Mental imageries of teachers on distance education in Turkey

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ABSTRACT

Distance education is an education type applied under ordinary and extraordinary conditions. This type of education has synchronous and asynchronous dimensions of realization. It can be said that computer-based internet technologies gain significance in a process where any of these dimensions are used. In these technology-supported learning environments, it is remarkable that the teacher and the student are in different perimeters. In this context, it can be stated that the concept of *distance education* requires a particular perspective, and the existing mentality of people diverts this perspective. Therefore, this study primarily aims to determine the teachers' perceptions of distance education concepts according to their genders by using mental imageries. The working group of this research, which was prepared according to the qualitative methods, consisted of 100 teachers (38 males and 62 females) who served in various academic majors in public and private educational institutions in many provinces of Turkey during the 2020-2021 school year. The study data were obtained through a survey in which the participant teachers filled in the blank spaces in the sentence of " Distance education is similar to ... because ... ". Study data were interpreted using the content analysis technique. Regarding the distance education concept, teachers produced mental imageries under twelve different themes. When these various themes were evaluated, it was observed that the teachers mostly formed their mental imagery by considering the "Image of Nature" theme.

Keywords: Mental imagery, metaphor, teacher, distance education.

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INTRODUCTION

While a picture only has a mission to show unchanging imagery, a metaphor can be said to demonstrate mental imagery for reasoning about a phenomenon. Thus, just as a picture corresponds to 1000 words, a metaphor can be said to meet 1000 pictures (Shuell, 1990; Saban, 2008; Koçoğlu and Kaya, 2016; Koçoğlu, 2018). Mental imagery can be defined as the representation of the external world in one's mind (Eysenck, 2012). On the other hand, imagery is an objectivation of things by transforming to a nonmaterial state in mind or gaining a new appearance. In other words, the imagery can now be expressed as a new name, meaning, or symbol of the object (Orhanoğlu, 2010). According to Alakuş and Özsoy

(2017), the word "imagery" can be used for terms such as "dream," "imagination," and "impression."

Image consists of some concepts and values that are sometimes used together with imagery, and sometimes instead. Although, among these concepts, "metaphor" is the most used, additionally, "allegory," "symbol," "archetype," and "theme" are expressed in the concepts.

"Metaphor" can be expressed as a way of transferring a concept or situation with a different concept or situation (Abrams, 1999; Aydın and Pehlivan, 2010). Metaphor is a Greek word derived from the word *"metapherein"* and is obtained by combining the word *"meta"* meaning to "to change" and *"pherein"* meaning to "to carry" (Koçoğlu,

2018). Although metaphor was used as the word "metaphere", which was born as a result of the combination of the words "change" and "carry" in Greek, the word's modern utilization today is different. Today the concept identifies a relationship established with proportional connections between two objects, events, or relationships (Draaisma, 2007). Both Akman (2017) and Deant-Read and Szokolszky (1993) expressed metaphor as an indirect way of expression, that is, the indirect expression of a concept, situation, or object by using another concept or object instead of directly describing it with itself.

The metaphor concept was first used in Lakoff and Johnson's research, named "Metaphors We Live By" in 1980 (Döş, 2010). According to Lakoff and Johnson (1980), metaphor is an understanding and experiencing of a basic concept (or object) from the perspective of another concept (or object). Metaphor enables us to re-conceptualize an object or a phenomenon that we are trying to comprehend by establishing mental relationships with a network of concepts specific to a different meaning field, as well as allowing us to see this concept from different angles. It also helps us to have more detailed information about some situations that we could not see before (Taylor, 1984; Koçoğlu and Kaya, 2016; Koçoğlu, 2018).

There are many definitions or explanations about the concept of metaphor that are essentially the same. Metaphor is the expression of a phenomenon or an event by resembling it to another phenomenon or an event (Fitzgerald, 1997; Saban, 2009). While Semerci (2007) refers to the concept of metaphor as a meaning transfer from an object having perceptually similar features to another object, Yob (2003) and Ulu Kalın and Koçoğlu (2017) stated in their studies that "an association or a symbol of the concept" should come to the fore, and should be handled in this way. Again, for metaphor, various expressions were used, such as "language of experiences" (Miller, 1987; Pilav and Elkatmış, 2013), "mental mapping and modeling mechanism" (Arslan and Bayrakçı, 2006; Akman et al., 2017).

Metaphors are at the central position relating to how we know and explain our perception of both ourselves and the world because, thanks to metaphors, we can describe one phenomenon with the other. Besides, metaphors having a place in our language we use in daily life can influence our beliefs and actions (Koçoğlu, 2018). Also, metaphors serve as cultural and personal frameworks about how we direct our lives. However, we are not fully aware of how we use them (James, 2002; Demirtaş and Çoban, 2014; Ulu Kalın and Çalık Uzun, 2017).

Metaphors offer individuals a broad perspective. While the different features of the concepts that are not obvious are revealed with metaphors, also, it helps to think about the meaning transference on metaphors and the relationship between concepts (Rundgren et al., 2009; Koçoğlu and Kaya, 2016; Egüz and Öntaş, 2018).

Metaphors mediate different purposes. Sometimes they come up with the task of enriching the educational environments, and sometimes they find usage field in the form of expressing difficult concepts and facts with more comprehensible and intimate concepts in planned learning (Güveli et al., 2011; Geçit and Gençer, 2011; Yılmaz et al., 2013; Koçoğlu and Kaya, 2016; Alım et al., 2018; Koçoğlu, 2018).

Metaphors allow expressing the things desired to be said in fewer words but more emphatically. In other words, metaphors enable us to construct a powerful expression with fewer words (Demirtaş and Çoban, 2014). Metaphors facilitate understanding by simplifying complex concepts and terms, which are difficult to understand by students, as well as providing permanent learning by concretizing abstract concepts (İbret and Aydınözü, 2011; Koçoğlu et al., 2014; Koçoğlu and Kaya, 2016; Koçoğlu, 2018). Therefore, metaphors appear as a way of thinking and seeing as well as facilitating the learning of new information (Morgan, 1998).

Metaphors can be used as simulative concepts that offer a particular perspective. In this context, one of the concepts reflected by the subjective viewpoint is "distance education" which has become a part of our daily life with the rapid development of information technologies in the 21st-century information age. Nowadays, the concept or phenomenon of "distance education" is efficient in all education and training levels starting from pre-school education to graduate education. So it can be stated that using metaphors would be significant in interpreting an abstract concept such as "distance education".

Distance education can be defined as delivering education to individuals in a web-based manner using computers with developing internet technologies (Newby et al., 2006). TDK, on the other hand, choose to define distance education as "an education method in which the student and the teacher are not in a face to face contact, made from a certain center, and using various communication tools" (TDK, 2020). Distance education applications, which were a utopia for many societies in the past, have become easily applicable today thanks to the global communication network in parallel with information technologies. Although it is an easily practicable phenomenon today; considering that the teacher and the student are not in face-to-face communications, that it has many complex dimensions such as internet technologies and computer assistance; in order to facilitate the interpreting of the "distance education" concept, in this study, mental imageries related to the concept are included. Due to the Covid 19 pandemic that emerged at the end of 2019, education has started to be conducted through the distance education system also in Turkey, as in the whole world. This study was carried out to determine the teacher perceptions on the distance education concept through the imageries.

Purpose of the research

This study aims to collect the mental imageries that teachers have for the concept of "distance education" and identify the teacher perceptions towards the concept by categorizing and classifying the obtained mental imageries. In the study, the answer was sought to the question, "What are the mental imageries used by teachers for the distance education concept?" In this context, the sub-questions listed below were evaluated by considering the primary question:

- What are the mental imageries that teachers have developed for the concept of "distance education?"
- In which categories can the mental imageries produced by teachers for the " distance education " concept be classified?
- What is the relationship between the mental imageries expressed by male and female teachers regarding the concept of "distance education" in terms of themes and frequencies?

METHOD

Research model

For the purpose determined in this study, phenomenology design, one of the qualitative research methods, was used. The phenomenology pattern concentrates on phenomena that we are aware of; nevertheless, we do not comprehend intensely or thoroughly. The phenomena appear in many ways in daily life. However, we usually can not fully understand these facts to which we are not foreign. Phenomenology plays a significant role in studies that aim to investigate phenomenon whose meaning we do not comprehend although it is not entirely unfamiliar to us (Creswell, 2013; Koçoğlu, 2018; Koçoğlu and Egüz, 2019). In this study, the mental imageries developed by the teachers for the " distance education" concept were interpreted in this direction.

Participant

The working group of the research consisted of 100 teachers, including 38 male and 62 female, teaching in the majors of Preschool, Social Studies, English, Turkish, Mathematics, Science, etc., serving both in private education and public institutions in different provinces of Turkey during the 2020-2021 school year. Teachers who participated in the study contributed entirely voluntarily. The participation of male and female teachers from different majors and provinces of our country enabled the study group to consist of various characteristics and qualifications, which positively affected the data diversity regarding the study (Table 1).

Table 1. Demographic characteristics of the study group.

Gender/Branch	Male		Female		Total	
	f	%	f	%	f	%
Science	5	13.1	2	3.22	7	7
English	5	13.1	8	12.90	13	13
Maths	4	10.52	4	6.45	8	8
Pre-school	1	2.63	31	50	32	32
Social studies	4	10.52	1	1.61	5	5
Turkish	7	18.42	4	6.45	11	11
Other	12	31.57	12	19.35	24	24
Total	38	100	62	100	100	100

Collection of data

Study data were collected online via Google forms due to the ongoing Covid-19 pandemic. Before starting the study, all participants in the study group were informed about the mental association. Later, they were requested to create an image for the concept of "distance education." The teachers, who constituted the research sampling, were asked to fill in the blank spaces in the sentence "Distance education is similar to ... because ...," by taking into account their education, experiences, and daily lives. Besides, a gap was left after the word "because" so that teachers were desired to justify, or put forward a logical basis, for the mental imageries they developed for the concept of "distance education". Teachers were allowed four days to fill out the form. The teachers' mental imageries regarding " distance education," and their reasons have been processed as the primary data source in this study.

Analyzing data

First, a provisional form was established by lining up the

mental imageries presented by the participants for the " distance education" concept based on alphabetical order. Thus, whether the participants could clearly express particular mental imagery in the forms was checked. The lists that do not evoke mental imagery and blank ones (n = 29) were eliminated and not included in the study. After exclusion of the invalid forms, 83 valid mental imageries remained and were included in the study. Then, "sample mental imagery expressions" were assigned from the study group forms to describe each theme, and a "sample mental imagery form" was created by compiling the mental imageries of the study group members that were supposed to identify each theme best. Twelve-different themes were created out of the sample mental image chart, linking each mental image to a specific theme considering its relationship with distance education (for example, distance education concept in point of humanitarian qualities' association, distance education concept in point of nature's association, the distance education concept in point of tool-equipments' association, etc.). Besides, the sample mental imagery scale was assessed by the data analysis, which was carried out for each theme, considering their logical justifications. Furthermore, information about who produced each mental image was given in parentheses (e.g., male, teacher, or female, teacher).

The field experts' opinions were consulted to confirm whether the mental images given in the twelve themes obtained in the study had described subject themes or not to assure the study's reliability. For this purpose, three field experts were given a list of 83 sample imageries in alphabetical order and a chart containing twelve theme names. The field experts were requested to match the sample mental imageries in the first list to the twelve themes in the second list (in the form that all imageries to be matched). After this stage, the researcher compared the matches made by the field experts with their themes. The numbers of "agreement" and "disagreement" were determined in the comparisons, and the reliability of the study was calculated by taking into account Miles and Huberman's formula (Reliability = Agreement/Agreement + Disagreement × 100). In qualitative studies, when there is a 90% or more agreement between expert and researcher evaluations, it means reliability is achieved (Saban, 2008: 467). In this study, a reliability of 98% (Reliability = 72/72 + 2 × 100 = 98%) was obtained.

RESULTS

The obtained data were analyzed and interpreted to answer the general purpose and sub-questions of the research. In this study part, the mental imageries expressed by the teachers regarding distance education were mentioned firstly. Besides, twelve-themes developed in the study on the distance education concept were supported by the sample mental imageries produced by the study group. Also, twelve-themes were compared, considering the variable of the participant's gender.

According to the findings, it is seen that male and female teachers developed a total of 83 valid mental imageries for the concept of distance education (Table 2).

Teachers' mental imageries regarding the concept of "distance education"

Considering the mental imageries developed by teachers for the concept of " distance education," 38-male and 62-female teachers developed a total of 100 mental imageries. However, it is observed that both male teachers and female teachers sometimes produced the same mental imageries. Considering this situation, 83 different mental imageries were formed. In the study, four teachers (f: 2m, 2w) produced the "TV program" mental imagery, and this one was the most produced. While the mental imagery of "flower" was created only by female teachers (f: 3), the mental imageries of "arid field" (f: 1m, 2w) and "saltless food" (f: 2m, 1w) were produced by both male and female teachers. The teachers participating in the study expressed the mental imageries they created for the concept of " distance education " by establishing connections with concrete, abstract, living, and non-living beings and objects (Table 2).

The concept of "distance education" as a humanitarian qualities ımagery

Ten participants (10%) and ten imageries (12.04%) represented this theme, which included the expressions of the teachers, who claimed the distance education concept as the "imagery of humanitarian qualities." The striking imageries in this category are "big brother" (f: 1), "mother" (f: 1), "baby" (f: 1), "postman" (f: 1), "doctor" (f: 1) (Table 3).

When the mental imageries under the theme "Distance education concept as an imagery of humanitarian qualities" were analyzed, it was observed that, out of ten mental imageries, while the six mental imageries *(virtual baby, grandchild, stepmother, eye, lifeless soul, mother)* were only used by female teachers, the remaining four mental image *(big brother, baby, doctor, postman)* were produced by male teachers. Regarding this theme, teachers paralleled the *"distance education"* to a human, or a human's organ or a profession; and they ascribed some missions such as motherhood, labor, sacrifice, knowledge transfer, and the effort for reaching the distant ones, and love. We see that such characteristics are in human beings. From this perspective, we can say that teachers have identified *distance education* with human traits and characterized it as a living being.

Table 2. Mental imageries of the study group on the distance education concept.

Mental Imagery Code	Mental Imagery Name	Gender	Teachers Representing the Mental Imagery		Mental Imagery Code	Mental Imagery Name	Cinsiyet	Teachers Representing the Mental Imagery	
			f	%				f	%
1	Big Brother	1m	1	1	43	Well	1f	1	1
2	Mother	1f	1	1	44	Table	1m	1	1
3	Mirror	1f 1m	2	2	45	Letter	1f	1	1
4	Headache	2f	2	2	46	Homesickness	1m	1	1
5	Baby	1m	1	1	47	Distance relationship	1f	1	1
6	White wall	1f	1	1	48	Bus	1m 1f	2	2
7	Endless road	1f	1	1	49	Game	1f	1	1
8	Space	1f	1	1	50	Private lesson	1f	1	1
9	Iceberg	1m	1	1	51	Uncooked meal	1f	1	1
10	Plan B	1f	1	1	52	Postman	1m	1	1
11	Glass jar	1f	1	1	53	Restaurant	1m	1	1
12	Lifeless soul	1f	1	1	54	Virtual doll	1f	1	1
13	Circle	1f	1	1	55	Industrial revolution	1f	1	1
14	Flowe	3f	3	3	56	Limitless area	1m	1	1
15	Drum sound	1m	1	1	57	Cold tea	1m	1	1
16	Appreciation	1m	1	1	58	Water	2f	2	2
17	Mill	1m	1	1	59	Password	1f	1	1
18	Raft in the sea	1m	1	1	60	Following	1f	1	1
19	Sea travel	1f	1	1	61	Technology	1m	1	1
20	Thorn rose	1f	1	1	62	Non-contact education	1m	1	1
21	Bottomless well	1f	1	1	63	Tayammum	1m	1	1
22	Doctor	1m	1	1	64	Theater	1f	1	1
23	Future education	1m	1	1	65	Sow seeds	1m	1	1
24	Development	1f	1	1	66	Grandchild	1f	1	1
25	Goallless match	1m	1	1	67	Saltless	2m 1f	3	3
26	Shadow play	1m	1	1	68	Tv program	2m 2f	4	4
27	Blind walk	1f	1	1	69	Journey to hope	1f	1	1
28	Eye	1f	1	1	70	Kite	1f	1	1
29	Glasses	1f	1	1	71	Stepmother	1f	1	1
30	Sun	1f	1	1	72	Intimacy	1m 1f	2	2
31	Good days	2m	2	2	73	Simplicity	1f	1	1
32	Messenger bird	1m	1	1	74	Burning candle	1f	1	1
33	Rope	1f	1	1	75	False pregnancy	1f	1	1
34	Ghost	1f	1	1	76	Food advertisement	1f	1	1
35	Education everywhere	1m	1	1	77	Food recipe	1f	1	1
36	Internet shopping	1f	1	1	78	Inability	1f	1	1
37	Oxcart	1m	1	1	79	Road	1m 1f	2	2
38	Capitalism	1m	1	1	80	Youtube broadcast	1m	1	1
39	Cologne scent	1f	1	1	81	Face to face	1f	1	1
40	Uncontrolled education	1f	1	1	82	Time machine	1f	1	1
41	Arid field	1m 2f	3	3	83	Timeless rain	1f	1	1
42	Bird	1m 1f	2	2					
	Total					M:38	F 62	100	100

* m: male and f: female.

Table 3. Distribution of imageries regarding the distance education concept as an ımagery of humanitarian qualities.

Mental imagery code	Distance education concept as an ımagery of humanitarian qualities	Gender	Teacher representing the mental ımagery	
			f	%
1	Big brother	1m	1	1
2	Mother	1f	1	1
5	Baby	1m	1	1
12	Lifeless soul	1f	1	1
22	Doctor	1m	1	1
28	Eye	1f	1	1
52	Postman	1m	1	1
54	Virtual doll	1f	1	1
66	Grandchild	1f	1	1
71	Stepmother	1f	1	1
Total		4m, 6f	10	10

*m: male and f: female.

Some remarkable expressions from the mental imageries depicting the theme of *"the distance education concept as an imagery of human qualities"* are as follows:

"Distance education is like a postman because it carries what we want to convey to those far away." (Male, Social Studies Teacher)
"Distance education is like a stepmother. The child can never feel true motherly love." (Female, Science Teacher)
"Distance education is like a grandfather-grandson relationship because it transfers the knowledge to future generations." (Female, Social Studies Teacher)
"Distance education is like being big brother since it requires sacrifice." (Male, English Teacher)
" Distance education looks like a lifeless soul because there is no a classroom atmospheric spirit, the children remain neutral." (Female, English Teacher)

The concept of distance education as an imagery of nature

Seventeen participants (17%) and eleven mental imageries (13.25%) represented this theme, which included the expressions of the teachers, who claimed the distance education concept as the "imagery of nature." In this theme, the teachers who formed the study group produced the most mental imageries of flowers (f: 3), arid field (f: 3), bird (f: 2), and water (f: 2) regarding the distance education concept (Table 4).

When the mental imageries under the theme of *" distance education as an imagery of nature"* were analyzed, it was observed that, while the mental image of flower (f: 3) was produced only by the female teachers, arid field (f: 3) was created by one male and two female teachers, bird (f: 2) mental imagery was made by one male and one female teacher, and water (f: 2) mental image was produced by female teachers only.

Regarding this theme, teachers made an effort to define the distance education concept by making analogies with the natural elements. Although concepts such as flowers, arid fields, birds, and water came to the fore, it can be said that teachers tried to interpret distance education by being inspired by concepts such as iceberg and timeless rain.

Some teachers statements regarding mental imageries depicting the theme of *"the concept of distance education as an imagery of nature"* are given below:

"Distance education is like a timeless rain because not everyone is ready for it under the same conditions." (Female, Preschool Teacher)
"Distance education is like messenger birds; because it is delivered to the desired segment by using some tools. We can compare messenger birds to distance education tools." (Male, Social Studies Teacher)
"Distance education is like a flower because if we show interest and due diligence, we will get good results. If we do not fulfill our responsibilities, it will fade like a flower." (Female, Turkish Teacher)
"Distance education is like the sun because it enlightens us and warms us even it is far away." (Female, Preschool Teacher)
"Distance education is like plowing an arid field because there are no students." (Male, History Teacher)

Distance education concept as a tool-equipment imagery

Eight participants (8%) and seven mental imageries (8.43%) described this theme, which included teachers' expressions showing the distance education concept as a "*tool-equipment imagery.*" In this theme, the participants produced images of a mirror (f: 2), glass jar, glasses,

Table 4. Distribution of ımageries regarding the distance education concept as an imagery of nature.

Mental imagery code	Distance education as a imaginery of nature	Gender	The teacher representing the mental imaginery	
			f	%
9	Iceberg	1m	1	1
14	Flower	3f	3	3
20	Thorn rose	1f	1	1
30	Sun	1f	1	1
32	Messenger bird	1m	1	1
41	Arid field	1m 2f	3	3
42	Bird	1m 1f	2	2
43	Well	1f	1	1
58	Water	2f	2	2
65	Sow a seed	1m	1	1
83	Timeless rain	1f	1	1
Total		5m, 12f	17	17

*m: male and f: female.

rope, oxcart, table, and burning candle (f: 1) regarding the distance education concept (Table 5).

When the mental imageries in the theme " *Distance education concept as a tool imagery"* were analyzed, it was observed that, one male and one female teacher created the mirror mental imagery; two male teachers, oxcart and table imageries; four different female teachers glass jar, glasses, rope, and burning candle mental imageries.

Regarding the theme of the tool-material imagery, it was observed that the teachers who formed the study group tried to define the distance education concept by paralleling with some tools and equipment. While these comparisons were made, it was seen that these tools and equipment were generally selected from ones used in daily life.

Based on these analogies, it was observed that teachers' tools and equipment perception usually emphasized the negativeness of distance education by considering it as hard, arduous, and requiring financial possibilities. However, it should be stated that some teachers' perceptions were positive in the concept.

Some teachers' statements regarding mental images depicting the theme of "distance education concept as a tool imagery" are given below:

"Distance education is like a mirror because you can see your image as you want, but our reflection in the student may not be as we wish ..." (Female, English Teacher)
"Distance education is like a talk to a lighting candle because at the moment you can not control your breath, the candle will extinguish." (Woman, Guidance and Psychological Counseling Teacher)
"Distance education is like an oxcart because what we want to communicate can laboriously reach students." (Male, Turkish Teacher)
"Distance education is like a rope connecting us to life

while the world is passing through this process. Because I just feel like I can breathe when I teach my kids, even from a distance". (Female, Preschool Teacher)

Distance education as an ımagery of transport

Ten participants (10%) and eight mental imageries (9.63%) represented this theme, including teacher expressions which showed the distance education concept as a "*transportation imagery.*" In this theme, the mental imageries produced by participants related to the distance education concept are bus (f: 2), road (f: 2), endless road, raft in the sea, sea travel, blind walk, time machine, and journey to hope (f: 1) (Table 6).

When the mental imageries in the theme of *"distance education as a transportation imagery"* were analyzed, it was observed that each of the mental images of the bus (f: 2) and road (f: 2) were created by one male and one female teacher, the raft in the sea mental imagery was created by one male teacher, the mental images of the endless road, sea travel, blind walk, time machine, and hope journey were produced by one female teacher each.

Regarding the theme of transportation image, it was seen that the teachers who formed the study group made definitions by using process-oriented metaphors besides comparing the distance education concept to vehicles. Participants generally had the perception that distance education is a demanding and challenging process. However, there was also an opinion that happiness will prevail at the end of a hopeful period. In short, it can be mentioned that there were positive and negative opinions on this theme.

Some teachers' statements regarding mental imageries depicting the theme of "*the distance education concept as an imagery of transportation*" are given below:

Table 5. Distribution of imageries regarding the distance education concept as a tool-equipment imagery.

Mental imagery code	Distance education as tool-equipment imagery	Gender	The teacher representing the mental imagery	
			f	%
3	Mirror	1f 1m	2	2
11	Glass Jar	1f	1	1
29	Glasses	1f	1	1
33	Rope	1f	1	1
37	Oxcart	1m	1	1
44	Table	1m	1	1
74	Burning candle	1f	1	1
Total		3m, 5f	8	8

*m: male and f: female.

Table 6. Distribution of imageries regarding the distance education concept as an imagery of transportation.

Mental imagery code	Distance education as an imagery of transport	Gender	The reacher representing the mental imagery	
			f	%
7	Endless toad	1f	1	1
18	Raft in the sea	1m	1	1
19	Sea travel	1f	1	1
27	Blind walk	1f	1	1
48	Bus	1m 1f	2	2
69	Journey to hope	1f	1	1
79	Road	1m 1f	2	2
82	Time machine	1f	1	1
Total		3m, 7f	10	10

* m: male and f: female.

"Distance education is like a road because as you walk, you reach further." (Male, Visual Arts Teacher)
"Distance education is like an endless road because we cannot predict where the end of the road has reached and whether the effort we spend will lead us to a good point (successful for education); at the same time, we never see what awaits us on the road. (Female, English Teacher)
"Distance education is like traveling in the open sea because the process is difficult, but it gives a different happiness when you land, that is, when you reach the destination." (Female, Math Teacher)
"Distance education is like a journey of hope; because whoever has a goal will green his future with hopes. (Female Turkish Teacher)

The distance education concept as a game imagery

Six participants (6%) and six imageries (7.22%) represented this theme, which included the expressions of the teachers, who claimed the distance education concept as the "*game imagery*." In this theme, mental imageries of the teachers related to the concept of distance education, drum sound (f1), goalless match (f1), shadow play (f1), play (f1), theater (f1), kite (f1) were produced (Table 7).

When the mental imageries under the theme of *"distance education as a game imagery"* were analyzed, it was noticed that, while three mental imageries (drum sound, goalless match, shadow play) were produced by male teachers, three mental imageries (play, theater, kite) were created by female teachers.

It was observed that the teachers who constituted the analysis group regarding this mental imagery theme made an effort to define the distance education concept by analogy with some game imageries. They also created these imageries by making analogies with traditional games. While some of these perceived these metaphors as game imageries with negative results, it can be said that some of them interpreted and defined the distance education concept differently from real life by comparing it to games that were imaginary representatives of reality.

Statements of some teachers regarding mental images depicting the theme of *"distance education concept as game image"* are given below:

"*Distance education is like a kite because we feel a*

Table 7. Distribution of imageries regarding the distance education concept as a game imagery.

Mental imagery code	Distance education as a game imagery	Gender	The teacher representing the mental imagery	
			f	%
15	Drum sound	1m	1	1
25	Goalless match	1m	1	1
26	Shadow play	1m	1	1
49	Game	1f	1	1
64	Theater	1f	1	1
70	Kite	1f	1	1
Total		3m, 3f	6	6

* m: male and f: female.

connection, no matter how far away it is." (Female, Preschool Teacher)

"Distance education is like a shadow play. Because behind the curtain, there is a talking mechanism. The teachers are like this mechanism; they are continuously active. (Male, Turkish Teacher).

"Distance education is like a football match. Some rule, some play, the majority just watch." (Male, Religious Culture and Moral Knowledge Teacher).

Distance education concept as area and location ımagery

Seven participants (7%) and seven imageries (8.43%) represented this theme, which included the expressions of the teachers, who claimed the distance education concept as the "*area and location imagery.*" In this theme, the participants produced mental imageries related to distance education concept as; white wall (f1), emptiness (f1), circle (f1), mill (f1), bottomless well (f1), restaurant (f1), limitless area (f1) (Table 8).

When the mental imageries under the theme of *" distance education as an area and location imagery"* were analyzed, it was seen that male teachers developed three mental imageries (mill, restaurant, limitless area), and female teachers created four mental imageries (white wall, emptiness, circle, bottomless well).

Regarding this theme, it was observed that the teachers who formed the study group likened the distance education concepts to imageries that evoke various areas and locations. When the content and features of these paralleled areas were evaluated, it can be suggested that they interpreted the distance education concept as limitlessness and uncertainty.

Some expressions of teachers regarding mental imageries describing the theme of "*distance education concept as an imagery of area and location*" are given below:

"Distance education is like a bottomless well because you cannot see how much of the subject you are telling is

understood." (Male, Social Studies Teacher)

"Distance education is like writing something on a white wall with a white chalk because the lesson is taught without seeing the gestures of students." (Female, English Teacher)

"Distance education is like emptiness. Because you cannot touch, you can not wrap a heart." (Female, Preschool Teacher)

The distance education concept as a food and drink imagery

Seven participants (7%) and five mental imageries (6.02%) represented this theme, which included the expressions of the teachers, who showed the distance education concept as the "*food and drink imagery.*" In this theme, participants produced mental imageries related to distance education concept as; uncooked meal (f: 1), cold tea (f: 1), unsalted meal (f: 3), food advertisement (f: 1), recipe (f: 1) (Table 9).

When the mental imageries under the theme of "*distance education as an imagery of food and drink*" were analyzed, it was observed that, male teachers created one mental imagery (cold tea), female teachers produced three mental imageries (uncooked meal, food advertisement, recipe), and, both of the groups selected one mental imagery (saltless meal).

Regarding this theme, it was observed that the teachers who formed the study group likened the concept of distance education to food and drink imagery. Considering the characteristics of the likened food and drink imageries, it was seen that these imageries mostly evoked some foods and drinks, which were not well cooked and tasteless.

Statements of some teachers regarding mental images describing the theme of *"distance education as an image of food and drink"* are given below:

"Distance education is like food advertisements on TV because you can watch it, but it is impossible to taste it." (Female, Physical Education Teacher).

Table 8. Distribution of imageries regarding the distance education concept as area and location imageries.

Mental image code	Distance education as area and location	Gender	The teacher representing the mental imagery	
			f	%
6	White wall	1f	1	1
8	Emptiness	1f	1	1
13	Circle	1f	1	1
17	Mill	1m	1	1
21	Bottomless well	1f	1	1
53	Restaurant	1m	1	1
56	Limitless area	1m	1	1
Total		3m, 4f	7	7

* m: male and f: female.

Table 9. Distribution of imageries regarding distance education concept as food and drink imageries.

Mental imagery code	Distance education as food and drink imagery	Gender	The teacher representing the mental imagery	
			f	%
51	Uncooked meal	1f	1	1
57	Cold tea	1m	1	1
67	Saltless meal	2m1f	3	3
76	Food advertisement	1f	1	1
77	Food recipe	1f	1	1
Total		3m, 4f	7	7

* m: male and f: female

"Distance education is like a saltless meal because it tastes tasteless." (Male, Physics Teacher)
"Distance education is like a cooking program because you learn in theory, but you don't practice anything." (Male, Geography Teacher)

Distance education concept as an ımagery of affective association

Ten participants (10%) and eight imageries (9.63%) represented this theme, which included the expressions of the teachers, who claimed the distance education concept as the "*imagery of affective association*". In this theme, teachers' values related to the distance education concept were produced as appreciation (f: 1), beautiful days (f: 2), ghost (f: 1), distance relationship (f: 1), intimacy (f: 2), simplicity (f: 1), inability (f: 1) mental images (Table 10).

After analyzing the mental imageries of " *distance education as an affective association imagery*" it was observed that male teachers created three mental imageries (appreciation, beautiful days, homesickness), female teachers produced four mental imageries (distant relationship, simplicity, inability, ghost), and both male and female teachers developed one mental imagery (intimacy).

Regarding this theme, the teachers who formed the study group defined the distance education concept with intellectual images that expressed *affective association*. Considering the chosen affective images, it can be said that the participants defined distance education with imageries stating affective deprivation mostly.

Some teachers' statements regarding mental imageries depicting the theme of "the concept of distance education as affective association imagery" are given below:

"Distance education is similar to the relationship between two people who need each other, but the distance between them creates difficulties thus students and teachers try to communicate and reach each other in the distance education process in a way. The process is challenging because, unlike face-to-face training, there are many disadvantages such as distance and financial impossibilities." (Female, English Teacher)
"Distance education is similar to the homesickness, because the conditions do not allow you to return, but you take even the smallest opportunity to partially eliminate this longing." (Male, English Teacher)

"I have compared distance education to a ghost. It is a ghost that you can see, hear, speak, even learn but cannot touch, you cannot see the light in your eyes, when you reach out to shake its hand, you only hold the

Table 10. Distribution of imageries regarding the distance education concept as an affective association imagery.

Mental imagery code	Distance education as affective association imagery	Gender	The teacher representing the mental imagery	
			f	%
16	Appreciation	1m	1	1
31	Beautiful days	2m	2	2
34	Ghost	1f	1	1
46	Homesickness	1m	1	1
47	Distance relationship	1f	1	1
72	Intimacy	1m, 1f	2	2
73	Simplicity	1f	1	1
78	Inability	1f	1	1
Total		5m, 5f	10	10

* m: male and f: female.

space" (Female, Preschool Teacher).

Distance education concept as an imagery of technology and communication

Eleven participants (11%) and eight imageries (9.64%) represented this theme, which included the expressions of the teachers, who interpreted the distance education concept as the "*technology and communication imagery*."

In this theme, the teachers, who made up the working group, mostly produced mental imageries as; TV program (f: 4), internet shopping (f: 1), youtube broadcast (f: 1), letter (f: 1), password (f: 1), technology (f: 1) face-to-face (f: 1), following (f: 1) (Table 11).

After analyzing the mental images under the theme of ' distance education as a technology and communication imagery,' two mental imageries (technology, youtube broadcast) were observed to be produced by male teachers, five mental imageries (internet shopping, letter, password, face to face, following) by female teachers, one mental image (TV program) by both groups of participants.

For this theme, it was observed that the teachers, who formed the study group, tried to define distance education by making analogies to some technology products and communication devices. The analogies were made to some technology and communication tools that generally covered a place in our daily life. While some of these metaphors emphasized the digital transformation in our lives, some likened distance education to more traditional communication objects and touched upon the communication difficulties in distance education. Some teachers' statements regarding mental imageries depicting the theme of "distance education as a technology and communication imagery" are given below:

"Distance education is like a Youtube live stream because you open a broadcast and invite your followers to the air and share something with them." (Male, English Teacher)

"Distance education is similar to online shopping because access to education is provided without social interaction. Internet shopping takes place by seeing only a few photos, without touching the remotely purchased product, and placing an order. Just like distance education that takes place online, without the interaction of students with each other." (Female, Special Education Teacher)

The concept of distance education as an imagery of educational elements

Seven participants (7%) and seven imageries (8.43%) represented this theme, which included the expressions of the teachers, who showed the distance education concept as the "*imagery of educational elements.*" In this theme, the teachers, who made up the working group, mostly produced mental imageries as; education everywhere (f: 1), future education (f: 1), Plan B (f: 1), development (f: 1), uncontrolled education (f: 1), private lesson (f: 1), non-contact education (f: 1) (Table 12).

After analyzing the mental imageries included in the theme of " *distance education as an imagery of educational elements,*" it was observed that male teachers produced three mental imageries (future education, education everywhere, non-contact education), female teachers created four mental imageries (Plan B, development, uncontrolled education, private lesson).

It was seen that the teachers who made up the working group related to this theme explained the distance education concept by making an analogy with the educational elements included in education and teaching methods. Generally, an analogy was made using pedagogical concepts. While some teachers paralleled distance education to alternative education methods, others compared the concept to complementary education methods, thus emphasized the difference between face-to-face education and distance education.

Table 11. Distribution of imageries regarding the distance education concept as technology and communication imagery.

Mental imagery code	Distance education as technology and communication	Gender	The teacher representing the mental imagery	
			f	%
36	Internet shopping	1f	1	1
45	Letter	1f	1	1
59	Password	1f	1	1
61	Technology	1m	1	1
68	TV program	2m, 2f	4	4
60	Following	1f	1	1
80	Youtube broadcast	1m	1	1
81	Face-to-face	1f	1	1
Total		4m, 7f	11	11

* m: male and f: female.

Table 12. Distribution of imageries regarding the distance education concept as an imagery of educational elements.

Mental imagery code	Distance education as educational elements imagery	Gender	The teacher representing the mental imagery	
			f	%
10	Plan B	1f	1	1
23	Future education	1m	1	1
24	Development	1f	1	1
35	Education everywhere	1m	1	1
40	Uncontrolled education	1f	1	1
50	Private lesson	1f	1	1
62	Non-contact education	1m	1	1
Total		3m, 4f	7	7

* m: male and f: female.

Some teachers' expressions regarding mental imageries depicting the theme of *" distance education as educational elements"* are given below:

"Distance education is similar to private lessons because there are no disciplinary and preventive discipline concerns." (Woman, Math Teacher).
"Distance education is similar to the future education system because I think that institutions such as schools will disappear in the future." (Male, Visual Arts Teacher).

Distance education concept as a historical perspective imagery

Two participants (2%) and two mental imageries (2.4%) represented this theme, which included the expressions of the teachers, who demonstrated the distance education concept as the "*imagery of historical perspective.*" In this theme, the teachers, who made up the working group, mostly produced mental imageries as; Capitalism (f:1) and Industrial Revolution (f:1) (Table 13).
When the mental imageries under the theme of *"distance education as a historical perspective imagery"*

were analyzed, it was observed that one male teacher produced one mental imagery (capitalism) and one female teacher created one mental imagery (industrial revolution).
For this theme, the teachers who formed the working group made an analogy by comparing the concept of distance education to the economic systems and economic revolutions that direct the world economy, emphasizing that distance education is a revolutionary system in the education world.
Some teachers' statements regarding mental images depicting the theme of *" distance education as a historical imagery"* are given below:

"Distance education resembles the industrial revolution because it changed our lives a lot, I feel like as if we entered a new era, and also, if the student population is willing to learn and the conditions are convenient, you can achieve great success. It gives a great feeling. Furthermore, distance education likens to the industrial revolution because it made human life easier just like industrialization." (Female, Turkish Teacher)
"Distance education is like very capitalism because only the rich take full advantage." (Male, English Teacher)

Table 13. Distribution of imageries regarding the distance education concept as an imagery of historical perspective.

Mental imagery code	Distance education as historical perspective imagery	Gender	The teacher representing the mental imagery	
			f	%
38	Capitalism	1m	1	1
55	Industrial Revolution	1f	1	1
Total		1m, 1f	2	2

* m: male and f: female.

Distance education as disease and hygiene imagery

Five participants (5%) and four imageries (4.81%) represented this theme, which included the expressions of the teachers, who proposed the distance education concept as the "*Disease and Hygiene Imagery.*" In this theme, the teachers, who constituted the working group, mostly produced mental imageries as; headache (f: 2), cologne smell (f: 1), tayammum (f: 1), false pregnancy (f: 1) (Table 14).

When the mental imageries under the theme of *"distance education as disease and hygiene imagery"* were analyzed, it was observed that while female teachers produced three mental imageries *(headache, cologne smell, false pregnancy)*, a male teacher created one mental imagery *(tayammum)*.

Regarding this theme, the teachers who formed the study group compared the distance education concept to some illness symptoms and cleaning methods. While some teachers emphasized the effect of the chaos created by the distance education environment on the somatization by comparing it to a headache, some teachers emphasized the system deficiencies by underlining that distance education is not permanent like a cologne smell.

Some of the teachers' statements regarding the mental images depicting the theme of *"distance education as disease and hygiene ımagery"* are given below:

"Distance education is like the smell of cologne, quickly flies off the minds of children." (Female, Turkish Teacher)
"Distance education is like tayammum because it replaces the original." (Male, Turkish Language, and Literature Teacher)

Table 14. Distribution of imageries regarding the distance education concept as a disease and hygiene imagery.

Mental imagery code	Distance education as disease and hygiene imagery	Gender	The teacher representing the mental imagery	
			f	%
4	Head ache	2f	2	2
39	Cologne smell	1f	1	1
63	Tayammum	1m	1	1
70	False pregnancy	1f	1	1
Total		4f, 1m	5	5

* m: male and f: female.

Comparison of the mental imageries proposed for the "distance education" concept regarding the gender variable

The study group's mental imageries for twelve themes are compared in Table 15 concerning the gender variable. According to Table 15, male and female teacher participants' mental imageries diverge on the " distance education" concept.

The mental imageries of teachers were listed under twelve different themes. The theme of "distance education as nature imagery" has included seventeen mental imageries produced by five male and twelve female teachers in total. Thus, this theme emerged as the most produced one by the participants. The "distance education as technology and communication imagery" theme ranked second concerning the participant numbers. The " distance education as a historical perspective imagery" theme was the one including the least mental imageries of two participants. As is seen, the themes vary concerning the mental imageries where they are produced. The proportional differences in these themes are presented in Figure 1.

CONCLUSION, DISCUSSION AND SUGGESTIONS

Today, internet technology is an indispensable part of life, and many of the applications that seemed impossible before are possible today thanks to internet technology.

Table 15. The distribution of the imageries for the distance education concept produced by male and female teachers according to themes.

Themes	Male teacher		Female Teacher		Total	
	f	%	f	%	f	%
1. Distance education as humanitarian qualities imagery	4	10.52	6	9.67	10	10
2. Distance education as nature imagery	5	13.1	12	19.3	17	17
3. Distance education as tool-equipment imagery	3	7.89	5	8.06	8	8
4. Distance education as transport imagery	3	7.89	7	11.29	10	10
5. Distance education as game imagery	3	7.89	3	4.83	6	6
6. Distance education as area and location imagery	3	7.89	4	6.45	7	7
7. Distance education as food and drink imagery	3	7.89	4	6.45	7	7
8. Distance education as affected association imagery	5	13.1	5	8.06	10	10
9. Distance education as technology and communication imagery	4	10.52	7	11.29	11	11
10. Distance education as educational elements imagery	3	7.89	4	6.45	7	7
11. Distance education as historical perspective imagery	1	2.63	1	1.61	2	2
12. Distance education as disease and hygiene imagery	1	2.63	4	6.45	5	5
Total	38	100	62	100	100	100
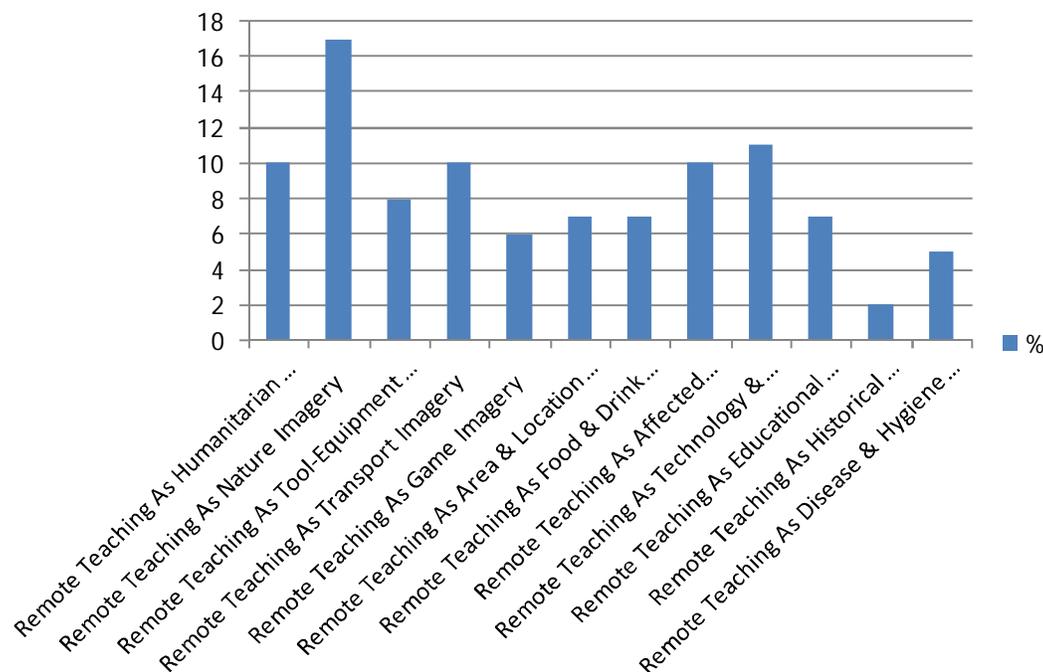
Figure 1. Proportional comparison of imageries related to the education concept based on the themes.

Technological developments have affected many areas of our lives as well as educational activities. Distance education technologies have been included in the education system through the Internet. Through distance education, the phenomena of time and space have disappeared. It can be stated that the walls have disappeared both in accessing information and in the learning process, and the opportunity to learn independently and flexibly emerged. In this context, it can be suggested that distance education has made a significant contribution to the development of lifelong learning (Torkul, 2012; Bakioğlu and Can, 2014). In this present study, which based on the mental imageries produced by the teachers regarding the "distance education" element that is effective in all training and teaching stages, the teachers (f: 38 males, 62 females), who constitute the study group, can be stated to have different perceptions (Figure 2).
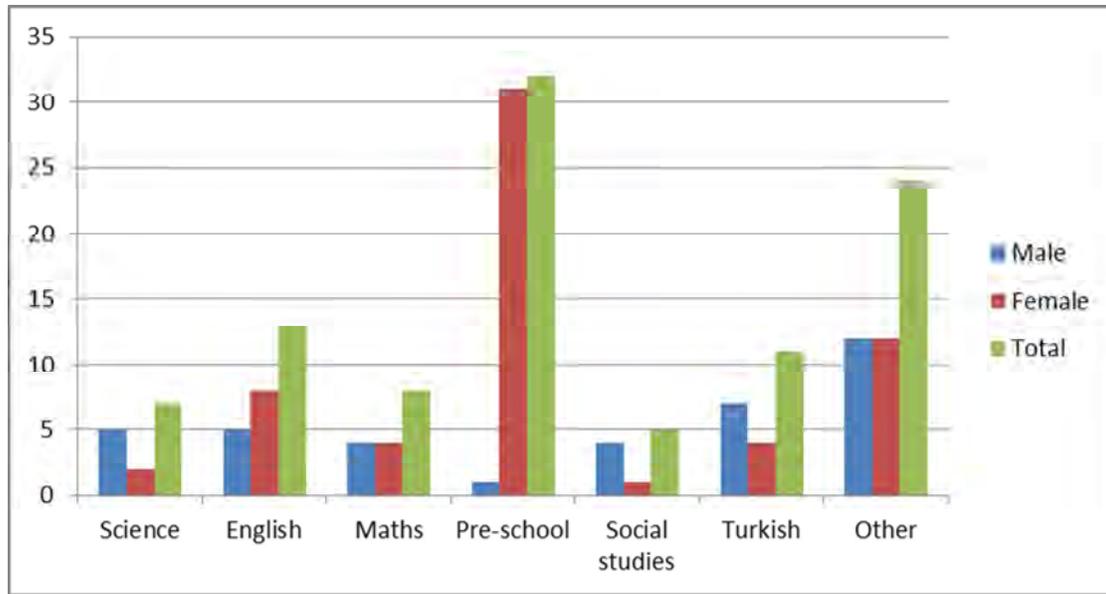
Figure 2. Demographic distribution of the study group.

The fact that teachers produced 83 different mental imageries collected under twelve themes for the "*distance education*" concept proves this statement. The "*distance education as nature imagery*" theme consists of 17 mental imageries. This theme emerges as the most selected one by the participants. The "*distance education as a historical perspective imagery*" theme is the one with the least mental imagery of two participants. When evaluated in terms of the mental imageries created by the teachers, the "TV program" imagery expressed by four teachers (f: 2e, 2k) appears as the most produced image.

It is observed that the participants in the study reflected their needs and perspectives regarding the "distance education" concept in the mental imageries produced. In this context, the fact that some study group members formed mental imageries relating to "Basic Principles of Turkish National Education" added particular significance to the research. In the study, by referring to the "Equality in opportunity and possibility" principle of National Education Basic Law (article 8), some participants expressed statements; for example, *"Distance education is similar to capitalism because only the rich benefit fully,"* and *"Distance education is like a timeless rain because not everyone is ready for this rain under the same conditions"* (Milli Eğitim Temel Kanunu, 1973). Besides, several paralleling mental images in the same perspective are observed for some other principles. This situation can be expressed as evidence that teachers did not feel the activities carried out for distance education comply with the "equal opportunity and possibility" principle.

Some problems caused by educators and students are possible in distance education. The primary troubles can be listed as time and continuity difficulty in providing support for students, insufficient social activities, limited technological infrastructure, inability to use time effectively, lecturer disability to adapt to the technology, and nonpreparation of the student-centered course contents. It can be said that these problems listed reflected on the mental imageries produced by the members of the study group participating in the study. For example, the following statement regarding the "nature imagery" theme, which was mostly produced by the participants, summarizes the situation: "*Distance education is like a flower because if we show interest and due diligence, we will get good results. If we do not fulfill our responsibilities, it will fade like a flower.*" Many expressions like this point out the possible problems of *"distance education"* but emphasize the responsibilities of both educators and students as well.

When considering the distance education concept definition, it is seen that a complicated process prevails. At this point, the statement, *"Distance education is like traveling in the open sea because the process is difficult, but it gives a different happiness when you land, that is, when you reach the destination,"* shows that generally, participants have a demanding process perception on distance education. However, there is also an opinion that happiness will prevail at the end of a hopeful process.

In his study, Sayan (2020) stated that most academic staff had questions about technological supports and software program, because of this reason, they could get less yield than the face-to-face training, so they needed technical support.

From the study of Asio and Bayucca (2020), they revealed that in terms of school preparation for distance learning of students, the schools were not yet ready in

the implementation of such scheme.

Bakioğlu and Çevik (2020) gathered various opinions from the participants (Science teachers) about completing the education program with distance education. Study group members, who claimed that they could not complete the curriculum, stated that the environment was unsuitable, student-participation was not at the desired level, and the duration was short.

In their studies, Serçemeli and Kurnaz (2020) stated that a significant part of the students lived in the villages, they usually followed the lessons on smartphones, for this reason, their success was negatively affected and, they had problems such as internet quota.

Bozkurt (2020) discussed metaphors in the positive and negative group forms, divided into categories and themes. He stated that social inequalities could occur in applications carried out without considering the existing possibilities in students. Also, he added that distance education provided students with flexibility in terms of time and place, on the other hand, their programs had to be planned by respecting the current infrastructure and possibilities students had.

As a result, when the mental imageries produced by the teachers in the study group and the reasons they put forward for distance education are examined, it can be said that they are similar to the results of the study on distance education mentioned above. Therefore, we can state that this situation is significant in revealing the study's validity and reliability. When all researches are evaluated together, we can suggest that distance education limitations are expressed, but also its positive aspects can not be ignored. Based on these results obtained in the research, suggestions can be developed as follows:

- Necessary attention should be paid to the joint participation of training programs in distance education processes,
- All individuals should access information resources, libraries, laboratories, equipment, etc. learning resources and benefit from these resources effectively,
- For a qualified distance education process, both the educator and the student should have the applicable technological infrastructure (information infrastructure) and access possibilities.

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