critical and creative thinking skills in social studies classes. Even though the teachers perceived themselves competent in these areas, they were found inadequate during the class observations. Yağcı

(2008) aimed at determining the type of activities used and the problems encountered by social sciences teachers while improving critical thinking with 5th grade students. It was seen that the activities teachers utilized to develop critical thinking were limited to the activities given in the curriculum. There was not any variation in the kinds of activities used by the teachers. On the other hand, the difficulties teachers faced were listed as insufficient time, inadequate materials, and unsuitability of students' level for critical thinking activities. Kanik (2010) aimed to explore teachers' conceptions of critical thinking and practices for critical thinking development in several courses in the seventh grade adopting a phenomenological approach with 70 teachers from 14 elementary schools. She found that participating teachers made definitions of critical thinking with references to a limited number of certain skills, abilities, or dispositions. Except for a few teachers who referred to skills and dispositions of critical thinking, most of the teachers provided a more superficial understanding of the term. Finally, Alkın (2012) investigated the extent to which Science and Technology, Mathematics, Homeroom, Social Sciences, and Turkish teachers display behaviors that support critical thinking in elementary schools. The qualitative dimension of her study that involved observation technique and a semi-structured interview form revealed that the way teachers perceive themselves in terms of their supporting behaviors shows a discrepancy from their actual teaching behaviors in classes. It was also observed that the teachers prevented students from thinking critically by exhibiting negative aspects of accurate behaviors.

The scarcity of research on Turkish EFL teachers' conceptualizations of critical thinking that guide and direct their instructional behaviors aimed to foster their students' critical thinking requires special emphasis on this particular issue.

3. Research Design

3.1 Research Questions and Data Collection Tools

This study investigated the current emphasis teachers place on critical thinking across English language in 9th and 10th tenth grades in Istanbul by examining teachers' reported knowledge and perceptions, and observed instructional practices. More specifically, this study aimed to find answers to the following research questions:

(1) What knowledge and understandings about CT do EFL teachers possess?
(2) What are EFL teachers' attitudes towards development of critical thinking among learners?
(3) How do EFL teachers integrate critical thinking into their lessons?
(4) What are the obstacles that prevent teachers from focusing on critical thinking in their classes?

Qualitative phenomenological research design was adopted in order to answer these questions. The data for this study were gathered using multiple tools: in-depth interviewing and participant observations. To this end, initially a semi-structured interview protocol was prepared. The review of literature was consulted for the preparation of the interview guide. Each participant was interviewed individually in Turkish except for one teacher who is a native speaker of English. The interviews were audiotaped. Interviews that were conducted at the school site lasted from 30 minutes to 40 minutes.

In addition to in-depth interviews, observations were carried out. Through participant observation, it was possible to study the setting, participants, and events that occurred in the classroom (Kawulich, 2005). It was assumed that certain behaviors displayed by teachers would be indicators of whether they were focusing on the development of critical thinking skills or not. Each participant teacher was observed four times in 9th and 10th classes. Since the participants expressed their reluctance about being video-recorded, the interactions in the

classrooms were documented in the form of field notes. to make more sense of observation data, pre-and post-observation reflection interviews were also carried out. The questions were formulated according to interviewees' performance during the lessons. For mini-reflection sessions, questions were prepared during the observations based on what went on in the classes. The purpose was to make sure all the activities observed were accurately understood. When teachers' behaviors indicated integration of critical thinking into their lessons, the questions aimed to reflect the preparation of the lesson, the limitations and self-assessments of teachers. When teachers' practices did not show the evidence of integration of critical thinking, the questions aimed to reflect reasons why this occurred. Sample pre-observation questions were *How did you prepare for the class today? What kind of materials and tasks did you prepare?* The questions such as *Do you think you have successfully integrated critical thinking into your class today? Were there any problems during your instruction?* were asked after the observations.

3.2. Sampling

The study was conducted at a private community high school affiliated to MONE in Istanbul. Given that the teachers are supposed to instruct classes under the guidelines mentioned in the curriculum developed by MONE, a high school where English language teachers pursue their teaching in line with the guidelines was selected as a research site. All the five EFL teachers working full time at the school participated in the study. The identification of the research site was made on the basis of its convenience and the willingness of the teachers to provide rich data for the study. The participants were graduates of ELT, English Literature and Liberal Arts ranging in age from 31 to 49 (M=38.4). Their teaching experience was between five and 25 (M=15.8). Detailed information on the participants is shown in Table 1.

Table 1. *Demographic information about the participants*

Participant	Gender	Major	Age	Teaching Experience
P1	Female	English Language and Literature	39	19
P2	Female	English Language and Literature	33	11
P3	Female	English Language Teaching	49	25
P4	Female	American Culture and Literature	40	19
P5	Male	Liberal Arts	31	5

4. Findings

4.1. Analysis of Interviews

The recorded data gathered through interviews were transcribed and translated by the researchers. The use of ethnographic interviews generated a multifaceted view of five participants' understanding of critical thinking and application of its principles in their classes. Content analysis was used to interpret the data collected through interviews. The process involved analysis of patterns in elements of the texts (words or phrases). The coding categories were derived inductively directly from the data (Thomas, 2006). Impressive quotes are given for support in order to allow the readers to listen to the voices of the teachers as they conceptualize and integrate critical thinking. In order to ensure reliability, inter-coder reliability was used. The independent analysis of the data by the researchers yielded a substantial agreement level (78%). The results gained from data analysis are presented following the order of the research questions.

(1) To what extent are the EFL teachers aware of critical thinking and its principles?

The first research question of this study aimed to find out to what extent EFL teachers are aware of critical thinking and its principles. In order to explore teachers' conceptualizations of critical thinking, they were requested to explain what they understand from the term critical thinking. After analyzing the answers given during the pre-interviews, it became clear that teachers defined the term using some common codes.

Table 2. *Definitions of critical thinking by the participants*

Codes	Definitions
Questioning	Questioning the given information and one's assumptions
Criticizing	Being able to criticize assumptions
Multiple Perspectives	Examining an issue from multiple perspectives
Self-awareness	Gaining self-awareness through ideas
Objectivity	Being able to view an issue objectively
Step-by step-process	Accepting that it is a conscious process that takes time

Table 2 shows some common codes, which teachers referred to while explaining the meaning of the term. All the participants indicated that critical thinking requires questioning, criticizing and being able to examine an issue from multiple perspectives. They added that this skill helps students gain self-awareness and objectivity. They believe that critical thinking includes the ability of making personal interpretations. From their point of view, critical thinking is questioning one's own assumptions. In addition to these, critical thinking was defined as a multi-directional skill, which should be applied in several aspects of life. All the participants also agreed that it is a skill students can acquire provided that they are given the necessary support.

To mention specifically, critical thinking was defined as;
" *a multi-directional perspective which appeals to many senses*" (P1)
"*a system which is beyond traditional methods*" (P2)
" *is not directly accepting an idea, event or anything but questioning it objectively and drawing reasonable conclusions*"(P3)
"*not saying yes to everything but weighing things and making critique*" (P4)
"*being able to view and examine an issue, situation from multiple perspectives*" (P5)

2) What are EFL teachers' attitudes towards development of critical thinking among learners?
The second research question of this study aimed to find out teacher attitudes towards critical thinking. The analysis of interview data showed that all participants have positive attitudes towards critical thinking. One of the participating teachers made the following comment that shows her enthusiasm.

"I wish I had more time to make all of them [students] think critically, I could make them speak more, understand their thoughts and opinions. Unfortunately, our time is so limited. But I think developing critical thinking makes an enormous impact on learners' development as a whole." (P3)

Teachers agreed on the idea that critical thinking should definitely be encouraged in schools and it should become a habit in students. They think that once students become aware of their capability in thinking critically, they feel satisfied and pleased. The teachers also assumed that critical thinking activities motivate students and arouse interest during the classes. They believe that the process of critical thinking helps students go beyond the traditional methods and expand their horizons. However, critical thinking should be a concern for all the teachers and it should be integrated into all the courses. One of the

participants enunciates that the development of critical thinking skills should not be limited to language classes.

"I think critical thinking should be dealt with in all the courses, so that students can make it a part of their lives. That is to say, it is not only a matter of questioning in a single English class, but to inquire into everything even question something the teacher says. I mean, it should not only be developed in English lessons, but integrated into all the other courses." (P1)

The teachers are fully aware that critical thinking skills cannot be taught in a short time; the acquisition of these skills requires longer processes of practice. In these processes, teachers should be responsible for providing guidance to students to accomplish thinking critically.

"Students get used to thinking critically. They get used to it through practice." (P2)
"When we constantly ask questions and prepare the grounds for them to think, when we guide them, they learn to think critically without even being aware of gaining it. (P3)

Moreover, participant teachers highlighted the importance of materials in fostering critical thinking. They mentioned that when carefully chosen, materials could become guides for both teachers and students. They believe that choosing interesting materials, introducing intriguing topics, and relating them with students' own experiences trigger curiosity and in the end students feel motivated.

When it comes to local educational curriculum, they generally believe that critical thinking is encouraged in the materials suggested by MONE up to a certain level, but it should have a larger place. All of them agreed that critical thinking should have a more dominant role in curriculum. Nonetheless, they also state that, it is the teachers' duty to integrate critical thinking. They believe that if teachers are willing to teach critical thinking skills, they should be able to manage the process regardless of the quality of the material or the lesson content.

"Especially the interpretation questions, authors' ideas, and themes in reading texts, they all support critical thinking skills. What matters is your willingness to make students think critically rather than the material." (P3)

3) How do EFL teachers integrate critical thinking into their lessons?

The teachers were asked to explain how they implement critical thinking in their classes, more specifically the strategies they use and the materials they prepare to this end. The analysis of their comments showed that teachers are willing to integrate critical thinking into their lessons. They stated that in their lessons, they use some certain techniques to foster critical thinking. For instance, in reading lessons, they plan to read between the lines and analyze the text with the students. They also indicated that they try to direct students to think, to question and to find the relationships in the given information. They said they use the pictures in books to ask questions and assist students to make predictions.

"We try to make them read between the lines. We want them to create their own questions. We want them to question the purpose of words and images and their relations with the topic. (P1)

"Before we begin to read, we can talk about the picture, discuss about it, or if it is a child's story, we can go deeper and talk about children's rights, or if it's a story about a woman, we can have a talk on women's rights. We encourage them to think more critically. And they like this, too."(P2)

Teachers emphasized that critical thinking helps them create an environment in which students are free to express their ideas and thoughts. They claimed that one of the best techniques is discussion. They added that they try to encourage discussion as much as they can during their classes. Teachers also mentioned that they go beyond the lesson topics and link them with daily issues of the country or the world. They stated that if the topic is related with childhood or a child's life, they talk about children rights. Moreover, while choosing materials, they indicated that they try to find informative texts and raise questions about the text and beyond.

"So I would start with brainstorming. Here is our topic, let us just throw some ideas. What is related, what is not related, which is the strongest argument? Once we had our ideas, we started editing them. We look at what to get rid of and what to keep. What ideas are supporting each other? So that was a form of critical thinking. Trying to teach how to organize and structure thoughts." (P5)

(4) What are the obstacles that prevent teachers from focusing on critical thinking in their classes?

Teachers were also asked to reflect on the obstacles that prevent them from fully integrating critical thinking to their teaching. Even though teachers reflected enthusiasm for integrating critical thinking into their lessons, they also expressed their concerns, mainly the obstacles that hinder their practices. A very prominent obstacle commonly voiced is the education system, which is largely governed by national examinations such as secondary schools entrance examination and university entrance examination. The respondents reported that it is not always easy to divert students into the process of thinking when they know that they will take an examination in a multiple choice question format. Due to such placement tests, the students are accustomed to indisputably accept the information they receive. Teachers think that the education system that is generally based on discrete-item testing weakens their efforts to enhance students' critical thinking skills.

"The fact that that students are asked to answer questions that do not require a lot of thinking starting from 5th and 6th grades affects their thinking skills negatively. They are already provided with options. There is a question and there are four or five options below. The child will choose one of them without giving too much thought on it. He will not be able to express his own truth in any way; he will have to choose something from something already given to him". (P4)

The second obstacle teacher's face is students' avoidance of expressing themselves, which originates from their lack of knowledge and limited abilities. Teachers claimed that students sometimes refrain from sharing their opinions and they do not participate probably because they do not start high school education with at least some knowledge and practice of critical thinking. Teachers wish to have students who are used to questioning and reflecting upon a given material.

"The most frequently encountered obstacle is that students are not ready for critical thinking. They should start questioning and analyzing when they are young. If they had read books or stories and reflected on them or very simply if they had noticed something, questioned it inquired about it, they could be more open-minded individuals now." (P3)

Another very important obstacle is students' proficiency level in English and the teachers' responsibilities to teach fundamental structures of this new language. Considering that the students are required to express their opinions in a foreign language using their limited sources, the teachers have to struggle with students' reluctance and resistance that makes the teaching process harder.

"For lower or even for higher classes the level of English is an obstacle. For teachers, I mean if you are required to cover this much grammar I don't know how you can integrate critical thinking. Obstacles also would be students' reluctance, unwillingness and stubbornness." (P5)

The other obstacles that prevent teachers from integrating critical thinking are their limited time and the curriculum itself, which is again connected with the education system that aims at preparing students for exams. Covering the content plus enhancing students' critical thinking skills in a limited time seems like a long-term goal, practically hard to achieve.

Relying on the data derived from interviews, it is possible to assert that participant teachers have adequate knowledge about critical thinking. They are also of the opinion that critical thinking must be integrated into EFL lessons. We can also deduce that all participants have positive attitudes towards critical thinking and they willingly try to integrate it into their lessons. Yet, their enthusiasm is interrupted by several factors. To what extent they implement critical thinking while teaching can only be inferred from the analysis of lesson observations.

4.2. Analysis of Observations

In order to make sense of interview data and understand how teachers focus on critical thinking skills during their classes, each teacher was observed four times in their classes. The observations were carried out in 9th and 10th grades. 9th grade students have English classes six hours a week and 10th grade students meet their EFL teachers 4 hours a week. The number of students in classrooms ranged from 12 to 24 with a mean of 18 students. The findings from lesson observations were analyzed individually and supported by pre-and post-observation interviews.

During four observed lessons, the first participant (P1) mainly focused on questioning technique. In both grammar and reading lessons, she used the question form "why" and expected the students to provide reasons to their answers. The teacher also tried to relate the topics with the students' personal experiences. The teacher fostered cooperative learning in the classroom. She also let the students assess each other. Furthermore, she regularly provided feedback. During the classes, there was no "right" or "wrong" answer, but there were answers reflecting different points of view. Nevertheless, the teacher did little work on problem solving and discussion. She did not give the students the opportunity to create their own materials themselves, either.

The second participant (P2) mainly focused on relating the topics with students' personal experiences and asking them to reconsider and respond to their statements. She also encouraged the students to analyze and investigate the text at a deeper level by using questioning technique. The teacher created situations and expected the students to solve a problem or predict what was going to happen. This helped students to make inferences by using clues and analyze those situations carefully. On the other hand, collaborative learning was not encouraged very much and similar to P1 there was little time for learners to create their materials themselves. In addition, the time reserved for classroom discussion was not sufficient.

The third participant (P3) mainly focused on problem solving and encouraged students to apply their knowledge. She provided constant feedback and frequently used brainstorming activities about the topics. She also motivated student to rethink about their statements and reevaluate their judgments. Nevertheless, she did not let students investigate their assumptions and she almost never fostered collaborative learning. The students did not create any materials. Nor did they engage in any discussion.

The fourth participant (P4) mainly focused on investigation of ideas at deeper levels and thinking aloud. She created several opportunities for students to discuss and reflect on topics. She provided feedback and triggered students to identify their own thoughts. She also encouraged the students to solve problems by focusing on their personal experiences at the same time. Students had opportunities to think aloud and participate in discussions. There was allowance for asking questions freely. The missing activity was giving more chances for materials development.

The last participant (P5) mainly focused on techniques of investigating deeper and looking for logical evidence. Thus, he continuously asked "why" and "how". He also created situations where students solved problems and expressed themselves freely. Linking the topics to daily issues, he tried to encourage students to reflect on their own learning. He also acted as a guide. However, the time allocated for discussion could be more and students could have been given opportunities to create their own materials.

In order to quantify the field notes gathered during observations, a checklist was filled out after the lessons by depending on teacher behaviors. Instead of evaluating teachers' instructional strategies with a pre-determined scheme, their strategies were translated into behaviors that support critical thinking. Once the behavior was observed, it was accepted as a demonstration of a supportive intervention. The number of occurrences of the behaviors was disregarded. Therefore, the results should be approached cautiously taking into account that the occurrence of behavior once does not guarantee that the way it was implemented was at a satisfactory level. What's more, the items in the checklist do not reflect an ideal set of practices that promote critical thinking. Table 3 shows the findings gained from the observations.

Table 3. *Findings from the observations*

Items	P1	P2	P3	P4	P5
1. The teacher introduces tasks and ask students to question what they read or listen to.	4/4	4/4	4/4	4/4	4/4
2. The teacher encourages students to investigate deeper meanings and identify assumptions and weaknesses.	4/4	4/4	3/4	3/4	4/4
3. The teacher asks students to reconsider and respond to the statements that emerge from their classroom materials.	4/4	4/4	4/4	4/4	4/4
4. The teacher encourages students to solve a problem.	2/4	3/4	4/4	3/4	4/4
5. The teacher includes activities that foster collaborative learning.	4/4	2/4	1/4	4/4	4/4
6. The teacher provides topics and enough time for students to discuss.	2/4	2/4	-/4	3/4	3/4
7. In addition to teacher-prepared projects, the teacher gives students the opportunity to create their materials themselves.	-/4	-/4	-/4	1/4	-/4
8. The teacher introduces the goals and objectives of the lesson clearly.	4/4	4/4	4/4	4/4	4/4
9. The teacher gives students the opportunity to reflect on the topics.	4/4	4/4	4/4	4/4	4/4
10. The teacher provides feedback and allows students to reflect on their self-understanding and development.	4/4	4/4	4/4	4/4	4/4
Total	32/40	31/40	28/40	34/40	35/40

The table displays that except for asking students to develop their own materials; the techniques that are used to enhance students' critical thinking skills are applied by all the teachers. It is seen that P5, a native teacher with a degree in Liberal Arts integrated almost all

the techniques into his classes. The non-native teachers who are graduates of English Language and Literature departments holding pedagogical certificates seem to employ these strategies very frequently as well. The most interesting finding regarding observational data is that the teacher who employs critical thinking strategies the least has a degree from English Language Teaching Department. Normally, one would expect graduates of education schools to be more qualified in terms pedagogical content knowledge that enables them to use a variety of techniques for fostering critical thinking skills.

5. Conclusions and Discussion

This qualitative case study was designed around the convergence of two research areas: beliefs and knowledge about critical thinking and the implementation of critical thinking. The self-reported data provided by teachers and observational data offered an interpretative view of how teachers perceive and integrate critical thinking in their EFL teaching context.

The results indicate that the EFL teachers in this study have adequate knowledge and understanding about critical thinking. They view critical thinking as a systematic process that involves questioning an issue objectively from multiple perspectives. From this point of view, their definition corroborates with the definition proposed by Beyer (1995) who defines critical thinking as the ability to make reasoned judgments. The respondents' insistence on the importance of questioning echoes the vital role of asking the right questions to foster students' critical thinking skills (Haynes & Bailey, 2003). Yet, when compared to definitions of critical thinking in the literature, it is hard to say that they have a firm grasp of all the elements of critical thinking. The teachers did not mention synthesizing, applying information and making appraisal, which are the core components of critical thinking. Another important aspect that is missing in their definitions and practice was the limited inclusion of collaborative learning environments. Group-work activities such as discussions and peer –assessment techniques did not have a dominant role in their teaching even though it is suggested that working cooperatively leads to achievement of higher levels of thinking compared to individual learning skills (Johnson & Johnson, 1986; 1994), and discussion is a powerful learning tool that provides the students with opportunities to become critical thinkers (Totten, Sills, Digby, & Russ, 1991). The relatively constrained conceptualization of the notion critical thinking by the teachers in this study resembles the narrow conceptions of the meaning of critical thinking by high school teachers teaching a variety of subjects in Hong Kong (Stapleton, 2011). Notwithstanding, the findings related to teachers' conceptualizations and integration of critical thinking do not lend support to the findings that indicate that the teachers are not in a favorable situation when critical thinking is concerned (Seferoglu & Akbıyık, 2006). The situation in this context contrasts with the findings of Chaffee (1992) who reported that critical thinking is a rarely taught skill in educational settings. Our study revealed that despite some limitations, participating teachers enthusiastically and explicitly practiced it.

Regarding teachers' attitudes towards development of critical thinking among students, the respondents have a very positive attitude towards inclusion of critical thinking into their course content. Critical thinking was definitely regarded as an important skill. They hold the belief that teaching critical thinking should be a major concern for all the teachers regardless of course content. The participants strongly advocated the need to focus on critical thinking processes and they require curricula that allow students to learn to do certain things across the curriculum and transfer these skills into their lives outside school. The teachers reported that they use a variety of techniques to support the development of critical thinking in students such as reading between the lines, questioning, making inferences, and connecting the topic to daily issues and concerns. Despite their enthusiasm, their ability to focus on critical

thinking is inhibited by several factors. The most prominent obstacle is the current examination based educational system that urges the teachers to follow the standardized curriculum that does not have much allowance for critical thinking. The same concern is expressed in different contexts. Researchers posited that standardization of curricula and emphasis on examination scores impairs teachers' efforts and ability to concentrate on critical thinking skills in the classroom (Smith & Szymanski, 2013; Stapleton, 2011). Another barrier is related to students' inability to think critically despite their education level. Normally, students should be able to make and criticize judgments and arguments when they begin primary school. Newmann (1990) indicates that for students to cope successfully with higher order challenges, they need in-depth knowledge, intellectual skills, and dispositions of thoughtfulness. Therefore, the initiation of children into critical thinking practices should start even before they start school (Bailin et al., 1999). All students have some degree of potential to think critically and integrating critical thinking in the core curriculum is the only method to develop this potential (Patrick, 1986).

An important implication that can be drawn from this study is related to the importance of teacher education programs. It was seen that the teacher who follows critical thinking principles most has a degree from Liberal Arts and the least is a graduate of a Language Teacher Education program. There is a possibility that the teacher training programs may not sufficiently equip future teachers with the ability of teaching critical skills. For the infusion of critical thinking into the education system, teachers should be educated to model critical thinking (Facione, 1990). Therefore, it is important to either embed critical thinking into all the courses given in teacher education programs or provide pre-service teachers with practice opportunities in critical thinking through separate courses. Oral (2014) describes the need and the process of starting a specific elective course called Critical Thinking Skills in Foreign Language Education in ELT Department at a state university in Turkey. Similar initiatives can be taken to emphasize critical thinking. Teacher candidates will improve their critical thinking and abilities to teach this skill when teacher educators use appropriate instructional methods (McCollister & Sayler, 2010).

5. Limitations and Suggestions

We have noted several limitations of this study. First, this study was conducted in a private high school where the number of students in each observed class is relative small. The class size might have a positive effect on the way teachers can implement critical thinking. Second, the small size of the participating teachers limits the generalizability of the results. It is not possible to generalize the findings to all language teachers working in high schools. Finally, data reported are constrained by teachers' responses to interview questions and dependent upon the number of classes observed. Longitudinal studies with larger sample sizes are necessary to obtain additional evidence to make stronger claims about EFL teachers' conceptualizations and practices of critical thinking.

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ENDNOTES

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