

Critical Visual Reading Skills of Students

Zekerya Batur*, Murat Başar, Hatice Nilüfer Sözen

Usak University, Turkey

Corresponding author: Zekerya Batur, E-mail: zekerya.batur@usak.edu.tr

ARTICLE INFO

Article history

Received: August 30, 2018

Accepted: July 21, 2019

Published: July 31, 2019

Volume: 7 Issue: 3

Conflicts of interest: None

Funding: None

ABSTRACT

Mother tongue education is accomplished with four basic language skills. These skills are listening, speaking, reading and writing skills. One of the basic skills that increase the vocabulary of the individual is the reading skill. Understanding and comprehension are important in this skill. Understanding of reading is a complicated process. There are many factors that affect the meaning of this process. The content of the text, such as the type and the punctuation, also affect the meaning. Visual reading has understanding qualities like text reading. Therefore, visual reading and visual comprehension also carry a textual characteristic. Accordingly, readers are expected to interpret the visuals with a critical approach in order to capture the details of the visuals. The purpose of this research is to determine whether the students are critical readers about the visuals. The study was qualitative based on a document review. The study was conducted with 20 students. Participants consisted of 10 fifth grade students and 10 sixth grade students. The data of the study were collected by taking the opinions of the students about visuals. The collected data were evaluated by content analysis. As a result of the study, it was seen that the students evaluated the images with a critical eye and the female students were more critical than the male students. As a result, it has been determined that the students differ in terms of mental development stages.

Key words: Reading, Critical Reading, Visual Reading, Student

INTRODUCTION

Education which focuses on language skills has proved that it also improves one's comprehension and expressive skills. This type of education mainly consists of listening and other skills such as speaking, reading, writing and visual literacy. Among these skills, listening and reading improve comprehension skills while speaking and writing help students develop a sense of self-expression. Different tools are often utilized in order to develop these skills. First, there are various methods which improve listening skills (Aarnoutse, Brand-Gruwel and Oduber, 1997; Anderson, 1952; Carrier, 2003; Chen and Zhang, 2011; Cong-Lem, 2018; Fawcett, 1966; Field, 1998; Gruhn, 2002; Kavaliauskienė and Anusienė, 2009; Nurpahmi, 2015; Othman and Vanathas, 2017; Peterson, 2010; Russell, 1964; Strother, 1987; Uman-ski Kogovšek, Ozbič and Schiller, 2010). In order to develop speaking skills, students may discuss various topics such as the news, weather forecasts, road directions, shopping problems, following instructions asking questions, telling others about memories, telling stories or fairy tales, talking about trips, forecasting, dramatization, playing with puppets, analogies, brain storming, talking about photos or videos, and pronunciation exercises (Kempe, 2003; Sze, 2007; Tafani, 2009; Ucgun, 2007; Wang and Sun, 2000). Techniques such as reading aloud, silent reading, and critical reading are

used in order to improve reading skills while activities such as summarizing, note-taking, creative writing and controlled writing are used to improve writing skills. Instructors should follow a balanced approach of teaching grammar rules and language production simultaneously. When introducing new skills, hands-on learning is preferable to rote methods. Nowadays, visual literacy, a recently introduced skill in education, has been incorporated in teaching and learning processes. This skill is named as visual literacy. Visual literacy is defined as the ability to interpret and make meaning from information presented in graphics and visual designs (Avgerinou and Pettersson, 2011; Avgerinou, 2009; Brumberger, 2011; Fernández and Ruiz-Gallardo, 2017; Jean, 2018; Metros, 2008; Rakes, 1999; Shivers, Levenson and Tan, 2017; Stokes, 2002; Trumbo, 1999). In this way, students are not only expected to assess what they read but also to interpret information presented visually. Students who are proficient in visual literacy often excel in basic analysis and critical thinking (Arnheim, 1969; Baker, 2015; Bowen, 2017; Cruz and Ellerbrock, 2015; Kim, Wee, Han, Sohn and Hitchens, 2017; Lasley and Haas, 2017; Santos Costa and Xavier, 2016; Smilan, 2016; Vitulli and Santoli, 2013). Additionally, in order to develop higher levels of understanding, students should participate in other activities and develop practical skills. Students need to develop visual literacy skills as well

as critical reading skills. This study was conducted to assess the different ways in which students perceive visual information. The main purpose of this study was to determine the different levels of visual literacy among elementary students.

Thinking is a cognitive reaction caused by stimuli in the brain. Every stimulus perceived by the brain produces a chemical reaction (Abrami et al., 2008; Carlgren, 2013). In other words, human beings generate thought from stimuli they perceive. In today's world in which knowledge and different philosophies are produced and spread very quickly, it is necessary to organize and develop systematic thinking processes to understand this information (Ennis, 1993; Glaser, 1983; Gok and Erdogan, 2011). It is necessary to examine and analyze information, assess and interpret their differences and similarities in a systematic approach. Therefore, developing critical thinking skills is the necessary intellectual approach of today's world (Gunes, 2009; Korkmaz, 2009).

The experts in cognitive science have defined critical thinking in many ways. Although their definitions encompass the same foundational principles of critical thinking, there are a few minor differences in their definitions. Scholars agree that critical thinking is a meta-cognitive process, which involves asking questions, trying to find solutions to the questions by understanding the rationale of the questions, using advanced level thinking, examining the subject in an objective and meaningful way, focusing on logic and reflection. This ultimately requires us to re-examine our own thinking (Branch, 2000; Ennis, 1993; Glaser, 1983; Gok and Erdogan, 2011; Kalman, 2002; Korkmaz, 2009; Lieberman et al., 2004; Nosich, 2001; Pettit, 2016).

Language is intimately connected to thought. Therefore, developing language skills directly affects thinking ability (Carruthers, 2002; Delefosse and Delefosse, 2002; Vygotsky, 2012). Reading ability, one of the most important language skills, is based on the principle that a text is structured and made meaningful in the mind. However, reading is not only limited to interpreting texts but it also includes all visual stimuli perceived by the mind. Thus, visuals are perceived by the mind through a reading process whether they are integrated with or without a text. Visual reading is an understanding of data obtained from a visual source of information and it plays an important role in thinking. Due to the connection between critical thinking and visual literacy, these skills should be developed simultaneously and they should not be thought of as separate or unrelated. Therefore, it would be ideal to demonstrate an approach for critical thinking through the use of visuals.

Objective and Research Questions

The purpose of this study was to examine the visual critical reading skills of students in the fifth and sixth grades. The study aimed to answer the following questions:

1. Do students demonstrate visual critical thinking?
2. How do the developmental characteristics of students influence their ability to use visual critical thinking?
3. How is changing the visual critical thinking of the students based on their sexes?

METHOD

This study is a qualitative study based on the analysis of various documents. Data were examined through content analysis. This study was descriptive and based on document analysis. According to Yıldırım and Şimsek (2016), document analysis covers the analysis of materials about events or events intended to be investigated. Document analysis can be used as a stand-alone method or can be used with other methods. The data of the study were analyzed by content analysis. Cohen, Manion, and Morrison (2007) reported that content analysis was a research technique consisting of editing, classification, comparison of texts and theoretical results from texts. Yıldırım and Şimsek (2016) stated that the content analysis was to reach the concepts and data that could explain the collected data.

Operation Stages

Subject determination stage

A total of 20 teachers and 200 students were gathered in order to determine visual objects that 5th and 6th grade students enjoyed. The teachers interviewed in the study were chosen among the volunteer teachers through stratifying method whereas the students were chosen via simple random method among six different schools which have low, medium and high socio-economic levels.

Subject limitation stage

Upon meeting with the students and teachers, the subjects were determined. The five topics were limited to the sun, outer space, the world, planets, and the Earth.

Visualization of subjects stage

These five topics were then visualized by an artist (Hatice Nilüfer Süzen).

Selection of participant students stage

A total of 5 male and 5 female students from 5th and 6th grade students (20 students in total) were chosen randomly and voluntarily.

Data collection stage

Each student was given approximately 20 minutes per visual and asked to state their opinions about the conflicts, inconsistencies or unrealistic components of the visuals in their writings. The study was conducted under the supervision of researchers. Visuals were coded as G1, G2, G3, G4 and G5. Student statements were ordered in the following manner: The first number shows the visual (1), the second number indicates the grade level (5), the third number denotes the student order (1), and the last letter signifies the gender (F/M): (1.5.1.E)

Data analysis stage

Students' thoughts about the visuals were interpreted and assessed by the researchers. The results of the study have

been analysed in the light of content analysis. Yıldırım and Simsek (2016) stated that content analysis is an effort to obtain the concepts and relations having the ability to explain the data gained. In this analysis, the data have been deeply examined and interpreted via being categorized as theme code sub code. Within this study, themes have been formed. Pictures have been drawn according to the themes. These themes have been determined in accordance with the opinions of three Turkish language teachers and three Turkish language experts. The visuals of the themes have been designed by a researcher whose branch is visual arts teaching. Visual arts experts and researchers have agreed upon the visuals' suitability with the themes. The themes have been determined as Pool Enjoyment in the Sun, Animal World in Space, Picnic on the Moon, Kites and Birds with Rockets. However, the codes have been specified by taking the counts of critical thinking which Sekerci and Bilgin (2008) conveys from Paul and Elder (2003). These codes include discrepancies, mixed and scattered thinking, being realistic enough, limiting the data and explaining mistakes, forming superficial concepts and misusing the words.

FINDINGS AND COMMENTS

This section illustrates the students' opinions regarding the visuals and interpretations of these opinions. Student participation was based on their grade (5th and 6th grade), gender, and their thoughts on the five visuals prepared. Interpretations were made according to the visual order of: Visual 1 (G1), Visual 2 (G2), Visual 3 (G3), Visual 4 (G4), Visual 5 (G5).

Depending on Pool Enjoyment in the Sun theme, the codes of realizing discrepancies, not being realistic enough, forming superficial concepts, limiting the data and explaining mistakes have been identified. Based on the code of realizing discrepancies, students suggested that:

- 1.5.1.E: 1. It is a mistake that there is water on the Sun.
2. It is a mistake that there is fish living on the Sun.
3. It is a mistake that there is seaweed on the Sun.
4. It is a mistake that there is a swing on the Sun or on water.

1.5.4.E: A fish is swinging on a swing, another fish is walking on land.

1.5.5.E: Fish cannot swing; mountains are not under the sea; fish does not have hair; fish does not have color; fish



Visual 1.

cannot talk; there are no sharks. It is certainly wrong that the fish has hands.

1.5.1.K: There is a ship in the sky. This has nothing to do with reality. Fish would die if they did not live in water but these fish communicate by talking, which is not realistic, either. Also, having seaweeds in sky is unrealistic.

1.5.4.K: In reality, fish does not swing. Fish cannot talk. Fish does not have such bright colors. This picture is a product of imagination.

Students have realized that the difference between the theme and daily life.

Based on not being realistic enough, the students emphasized unreal phenomena between the real events in their life and theme.

1.5.2.E: Fish are doing unrealistic things.

One fish is swinging on a swing. The chains of the swing are hung on the mountains.

One fish is tied to a chain.

1.5.3.E: No swing can be tied to mountains. Fish cannot live on land. And they cannot tie a ribbon since they do not have such cognitive ability. Fish cannot swing. Seaweed does not grow on land.

The students have repeated the superficial information in the theme depending on forming superficial concepts code.

1.5.2.K: It would have been better if the fish was not riding on the chain. It would have been better if it was not a chain. It could be better without a triangle. The fish look so beautiful.

1.5.5.K: The swing is not set up on the Sun.

Fish do not swing on swings.

Fish cannot talk with each other.

The sun's rays are not triangular.

1.6.3.K: The fish is getting on the swing.

The fish is in front of the sun.

1.6.4.K: It is impossible for the sun to be in the sea. Fish cannot be on the sun.

The sun cannot be tied with a rope.

1.6.5.K: Fish fins are not strong enough to hold an object. And fish cannot be tied to water with chains. Fish cannot hold onto land.

Within the limiting data and explaining mistake codes, students have clarified the mistakes they encountered in the visual of the theme.

1.5.3.K: This does not match. This is completely different from reality. Fish do not swing in swings in the seas of the world. They cannot tie their hair. The sea cannot be yellow. In reality, it is blue.

1.6.1.E: There is a Sun under the sea and fish are on the Sun.

1.6.2.E: Fish cannot live without water.

The fish is swinging on a swing.

1.6.3.E: The fish is swinging on a cradle.

1.6.4.E: Fish cannot swing on swings.

And fish cannot live in places other than the sea, rivers and other bodies of water:

1.6.5.E: It does not reflect the reality. Fish are swinging on a swing and a water boat.

1.6.1.K: Fish never swing. Fish cannot laugh or talk. The sun is not underground.

1.6.2.K: *Fish cannot live without water.**Boats cannot move on the sun, either.*

Based on Pool Enjoyment in the Sun theme, 3 male and 2 female 5th grade students have realized the discrepancies. 2 male students have determined the situations which are not realistic enough whereas there has been no opinion suitable for this code among female students. However, male students have not had any opinions within forming superficial concepts code, but female students have expressed their opinions within this code. Based on this theme, male students are able to determine unrealistic situations whereas female students are more successful than male students in that thinking superficially and forming concepts.

The male students in the 5th grade tried to describe G1 and define the existing objects while two students (1.5.1.M, 1.5.2.M) indicated that there were unreal situations in G1 visual. Female students in 5th grade found G1 unrealistic in general and a student (1.5.2.F) tried to interpret the visual as it is.

Male students expressed the visual G1 in a more concrete way while female students examined it more critically. It can be said that female students at the 5th grade level are able to have a more abstract and critical perspective than male students.

Male students in 6th grade generally tried to describe the visual G1 as it is. Only one student (1.6.4.M) pointed out the unrealistic nature of the visual. Female students, on the other hand, found the G1 visual unrealistic and criticized it.

It is seen that male students in 6th grade tried to merely describe the visual G1 just like the male students in the 5th grade while female students examined the visual G1 critically. It can be said that female students in 6th grade think more critically than male students and can perform more abstract procedures.

In the pool enjoying in the sun theme, eight different ideas have been suggested to reveal the contradictions. Four ideas have been suggested about the inability to be realistic. Ten different ideas have been suggested on data limitation.

Depending on the Animal World in Space theme, the codes of realizing discrepancies, not being realistic enough, superficial thinking, limiting the data, explaining mistakes, mixed and scattered thinking and misusing the words have been identified. Based on the code of realizing discrepancies, the students have suggested that:

2.5.1.E: *1. It is impossible that animals live on other planets.*



Visual 2.

2. It is a mistake that wild animals and plant eaters live together.

3. It is impossible that trees grow on other planets.

2.5.2.E: *Here, there is life in space. But it does not exist in real life. It is as if all planets are united. But this cannot be true in reality.*

2.6.3.E: *Animals are breathing and living in the atmosphere.*

The elevator has 30,000 floors.

The subway to Earth is 100 m.

2.6.1.K: *There is a subway going to Earth, a subway going to Mars. There is a sign that reads, "attention, outer space" This is not possible. Earth cannot exist there.*

2.6.2.K: *Animals cannot live in space.*

2.6.3.K: *The elevator goes up 300,000 floors in the picture. The subway to the Earth is unrealistic.*

There are animals in space.

There is life in space.

With regard to the code of realizing discrepancies, the students have revealed the discrepancies between the zoo in the real life and the visuals in the theme. Female students are more successful than male students whereas 6th grade students are more successful than 5th grade students in terms of realizing the discrepancies.

Mixed and Scattered Thinking

2.5.3.E: *In this picture, there are animals on the moon. But no animal can live on the moon. Trees cannot grow on the moon. The moon has a spherical shape. That is, all around is covered with space. That's why there is no risk of falling into emptiness. The distance between the Earth and the Moon is too far; thus the subway cannot travel this distance. An elevator cannot travel from the Moon to the Earth.*

2.5.4.E: *There is a zoo in space, a space subway, the animals are free, how they breathe is unrealistic, and there are animals flying in the air.*

2.5.5.E: *There are planets and toys in the zoo, a space elevator, the animals should be in cages, the sky should not be colorful.*

Depending on mixed thinking code, 5th grade students have mixed and scattered thinking style. On the contrary, 6th grade students have not produced mixed and scattered opinions. In addition, 6th grade male students have mixed scattered thinking whereas female students have not revealed mixed and scattered opinions.

2.5.2.K: *Outer space, subway to Mars, subway to the Earth. It would have been better if these were not in a zoo on Earth.*

2.6.5.E: *It does not reflect the reality. There is an elevator going to Earth, a subway going to Earth, and a subway going to Mars*

6th grade students have been able to think more extensively whereas 5th grade students have formed superficial concepts.

2.5.3.K: *This cannot be true. It does not exist in reality. Animals cannot live or walk in space since there is no water in space. Because there is no gravity in space.*

2.5.4.K: *A zoo cannot exist in space. There is no life in space. It is not possible to have plants, flowers or trees in space. Since animals are not literate, they cannot understand the text "Attention, outer space!" There is no water in space.*

2.5.5.K: *There is no zoo on the Moon.
There can be no elevator going to the Earth.
No trees grow on the Moon.
Animals cannot walk on the Moon.
There can be no subway on the Moon.
There can be no signs on the Moon.
Animals should be in cages.*

2.6.1.E: *The elevator is going down to Earth.*

2.6.2.E: *The subway is going to other planets.
There is a zoo in space.
Space has a different color.
There is an elevator going to Earth.*

5th grade and female students have been able to determine the unrealistic situations within the Animal World in Space theme. 3 female and 2 male students have been able to determine this situation. Female students are able to discuss this situation more critically than male students.

2.6.4.E: *Trees, flowers or etc. cannot grow on Earth.*

And since there is no gravity, animals, trees cannot stand on land.

2.6.5.K: *There is no communication in space. There can be no connection to the outside world through an elevator. No objects can be placed on planets. We live in it. Vehicles cannot move in space. There is no gravity in space. Everything is floating. Also, animals cannot live without oxygen.*

2.5.1.K: *The zoo in space does not exist in real life. An elevator in space does not exist in reality. There is no life in space and animals cannot live there. A subway in space has nothing to do with reality. There is no lake on the moon; it is not real.*

2.6.4.K: *Animals cannot breathe and they would die in outer space.*

Living things cannot grow without oxygen.

Male and female students in the 5th grade regarded G1 as unreal except for one girl (2.5.5.F) and one boy (2.5.4.M). They stated that this is not a realistic situation.

Three of the male students in the 6th grade simply described objects in the visual as they were (2.6.1.M, 2.6.2.M, 2.6.3.M) while two students mentioned the unrealistic nature of the visual. It is seen that all of the female students considered G2 as unreal.

In the zoo theme, thirteen codes have been suggested in the code of discernment of contradictions, four ways of thinking in the code not sufficiently realistic, two ways of thinking in the code of superficial thinking and concept creation, two ways of thinking in the code limiting data, three ways of thinking in the code of mixed and scattered thinking, and two different ways of thinking in the code of using the words incorrect.

Based on the theme of Picnic on the Moon, the codes of realizing discrepancies, not being realistic enough, forming superficial concepts, limiting the data, explaining mistakes and misusing the words have been discussed. The followings are the statements of the students regarding their realizing the discrepancies:

3.5.5.E: *You cannot have picnic on Mars; there is no air. They cannot go to Mars. This is an impossible dream.*

3.5.3.K: *This picture does not portray reality at all. People are having a picnic on Mars or on another planet. Also,*

human beings cannot sit in space since there is no gravity. They would fly. This does not match.

3.6.1.K: *This family cannot be on Mars, they cannot eat and children cannot play ball.*

Based on the code of realizing discrepancies within Picnic on the Moon theme, 3 students have expressed their opinions. Two of 5th grade and one of 6th grade students have realized the discrepancies within the theme.

3.5.1.K: *There is a family having a picnic and two children are playing with a ball. Over there, on another planet they are having a picnic. They cannot live in space without astronaut outfits. This is unrealistic.*

3.5.2.K: *This picture is beautiful. They are having breakfast on a beach. Children are playing. It would have been better without the Earth.*

3.5.5.K: *A family cannot live on the Moon or eat.*

People cannot sit on the moon surface. There is no gravity. If people sat there, they would be severely burned by the sun. Food cannot go from the Earth to the Moon.

Fruits or vegetables do not grow on the Moon. Therefore, since food cannot go there, one cannot eat on the Moon.

Sound waves do not spread in outer space and clothes are not appropriate. They should wear clothes like astronauts

3.6.4.E: *There is no gravity on any other planet other than Earth.*

Things like fruit, tea, plates etc. in the picture cannot be on the floor since there is no gravity.

3.6.5.K: *Currently, there is no life on another planet. Therefore, they cannot live there. There is no gravity. People cannot stand balanced without special clothes. Food would be floating in the air as well.*

3.6.1.E: *Their having a picnic on Mars, playing ball.*

3.6.2.E: *Having a picnic on another planet.*

Space is blue.

3.6.3.E: *People are living and breathing in outer space and they are walking extremely close to the Sun.*

3.5.4.K: *Human beings cannot live on the Moon. They cannot find fruit or food there since there are no grocery stores*

3.6.3.K: *Life on another planet.*

People are comfortably standing on the planet.

3.5.2.E: *The people here live on another planet. But people need to live on Earth.*

3.5.4.E: *They are having a picnic in space while the children are playing ball.*



Visual 3.

Within Picnic on the Moon theme, male students have had superficial thinking and formed concepts rather than female students.

3.6.4.K: *People cannot do anything on a place where they cannot breathe.*

3.6.5.E: *It does not reflect the reality. Picnic in space, explosive material in space.*

3.5.1.E: *1. It is a mistake that the Earth is seen in the sky.*

2. It is unrealistic for people to have a picnic on another planet and not wear an astronaut costume.

Within the theme, male students have misused the words. One of 5th and 6th grade students has misused the words.

3.6.2.K: *One cannot have a picnic on Mars. The Earth cannot be seen from Mars. If it could be seen, we would see Mars from Earth.*

Based on the theme, only a student has been able to produce mixed and scattered thinking.

3.5.3.E: *This place looks like Mars. Because there are craters. And its surface looks like a desert. They cannot play ball here since there is no air. No space ship is seen around. Therefore, it is impossible for them to come here.*

In fact, food is not eaten and games are not played where there are explosions.

People cannot be close to the Earth or the Sun.

Depending on the theme, a 5th grade male student has been able to reveal the not-being-realistic-enough situation.

While four of the male students in the 5th grade assessed the inconsistencies and unreal items in G3 visual, one student (3.5.4.M) just listed the objects in the visual G3. Three of the female students described the visual G3 critically while two of them (3.5.1.F, 3.5.2.F) described it as it is.

In picnic on the moon theme, students find out four differences according to the code of discernment, nine different way of thinking in code that is sufficiently realistic to create a superficial concept, twelve ways of thinking in the data limiting code, one way of the code of mixed and scattered thinking, and one way in the code to use the words incorrectly.

Based on the theme of Kites, the codes of realizing discrepancies, not being realistic enough, forming superficial concepts, limiting the data, explaining mistakes and misusing the words have been discussed. The followings are the statements of the students regarding their realizing the discrepancies:

4.5.1.E: *1. It is impossible that people fly planets like a kite.*

2. It is impossible for the father to fly the Moon like a kite and keep it stable.



Visual 4.

3. Similarly, it is impossible for the child to fly the Star and keep it stable.

4. It is impossible for the mother to fly the Sun and keep it stable.

4.5.2.E: *People here are very big. And they control the Moon, the Earth and the Sun. This cannot happen in reality.*

4.5.5.E: *Children in space, the Moon and the Sun cannot be tied with a string. There cannot be a rainbow in space.*

4.5.3.K: *This picture also does not portray reality. No human being can hold on to the moon, the stars or the sun standing on the earth. The shapes in the sky can never come out at the same time and rainbows do not appear this frequently. The moon, stars and the sun cannot smile.*

4.5.5.K: *People cannot climb on the Earth.*

You cannot fly the Moon, the Sun or stars.

They cannot walk on the Earth.

4.6.2.E: *The picture is not realistic. It is impossible to hold the sun, the moon and the stars with a string and walk on the Earth.*

4.6.5.E: *It does not reflect the reality. The Earth and children are flying kites.*

4.6.3.K: *In the picture, children's kites reach the sky.*

Children can stand on the earth.

At night, there are both rainbow and stars at the same time.

4.6.4.K: *Human beings cannot hold the moon, stars and the sun with a string.*

The rainbow and the stars cannot be in the same place.

People cannot stand on the earth

With regard to the theme of Kites, students have mostly revealed the discrepancies. Five of the 5th grade and four of the 6th grade students have realized the discrepancies within the theme. In addition, 5 male and 4 female students have revealed the discrepancies.

4.5.3.E: *Children cannot step on the Earth. There can be no rainbow outside of the Earth's atmosphere. And one cannot tie a string to the Sun, stars or the Moon and fly them because there is no air in space.*

4.5.2.K: *The picture is really beautiful but it depends on one's preference and imagination. It could have been more realistic.*

4.5.4.K: *We cannot hold the Sun, the Moon or the stars. There are no rainbows in outer space.*

4.6.5.K: *People cannot tie a string on the sun, moon or star. There can be no rainbow in space. The space is a dark universe. People cannot float above the Earth without special equipment. And they cannot step on the Earth. The sky is not colorful. Planets cannot laugh or talk.*

Within the theme of Kites, 3 female and a male student have limited the data and explained the mistakes. Three of 5th grade and one of 6th grade students have limited the data and determined the mistakes as well.

4.5.4.E: *Kids have to be on top of the world to be a rainbow in space and fly the moon, star and sun as kites. the girl is holding the sun with rope or something else, it has nothing to do with reality.*

4.6.1.E: *They held the star, the bear and the sun with the rope.*

4.6.3.E: *Children are on top of the Earth.*

Children are holding on to the Moon, the stars and the Sun with a string.

4.6.2.K: *The moon, stars and the sun cannot be flown by people.*

Depending on the theme of Kites, a female and 3 male students have performed superficial thinking and formed concepts. In addition, 6th grade students are more skilful than 5th grade students at superficial thinking and forming concepts.

4.6.4.E: *There are no humans big like that and human beings cannot stand on the Earth.*

And they cannot fly planets such as the moon, stars etc.

4.5.1.K: *The boy holding the moon with something like a string is really one of the realistic things in this picture. Also, the girl in the red dress is holding the star with a string or something else and this is unrealistic as well. The girl in the purple dress is holding the Sun with a string or something else and this is also unrealistic.*

Based on the theme of Kites, two students have been identified to misuse the words.

4.6.1.K: *The Earth cannot pull the stars with a string; they cannot stand on the Earth. There cannot be a rainbow, either.*

Four of the 5th grade male students expressed the inconsistencies and differences in visual G4 with a critical approach while one male student (4.5.4.M) only described the visual. All of the female students expressed the inconsistencies and differences in visual G4 with a critical approach.

Two of the male students (4.6.1.M, 4.6.3.M) of the 6th graders expressed the visual as it is while three of them recognized the unrealistic aspects of the visual and commented on them. One of the female students (4.6.3.F) described the visual as it is and four of them expressed it using a critical approach.

According to the kites theme, twenty-five different ways of thinking were identified in the code of discernment of contradictions. Three different ways of thinking were identified in the code of superficial thinking and concepts. Four different ways of thinking have been found in the data limitation code, mixed and scattered thinking codes. There are four different ways of thinking in the code of incorrect use of words.

Based on the theme of Birds with Rockets, the codes of realizing discrepancies, not being realistic enough, forming superficial concepts, limiting the data, explaining mistakes and misusing the words have been discussed. The followings are the statements of the students regarding their realizing the discrepancies:

5.5.1.E: *1. It is a mistake that birds lift the spaceship.*

2. It is a mistake that the birds are in space.

3. It is a mistake that the mosques and the city are on a mountain.

5.5.3.E: *The spaceship is very heavy. Therefore a few birds cannot carry it. Clouds cannot be blue or yellow. The sky is not that colorful.*

5.5.1.K: *There is a rocket there and it is unrealistic that the rocket is taking off so close to the sea or lake. There are birds tied to the top of the rocket and this is also unrealistic. Birds cannot live in space.*

5.5.5.K: *Birds cannot fly the rocket.*

Clouds cannot be blue.

Birds cannot be tied with a string.

5.6.5.E: *The shapes do not match the pictures. Picture 5 does not reflect reality.*

5.6.2.K: *8 birds cannot fly a rocket ship.*

Clouds cannot be pink, blue or purple.

5.6.5.K: *Space is not light. Birds or other animals cannot live in space because there is no life. Birds do not have enough strength to carry the rocket. Clouds are seen as smoke in the air. They have no shape.*

With regard to the theme of Birds with Rockets, students have realized the discrepancies most. Four of 4th grade and three of 6th grade students; 4 female and 3 male students have been able to realize the discrepancies within the theme. 5th grade students are better than 6th grade students whereas female students are more skilful compared to male students in terms of realizing the discrepancies.

5.5.2.E: *The birds here are driving the spaceship. And the strings of the rocket are tied to the birds' tails. But it is an unrealistic that the birds are pulling a rocket ship.*

5.5.4.E: *Spaceship on land, birds tied with strings and colors in the air.*

5.5.5.E: *Birds or butterflies flying the spaceship and the space ship is on a mountain. The city is blue, the clouds are yellow. The birds are colorful. The sea is small, the sky is yellow. The birds are not strong enough to carry the rocket.*

5.5.2.K: *This is a product of imagination. The birds are tied. If the birds flew and there was no rocket, it would be a better picture. The scene behind is very beautiful.*

5.5.2.E: *The birds here are flying the spacecraft. And the spacecraft's ropes are tied to the birds' tail. But it is not real for birds to take off a rocket.*

5.5.5.E: *Birds or butterflies to fly the spacecraft and space ship to be on the mountain in the city to appear blue clouds yellow. The birds are so colorful. The sea is small and the sky is yellow. The birds do not have the power to carry the spacecraft.*

5.5.2.K: *Very imaginary rocket to the birds attached to the birds if the picture would be more beautiful rocket. The landscape in the back is very nice. There's no bird in the space.*

5.6.4.E: *Birds cannot lift such a heavy thing.*

Birds cannot escape the atmosphere.

Depending on the theme of Birds with Rockets, male students and 5th grade student have limited the data and



Visual 5.

explained the mistakes compared to female and 6th grade students respectively.

5.5.3.K: *In this picture, the clouds are yellow but in reality they are white. There are green and orange colors in the sky but in reality these colors are not in the sky. There should be no birds near the flying spaceship. Even so, they do not fly at the same time or in the same way. The area around the clouds should be the same color. They cannot be different colors.*

5.5.4.K: *In real life, birds cannot pull a rocket. Because in this picture, the rocket works. This rocket travels fast. Therefore there is no need for birds. Also, a rocket ship cannot be in a grassy field or in a forest. There are special areas for the rocket.*

Within the theme of Bird with Rockets, two female students have expressed their opinions depending on the code of not being realistic enough. 5th grade students have emphasized the fact of not being realistic enough whereas 6th grade students have not expressed any opinions.

5.6.1.E: *Birds are pulling the space ship.*

5.6.2.E: *Birds are flying on top of the rocket.*

There are different colors in the sky.

The colors of the clouds are different.

5.6.3.E: *The space shuttle can come from any point in the world and the birds are flying out of the space shuttle.*

5.6.3.K: *Birds are taking the rocket.*

A space ship cannot be used in a regular area.

5.6.4.K: *Rockets cannot take off from a place where there is the mosque.*

There are no birds in outer space.

Based on the codes of thinking superficially and forming concepts, four of 6th grade students have expressed opinions about them. Three male students have been able to think superficially and form concepts whereas two female students have expressed opinions suitable for those codes.

5.6.1.K: *There can be clouds. There can be mountains. There cannot be a rocket here. Birds cannot come out of the trees.*

A student in the study has misused the words while expressing his/her opinion related to the theme.

Two of the male students in the 5th grade evaluated the unrealistic aspects of the visual G5 in a critical manner while three students (5.5.3.M, 5.5.4.M, 5.5.5.M) only stated what they saw. Four of the female students found the visual G5 inconsistent while one student (5.5.2.F) listed the items in the visual. Three of the male students in the 6th grade described the visual G5 as it is while two of them (5.6.4.M, 5.6.5.M) realized the inconsistencies in the visual. One of the female students (5.6.3.F) listed what she saw in visual G5 while other students recognized the inconsistencies and irrational points in the visual and made evaluations accordingly. Within the scope of the birds which are tied to spacecraft theme, thirteen ideas were determined in the code of discernment of contradictions. Two ideas were determined according to the code being sufficiently realistic. Nine ideas were determined according to the code of super imposing and creating concepts. Six ideas were determined within the scope of the data restriction code. Just one idea has been identified in the code for incorrect use of words.

DISCUSSION AND CONCLUSION

Information literacy along with developments in information technology has directed individuals to different ways of reading. It has become a must for individuals to acquire and improve skills in regard to information literacy. This requires more cognitive development at each level and stage. Nowadays, the ability to see and understand numerous amounts of information quickly is an invaluable skill. Seeing, understanding and expressing require different cognitive skills which are obtained from early childhood to the university level (Cummins, 2001; Ege, 2006; Gunes, 2012; Noormohamadi, 2008; Yilmaz, 2001). Grade and education level may affect the development of individuals' listening, speaking, reading and writing skills (Gunes, 2009; Kalfa, 2014; Kartal and Ozteke, 2010; Kronon, 2003; Kurudayioglu and Cetin, 2015; Yuksel, 2010). Becoming the main skill of the 21st century, especially in such environment where the visuality is increasing day by day, a different reading and comprehension skill has been emerged.

Particularly, in today's world, where visual stimulation has become more prevalent, a different reading and writing skills have emerged (Ehri, 1987). These skills have become the main language skill that includes basic mastery skills and requires superior cognitive skills (Aydin and Basoglu, 2016). This skill is called visual literacy. The difference between visual literacy and basic reading skills is that it requires the use of different senses including sight and hearing (Aslan, 2003; Duran, 2013; Guven and Aktas, 2013). Therefore, the individual is obliged to spend more energy and pay attention to grasp the meaning of the image. Realizing the discrepancies in the visuals have required critical approach such as mixed and scattered thinking that includes the ability of not being realistic enough, limiting the data, explaining mistakes, forming superficial concepts and misusing the words. The main focus of the study is to ensure students to reach those codes mentioned above. Visual literacy requires a critical approach along with basic reading ability. In order to recognize an inconsistency or irrationality in the visual, one must think critically. The focus of this study was to examine how students detected inconsistencies in the given visuals. Based on the data obtained from the findings, the following conclusions were made:

Students, particularly the male students, participating in the study found it sufficient to describe the visuals compared to the female students in the 5th and 6th grades. Female students have been found to be more critical while commenting on the themes. On the other hand, it is seen that female students were more critical while interpreting the visuals. It is also seen that male students in both 5th and 6th grade tried to simply list the items in the visuals whereas female students had a more critical approach towards the visuals than their male peers. This finding is found in parallel with other studies conducted on critical reading and thinking (Ay and Akgol, 2008; Sadioglu and Bilgin, 2008). Both female and male students were able to recognize the unrealistic elements of the visuals by comparing them with scientific facts. This

shows that the students have a certain level of knowledge about the universe and are generally curious about science.

Both male and female students analyzed visual G1 theme critically and were able to distinguish the realistic and unrealistic items and concepts in the images. While analyzing visual G2, male students had more concrete observations while female students displayed more abstract and critical thinking. When recognizing the unrealistic components of the visuals, the students explained the irrationalities with scientific information. This shows that the students have already acquired some basic knowledge about space or the universe from their regular curriculum. Three of the 6th grade male students expressed the G3 visual as it is while two of them (3.6.1.M, 3.6.2.M) explained the inconsistencies and the unrealistic items with a critical approach. The visuals G4 and G5 themes were generally handled with a critical approach by the 5th and 6th graders. Students can express irrationalities and inconsistencies confidently. This should be regarded as a subject to a further discussion. Therefore, studies with regards to critical literacy and thinking should be conducted with students of younger ages (Demirer and Sak, 2016; Yilmaz, 2012).

The fact that the students generally use expressions in abstract level might be interpreted as that their cognitive development falls below the age limit indicated in the literature. It is also observed that the mental stages determined by Piaget could also fall below the levels indicated. Different studies should be conducted regarding changes in students and the findings should be discussed. Within this context, it would be helpful for the educational and instructional materials to be prepared and reevaluated based on the students' thinking levels and their interests. It is crucial that programs be restructured from basic education to higher level education with a more critical approach and textbooks should be reviewed with a critical thinking based perspective. Last of all, as an overall conclusion for the present study, the 5th and 6th grade female students have more critical visual reading skills compared to the male peers. The cause of this result may depend on the fact that the female students are better readers than the males. The following recommendations can be made based on the present findings:

1. Teachers can include activities in their lessons that improve visual critical thinking skills in order to develop critical thinking skills in students.
2. It has been proven that the cognitive development of children begins at an early age. Thus, the cognitive development for children of young ages should be taken into consideration while preparing curriculum.
3. In the schools, constructive activities should be performed in order to make realize students mixed or scattered ideas.
4. Activities helping the students to use the words and concepts correctly should be developed.
5. The students should be supported with some activities which are able to facilitate students' realizing real or unreal situations.
6. This study may be carried out with different themes in different class levels.

REFERENCES

- Aarnoutse, C., Brand-Gruwel, S., and Oduber, R. (1997). Improving Reading Comprehension Strategies through Listening, *Educational Studies*, 23(2), 209-227.
- Abidin, M. J. Z. (2011). Improving Listening Comprehension Among Malay Preschool Children Using Digital Stories, *International Journal Of Humanities And Social Science*, 1(14), 159-164.
- Abrami, P. C. Vd. (2008). Instructional Interventions Affecting Critical Thinking Skills and Dispositions: A Stage 1 Meta-Analysis, *Review of Educational Research*, 78(4), 1102-1134.
- Anderson, H. A. (1952). Needed Research in Listening, *Elementary English*, 29(4), 215-224.
- Arnheim, R. (1969). *Visual Thinking*, Berkeley: University Of California Press.
- Aslan, U. T. (2003). Reading Visual: Critical Visual Literacy, *Communication Research*, 1(1), 39-64.
- Avgerinou, M. and Pettersson, R. (2011) Toward a Cohesive Theory of Visual Literacy, *Journal of Visual Literacy*, 30(2), 1-19.
- Avgerinou, M. D. (2009). Re-Viewing Visual Literacy in the "Bain D' Images" Era, *Techtrends*, 53(2), 28-34.
- Ay, S. and Akyol, H. (2008). Critical Thinking Power and Gender, Age and Class Level, *Theoretical Education Science*, 1(2), 65-75.
- Aydin, E. and Basoglu, N. (2016). Analysing a Model over Using Trailer Technique in Language Skills: Australia as a Sample, *International Turkish Literature Culture Education Journal*, 5(4), 1999-2022.
- Baker, L. (2015). How Many Words Is A Picture Worth? Integrating Visual Literacy in Language Learning With Photographs, *English Teaching Forum*, 1-13.
- Bowen, T. (2017). Assessing Visual Literacy: A Case Study of Developing a Rubric for Identifying and Applying Criteria to Undergraduate Student Learning, *Teaching in Higher Education*, 22(6), 705-719.
- Branch, J. B. (2000). *The Relationship among Critical Thinking, Clinical Decision Making and Clinical Practica: A Comparative Study* (PhD Thesis), Idaho: University Of Idaho.
- Brumberger, E. (2011). Visual Literacy and the Digital Native: An Examination of the Millenniallearner, *Journal of Visual Literacy*, 30(1), 19-47.
- Carlgren, T. (2013). Communication, Critical Thinking, Problem Solving: A Suggested Course for All High School Students in the 21st Century, *Interchange*, 44, 63-81.
- Carrier, K. A. (2003). Improving High School English Language Learners' Second Language Listening Through Strategy Instruction, *Bilingual Research Journal*, 27(3), 383-408.
- Carruthers, P. (2002). The Cognitive Functions of Language, *Behavioral and Brain Sciences*, 25, 657-726.
- Chen, L. and Zhang, R. (2011). Web-Based CALL to Listening Comprehension. *Current Issues in Education*, 13(4).
- Cong-Lem, N. (2018). Web-Based Language Learning (WBLL) For Enhancing L2 Speaking Performance: A Review, *ALLS*, 9(4), 143-152.

- Cruz, B. and Ellerbrock, C. (2015). Developing Visual Literacy: Historical and Manipulated Photography in the Social Studies Classroom, *The Social Studies*, 106, 274-280.
- Cummins, J. (2001). Bilingual Children's Mother Tongue: Why Is It Important For Education? *Sprogforum*, 7(19), 15-20.
- Delefosse, M. S. and Delefosse, J. M. O. (2002). Spielrein, Piaget and Vygotsky, *Theory & Psychology*, 12(6), 723-747.
- Demir, V. and Sak, N. (2016). Programming Education and New Approaches around the World and in Turkey, *Theory and Practice in Education*, 12(3), 521-546.
- Duran, E. (2013). Critical Reading in Turkish Curriculum, *The Journal of Academic Social Science Studies International Journal of Social Science*, 6(2), 351-365.
- Ege (2006). Communication Characteristics of Different Barriers and Suggestions for Teachers (Farklı Engel Gruplarının İletişim Özellikleri ve Öğretmenlere Öneriler), *Ankara University Faculty of Educational Sciences Special Education Journal (Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi)*, 7(2) 1-23.
- Ehri, L. (1987). Learning to Read and Spell Words, *Journal of Reading Behavior*, XIX (1), 5-31.
- Ennis, R. H. (1993). Critical Thinking Assessment, *Theory into Practice*, 32(3), 179-186.
- Fawcett, A. E. (1966). Training in Listen, National Council of Teachers of English, *Elementary English*, 43(5), 473-476.
- Fernández, B. and Ruiz-Gallardo, J. (2017). Visual Literacy in Primary Science: Exploring Anatomy Cross-Section Production Skills, *Jsci Educ Technol*, 26, 161-174.
- Field, J. (1998). Skills and Strategies: Towards A New Methodology for Listening, *ELT Journal*, 52(2), 110-118.
- Glaser, R. (1983). Education and Thinking: The Role of Knowledge, Learning Research and Development Center University of Pittsburgh, Technical Report No. PDS-6.
- Gok, B. and Erdogan, T. (2011). The Investigation of The Creative Thinking Levels and The Critical Thinking Disposition of Pre-Service Elementary Teachers, *Ankara University Journal of Faculty Of Educational Sciences*, 44(2), 29-51.
- Gruhn, W. (2002). Phases and Stages in Early Music Learning. A Longitudinal Study on the Development of Young Children's Musical Potential, *Music Education Research*, 4(1), 51-71.
- Gunes, F. (2009). The New Developments in Teaching of Turkish and Constructivist Approach, *Mustafa Kemal University Journal of the Institute Of Social Sciences*, 6(11), 1-21.
- Gunes, F. (2012). Improving the Thinking Skills of Students, *TUBAR-XXXII*, 127-146.
- Güven, M. Ve Aktas, B. C. (2013). The Relationship between Critical Reading and Visual Reading, *International Journal of Educational Programs and Teaching Studies*, 3(6), 31-45.
- Jean, R. (2018). Promoting Social Action through Visual Literacy: New Pioneer & the Labor Defender in the Secondary Classroom, *Radical Teacher*, 25-32.
- Kalfa, M. (2014). Developing the Writing Skills of Basic Level Students through Educative Games in Teaching Turkish to Foreign Learners, *Hacettepe University Journal of Turkish Studies*, 20, 85-102.
- Kalman, C. S. (2002). Developing Critical Thinking in Undergraduate Courses: A Philosophical Approach, *Science & Education*, 11, 83-94.
- Kartal, E. and Ozteke, H. Ç. (2010). Determination of Primary School Students' Reading Comprehension and Expression Levels, *The Journal of International Social Research*, 3(11), 372-380.
- Kavaliauskienė, G. and Anusienė, L. (2009). English for Specific Purposes: Podcasts for Listening Skills, Santalka. Filologija. *Edukologija*, 17(2), 28-37.
- Kempe, A. (2003). The Role of Drama in the Teaching of Speaking and Listening As the Basis for Social Capital, *Research in Drama Education*, 8(1), 65-78.
- Kim, K., Wee, S., Han, M., Sohn, J. And Hitchens, C., (2017). Enhancing Children's Art Appreciation and Critical Thinking Through A Visual Literacy-Based Art Intervention Programme, *ETA*, 13(3), 317-332.
- Korkmaz, O. (2009). Teachers' Critical Thinking Level and Dispositions, *Ahi Evran University Kirsehir Education Faculty Journal*, 10(1), 1-13.
- Kroon, S. (2003). Mother tongue and mother tongue education, in J. Bourne, & E. Reid (Eds.), *Language Education* (pp. 35-48). (World Yearbook of Education; No. 2003). London: Kogan Page.
- Kurdayıoğlu, M. and Cetin, O. (2015). Basic Skills and Turkish Education, *Journal of Mother Tongue Education*, 3(3), 1-19.
- Lasley, A. and Haas, L. (2017). Visual Literacy, Academic Standards, and Critical Thinking: Using Wordless Picture Books as an Instructional Tool, *The California Reader*, 50(2), 29-36.
- Lieberman, L. J. et al. (2004). How Students With Visual Impairments Can Learn Components of The Expanded Core Curriculum Through Physical Education, *Journal of Visual Impairment & Blindness*, 108 (3), 239-248.
- Metros, S. E. (2008). The Educator's Role in Preparing Visually Literate Learners, *Theory into Practice*, 47, 102-109.
- Noormohamadi, R. (2008). Mother Tongue, a Necessary Step to Intellectual Development, *Pan-Pacific Association of Applied Linguistics*, 12(2), 25-36.
- Nosich, G. M. (2001). *Learning to think things through a guide to critical thinking across the curriculum*. Boston: Pearson Education.
- Nurpahmi, S. (2015). Improving Listening Skill By Means of Activating Students' Prior Knowledge, *ETERNAL*, 28-38.
- Othman, J. and Vanathas, C. (2017). Topic Familiarity and Its Influence on Listening Comprehension, *The English Teacher*, XXXIV, 19-32.
- Peterson, M. (2010). Computerized Games and Simulations in Computer Assisted Language Learning: A Meta-Analysis of Research, *Simulation & Gaming*, 41(1), 72-93.
- Pettit, P. (2016). Making Up Your Mind: How Language Enables Self-Knowledge, Self-Knowability and Personhood, *European Journal Of Philosophy*, 24 (1), 3-26.
- Rakes, G. C. (1999). Teaching Visual Literacy in a Multimedia Age, *Tech Trends*, 43(4), 14-18.

- Russell, D. H. (1964). A Conspectus of Recent Research on Listening Abilities, *Elementary English*, 41(3), 262-267.
- Sadioglu, O. and Bilgin, A. (2008). The Critical Reading Skills of Primary School Students According to Gender Differences and Educational Level of Their Fathers and Mothers, *Elementary Education Online*, 7(3), 814-822.
- Santos Costa, G., and Xavier, A. C. (2016). Critical Visual Literacy: The New Phase of Applied Linguistics in the Era of Mobile Technology. In A. Pareja-Lora, C. Calle-Martínez, & P. Rodríguez-Arancón (Eds), *New perspectives on teaching and working with languages in the digital era* (pp. 201-212). Dublin: Research-Publishing.
- Shivers, J., Levenson, C., and Tan, M. (2017). Visual Literacy, Creativity and the Teaching of Argument, Learning Disabilities: *A Contemporary Journal*, 15(1), 67-84.
- Smilan, C. (2016). Developing Visual Creative Literacies Through Integrating Art-Based Inquiry, *The Clearing House*, 89(4-5), 167-178.
- Stokes, S. (2002). Visual Literacy in Teaching and Learning: A Literature Perspective, *Electronic Journal for the Integration of Technology in Education*, 1(1), 10-19.
- Strother, D. B. (1987). On Listening, *Phi Delta Kappa International*, 68(8), 625-628.
- Sze, P. M. (2007). Developing Students' Listening and Speaking Skills through ELT Podcasts, *Education Journal*, 34(2), 115-134.
- Tafani, V. (2009). Teaching English through Mass Media, *AND*, 2(1), 81-96.
- Trumbo, J. (1999). Visual Literacy and Science Communication, *Science Communication*, 20(4), 409-425.
- Umanski, D., Kogovšek, D., Ozbič, M., and Schiller, N. O. (2010). Development of a Voice-Based Rhythm Game for Training Speech Motor Skills of Children with Speech Disorders, Proc. 8th Intl Conf. Disability, Virtual Reality & Associated Technologies, 255-262.
- Vitulli, P. and Santoli, S. (2013). Visual Arts and Social Studies: Powerful Partners in Promoting Critical Thinking Skills, *Social Studies Research and Practice*, 8(1), 117-134.
- Vygotsky, L. (2012). *Thought and Language*, England: The MIT Press.
- Wang, Y. And Sun, C. (2000). Synchronous Distance Education: Enhancing Speaking Skills via Internet-Based Real Time Technology, *IEEE*, 168-172.
- Yılmaz, A. (2001). The Effects Of Student-Student Interaction On Learning And Social Development, *Educational Administration In Theory And Practice*, 25, 147-158.
- Yılmaz, K. (2012). Investigation into Controversial Issues and Taboo Topics: Social Studies Teachers' Perspectives, *Mustafa Kemal University Journal of Social Sciences Institute*, 9(18), 201-225.
- Yuksel A. (2010). A Study About Improving One's Reading Skills Who Has Reading Disability, *Journal of Theoretical Educational Sciences*, 3(1), 124-134.