Turkish and Italian University Students' Views on Visual Literacy*

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Abstract

The purpose of this study was to explore the Italian and Turkish students' perceptions of their visual literacy ability. The study used the qualitative research methodology and interviews as the data collection tool. Purposeful sampling was used for sample selection. Descriptive analysis was selected as the analysis method since it was determined to be the most appropriate analysis method for the research. A semi-structured data collection tool was used. The study's sample consisted of thirty-two university students studying in Turkey and Italy. Turkish interviewees included sixteen university students who studied at Çanakkale Onsekiz Mart University in Turkey. Italy's sample also consisted of sixteen university students who studied at La Sapienza University in Italy. The study took into consideration equal gender representation. The findings indicate that neither Italian nor Turkish students received a course on visual literacy. According to the results, students utilised maps, graphs,

Keywords: Visual Literacy, Italy, Turkey, Qualitative Research.

slides, pictures, caricatures, movies, and timelines in their classes.

DOI: 10.29329/epasr.2022.478.11

Submitted: 14 March 2022 Accepted: 13 September 2022 Published: 05 December 2022

*This research was derived from the TUBITAK Project coded as 1059B191800790— and called as "A Comparative Study on Visual Literacy Skills of Italian and Turkish University Students".

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Introduction

In the past, when human beings needed to communicate, they used visuals. Smoke signals and images on cave walls were also used. Then, as time passed, technology advanced. Today, we can communicate quickly. We have access to Facebook, Instagram, WhatsApp, and other social networks. The world in which we live today is visually oriented. We can categorize media literacy, information literacy, computer literacy, environmental literacy, and technology literacy under the general phrase "new literacies." This study examined Italian and Turkish university students' perceptions of visual literacy.

Today, we know that media and visual literacy have become increasingly significant for human life, especially in political, economic, and scientific subjects that are concerned with visuals and media. Obviously, media and visuals are relevant to communication processes for people. Regardless of the time when we first began employing images in history, trends and preferences are changing constantly (Hug, 2012).

Semiology is a science branch studying signs. In Turkish, semiology is called *göstergebilim*. Semiology was founded towards the end of the nineteenth century in Europe and the USA. The word semiology is derived from the Greek word *Symptom*. This term was first used by Charles Sanders Pierce (1839–1914), who studied astronomy, chemistry, mathematics, and various other subjects (Çulha, 2011). A. J. Greimas once remarked that semiology was a branch of science that focuses on both the meaning of the world to humankind and the meaning of humankind to humankind (Kıran and Kıran, 2012). Semiotics is the study and analysis of cultural facts viewed as a communication process, according to Umberto Eco. For Eco, an indicator is a tool that can significantly replace another item. In this way, the concept of an indicator has taken on a larger meaning. For Saussure, language represents concepts with signs. As a result, it is feasible to draw analogies with sacred ceremonies such as troops' communication among themselves, the alphabet for deaf and hearing-impaired people, and similar practices. Of course, the most crucial component of these systems is language. This shows that research can be done to examine how indicators function in societies. Saussure referred to this field of study as semiotics. According to Kıran and Kıran (2012), semiotics describes the fundamental characteristics of the indicators and the laws they relate to.

Signs are a part of our lives. We utilize signs at every moment of life, from art to architecture, from paintings to museums. Pezzini (2011) referred to the museum in Çukurcuma, which Orhan Pamuk organized for his novel *The Museum of Innocence*. In this novel's story, the events are associated with the museum. Each item in the museum has a meaning. In this aspect, this novel is a good example of how well a story combines with visuals. Pezzini (2011) discusses the museum that

Orhan Pamuk created in Çukurcuma for the story about *The Museum of Innocence*. This serves as a good illustration of how a story and images can be integrated.

Prensky (2001) asserts that college graduates devote fewer than five thousand hours of their lives to reading. Additionally, young people play video games for 10,000 hours every year. Moreover, they watch TV for almost 20,000 hours every year. This image demonstrates how they are becoming accustomed to living with technology facilities. However, unfortunately, we can see that people spending time reading and playing video games and watching TV are less than the aforementioned groups. Prensky (2001) called them "Digital Natives" because he believes that today's youth are all "native speakers" of the digital language and of everything technical. They are not immigrants from the digital world since they have no trouble understanding technical advancements.

Visual literacy was first introduced by John Debes in the 1960s. Debes's (http://fod.msu.edu/oir/visual-literacy) visual literacy is defined as "developing the visual competencies of a group and integrating what one sees with other sensory experiences." According to the researcher, visual literacy is defined as the ability to make sense of the messages given with visuals and to produce new messages with them.

There are many different definitions of visual literacy. One of these definitions belongs to Debes. According to this definition, visual literacy is a group of visual competencies that people gain through sight and that they can integrate and develop with other sensory experiences at the same time. Ensuring the development of these competencies is fundamental to learning. A visually literate person is an individual with the ability to distinguish and interpret visible actions, objects, symbols, and natural or man-made things that they encounter after acquiring the mentioned competencies. A visually literate individual can communicate with others, understand visual communication works, and enjoy them through the creative use of these competencies. Debes's definition emphasizes that visual literacy is related to learning, communication, aesthetic perception, and art. The process of reading and interpreting images is also included in the definition. In addition, visual literacy is also associated with visual design processes. Visual literacy is an interdisciplinary subject. Thus, many researchers from different fields conduct studies on this topic (Cakıroğlu, 2016).

Arnheim's (2012) views on visual literacy also spearheaded the generation of new ideas in this field. According to this researcher, syntax in verbal language is one-dimensional. In the visual environment, however, shapes are represented as two- and three-dimensional spaces. This indicates that visual literacy is more comprehensive than verbal literacy.

According to Avgerinou and Ericson (1997), the basic principles of visual literacy, on which a relative consensus has been reached, can be listed as follows: 1. Visual literacy is related to the use of

visuals for communication, thinking, learning, production of meaning, and aesthetic appreciation. 2. Within the scope of visual literacy, visuals are first seen by the eye and then perceived by the brain. 3. Visuals may have been produced by people, or they may be natural. They may include various actional and pictorial images and realistic or iconic signs. They may consist of written words combined with various non-verbal symbols and digital symbols. 4. The study of visual literacy consists of theory, research, practice, and the relationship between these (Avgerinou and Ericson, 1997).

Due to Italy's strong visual literacy and reputation for safeguarding ancient works of art better than other nations, it has become necessary to compare Turkey and Italy in the context of the study's main question. Italy is particularly well-known for its achievements in the fields of painting and sculpture. Because of this, it might be argued that it is hard for young Italians to live in such a diverse geographic area and not be influenced by visuals. It will also be useful for similar researchers in our country to know what kinds of studies have been conducted on visual literacy skills in university education. Because they are both Mediterranean countries, Turkey and Italy have comparable cultures. By contrasting what has been done in this research, there is a significant likelihood that other researchers will use it in Turkey. The development of these types of studies will be beneficial for better education, as studies on visual literacy ability have only recently begun in Turkey.

The research's main purpose is to compare Turkey and Italy's arise from the rich visuals. Studies on media literacy in Europe started in 2005 when the European Union Commission and European Parliament were urged to develop policies in this area. However, member countries struggled to begin their media literacy education programs, according to organisations like UNESCO. Consequently, the media literacy group's specialists created the definition of media literacy, among others. As a result, in the 2000s, media literacy education began to steadily gain relevance in the European Union. The creation of the EU's audio-visual media service directives in 2007 was another crucial milestone. Since then, governments of member nations have found value in the discussion of media literacy.

The population of the European Union is looked at in terms of "using skills," "critical comprehension," and "communication skills." This has allowed for the collection of a wide range of data and the presentation of suggestions. Within a brief period, the EU made major advancements in media literacy, in terms of the organisation of both the discipline and its areas of study (Gül, 2014).

Students are getting close to understanding technology growth as they progress from elementary school to secondary school and high school. It is crucial for university students to advance in all areas of their lives. Therefore, in the modern technological environment, improving visual literacy skills is necessary.

This research on visual literacy that is conducted with university students will be a significant help in developing different activities in the field in our country. Analysis of visual literacy activity levels of Italian and Turkish students may bring significant contributions to similar studies in our country.

The goal of Çelik's (2017) doctoral dissertation project was to determine whether the activities designed to develop students' visual literacy skills in the seventh grade of secondary school would have an impact on those students' attitudes about reading. The author found no statistically significant difference between the pre-test and post-test results of the group that participated in activities that used visual literacy competence. It was also reported that pre-test and post-test scores of neither the applied visual literacy skill exercises nor the group's visual literacy skill significantly differed from each other. Additionally, it was observed that there were no appreciable differences in their perspectives on reading. However, the experimental group's high average scores demonstrate that instruction in visual literacy skills has a beneficial impact on students' visual literacy abilities and attitudes toward reading.

Lee (2010), working on the same topic, aimed to identify the variations in students' knowledge and academic performance in art classes. The research's findings support the students' assertion that they believe their paintings are unique. The research's findings also pointed to a growth in visual literacy abilities.

Shurtleff (2008) conducted his research in his class over a six-month period from November 2003 to May 2004. Reading texts were used in the study along with exercises made with story maps and movies. It was anticipated that this would increase students' interest in reading. Three (3) students with poor academic performance were chosen for the case study. In English courses delivered via story maps and videos, their responses to fictional texts and poems were observed and evaluated. According to the results of the research, visuals increase students' interest in the lesson. The researcher supported his lessons with storyboards and videos. Thus, he witnessed that students' general enthusiasm levels increased. He also stated that if they did not understand a poem or story, they drew a picture to understand what the author was trying to say.

In his doctoral dissertation, Robertson (2007) aimed to examine and evaluate how visual literacy was applied and interpreted in occupational standards in English language and art classes in a school in Kansas. The study's findings suggested that in addition to reading and listening, students should also monitor, observe, and use visual materials to learn since classes may be more effective with this approach. This study also demonstrated that lessons could be more fruitful when teachers incorporate pictures into their lessons more frequently.

Recently, International Visual Literacy Association (IVLA), (http:///doi.org/10.52917/ivlatbsr.2022.001) which works on visual literacy, prepared a book about visual literacy education. In the book, examples of visual literacy education from movies to graphics are presented in various fields and disciplines (Lee, J., Beene S., Chen X., Huang W., Okan L. & Rodrigues F. 2022).

Method

The widespread use of social media in today's world, the use of smartphones, and the Internet making communication faster have changed our lives. For these reasons, the need for interpreting visuals correctly has increased. The aim of this research was to determine the opinions of Turkish and Italian university students on visual literacy skills. It is believed that comparing the opinions of students in these two different countries on this issue will help to eliminate the gaps related to visual literacy skills development in Turkey's education system. Italy and Turkey share certain characteristics of Mediterranean culture. Other important reasons why Italy was selected are that visual arts have been valued in Italy since ancient times and Italy attaches great importance to the preservation of works of art.

The present study is a case study. The research used a qualitative methodology as well as interviews as data collection tools. To reach a large audience, quantitative research is preferable. Unfortunately, the model falls short when it comes to gathering data about people's perspectives carefully. We conduct interviews with smaller groups. The qualitative research technique helps researchers gather specific information about people's observations and opinions regarding certain subjects. In qualitative interviews, participants express themselves more clearly. Thus, they can provide in-depth responses to questions. Participants share their knowledge of a topic according to the situation. This will give the entire process a rich flavour (Patton, 2014).

In this research, the purposeful sampling method was used for sample selection. Descriptive analysis was used as the analysis method. A semi-structured data collection tool was employed. The purposeful sampling method allows in-depth research by selecting situations that have a depth of information that is related to the purpose of the research. It is used to study one or more special cases that meet certain criteria or have certain characteristics. With this method, the researcher tries to interpret natural or social cases or phenomena according to the selected situations, and reveal the relationships between these (Büyüköztürk et al., 2012).

Descriptive analysis, which was the analysis method utilized in this research, is done by summarizing data obtained through various data collection methods according to previously determined themes. These themes are then interpreted. The researcher can include direct excerpts in order to present more accurately the opinions of the individuals they have interviewed or observed.

The purpose of this analysis type is to convey a summary of findings to the reader with an interpretation of the researcher (Yıldırım and Şimşek, 2003). While data analysis is being performed, interview transcripts or observation notes should be read, line by line, by the researcher. Through this process, the researcher can focus on the data. In this process of reading data, codes are extracted from the data (Glesne 2013: 269). Then, by getting the opinions of another researcher, validity is achieved (Miles and Huberman).

The data collection tool used in this research was interviewing. The semi-structured data collection tool allows the researcher to ask additional questions to the interviewee or skip some questions according to the answers they receive. With this process, the researcher participates in the process, unlike in other types of research. Since the researcher is present in the interview environment, the response rate of this method is higher (Yıldırım and Şimşek, 2011, p. 125).

Study Groups

Table 1 shows the samples consisting of thirty-two volunteering university students who study at Çanakkale Onsekiz Mart University in Çanakkale and Roma La Sapienza University. There are eight female and eight male students from Turkey and eight female and eight male students from Italy. The students' ages range between 18 and 45 in Turkey and between 18 and 35 in Italy. The Turkey leg of the research was carried out in the 2018-2019 Academic Year with students of Çanakkale Onsekiz Mart University. They were first-year, second-year, third-year, and fourth-year students studying at the Turkish Language Teaching Department, and they volunteered to participate in the study. During the research, there occurred some disruptions due to the coronavirus pandemic. Interviews were done when the researcher could go back to Italy. The Italy leg of the research was carried out in the 2021-2022 Academic Year with students of Roma La Sapienza University. They were first-year, second-year, and third-year students studying at the Communication and Social Research Department and Philosophy and Letters Department, and they volunteered to participate in the study.

Table 1. Study Groups

Gender	Age	University	Gender	Age	University
1M	20-25	ÇOMÜ	1F	18-25	La Sapienza
2F	40-45	ÇOMÜ	2M	18-25	La Sapienza
3M	20-25	ÇOMÜ	3M	30-35	La Sapienza
4F	20-25	ÇOMÜ	4F	20-25	La Sapienza
5M	20-25	ÇOMÜ	5M	20-25	La Sapienza
6M	20-25	ÇOMÜ	6M	20-25	La Sapienza
7F	20-25	ÇOMÜ	7F	20-25	La Sapienza
8F	20-25	ÇOMÜ	8F	20-25	La Sapienza
9M	20-25	ÇOMÜ	9 M	20-25	La Sapienza
10F	20-25	ÇOMÜ	10F	20-25	La Sapienza
11M	20-25	ÇOMÜ	11M	20-25	La Sapienza
12M	20-25	ÇOMÜ	12M	20-25	La Sapienza
13F	20-25	ÇOMÜ	13F	20-25	La Sapienza
14F	20-25	ÇOMÜ	14F	20-25	La Sapienza
15F	20-25	ÇOMÜ	15M	20-25	La Sapienza
16M	20-25	ÇOMÜ	16F	20-25	La Sapienza

^{*}F=Female M=Male ÇOMÜ= Çanakkale Onsekiz Mart University

Data Collection Tools

This study used interviews as its primary data collection tool. Interviews are often preferred as data collection tools for qualitative research. In interviews, people can express their thoughts in detail (Yıldırım & Şimşek, 2011). This study was therefore assessed in accordance with the participants' opinions and ideas regarding visual literacy. The researcher sought to answer the following question: "What do Italian and Turkish students think about the capacity to read images?" Initially, the researcher created an interview form. While face-to-face interviews were held with several students, e-mails were sent to contact the rest of the students.

Descriptive analysis was selected as the analysis method. A semi-structured data collection tool was used. The data collection tool consisted of six items:

The questions were constructed as follows:

- 1. What does visual literacy mean to you?
- 2. Have you received any education to improve your visual literacy skills?
- 3. How do you benefit from the visuals in university courses? Can you give an example?
- 4. Think about a lesson subject. What kind of visuals would you use in the narration of this subject? Why? What differences would these visuals make?
- 5. Can you talk about a lesson that you never forget or always remember because of the usage of visuals?
- 6. In what areas is visual literacy mostly used in Turkey/Italy?

Validity and Reliability

In this study, numerous approaches to enhancing validity and reliability were prioritised.

During the data analysis, themes and codes were developed by the researchers and experts. Next, the themes and codes were compared. Two unbiased individuals received the themes to correct the mistakes and make necessary editions. Both the data and the instruments used to obtain the data were kept private. The researcher introduced herself to the participants at the beginning of the study. The participants' real names were concealed. They received instructions specifying that the data they provided would only be utilised for research purposes.

After the literature review, six items were developed for this study. Final decisions on the items were made after consulting with two education professionals. First, data about the participants' demographic characteristics were obtained, then the interview questions were asked to the participants.

The students were assigned codes such as 1M, 2M, etc. for male students and 1F, 2F, etc. for female students. The study enrolled a total of 32 students, including eight female and eight male students from Turkey and eight female and eight male students from Italy.

For students in Turkey; Reliability= Consensus/ (Consensus + Disagreement)= 75/(75 + 10) = .88. After the analysis, the reliability of the research was calculated as .88. According to Miles and Huberman (cited in 1994: Creswell), for a study to be considered reliable, coding reliability must be at least .80 level of compliance.

For students in Italy; Reliability= Consensus/ (Consensus + Disagreement)= 99/ (99+12) = .89. After the analysis, the reliability of the research was calculated as .88. According to Miles and Huberman (cited in 1994: Creswell), for a study to be considered reliable, coding reliability must be at least .80 level of compliance.

Data Analysis

Analysis of qualitative research data is performed in four stages;

- 1. Data are encoded.
- 2. Themes are found.
- 3. Codes and themes are arranged.
- 4. Findings are defined and interpreted (Yıldırım ve Şimşek, 2011, pp. 227-228).

Findings from Turkish Students

Table 2. Turkish Students' Definitions of Visual Literacy

Definition	Gender
Caricatures	1M, 11M
Visualization	2F
Understanding the image	3M, 6M, 8F, 12M, 13F, 14F, 16M.
Perceive the image	3M, 14F
Interpret the image	3M, 6M, 7F, 9M, 12M, 14F, 16M
Video	4F
Presentations	4F
Visual materials	4F, 15F
Photos	4F
Social Media	5M
The most popular reading	5M
Visual text	5M
Traffic signs	5M
Reading the picture	6M, 8F, 9M, 13F
Explain the image	7F
Grasp the meaning of the image	8F, 16M
Visual intelligence	10F
Novel	11M
Visual source	15K

[&]quot;It means being able to better understand the visuals I see." (2F)

"In other words, it helps us comprehend the message that the images we see in life are trying to convey to us and the interpretation that we should make of them so we can respond to them appropriately in terms of interpretation." (12M)

"I think the visual literacy skill is the ability to understand, comprehend, and interpret what I see. People with this ability are already self-explanatory. I think they can achieve a certain level of success." (16M)

We can observe that students generally associate visual literacy with "understanding the image" and "interpreting the image." Other important things about visual literacy are caricatures, videos, presentations, reading pictures, social media, grasping the image, etc.

Table 3. Visual literacy education

Education	Gender
I attended	5M, 14F
I didn't attend	1M, 4F, 6M, 7F, 9M, 10F, 11M, 12M, 13F, 15M, 16M
I'm attending	2F, 3M, 8F

[&]quot;I am taking this lesson at university now." (2F)

[&]quot;I define the visual literacy skill as being able to understand a visual I see, to be able to perceive and interpret what I understand." (3M)

[&]quot;I think that visual intelligence is more advanced." (10F)

"I have not received this lesson yet." (4F)

Generally, students didn't acquire this skill from a lesson. Some of the students suggest that they have acquired this skill from different lessons such as Visual Text Analysis or Media Literacy.

Tablo 4. Where do you encounter visuals in university education?

	Gender	
Project assignments	1M, 14F	
Smartboards	2F, 4F, 5M, 8F	
Images	2F, 3M, 8F, 13F, 16M	
Advertisements	2F	
Storytelling images	2F	
Slides	4F, 5M, 9M, 10F, 11M, 12M	
Video commentary	2F, 4F, 6M, 7F, 15F	
Materials	4F, 7F	
Caricatures	5M	
Painting	6M, 16M	
Photographs	7F, 16M	
Graphs	9M	
Presentations	9M, 10F, 11M, 12M	

"We use visuals on smartboards. Especially on slides, a joke or a caricature that is sometimes brought to explain a topic or help to summarize the topic." (5M)

"For example, we use visuals and materials in our presentations in some classes. We use them in this way. We design materials by ourselves. Sometimes, we must go to some places and see them. Based on them, we take pictures and use them later." (7F)

At university, students use visuals mostly in educational slides in their lessons. Also, they use video commentary, images, smartboards, project assignments, presentations, photographs, paintings, etc.

Table 5. Students' Use of Images

Use of Images	Gender
Turkish Folk Literature-Slides	1M
Turkish Folk Literature-Models	1M
Geography-Games with materials	1M
Classical Turkish Literature-Paintings	2F, 3M
Modern Turkish Literature-Photographs	3M,4F
Turkish Folk Literature-Video	4F,15F
Modern Turkish Literature-Impersonation	4F
Turkish Grammar-Caricature	5M,12M
Turkish Folk Literature-Paintings	6M, 8F, 13F
Literature Information and Theory-Visuals	7F
Listening Education-Visuals	9M
Artificial Intelligence-Video	10F
History of Turkish Revolution and Atatürk's	11M
Principles-Video	
Media Literacy-Photographs	15F
Traffic Lesson-Paintings	16M

"I use visuals about history in the Turkish Revolution course. Videos and images about wars." (11M)

"The elements of the sentence, for example, at my Turkish Language Teaching Department, for example, I give a sentence in the cartoon. I can use visuals such as separating the sentence into elements or making the elements speak with visuals. Only a simple example as such." (12M)

The students gave a lot of different examples regarding the use of visuals in different lessons. For example, in media literacy lessons, they use photographs, and in Turkish Folk Literature lessons, they use paintings.

Table 6. Students' Use of Visual Mnemonics

Visual Mnemonics	Gender
Computer-Visuals	1M
Geography-Paintings	1M, 12M
Visual Literacy- Selective Perception	2F
Theatre-Visuals	3M
Science-Experiment	4F,16M
Simulation-Presentation	5M
Turkish Folk Literature-Video	6M
Media Literacy-Video	6M
Turkish Language Lesson-Presentation	7F, 10F
Visual Analysis-Paintings	8F
Biology-Visuals	9M,13F
History-Presentation	11M
Social Sciences- Maps	15F
Social Sciences-Photographs	15F, 14F

"I don't believe that pictures are used sufficiently in education. In Turkey, I believe we do not place a lot of value on images, although I am not familiar with the daily activities in every school. Graphics are not used sufficiently anywhere. Nowhere, neither in the world of education nor in normal life." (14F)

"In the Social Studies lesson, our teacher was using them, making use of the maps while describing the wars. He used photos of people. Because of this, I never forget them. I still remember the lessons, especially the Revolution History of Turkey." (15F)

"Once, you know, it was a science course. I was in high school. My teacher brought something like, how to put it... He brought a cell model. So, I never forget the shape of the organelles in the cytoplasm inside the cell. They stuck in my mind. For instance, from this example, we can see how useful they are." (16M)

Due in large part to the use of visuals, students are less likely to forget what they learn in science classes. Additionally, they remember Turkish language classes better because of graphics and video presentations. Students believe that visuals are not used sufficiently in Turkish education and daily life. This could be a result of ignorance about the subject.

Table 7. The use of visuals in Turkey

Visuals in Turkey	Gender
Traffic	1M, 5M
Factory	1M
Art	2F, 7F, 8F, 10F, 11M
Advertisement	2F, 4F, 6M, 12M, 13F, 15F
Media	3M, 4F, 7F, 11M, 12M, 15F
Museums	8F
Tourism	9M
Fashion	10F
Photography	10F
Graphics	11M
Education	8F, 12M, 13F, 16M
Inadequate	14F, 15F
Literature	15F
Plaque	15F, 16M, 4F
Brochure	4F
Boards	16E

"Images are dominant over the media. Because the media is a wide framework, here is television, cinema, newspaper, magazine, social media, computer, telephone, etc. Since all of these are combined in the media environment, I, therefore, believe that visuals are predominantly used in the media sector." (3M)

"I mean traffic signs can be an example. Because I am not going too long, because my house is close to my school. But even at hundred kilometers, I see incredible traffic signs." (5M)

According to university students in Turkey, visuals are mostly used in traffic and media. On the other hand, some students stated that art and advertisement are the other domains where visuals are used in Turkey.

Findings from Italian Students

Table 8. Italian Students' Definitions of Visual Literacy

Definition	Gender	
Image	1F, 6M, 10F, 13F	
Graphic	1F, 13F	
Expressing beyond images	2M	
Teaching with pictures	3M	
Message with picture and video	4F	
Visual alphabetization	4F	
A new way of learning	7F	
Ordinary literacy	7F	
Visual experiences	8F	
Perception	9M	
Intuitive teaching	10F	
Learning the disciplines	11M	
Learning with visuals	12M, 16F	
Drawings	13F	
Sketches	13F	
Enlarge text with images	15M	
Form of education	14F,16F	

"A method of expressing a concept or idea beyond images." (2M)

"Visual alphabetization, I think, is something through which you can give a message with images or videos." (4F).

"The field of literacy through the use of images." (6M)

"For me, ordinary literacy represents a new way of learning which facilitates the learning process and is essential in this age of social reasoning." (7F)

"By visual literacy, I believe we mean a method of teaching that will become easier and more intuitive, where images have a fundamental means of learning." (10F)

"In my opinion, visual literacy is a type of education that is carried out using images and visual media in general." (16F)

Visual literacy, in the eyes of Italian students, is all about "images." This is the most common response. "Graphic" is the alternative response. Generally, when students are asked about the meaning of visual literacy, they understand it as "learning with visuals" and a "form of education." Visual alphabetization, a new way of learning, ordinary literacy, visual experiences, perception, intuitive teaching, learning the disciplines, learning with visuals, drawings, sketches, enlarge text with images, and form of education are some additional definitions of visual literacy that we can see.

Table 9. Visual Literacy Education

Education	Gender
No, I didn't receive any education	1F, 3M, 6M, 9M, 11M, 12M, 13F, 14F, 15M
Through slides at the university	2M
In schools and universities	4F, 8F
Digital marketing courses at the university	7F
On courses at the university	10F
These skills are autonomous	15M
Symbols, signs, education	16F

[&]quot;No, I didn't receive any type of visual education." (1F)

[&]quot;Yes, no, I hear it in information and digital marketing courses at university." (7F)

[&]quot;Yes, during university courses." (10F)

[&]quot;Yes, it is useful for learning lessons." (12M)

[&]quot;No, none." (13F)

Table 10 reveals that some students at La Sapienza have acknowledged that they lack basic knowledge about visual literacy. Some university students receive education in visual literacy using slides, symbols, and signs. They utilize this type of education during their lessons at university.

Table 10. Where do you encounter visuals in university education?

	Gender
Pictures	1F, 4F, 13F, 14F, 6M
Affect with visuals	2M
Work graphs	3M, 4F
Maps	4F
Video about what marketing isn't	7F
Helping understand concepts better	8F, 10F, 12M, 13F, 14F, 15M
Icons for archeology	9M, 16F
Slides are useless	11M
Films	16F

[&]quot;One can keep in mind better with images rather than long texts. E.g., graphs, maps, images." (4F)

"Yes, it happens sometimes. For example, in one lesson, a teacher showed us a video about what marketing is not. This made it much easier for us to learn what marketing is about." (7F)

"Very much. They help me remember concepts better." (8F)

These kinds of images are frequently used in lessons in Italy to aid in conceptual understanding. Additionally, they employ visual aids like charts, maps, icons for archaeology, slides that are useful, and movies. One student claimed using a video about "what marketing isn't" helped her better understand what marketing is.

Table 11. Students' Use of Images

Use of Images	Gender
Graphs (To learn better)	1F, 8F, 15M
Maps (To remember better)	1F, 4F
Business Models	2M
Slides	2M, 7F
Graphs (Seeing employee results)	3M
Timelines (For history)	4F, 12M
Visualization (For calculation rates)	6M
Video (Learning what marketing is)	7F
Schematics	8F
Annotated pictures	8F
Images (When imagining)	9M, 10F, 14F
In socio-economic inequalities	13F
Symbols (To facilitate understanding)	16F

[&]quot;Pictures help students learn. They help you understand topics better." (6M)

"We make use of maps and graphics to help us remember what we learn. It makes a significant impact since you can better memorise something when you see it. (1F)

"Graphs to view the results of the studies at any time." (3M)

"Advertising slides or video clips are often used in classes to help students learn a concept better. I think these images will make the learning process much faster." (7F)

"Maybe in commercials." (10F)

"For instance, it is impossible to determine experimentally what causes the major events that worsen inequalities when addressing socio-economic inequalities. With a view of two neighbourhoods, one could be considered 'poor' (or pauperized) and the other, rich."

According to the students, they use visuals in different lessons. When asked to provide examples, they brainstormed a lesson plan that included illustrations. Examples include graphs for learning more effectively and viewing employee results, maps for improving memory, business models, timelines for history, and rate calculation visualization.

Table 12. Students' Use of Visual Mnemonics

Visual Mnemonics	Gender
Maps used in math classes in middle school	1F
University video of a manager	2M
Watching a movie to study an international situation in high school	3M
Geographic Maps	4F
No, none	6M
Movie in high school history class	7F
In all classes	8F, 12M
When grandparents teaching in Latin to grandchildren	11M
A religion lesson that shows pictures of Africa	15M
In architecture classes	16F

"In secondary school, I used to use maps in math classes for better explanation. I still remember this map because I memorised it." (1F)

"Watching a film in high school as a basis for studying the international situation." (3M)

"I usually have images in all the classes I attended, and this helps me understand better." (8F)

"It is related to Latin. When grandparents talk about Latin." (11M)

"Many images were used in the lessons, so I don't remember." (12M)

"I remember a religion lesson where we were shown pictures of Africa, which I will never forget." (15M)

In response to the researcher's question, "Can you talk about a lesson that you never forget or always remember due to the use of visuals," they replied, "In all classes," in general. Additionally, they mentioned the use of maps in math classes in middle school, a manager's university video, and attending a movie to explore a global issue in high school. Another participant remarked, "When grandparents taught in Latin." A participant shares this: "A religion class that includes images of Africa." "I never forget this," he further stated.

Table 13. The use of visuals in Italy

Visuals in Italy	Gender
In the streets	1F
In transport	1F
Advertising communication	2M, 4F
Medicine	3M, 9M, 15M
Training	5M
Journalism	5M
Allover	6M
In museum	7F
In tourism	7F
In university	7F, 8F
In schools	7F, 8F
Introduction	8F
Biology	9M
Depends on the situation	12M
In the media field	13F
Being an architect	13F
History	14F
Photograph	15M
Science	15M
Culturally	16F

[&]quot;Medicine" (3M)

"In Italy, probably, the use of images is best found in spaces, museums, and tourism, while its essence is still present in universities and schools, where it would be difficult to translate what is needed in books into a visual stimulus." (7F)

[&]quot;Advertisement" (4F)

[&]quot;In training, team building, journalism, satin courses." (5M)

[&]quot;Culturally, I think there is a religious use of images in Italy." (16F)

Table 14. Results on Comparison of Data Obtained from Turkish and Italian Students

Turkey	Italy	
Definition: Understanding the image, interpreting the	Definition: Image, graphic, learning with visuals,	
image.	form of education.	
Education: Eleven students did not attend. Five did.	Education: Nine students did not attend. Six did.	
Images in University Education: Slides, video	Images in University Education: Helping understand	
commentary, smartboard, presentation.	concepts better, pictures, work graphs, icons for	
	archeology.	
Use of images: Paintings, videos, photographs,	Use of images: Graphs, images, timelines, maps,	
caricatures.	slides.	
Visual mnemonics: Geography- Paintings, Science-	Visual mnemonics: In all classes, A religion lesson-	
Experiment, Turkish Language Lesson-Presentation,	Pictures, Geographical maps, watching a movie, none.	
Biology-Visuals, Social Sciences- Photographs.		
Visuals in Turkey:	Visuals in Italy:	
Advertisement, media, art, education, plaque, traffic,	Medicine, advertising communication, in university,	
inadequate.	in school, depends on the situation.	

Turkish and Italian students evaluate the definition of visual literacy, common point images, and image interpretation. They consider visual literacy to be an academic discipline. This is a technique for deciphering the meaning of images. When the researcher asked students if they had taken a course on visual literacy or not, most students in both Turkey and Italy said they did not. Italian students claimed to have taken university courses in visual literacy. Turkish students who took visual literacy classes received this education in higher education. Students from both countries highlighted how their professors incorporated visuals into their classes. Typically, they make use of presentations, slides, videos, and graphs. In classes, it is helpful for taking notes.

When students talk about how they benefit from visuals in university courses, they said that they use maps, graphs, slides, photographs, images, caricatures, videos, and timelines. According to them, they can tell the easy way with these images. They also claim that graphics make it simple for them to communicate with the class. Students from both countries stated that when making presentations, they employed slides, paintings, movies, photos, caricatures, graphs, and graphics such as timelines and maps. The researcher asked students of both nationalities, "Can you talk about a lesson that you never forget or always remember due to the use of visuals?" Their response was that they employed paintings in geography courses, experiments in science lessons, presentations in Turkish language lessons, graphics in biology classes, and photographs in social science lessons.

To the question "According to you, in what areas is visual literacy used mostly in

Turkey/Italy?" Turkish students responded as advertisements, media, art, education, plaque, and traffic while Italian students responded as medicine, advertising communication, in university, and in school.

Discussion and Conclusion

According to Turkish university students, visuals are important to remember what they learn in classes. Students obtain necessary information through visuals. In higher education, both students and lecturers need information more efficiently via digital technologies. It is important for e-learning, distant learning, and face-to-face learning methods. For this reason, students in higher education should be able to correctly analyze visuals. On the other hand, students in higher education should learn how to take information from visuals and communication technologies. Besides, they should learn to develop their visual literacy skills. As a result, it is important to specify students' abilities in this field by taking specific parts of their visual literacy skills into account.

Kaya (2012: 2206-2208) had a research project in Eskişehir with 42 classroom teachers. The author used the qualitative research method in his study. This research was quantitative research. He obtained data from experts. He used three open-ended questions in his research. Two of them were about in-class exercises including visual reading and visual presentation topics. The other, though, focused on the challenges the teachers encounter when engaging in these activities. The findings support our study on the use of visual tools in the classroom. Twelve classroom teachers reported that they had previously engaged in predicting activities and the topic of a text based on the textbook's illustrations. Three teachers mentioned that they had engaged in activities including questions that used both text and images. Teachers who responded to the question concerning their ability to make visual presentations typically stated that they used visual aids, such as images, displays, and posters when teaching.

Different people may interpret what they see differently. Tycho, Kepler, Simplicius, Einstein, De Broglie, Born, Heisenberg, and Bohm could not have made the same observations if this was not the case. They had different theories about these observations even when they were looking into related problems. It means that different impressions can result from observations made about the same subjects. It wouldn't be incorrect to suggest that the retina's ability to perceive colors differently causes numerous different perceptions. Images are ambiguous and might be interpreted differently by different organizations. Max Wertheimer stressed that if the figure is rebuilt when attempting to solve a geometry puzzle, the answer can be found with ease. The identical visual stimulus may provide two distinct perceptions in geometry. Occasionally, one of them leads us away from the answer while the other is appropriate. As an illustration, consider a footprint in the sand. We can be able to see the missing foot thanks to the track. In actuality, the majority of human abilities and advancement of humanity are brought about by such practice (Arnheim 2018: 334-337). According to Italian students, visual literacy is a form of education and understanding of visuals' importance. While most of them did not attend any visual literacy education program, all of them are aware that visual literacy is important for understanding images. They reported using visuals in their

lessons at university. Also, when they use visuals in their lessons, they cannot forget the lesson because visuals help them remember conceptions.

In September-October 2016, research was done (Lopatovska, Carcamo, Dease, Jonas, Kot, Pamperien, Volpe, and Yalçın 2018: 592-600) in Brooklyn Public Library. A library staff member recruited 30 children who were voluntary library visitors. Four workshops were conducted with these children whose ages ranged between 2.5 and 4. They participated in voluntary visual literacy workshops. Some workshops spent more time on discussion about colours and lines. Other workshops spent less time on discussion and more time on activities about shapes and textures. In these workshops, children were given fewer opportunities to talk about visual elements. According to the research findings on children's interests in visual literacy components, colour and texture are two visual literacy components. The children responded more actively and with greater curiosity to these. Previous studies have also suggested that young children are naturally inclined to focus on colours. Children's grasp of colours, temperature, primary colours, perspective, relationships between objects and shapes, natural textures, and painting methods were all improved through these sessions.

One of the remarkable findings of the current research is that most of the both Italian and Turkish university students stated that they had not received any education related to visual literacy. They agreed that classes taught with visuals were more memorable and that visual literacy helped them achieve more permanent learning. While visual literacy was perceived as a form of education and a way of understanding visuals by Italian students, Turkis students considered visual literacy to be an ability to understand and interpret visuals.

Learning different ideas from different societies, recognizing our weaknesses, and trying to eliminate them will make a great contribution to educational development in our country. Visual literacy can be improved among students. To do so, classroom activities should be developed. Also, having students participate in lessons with visual literacy activities will be helpful for students. Besides, university students need to develop visual literacy skills as they will need to use these skills in their future professional lives.

Recommendations

Future studies can benefit from the following recommendations:

- 1. Comparative research can be carried out in different countries. This can reveal what people from different cultures think about visual literacy.
- 2. Most of the students, according to the research's findings, did not receive any education in visual literacy. Universities may develop programs to teach visual literacy.

3. Academicians can be included in a study on the teaching of visual literacy. By obtaining their opinions, it is possible to guarantee the development of this competence.

I would like to extend my sincere gratitude to Prof. Isabella PEZZINI for the information and assistance she offered during the implementation and progress of this research.

Conflict of Interest

No potential conflict of interest was declared by the author.

Funding

This research was derived from the TUBITAK Project coded as 1059B191800790— and called as "A Comparative Study on Visual Literacy Skills of Italian and Turkish University Students".

Ethical Statement

This research in the 1st semester of the 2018 2219-Overseas Postdoctoral Research Fellowship Program in line with the evaluation results of the panelists who are experts in the relevant discipline, the Science At the meeting of the Executive Committee of the Presidency of Humanitarian Support Programs, dated 10/08/2018 and numbered 14 examined and found suitable for research.

References

- Arnheim R. (2018). Görsel düşünme. Metis Yayıncılık.
- Avgerinou, Maria & Ericson John (1997). A review of the concept of visual literacy. *British Journal of Education Technology*, 28 (4), 280-291., https://doi.org/10.1111/1467-8535.00035.
- Büyüköztürk, Ş. vd. (2012). Bilimsel araştırma yöntemleri. Ankara: Pegem Akademi.
- Çakıroğlu, E. (2016). The significance of basic design training on the development of visual literacy. The Journal of International Social Research, 9(44), 897-901.
- Çelik, G. (2017). A mix method study for developing reading skills using visual literacy in Turkish language teaching class [Unpublished doctoral dissertation]. Çanakkale Onsekiz Mart Üniversity.
- Çulha, O. (2011). Examining Canada photos by using semiotics method. *ZKU Journal of Social Sciences*, 7(13), 409-424.
- Debes, J. (1969). "What is 'visual literacy?". International Visual Literacy Association. [online: 20.12.2012] Available online at: http://fod.msu.edu/oir/visual-literacy.
- Eckhoff, A. (2010). "Young children–using games to explore visual art with young children, national association for the education of young children". www.nxtbook.com/nxtbooks/naeyc/youngchildren_201001/index.php?startid=17;www.nx tbook.com/nxtbooks/naeyc/youngchildren_201001/index.php?startid=17#/20.

- Gardner, H. (1970). "Children's sensitivity to painting styles", *Child Development*, *41*(3), 813-821. https://doi.org/10.1111/J.1467-8624.1970.TB01033.X.
- Glesne, C. (2013). Nitel araştırmaya giriş. Anı Yayıncılık.
- Gül, A. A. (2013). Media literacy in the European Union: Tendencies observed in the regulations and the studies, *AJIT-e: Online Academic Journal of Information Technology*, 4 (11), 15-33. https://doi.org/10.5824/1309-1581.2013.1.002.x.
- Hug, T. (2012). Media competence and visual literacy-towards considerations beyond literacies. Social and Management Sciences, 20(2), 115-125, https://doi.org/10.3311/pp.so.2012-2.06.
- Kaya, M.F. (2012). The determination of the in class applications of visual literacy and problems faced during these applications about the views of Turkish classroom teachers, *Procedia Social and Behavioral Sciences*, 46, 2205 2209, https://doi.org/10.1016/j.sbspro.2012.05.455.
- Kıran Z. & Kıran A. (2012). Dilbilime giriş. Ankara: Seçkin Yayıncılık.
- Lee, J.,Beene S., Chen X., Huang W., Okan L. & Rodrigues F. (2022). International visual literacy association, http:///doi.org/10.52917/ivlatbsr.2022.001.
- Lee, M.M. (2010). Working toward third space: visual literacy acquisition in art studio classrooms (Doctorate). Faculty of The USC Rossier School of Education University of Southern California, United States.
- Lopatovska, I., Carcamo, T., Dease, N., Jonas, E., Kot, S., Pamperien, G., Volpe, A. & Yalçın, K. (2018). Not just a pretty picture part two: evaluating a visual literacy program for young children. *Documentation Journal*, 74 (3), 588-607, https://doi.org/10.1108/JD-08-2017-0119
- Patton, M.Q. (2014). Nitel araştırma ve değerlendirme yöntemleri. Ankara: Pegem Akademi.
- Pezzini, I. (2011). Semiotica dei nuovi musei, Roma-Bari, Laterza, 2011; on RIFL-Rivista Italiana di Filosofia del Linguaggio, 8(2), 341-343, https://doi.org/10.4396/20141225.
- Prensky, M. (2001). Digital natives, digital immigrants, MCB University Press, 9(5),1-6.
- Robertson, M.S.M. (2007). Teaching visual literacy in the secondary English/language arts classroom: An exploration of teachers' attitudes, understanding and application. http://krex.kstate.edu/dspace/bitstream/handle/2097/269/MarthaRobertson?sequence=1.
- Shurtleff, S. J. (2006). Visual literacy as a method of understanding texts in the language arts classroom: storyboarding and video production. Master Thesis. Kent State University College and Graduate School of Education, Health and Human Services.
- Yenawine, P. (2003). "Jump starting visual literacy", Art Education, 56(1), 6-12.
- Yıldırım A. & Şimşek H. (2011). Sosyal bilimlerde nitel araştırma yöntemleri. Ankara: Seçkin Yayınları.