

# Evaluation of the 2006 and 2015 Turkish Education Program in Secondary School Curriculum in Turkey in Terms of Critical Thinking

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Received: February 9, 2016

Accepted: February 16, 2016

Online Published: March 6, 2016

doi:10.5539/jel.v5n2p38

URL: <http://dx.doi.org/10.5539/jel.v5n2p38>

## Abstract

The objective of this study is to evaluate the primary school second stage Turkish Education Curriculum effectuated in 2006 and the secondary school Turkish Education Curriculum effectuated in 2015 comparatively in terms of critical thinking. Of qualitative research designs, document analysis approach and content analysis were adopted for the study. The elements of aforementioned curriculums such as teaching approach, overall objectives, basic approach, basic skills, basic language skills, achievements, elements and methods were analyzed in terms of critical thinking. Both Turkish Education Curriculums have taken critical thinking as a basic skill, and have included critical thinking in the sections of overall objectives, basic approach and vision. On the other hand, 2006 Turkish curriculum is richer in methodological basis in terms of giving basic language skills, while 2015 Turkish curriculum is richer in terms of achievements.

**Keywords:** 2006 Turkish Education Curriculum, 2015 Turkish Education Curriculum, critical thinking

## 1. Introduction

Critical thinking and creative thinking can be stated as the outstanding thinking skills of twenty-first century. With the effect of scientific and technological developments, the individuals' adopting thinking skills became essential in this modern world, today. In the course of teaching-learning process, learning of thinking gained importance rather than transferring of knowledge. Therefore, the individuals who are able to think creatively, to criticize, to produce, to access information by using information technology have been tried to be raised and thinking skill-focused programs have been prepared for students (Akbiyik & Seferoglu, 2006). Critical thinking is a complex thinking skill that requires to be operated the metacognitive skills. "It is based on synthesis and assessment rather than practical and analytical skills" (Moore, 2001). Critical thinking skills can be sorted as researching the diversity between the major allegations and facts, establishing the cause-effect relationships, revealing the difference between objective knowledge and the alleged idea, determining the degree of reality verification of a situation, making decision, questioning the credibility of the information coming from the source, identifying the hidden meanings in the claims or discussions, testing assumptions, identifying trends, identifying logical fallacies, creating the reasons according to logical sequence, and making decisions for the strong claims (Inceliö, 2015; Rudd et al., 2000). In this context, critical thinking can be defined as: "an individual's making assessable, analysing and conscient judgments in order to decide what to do and what to believe" (Evancho, 2000). In short, critical thinking covers mental or intellectual skills such as, proving the validity and credibility of an information or an alleged idea that is faced, considering several criteria when deciding on a topic, attempting to find evidences related to what is read or listened, demanding from other people to testify their ideas or claims before accepting them, being transparent, being honest, being consistent and being truthful (Ozdemir, 2003). According to Johnson (2000, p. 5), critical thinking is "a way of thinking in which a person organizes, analyzes, and evaluates an interest".

Educational theorists and their researches agree that critical thinking is an important objective of education (Lafer, 2014; Norris, 1985; Siegel & Carey, 1989). Being able to think critically and to take effective decisions are cognitive skills that an educated individual must have (NCEE, 1988).

Watson and Glaser (1980) defines critical thinking as attitudes, manners, a combination of information, and skills regarding the use and practice of information. According to Slattery (1990), critical thinking includes asking questions, recognizing problems, researching evidences, analyzing hypothesis and assumptions, avoiding from the emotional reasoning and generalization, taking other comments into account and showing tolerance for uncertainty. To develop critical thinking skills, the following strategies can be utilized:

- Preparing a safe environment.
- Utilizing from what is known.
- Working with classmates.
- Learning to ask questions well.
- Learning loyalty for classmates.
- Giving multiple perspectives.
- Creating sensibility.
- Creating a perspective for the future and developing standards.
- Converting thoughts into behaviours (Berman, 1991, p. 10).

Students' being equipped with critical skills such as classifying, building relationships, analyzing, synthesizing and evaluating is not only vital for Turkish course, but also those skills are needed in order to ensure academic success in other subjects (Aydin, 2012). The purpose of the study is to evaluate 2006 Turkish Education Curriculum and 2015 Turkish Education Curriculum in terms of critical thinking. While evaluating them, general purposes, basic approaches, methods and acquisitions of the curriculums were taken into account. Since Turkish course targets understanding and explaining skills of students, their levels of critical thinking in Turkish course which is a pivot subject will affect other courses in terms of academical achievement and attitude.

## 2. Literature Review

When it is reviewed the literature on critical thinking in Turkey, a wide range of studies can be seen from elementary and high school students to graduate students, and from the teachers who are actively working to the instructors at university. Akinoglu (2001) confirms that science education that is sensitive to the critical thinking skills affects academical success of the students and their attitudes towards the course positively. Yet, Sahinel (2001) reveals that using critical thinking skills influences academical success and attitudes of the students in Turkish courses more positively than the traditional methods when teaching integrated language skills.

Critical thinking has a positive impact on students' academic achievement (Elias & Kress, 1994). Akbiyik and Seferoglu (2002) confirm that students who have higher critical thinking tendencies are more successful in maths, physics, chemistry, biology, Turkish literature, history and geography lessons than the ones who have low critical thinking tendencies in their study that tested the relationship between academic achievement and critical thinking. Coskun (2013), in his study on critical thinking tendencies of prospective religion and ethics knowledge teachers, determines that critical thinking tendencies of prospective teachers were moderately positive. Ozdemir (2005), in his study that was conducted with 128 prospective teachers, determines that prospective teachers have critical thinking skills at a moderate level.

Bokeoglu and Yilmaz (2005) found that the more critical thinking levels of students increase, the less anxiety they feel while they do scientific research. Bayat (2014), in his study that he conducted with 181 prospective teachers from six different branches, confirms that there is a significant relationship between critical thinking tendencies and academic writing skills. With reference to the results of these researches, the importance of critical thinking skills can be seen in maximizing academic writing skills and in minimizing scientific research anxieties of students.

In a study conducted by Ekinici and Aybek (2010) on prospective teachers, when reviewed the relationship between critical thinking and empathical tendencies, a significant positive correlation was found between the empathical tendencies and critical thinking tendencies. Since both are thinking skills, it can be said that prospective teachers who developed critical thinking skills can develop their emphatical skills, as well. In the study conducted by Korkmaz (2009) on teachers and lecturers, he found that critical thinking levels of participants were at moderate levels. Besoluk and Onder (2010) conducted a study with 528 prospective teachers and stated that major portion (68%) of prospective teachers have critical thinking tendencies at moderate level and a considerable number of them (26.7%) have those tendencies at lower level. In Turnuklu and Yesildere's

(2005) study with 227 prospective mathematics teachers, the students' critical thinking tendencies showed a positive tendency, and those tendencies were not at desired high level.

Sen (2009), in his study with prospective Turkish teachers, determined that prospective teachers had moderate level critical thinking levels. Cetinkaya (2011) also found that the levels of critical thinking of prospective teachers were lower in his study with prospective Turkish teachers.

In Tumkaya's (2011) study conducted on 650 science students, it was found that critical thinking levels were significantly lower. Demir's (2006) study with 2488 primary school students revealed that fourth and fifth grade students had a high level of critical thinking skills in the context of social studies course.

Dutoglu and Tuncel (2008) suggested that critical thinking and emotional intelligence levels of prospective teachers were not at high level in their study conducted on 374 prospective teachers. In Narin and Aybek's (2010) study conducted on social studies teachers, the teachers who have a higher critical thinking levels preferred teaching methods that provide a higher-level thinking in the teaching-learning process and they were found to be more efficient in students' gaining critical thinking skills. Semerci (2003), in his study that he conducted on doctoral (phD.) students, determined that the courses of "Development and Learning" and "Planning and Evaluation in Teaching" developed critical thinking skills of students. Conducting a study on physical education and sports teachers, Sacli and Demirhan (2008) found the level of critical thinking of prospective teachers were at moderate level. Guven and Kurum (2008) confirmed that critical thinking levels of prospective teachers were at lower level in general terms in their study conducted on 251 prospective teachers. Korkmaz and Yesil (2009) found that the students had the critical thinking skills at a moderate level in their study conducted at middle school, high school and university levels on a total of 395 students. Sengul and Ustundag (2009), in a study conducted on 80 physics teachers, determined that physics teachers had low level critical thinking tendencies and did not include any activities to develop critical thinking in their class times.

### 3. Method

The data of the study were obtained by the document analysis method. Document analysis includes data collection by analyzing existing records and documents, and analysis of written materials that contains information about the aimed fact or facts. Furthermore, the method covers finding sources, reading, note-taking and assessment processes (Karasar, 2012, p. 183; Yildirim & Simsek, 2006, p. 187). Teaching approach, overall objectives, basic approach, basic skills, basic language skills, acquisition, method and techniques of 2006 and 2015 Turkish Education Curriculums were evaluated in terms of critical thinking. The obtained data were subjected to content analysis. "The basic process in the content analysis is to bring similar data together under the certain concepts and themes and to interpret them by editing in a way that readers can understand" (Yildirim & Simsek, 2006). "Content analysis is valuable for categorizing the substantive focus of published research and providing a parsimonious perspective on a topic and insight into what is viewed as important to the field. Content analysis was also used to study distance education at the level of the course, across programs, and within the literature" (Aydin, 2013, p. 1342).

### 4. Findings

In both Turkish Teaching Program, critical thinking is among the basic skills that are supporting the development of language skills such as "using Turkish accurately, nicely and efficiently, creative thinking, communicating, problem solving, decision making, using information technology, researching and entrepreneurship".

2006 Turkish Curriculum consists of basic language skills such as listening, reading, speaking and writing and additionally grammar learning. 2015 Turkish Curriculum placed the skills of listening and speaking under the title named verbal communication. Being a separate field, listening and speaking skills are discussed in the verbal communication with the new program.

When the 2006 Curriculum is carefully viewed, the acquisitions such as "distinguishes between subjective and objective judgments in what she/he listens/watches" in listening skills and "distinguishes between subjective and objective judgments in what she/he reads" in reading skills are towards critical thinking. Additionally, in the methods and techniques section of the program, descriptive information related to critical thinking, speaking, reading and writing methods is given in respect of these acquisitions: "uses listening methods and techniques", "uses speaking methods and techniques", "uses writing methods and techniques" and "uses reading methods and techniques".

#### 4.1 Critical Listening/Watching

**Objective:** To provide students to find their own truth by ensuring them to have habits of asking questions about what they listen/watch, to think about the topic with its positive and negative sides, and to provide them to evaluate it objectively.

**Application:** Provided information must be quickly analyzed if it reflects the speaker's personal feelings or it is based on scientific data and observations. For this reason, students are required to have had the ability to ask the following questions about the topic:

- 1) What is the purpose of the speaker?
- 2) Does the speaker have enough knowledge and experience about the subject?
- 3) Is the given data updated and valid?
- 4) Is the subject examined with an objective perspective? Are the critics correct?
- 5) Are the alternative solution offers presented?
- 6) Are the solution offers scientific? (Ministry of Education, 2006, p. 63)

#### 4.2 Critical Speaking

**Objective:** To interpret a specific topic by evaluating it with its positive and negative sides and with a neutral point of view and to improve the skills of generating ideas and solutions.

**Application:** The speaker presents her/his speech that s/he selected and limited related to the topic to the audience without any missing points. She/he reveals her/his reactions and admirations relying on an objective and scientific data and proposes alternative solution offers (Ministry of Education, 2006, p. 64).

#### 4.3 Critical Reading

**Objective:** To provide the students to think about what they read by giving them the habit of asking questions; and to have them find their own truth by evaluating the topic with its pros and cons with a neutral point of view.

**Application:** While reading texts, students determine the ideas they agree or not and seek answers to the questions in their minds. They try to establish a cause-and-effect relationship between thoughts, emotions and events. They give the meanings to what they read starting from their personal experiences (Ministry of Education, 2006, p. 69).

#### 4.4 Critical Writing

**Objective:** To develop students' skills of viewing events and cases objectively, making comments, creating ideas and finding solutions.

**Application:** Any event, situation and thought are discussed with the class by putting on the agenda. Students express their thoughts on the topic with the positive and negative aspects and the impartial approach (Ministry of Education, 2006, p. 72).

In the "overall objectives" section of the 2006 Turkish Education Curriculum, it is intended that "students should be constructive, creative, rational, and critical. They also should learn accurate ways of thinking and should make them habits. They should benefit from the mass media tools in order to access the information, they should obtain critical perspective against the messages coming from these tools and they should be selective".

In the "features to be required in the reading texts" section of the 2006 Turkish Education Curriculum, the texts should have features that will give students a critical perspective (MOE, 2006, p. 56). In the assessment and evaluation section, it is stated that "in all stages of education, self-assessment, group assessment and peer-assessment that are effective on the development of basic skills such as decision-making in performance assessment, and critical thinking skills must be made" (MOE, 2006, p. 227).

In the section of vision of 2015 Turkish Education Curriculum, the individuals who are "scientific thinker, understanding, researching, analyzing, criticizing, questioning and interpreting" and "can evaluate what they read with a critical perspective by understanding, can synthesize them, can enjoy from reading and learning", are intended to be raised (MOE, 2015, p. 3). In the section of basic approach of the curriculum, it is stated that "Turkish course education curriculum aims to raise individuals who can understand what they listen and what they read in the printed and electronic environments. Those individuals can also express themselves both in written and verbally, can think critically, reflectively and creatively, and can be sensitive towards national, spiritual and universal values" (MOE, 2015, p. 4).

Among the overall objectives of the program, the objective of “to develop students’ basic skills such as being scientific, being constructive, thinking critically and creatively, expressing themselves, communicating, collaborating, problem solving and entrepreneurship” has been mentioned (MOE, 2015, p. 5). In the reading section of the curriculum, reading skill has been revealed as a skill that includes “the process of learning, researching, interpreting, discussing and critical thinking” (MOE, 2015, p. 6). In the measurement and evaluation section, the importance of critical thinking was mentioned (MOE, 2015, p. 15). In the 2015 Turkish Education Curriculum, the acquisitions relating to the critical thinking in the context of the secondary school (5-8 grades) level and their learning fields are shown in the following tables:

Table 1. 5th Grade

<b>Verbal Communication</b>
Collects the ideas expressed in the lecture/the discussion, states what s/he understands from the lecture and expresses his/her own thoughts.
Makes inferences about what she/he watches/listens
Distinguishes between fiction and non-fiction in what she/he listens.
<b>Reading</b>
Distinguishes between fiction and non-fiction.
Questions the reliability of multimedia sources
<b>Writing</b>
Collects reasons and evidences from the written and the multimedia sources in order to support his/her point of views and uses them to support his/her opinion.
Links the paragraphs or sections of the text supporting the main idea, opinion or thesis, so she/he provides consistency in the text itself.

The fifth graders’ making inferences about what they listen and what they read, their noticing fiction and non-fiction in what they listen and in what they read, their questioning the reliability of messages come from the media, and additionally their supporting the alleged opinions they obtained from the written and the visual sources by reasons and evidences are important for the development of critical thinking skills.

Table 2. 6th Grade

<b>Verbal Communication</b>
Notices different perspectives in the lecture/the discussion.
Distinguishes between the thesis or views of the speaker which are supported by reasons and evidences and the ones which are not supported.
Makes inferences about what she/he watches/listens
Questions the consistency of information and thoughts in what she/he listens/watches.
Distinguishes between fiction and non-fiction in what she/he listens.
<b>Reading</b>
Determines the authors purpose and perspective in an informative text.
Distinguishes the opinions supported by reasons and evidences in the informative texts from the views not supported by reasons and evidences.
Compares an author’s presentation of a topic and an event in an informative text to the another author’s presentation.
Distinguishes between fiction and non-fiction.
<b>Writing</b>
Collects reasons and evidences from the written sources and multimedia sources in order to support his/her views and uses them to support his/her opinion.
Links between the paragraphs or sections of the text supporting the main idea, opinion or thesis, so she/he provides consistency in the text itself.

It has been aimed that the sixth graders can recognize different perspectives during verbal communication, can question if the speaker proves his/her ideas, can make inferences during listening, can also question the consistency of what they listen, can determine the purpose of the author of the text which they read, and can

make the text they wrote coherent by connecting the main idea and supporting ideas in the text and by making appropriate transitions in it.

Table 3. 7th Grade

<b>Verbal Communication</b>
Distinguishes between the thesis or views of the speaker which are supported by reasons and evidences and the ones which are not supported.
Makes inferences about what she/he watches/listens.
Questions the reliability of information and thoughts in what she/he listens/watches.
Distinguishes between fiction and non-fiction in what she/he listens.
Determines the reasons and evidences of alleged opinions in the lecture she/he listens.
<b>Reading</b>
Questions the reliability of the information she/he obtains from the multimedia sources.
Determines the author's perspective in the text.
<b>Writing</b>
Collects reasons and evidences from the written sources and multimedia sources in order to support his/her views and uses them by quoting or referring directly.
Determines not only the reasons/evidences that support his/her opinions, but also the opposing reasons/evidences and refers them.

It has been aimed that the seventh grade students can realize if the speaker supports his/her ideas with the evidences while listening, can check the validity of the information in written and visual resources, can present a text they wrote as a whole by showing proofs and evidences as well as considering the opposite views.

Table 4. 8th Grade

<b>Verbal Communication</b>
Determines the persuasive and guiding statements in the lecture/discussion.
Justifies his/her own thoughts by considering the opinions and the information expressed in the lecture/discussion.
Notices different views in the lecture/discussion.
Distinguishes between the thesis or views of the speaker which are supported by reasons and evidences and the ones which are not supported.
Determines the alleged reasons and evidences in the lecture she/he listens, questions and evaluates them.
<b>Reading</b>
Questions the reliability of the information she/he obtains from the multimedia sources.
Determines the author's perspective in the text.
Analyzes the contrasting information/opinions on the same subject.
Understands the messages in the multimedia sources and evaluates them.
Compares fiction texts to anonymous works.
<b>Writing</b>
Collects reasons and evidences from the written sources and multimedia sources in order to support his/her views and uses them by quoting or referring directly.
Determines not only the reasons/evidences that support his/her opinions, but also the opposing reasons/evidences and refers them.

It has been aimed that the eight graders can determine persuasive and guiding expressions in the speech, can question the evidences of the alleged ideas in the speech they listen, can analyze the thoughts conflicting and matching up on the same subject, can determine supportive reasons of their ideas as well as the opposite reasons and evidences and can cite to the opposite reasons and evidences.

## 5. Discussion and Conclusion

When the literature examined on critical thinking in Turkey, it is observed that almost all the participants from elementary school to graduate level are seen to have medium or low level of critical thinking. "Having looked at the criticism directed to our education system, it has been complained about needlessness of rote-learning approach, and transferring of the concepts in any field to learners without questioning and interpreting. Therefore, students cannot perform themselves against information, and cannot develop new and original values towards social life" (Karaduz, 2010, p. 1571). Level of critical thinking in the West does not seem to be at the desired level, as well. In this context, Lan (2002) emphasizes that critical thinking should be taught as a separate course which includes acquisitions and activities or it needs to have a structure integrating other courses, while Paul (2005) states that many universities is quite lack of critical thinking.

In this study in which 2006 and 2015 Turkish curriculums were evaluated in terms of critical thinking, critical thinking was determined to have considered in both curriculums as a basic skill. In addition, both curriculums placed critical thinking in the parts that have theoretical bases such as general purposes, vision, and general approach. In 2006 Turkish Education Curriculum, critical thinking was recommended as a method in all listening, reading, speaking and writing skills: critical listening, critical reading, critical speaking, critical writing. 2015 Turkish Curriculum did not include any method as a recommendation in the context of basic language skills as in the previous program. On the other the hand, while 2006 Turkish Education Curriculum has two acquisitions named distinguishing subjective and objective judgments in reading and listening skills, 2015 Turkish Education Curriculum has more acquisitions towards critical thinking. In brief, it can be said that 2006 Turkish Education Curriculum is richer in terms of methodological basis in giving basic language skills, but 2015 Turkish Education Curriculum is richer in terms of acquisitions.

Turkish course aims to develop the understanding and explaining skills. In this respect, Turkish course can be said that it is a principal lesson of school-type learning in order to ensure academic success. Metacognitive skills such as critical thinking should be enabled in the process of teaching the native language to the students in order to succeed in other subjects and to develop a questioning attitude towards themselves, their environment and the world in general. On the other hand, with the development of information technology, students are exposed to many messages through electronic reading on the mass media rather than the ones on the paper-based texts. The students' presenting a questioning approach to the messages from these sources is vital for happy individuals and a peaceful society (Hall & Quinn, 2015). Akyol (2010) indicates that in this age when people read less and media influences people with multiple ways, individuals are exposed numerous propaganda or persuasive speeches and visual presentations. In order to evaluate these messages, Akyol states that critical thinking-based language skills must be developed. Gunes (2012) emphasizes that thinking education course which also includes critical thinking should be taught as a compulsory course and should not be optional. Gunes also emphasizes the need of the individuals who develop thinking skills at all levels from pre-school to university, question and solve problems in this context. Akar Vural and Kutlu (2004) indicate the importance of critical thinking about education programs' responsibilities for raising rationalistic individuals and also citizens who can understand, reinterpret and then convert the complex world we live in. Those individuals should also think freely, effectively solve complex problems they face by avoiding prejudices, and take proper and effective decisions.

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