

**RAISING ELT STUDENTS' AWARENESS ON
THE IMPORTANCE OF CRITICAL THINKING
IN LANGUAGE EDUCATION**

**İngilizce Öğretmenliği Öğrencilerinin Eleştirel Düşünmenin Dil
Öğretimindeki Önemi Hakkında Bilinçlendirilmesi Üzerine Bir
Çalışma**

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Abstract

Critical thinking is an essential concept gaining more and more attention of shareholders particularly in bussiness, and education lately. When the fact that today's students have to deal with astounding information overload is taken into consideration, cultivation of it is an inevitable goal for professionals in education (Lipman, 2003; Lun et al., 2010; Ketabi, 2013). In order to teach such a skill in the classroom, teachers must first develop an awareness of what critical thinking is and possess the dispositions to an extent so that they can set an example for the learners. Thus, the current study aimed to investigate whether a training on the conception of critical thinking and its integration into language teaching brought about any cognitive change in a group of freshman ELT students. Having been guided with related reading resources, tasks and a specific technique (The PMI) developed by Edward de Bono (1985), participants demonstrated an increased awareness of critical thinking as an educational concept and its use in English teaching. The results of the study are expected to be enlightening for designing realistic and effective pre-service training programs to integrate critical thinking into English language teaching.

Key Words: *Critical thinking, freshman ELT students, language education.*

Özet

Eleştirel düşünme son zamanlarda özellikle eğitim ve iş arenasında gittikçe önem kazanan bir kavramdır. Günümüz öğrencilerinin şaşırtıcı düzeydeki bilgi patlaması ile daha iyi baş edebilmesi için eleştirel düşünmenin öğretimi eğitimciler açısından kaçınılmaz bir amaç haline gelmektedir (Lipman, 2003; Lun et al., 2010; Ketabi, 2013). Böyle bir beceriyi sınıfta öğretebilmek için öğretmenlerin ilk önce eleştirel düşünmeyi kavramsal olarak iyi bilmeleri ve öğrencilere iyi bir örnek teşkil edebilmek için eleştirel düşünme becerilerine sahip olmaları gerekmektedir. Bu nedenle, söz konusu çalışma bir grup birinci sınıf İngilizce öğretmenliği öğrencisine eleştirel düşünme ve dil öğretiminde kullanımı hakkında verilen bir eğitimin bilişsel gelişim açısından katkısını araştırmıştır. Çalışma sonunda, konuyla ilgili okuma kaynakları, aktiviteler, ve Edward de Bono (1985) tarafından geliştirilen PMI isimli özel bir teknikle eğitilen katılımcılarda eleştirel düşünmenin tanımı ve İngilizce öğretimine adapte edilmesine dair bilinç düzeyinin yükseldiği gözlemlenmiştir. Çalışmanın sonuçları hizmet öncesi öğretmen yetiştirme programlarının eleştirel düşünmenin İngilizce öğretimine entegre edilmesi konusunda gerçekçi ve etkili bir şekilde düzenlenmesine ışık tutacaktır.

Anahtar Kelimeler: *Eleştirel düşünme, İngilizce öğretmenliği öğrencileri, dil eğitimi.*

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Introduction

21st century as a new era of communication and growing information highways has witnessed much improvement in education, health and economics. Therefore, it is becoming indispensable to guide students in developing effective cognitive and meta-cognitive strategies to be conscious consumers of knowledge (Lun et al., 2010). Parallel to the rapid spread of information, the use of English as a second/foreign language has become one of the main goals in English teaching curriculum in Turkey and Europe. It is given much credit not only as an object of study but to strengthen independence of thought and problem solving which are higher order thinking abilities like critical thinking (CEFR, 2001; NELTCPE, 2013).

Although critical thinking (hereafter CT) has been one of the buzz words in the academia, there is still a lack of one unified definition pertaining to it. The explanations are abundant in the literature, but it is hard to reach a uniform, clear-cut and one-size fits all definition (Grosser and Lombard, 2008). It can be due to the fact that the term is open to multiple interpretations influenced by a variety of culture-related elements such as morals, norms and belief systems (Lun et al., 2010). Another reason is it is a broad term with various dimensions and characteristics that cannot be narrowed down into one small set.

A repeatedly stated fact is that in history CT has taken its place resulting from the hypothetical studies of Socrates, Plato, Aristotle. Besides Dewey's reflective practice is accepted as one of the stepping stones triggering the revitalization of CT. More recently, some contemporary definitions have also been suggested by scholars in the field like Robert Ennis, Mathew Lipman and Richard Paul and Linda Elder.

For example, Ennis (2001) emphasizes the reflective side of CT by defining it as asking thought-provoking questions while Lipman (2003) asserts that it goes beyond understanding events and means producing something by looking at an issue from different perspectives. On the other hand, for Paul and Elder (2009) it is an act of art in analyzing thinking based on reasoning.

The question of whether critical thinking can be taught or not is not controversial anymore. Nowadays, the research is more interested in the knowledge and perceptions of teachers or teacher candidates regarding the meaning of critical thinking or their self-efficacy beliefs on its instruction (Warburton and Torff, 2005; Bataineh and Alazzi, 2005; Choy and Cheay, 2009; Bedir, 2013; Yeşilpınar and Doğanay, 2014; Gashan, 2015 etc.).

In Turkey, many studies have been conducted on prospective teachers' CT tendencies or levels ranging from freshman to the fourth year teacher candidates (Çubukçu, 2006; Genç, 2008; Tufan, 2008; Saçlı and Demirhan, 2008; Yıldızlar, 2009; Sen, 2009; Beşoluk and Önder, 2010; Güleç-Çakmak, 2010; Ekinçi and Aybek, 2010; Çetinkaya, 2011; Serin, 2013). The participant populations were from different fields of teaching such as Turkish, Physical Education, and English. Another study by Yeşilpınar and Doğanay (2014) queried the perceptions of classroom teachers and prospective teachers on the definition of CT and their efficacy beliefs of CT integration. Although the studies on the CT levels or tendencies of prospective teachers are abundant, these studies have been carried out in a descriptive manner aiming to explain the existing levels of CT compared with some demographic variables. The results revealed that the CT levels or tendencies are either at medium or low level in the Turkish context. Such background research increases the

significance of the current study in that it has an interventional nature for improving prospective teachers' perceptions of CT and how to implement it in the classroom instead of describing their potential thinking skills.

The research on the perceptions is relatively broader abroad. It has been shown in many studies that in-service and pre-service teachers seem to have a slight or no idea of what CT entails, whether it is beneficial to teach it or not, and how to infuse it into their teaching (Black, 2005; Bataineh and Alazzi, 2009; Choy and Cheah, 2009; Stapleton, 2011; Ketabi et al., 2013, Gashan, 2015). Due to the important role of teachers to guide the students in attaining good thinking skills, equipping pre-service teachers with the necessary blend of theory and practice on critical thinking should be one of the ultimate requisites of modern teacher education.

Significance of the study

For expressing themselves, humans need words as invaluable tools of communication. While some words have a global meaning, some others may reveal culture bound differences which may lead to misperceptions. The word *critical*, despite having a constructive meaning in English in the educational context, unfortunately carries a negative connotation in Turkish. Considering the deep impact English teachers have on the development of language and thinking in their students (Choy and Cheah, 2009), a lack of adequate awareness regarding the true meaning of CT and how it can be incorporated into language teaching may be a big obstacle for thinking to flourish in tandem with language learning in the classroom.

Thus, first there is a need to understand the perceptions of freshman English Language Teaching (hereafter ELT) students about critical thinking and its enhancement since they are going to be teachers in the future. More importantly, research should be conducted on the effects of a CT training for increasing awareness on the part of the ELT students. Such an attempt is expected to enable English teacher education programs to better serve the needs of teachers and their learners to cope with the growing demand of qualified, and thinking workforce in the world.

Moreover, the current study aims to contribute to the Turkish language teacher education system by showing the benefits of a training that blends theory with practice about the application of CT in classroom on a group of candidate English teachers.

Research Questions

The study aimed to explore any cognitive change in a group of freshman ELT students given a training course focusing on the definition and implementation of critical thinking in the language classroom. The study was conducted during the fall semester of 2014-2015 academic year, and it addressed the following research questions:

1. What are the perceptions of a group of freshman ELT students on critical thinking before and after a training on CT?
2. What are the perceptions of a group of freshman ELT students on the integration of critical thinking into language teaching before and after a training on CT?
3. Does a training on CT and its use in English classrooms lead to any increase in the awareness of a group of freshman ELT students?

Methodology

Participants

The study was conducted at the English Teaching Department of a state university in Turkey. The participants were 48 freshman ELT students who were enrolled in the fall semester of a departmental course entitled Study Skills.

The course mainly aims to guide prospective English teachers on how to become a self-regulated learner by familiarizing them with metacognitive strategies and working on these strategies. Although the relationship between metacognition and critical thinking has been emphasized in the literature, it was observed by the researchers that Turkish ELT students are not really aware of the term *critical thinking* in educational context and how to infuse it into language teaching due to the lack of importance given to it in the syllabus. Therefore, a semester-long training including the definition(s), characteristics of CT and its potential activation in the language classroom was integrated into the syllabus by the researchers. Purposive sampling was used to decide on the participants of the study. This means all the participants were freshman ELT students, aged between 20-22. The fact that they were taking the Study Skills course which is delivered by one of the researchers encouraged a better observation and implementation process for the research.

Data Collection

In order to capture freshman ELT students' perceptions of CT both before and after the CT training, the study adopted a mixed method approach. It employed both qualitative and quantitative data collection strategies. The quantitative data was collected via two tasks related with critical thinking (hereafter CT tasks). These were adapted from Paul (1995) and translated into Turkish in order to avoid English to be a barrier against tracking freshman ELT students' cognitive change on the topic. The tasks which were previously piloted with a group of pre-service English teachers formed the quantitative part of the study. Following the task analysis, the participants were given an open-ended questionnaire that provided the qualitative data at the beginning and at the end to better understand the emerging themes and change in perception. The open-ended questions posed to the participants in the pre and the post questionnaire were as follows:

1. *What do you think critical thinking means? Please explain either with an example or a definition*
2. *Do you think CT is important in language teaching?*
3. *Do you think CT could be integrated into English teaching? How can it be integrated into English teaching?*

Procedure

At the beginning of the teaching semester, the two CT tasks were given to the participants. The tasks included the interpretation of two statements by four students. The participants were asked to decide which student showed the characteristic of a critical thinker looking at his/her interpretation of the related statement. The CT tasks were used to collect the preliminary data. Then the participants were asked to respond to 3 open-ended questions (see above) in the questionnaire in a detailed manner.

After the analysis of the quantitative and qualitative data which is explained in the data analysis section below, the researchers asked the participants to read some articles on

the traits of a critical thinker, and how to use CT in language education and then fostered face to face and online discussions in the first three weeks. After the introduction stage, a speech on the story of a successful mother whose son is suffering from ALS disease was taken from an English website that welcomes speakers from around the world who give inspiring talks and adapted into a reading passage with a few questions that would lead the participants to look at the material critically. In the following week, the participants watched the same speech in the video format to practise listening comprehension skills and were asked to answer some reflection questions during and after the speech. All the answers were discussed in weekly-class meetings.

Through the end of the semester, participants were presented with the Plus Minus Interesting (PMI) technique that was created by Edward de Bono (1985) with a purpose to enhance critical and creative thinking. Participants not only received theoretical training on the technique but also had the chance to experience it in the classroom. They were grouped into three and given a contemporary topic about their field. Upon explaining the procedure, the researchers asked the participants to think on the plus, minus and interesting sides of *English being adopted as the second official language of Turkey*. First, when they wrote their own ideas, the responses were limited in number. However, after exchanging their point of views in groups, a great many perspectives emerged leading to a more lively discussion and evaluation of the topic. All the tasks and materials covered throughout the training were in English; so was the medium of instruction and communication in the classroom. Towards the course completion, a post-questionnaire, identical to the pre-questionnaire and the two CT tasks were administered. The aim was to elicit the change in participants' beliefs regarding critical thinking and its use in English teaching after the training.

Data Analysis

Descriptive statistics in frequencies and percentages was used for the analysis of the CT tasks. The open-ended questionnaire was analyzed both qualitatively and quantitatively. The qualitative data comprising participants' answers to the open-ended questions were content analysed. The participants' answers were first systematically coded and then categorized in terms of the key themes with a data driven inductive approach. The data collected over the training were triangulated by the CT tasks, open-ended questionnaire and the classroom observations of the researcher to draw inferences about any cognitive change in participants' perceptions. In other words, the responses to the CT tasks and the questions in the open-ended questionnaire both before and after the training were analyzed keeping in-class discussions with the participants in mind. All the data were observed to be complementary to one another.

Findings

Comparison between the responses given to the CT tasks and the questionnaires before and after the training was part of the research design in this study. Analysis of the results revealed that there had been a cognitive shift in the way participants perceive critical thinking and its integration into English teaching. The results are explained in the light of the tables below.

Table 1. Analysis of Task1 before and after the CT training

Pre (n=)		Post (n=)	
correct answers	In %	correct answers	In %
16	33.3	42	87.5
incorrect answers		incorrect answers	
32	66.7	6	12.5
Total: 48	100	Total: 48	100

In the first CT task, there were two sample students who speculated on the following statement: *The stillness of the morning air was broken. The men headed down the bay.* Here between the two students in the task, one of them interpreted this statement critically while the other did not. Participants were required to spot the correct answer, namely, the critical thinking student in the task. In table 1, it is shown that only a minority of the participants (33.3 %) provided the correct answer to the first task. However, in the post stage, the number of correct answers increased prominently (87.5%). This is the indicator that the participants had a clearer idea of how a critical thinker interprets a situation after the awareness raising training.

Table 2. Analysis of Task 2 before and after the CT training

Pre (n=)		Post (n=)	
correct answers	In %	correct answers	In %
21	43.7	44	91.7
incorrect answers		incorrect answers	
27	56.3	4	8.3
Total: 48	100	Total: 48	100

Similarly, there were two other sample students in the second CT task. This time they wrote a paragraph about *the qualities of a good friend*. One of them had a critical perspective of the qualities of a good friend while the other did not. The participants were required to pick the critical thinker out between these two students. As table 2 demonstrates, the amount of correct answers was less (43.7%) than the incorrect ones in the pre-part. In the post CT task, the rate of correct answers improved dramatically (91.7 %). Supporting the findings in the first task, the increased level in the correct answers in the second task warranted attention to the cognitive change in the perception of critical thinking at the end of the semester.

Table 3. Analysis of responses to the 1st open-ended question

Pre		Post	
in frequencies (n=)	in %	in frequencies (n=)	in %
• Being sceptical about an event or a person in other words nitpicking (16)	33.3	• Looking at an issue from multiple perspectives objectively by taking both the good and the bad sides of an issue into consideration (28)	58.4
• Looking at issues from multiple perspectives by taking both the	20.9	• Thinking on a topic by doing scientific research, questioning, presenting evidence for your claims	37.5

good and the bad sides of an issue into consideration (10)		and being consistent (18)	
• Making subjective predictions and deciding with those predictions (10)	20.9	• Respecting others' opinions (2)	4.1
• Questioning (8)	16.6	-	
• Explaining what you think obviously (4)	8.3		
Total : 48	100	48	100

In addition to the CT tasks, three main open-ended questions were posed to the participants. The first question in the questionnaire queried freshman ELT students' understanding of critical thinking. Accordingly the original question was as follows: *1. What do you think critical thinking means? Please explain either with an example or a definition.* Table 3 indicates the key themes reached at the end of the content analysis. At the pre-stage, five main themes were obtained through the coding of the answers. As seen above, majority of the participants (33.3%) associated CT with being sceptical about a person or an event, namely, nitpicking. This majority response shows that there is a consensus on the negative meaning of critical thinking which is beyond the scope of this study. The second mostly preferred definition was looking at an issue from multiple perspectives by taking both the good and the bad sides of an issue into consideration (20.9%) which is connected with CT. Another emerging definition was making subjective predictions and deciding with those predictions (20.9%). This definition is in contrast with the nature of CT which indeed encompasses trying to make objective predictions based on reasoning and research. Questioning was suggested by some other participants (16.6%) as the meaning of CT which is quite related with CT but the participants' answers were not clear about how to question or what to question. A minority (8.3%) claimed CT to be about explaining what you think obviously. It is true that a critical thinker tries to be open while answering the "why" question in every problem (Paul, 1995), but this does not mean the same as verbalising one's every thought. Hence, the definition of the minority is inappropriate in the context of this study. As can be seen, the participants expressed different characteristics related with CT to an extent. However, they could not explain or exemplify what it really entails.

Answers to the same question were much more explanatory at the post-stage. More than half of the participants (58.4%) defined CT as looking at an issue from multiple perspectives objectively by taking both the good and the bad sides of an issue into consideration. Here the participants realized the importance of multidimensional evaluation of an issue objectively rather than one sided thinking. The second emerging theme was thinking on a topic by doing scientific research, questioning, presenting evidence for your claims and being consistent (37.5%). Many of the participants produced definitions composed of the true characteristics of CT mentioned during the training. Respecting others' opinions was another definition taking the attention of a few students (4.1%) which was also covered throughout the training.

Table 4. Analysis of responses to the 2nd open-ended question

	Yes	In %	No	In %	No idea or comment	In %	Total	In %
Pre	39	81.2	6	12.5	3	6.3	48	100
Post	46	95.8	2	4.2	0	0	48	100

The second question sought answer to whether participants deemed critical thinking important in language teaching or not. Table 4 reports the positive change in perception (95.8%) towards the topic.

Table 5. Analysis of responses to the 3rd open-ended question

	Yes	In %	No	In %	No idea or comment	In %	Total	In %
Pre	31	64.5	10	21	7	14.5	48	100
Post	46	95.8	2	4.2	0	0	48	100

The third question was twofold: the first part inquired whether participants thought CT could be integrated into English teaching. While in the pre-questionnaire there was less agreement on a positive answer, the analysis of the post-questionnaire indicated a much higher agreement (95.8%) on the applicability of CT in English classrooms. Even the participants who didn't provide an answer in the pre-stage supported the positive attitude towards the issue.

Table 6. Analysis of responses to the second part of the 3rd question

	ideas (n)	no comment (n)
Pre _/31	<ul style="list-style-type: none"> • Comparison can be made between Turkish and English while learning English (1) • Through assignments and some techniques (1) 	29
Post _/46	<ul style="list-style-type: none"> • Through guiding students to discuss an issue from different perspectives as we did in the PMI technique (12) • By teaching students to present their viewpoints on some contemporary articles or videos (10) • Through making students read from different authors and written sources (7) • By asking open ended questions to students (4) • By making sts do research and question on a topic (3) • By helping students to discuss some grammar, vocabulary and usage similarities and differences between Turkish and English (2) 	8

In table 6, among the 31 participants who provided a positive answer to the first part of the third question, only two of them were able to offer vague suggestions to the question *How can critical thinking be integrated into English teaching?* When given the same question in the post-phase, a wide array of suggestions were obtained. The striking key themes in the table make it clear that freshman ELT students' had a developmental change of perspective toward the infusion of critical thinking; especially based on their experiences from the training. They were able to come up with more concrete and specific ideas.

Discussion and Conclusion

Teachers' inability to think critically limits the chances students have to think critically (Black, 2005). In order to think critically, one must be acquainted with what it entails, how to do it and also develop a positive attitude towards the use of it in his/her life. In teaching context, it is only when CT-related beliefs of teachers are addressed via designing education models that will guide them in integrating CT into teaching effectively, can they create an environment conducive to CT-learning (Warburton and Torff, 2005). Thus, the purpose of this study, carried out in action research design, was to raise awareness in a group of freshman ELT students who are studying to be English teachers in the future by training them about the true definition of critical thinking and how to apply it in the language classroom.

In the analysis of the pre and post CT tasks, questionnaires and the informal observations, participants demonstrated an increased awareness of; critical thinking as an educational concept; the importance of its use in language teaching and how it can be integrated into English teaching.

Since the language of instruction, the materials and in and out of class discussions were in English, the close connection between thinking and language learning was exemplified in a smooth and effective way. Deducing from the analysis of the results coupled with the researchers' in-class observations, it was concluded that freshman ELT students highly benefitted from the CT training at the awareness level.

The results of the current study partially parallel the previous research in Turkey driving attention to the need for developing teacher candidates' CT skills (Çubukçu, 2006; Genç, 2008; Tufan, 2008; Saçlı and Demirhan, 2008; Yıldızlar, 2009; Sen, 2009; Beşoluk and Önder, 2010; Güleç-Çakmak, 2010; Ekinci and Aybek, 2010; Çetinkaya, 2011; Serin, 2013). In this study, level of CT in prospective teachers was not measured, but their lack of ability in defining CT and how to use it in the classroom was discovered. Previous research supports this finding by showing that teacher candidates are at a loss in CT skills. Recommendations regarding the integration of required or elective courses on improving prospective teachers' CT skills and efficacy in the teacher-training programs were made (Serin, 2013; Yeşilpınar and Doğanay, 2014).

With reference to the conclusion made by Yeşilpınar and Doğanay (2014) about pre-service teachers' inadequacy in gaining skills about CT and its instruction and the previous research mentioned in the literature review of this study (Bataineh and Alazzi, 2009; Choy and Cheah, 2009; Stapleton, 2011; Ketabi et al., 2013, Gashan, 2015) drawing attention to the lack of teachers' awareness on critical thinking and its application, this study also proved to be valuable in that a group of English teacher candidates changed their perceptions on the meaning and use of CT in teaching.

Teachers need to recognize the essential role of CT in education and introduce the integration of it into our courses through the implementation of appropriate strategies (Bedir, 2013). As a prerequisite to that, they need to be familiarized with the concept and skills. Accordingly, this study revealed that given explicit and purposeful training, English teacher candidates can break the judgemental barriers about the negative connotation of CT and feel more competent and enriched in infusing CT into their teaching.

Implications of the Study and Suggestions

The implications gained through the conclusions of the study are as follows: The in-class observations, informal interviews, open-ended questionnaire and the CT tasks revealed that freshman ELT students were not familiar with the meaning of critical thinking. Despite having a positive attitude towards the importance of critical thinking in language teaching, majority of the students were not knowledgeable on how to use it in the language classroom. This is the indicator that they were not introduced to such learning during their high school or secondary education years which are essential for learning some basic higher order thinking skills.

However, the study showed that they were very willing to learn about the concept and the ways of integrating it into their teaching and if given appropriate training, they can develop an awareness of how to integrate critical thinking into their daily life and teaching. Cognitive change is expected to lead to behavioral change, so this research proved to be a valuable resource for the freshman ELT students to both improve their English and vision on critical thinking in the ELT context.

On the basis of the findings, some suggestions for further research and improvement in practise are as follows:

First of all, this study was limited to the observation of increase in the awareness level of 48 freshman ELT students at a state university. Despite the obvious positive change at the cognitive level, to what extent these candidate English teachers put the acquired knowledge on CT and its teaching into practice needs to be researched. Therefore, further studies could dwell on the process and results of CT application by pre-service English teachers in real life teaching situations.

The participants of this study were chosen via the purposive sampling method. In another study, if possible, a wider perspective of participants differing at age, level of education or gender could be trained to see the possible effects.

The potential obstacles that freshman ELT students may face in teaching CT was not in the scope of this study. Their beliefs and coping strategies should be highlighted and they should be trained on the problematic issues.

Inspired by the results, decision makers can give more emphasis to such training in teacher preparation programs. It could be either in the form of a separate elective course or integrated into the courses like Study Skills.

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