



## The Secondary School Students' Opinions on Distance Education

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### Abstract

The purpose of this study is to find out secondary school students' opinions on distance education, after encountering the distance education process for the first time. Descriptive scanning model was used for this research and the sample chosen from the universe was used to determine the result. The study was carried out with 172 volunteers from 672 secondary school students studying in secondary schools located in Salıpazarı district of Samsun. The data was collected using "Opinions on Distance Education Scale". The data analysis, it was found out that the students' opinions on distance education were at the indecisive level with 2.91; 47% were indecisive about distance education, 27% did not want distance education; 80% of them find teachers inadequate; 47% of them partially understood the lessons and 39% did not understand the lessons at all. The leading problems students encountered were the interpersonal communication and internet connection problems and that students preferred formal education to distance education.

**Keywords:** Distance education, Secondary school, Students' Opinions.

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### Contribution of this paper to the literature

This study contributes to existing literature by finding out secondary school students' opinions on distance education, after encountering the distance education process for the first time.

## 1. Introduction

The Covid-19 global pandemic kept nearly 1,2 billion students away from their schools. In this period, education has changed its shape, e-learning has come forward, and teaching has begun to be done on digital platforms.

As in other countries, there has been a huge investment to technology use in education in Turkey. However, we had to change the shape of education fast because of the pandemic. Distance education has been set up firstly with higher education grades, after which open high schools have been formed and lastly different systems have been developed for elementary and secondary schools.

In this regard, distance education can be defined as an independent learning practice in which teachers and students are not bound to time and space and that supports self-learning. In distance education, a student doesn't have to go to school. Learners are responsible for their own learning processes. With the help of technology, studies on distance education have stepped up and have become more popular lately (Eygü & Karaman, 2013).

Nowadays, there are different definitions of distance education. According to Wisconsin University Constant Education Group, Distance Education is a planned experience which is designed to provide student interaction and educational certificate and also it must use high technology (Adıyaman, 2002). As stated before, the importance of distance education has been understood by everyone during this pandemic.

In 2012, there was an investment to education in order to integrate technological materials in teaching and learning and also to provide the use of technology in education effectively. This was the "Action of Raising Opportunities Improving Technology" (FATİH) Project (Bozkuş & Karacabey, 2019).

Schools were provided with smartboards and tablets were given to the students. To make this process more effective, the Education Information Network (EBA) was built by The Turkey Ministry of National Education (MoNE). There were attempts to integrate technology with learning processes. The aim was that information could be accessed from everywhere easily and that a student based educational system must be widespread and that equal opportunities in education must be provided.

EBA users are parents, teachers and students but it has not been used effectively by them. In a study on the use of EBA by Alabay (2015), it was seen that teachers did not use EBA enough during the courses. In another study by Bahçeci and Efe (2018) it was seen that students rarely used EBA.

During the Covid-19 pandemic, distance education had to be carried out and the EBA network had to be restructured as TV classes and online courses. Lessons have been shown on TV and 'live classes' added on EBA which enabled schools to plan their own education programs and continue the learning-teaching process. In this way, students were able to follow their own teachers' classes.

In addition to this, teachers used programs like Google Meet, Zoom, Teamlink etc. for interactive live classes. Groups have been created on Whatsapp for the students, parents and teachers to communicate faster. MoNE and Turk Telekom has given 3 GB of internet to every student each month to use the EBA as some students cannot afford an internet connection. Sadly, despite all these efforts, distance education could not provide student interaction effectively and has increased technology addictions. Teachers and parents could not use technology effectively and there was not enough e-content and some students did not have access to the internet (especially in the countryside).

This study tried to determine the problems and views of the students on distance education which has become compulsory during Covid-19 pandemic in Turkey since March, 2020. Whether students' opinions have significant differences in terms of gender and grade level variables was revealed, too.

## 2. Methodology

The descriptive scanning model was used for this research.

"General scanning models are the scanning arrangements made on the whole universe or a group chosen from it in order to reach a general idea about the universe consisting of many elements" (Karasar, 1991).

### 2.1. Research Goal

The purpose of this study was to find out the secondary school students' opinions on distance education who have encountered the distance education process for the first time.

### 2.2. Sample and Data Collection

The population of this study comprised secondary school students from the Salıpazarı district of Samsun. Purposive sampling was used to select the sample. Students were required to access the form on Google Docs via the internet and the entire population of the students filling this form composed the sample. There are 672 students in the population of this study and 172 voluntary students in the sample of this study. Table 1 shows the rates of gender and classes.

59,9% of the participants were girls and 40,1% of the participants were boys. Eighth-grade students led the grade section with 36%. The research data were collected with a "Personal Information Form" developed for the secondary school students by the researchers and a "Opinions on Distance Education Scale". The Personal Information Form required information about the use of EBA before the pandemic besides gender and class variables. Opinions on the Distance Education Scale, the validity and the reliability of which was processed by Sentürk and Duran (2020) was used to define the students' opinions on distance education. There was no reverse item in the scale consisting of ten items. The scale has three dimensions; Functional (5), Motivation (3) and Communication (2). The result of KMO and Bartlett's Test was .745 and Cronbach's Alpha was .768. It was interpreted from the high scores of the results that the opinions on the distance education were positive.

**Table-1.**The findings of students' personal informations.

Variables	Name of variable	f	%
Gender	Boy	69	40.1
	Girl	103	59.9
Grade	5. Grade	39	22.7
	6. Grade	28	16.3
	7. Grade	43	25.0
	8. Grade	62	36.0

### 2.3. Analyzing of Data

The data were analyzed using SPSS, and the T-Test was used if there were two variables and analysis of variance was used if there were three or more variables. TukeyHSD, one of the Post Hoc tests, was headed to define which groups had significant differences. To determine the minimum and maximum length of the five-point Likert scale, the range was calculated ( $5-1=4$ ) then divided by five as it was the greatest value of the scale ( $4/5=0.80$ ). The length of the cells was determined as; Strongly disagree (1.00 – 1.79), Disagree (1.80 – 2.59), Indecisive (2.60 – 3.39), Agree (3.40 – 4.19), Strongly disagree (4.20 – 5.00). For the analysis of open-ended questions, frequency and percentage values were used.

## 3. Findings / Results

### 3.1. The Findings about the Overall Purpose of the Study

Table 2 includes the means and the standard deviations of students' opinions on distance education.

**Table-2.**The means and the standart deviations of students' opinions on distance education.

Dimensions	N	$\bar{x}$	Ss
Functional	172	3.35	0.66134
Motivation	172	2.23	0.85158
Communication	172	3.14	0.92990
General	172	2.91	0.56306

According to the data in Table 2, the arithmetic means of students' opinions on distance education were found to be  $\bar{x}=3,35$  in Functional dimension,  $\bar{x}=2,23$  in Motivation dimension and  $\bar{x}=3,14$  in Communication dimension. The overall mean was  $\bar{x}=2,91$  at the level of indecisive. The result of unpaired t-test between functional and communication dimensions showed two-way value was 0,0163. According to the traditional criteria, this difference was considered statistically significant. It was observed that there was a significant difference between the functional and the communication dimensions since the p value was low ( $p < 0.0001$ ). It was found that there was a significant difference between the functional and the general dimensions since the p value was low ( $p < 0.0001$ ). It was seen that there was a significant difference between the motivation and the communication dimensions since p value was low ( $p < 0.0001$ ). It was observed that there was a significant difference between the motivation and the general dimensions since p value was low ( $p < 0.0001$ ). It was seen that there was a significant difference between the communication and general dimensions, since p value was low ( $p = 0.0058$ ). In this sense, it can be said that there were significant differences between the sub-dimensions related to distance education. Accordingly, it can be stated that students were most satisfied about EBA in the functional and the communication dimensions, however, they were least satisfied in the motivational dimension.

### 3.2. The Findings about the Gender Variable

#### 3.2.1. Do the Students' Opinions about Distance Education Differ in Terms of Gender Variable?

Table 3 shows the result of t-test conducted in terms of gender variable.

**Table-3.**The T-test table about the students' gender variables.

Subcomponents	Gender	N	$\bar{x}$	ss	sd	t	p
Functional	Boy	69	3.3159	0.65296	148.358	-0.571	0.569
	Girl	103	3.3748	0.66902			
Motivation	Boy	69	2.1259	0.75422	162.155	-1.372	0.172
	Girl	103	2.3072	0.90731			
Communication	Boy	69	2.9638	0.87581	153.685	-2.117	0.036
	Girl	103	3.2670	0.94924			

Note: \*  $p < .05$  Significant.

Table 3 reveals that there was a significant difference in the communication dimension of students' opinions on distance education in terms of gender variables in favor of girls ( $t=-2.117$ )  $p < .05$  level. On the five-point likert scale, the boys' mean was 2.97 and girls' mean was 3.27. In this case, it was observed that the girls had more positive opinions on distance education in terms of the communication dimension than the boys.

### 3.3. The Findings about the Grade Variable

#### 3.3.1. Do the Students' Opinions about Distance Education Differ in Terms of Grade Variable?

Table 4 shows the result of the analysis of variance conducted in terms of grade variable.

**Table-4.** The table about the analysis of variance of students' grade variables.

Dimension	Source	sd	Sums of Squares	Means of Squares		fp
Functional	Between-group	3	0.935	0.312	0.709	0.548
	In-group	168	73.855	0.440		
	Total	171	74.790			
Motivation	Between-group	3	2.313	0.771	1.065	0.366
	In-group	566	121.694	0.724		
	Total	569	124.007			
Communication	Between-group	3	11.469	3.823	4.709	0.003
	In-group	566	136.397	0.812		
	Total	569	147.866			

Note: \* p<.05 Significant.

The result of the analysis of variance based on grade variable of students points out that there was no significant difference in terms of functional and motivation dimensions but there was a significant difference in communication dimension ( $f=4.709$ ) at the level of  $p<.05$ . Tukey HSD test was conducted to find out which groups differed in the communication dimension and the results are shown in Table 5.

**Table-1.** Tukey HSD test results showing the differences between the students' opinions based on grade variable

Dimension	$\bar{x}$	n	Groups	Groups			
				5	6	7	8
Communication	2,74	39	5. grade		*		*
	3,39	28	6. grade	*			
	3,03	43	7. grade				
	3,36	62	8. grade	*			

According to Table 5, it was seen that the 5th grade students' arithmetic mean on communication dimension was 2.74, sixth grade students' was 3.39, seventh grade students' was 3.03 and eighth grade students' was 3.36 on five point scale. In this case, it can be said that there was a significant difference between the fifth grades and the sixth and eighth grades in favor of the sixth and eighth grades, in other words, sixth and eighth graders' opinions on distance education were more positive.

## 4. Findings Regarding Problems Encountered in Distance Education

### 4.1. What are the Problems of Students Involved in the Study during the Distance Education Period?

Table 6 includes the problems of students during the distance education period.

**Table-6.** The problems encountered in distance education period.

Expressions	f	%
There is no interactive communication, we cannot ask the things we do not understand.	95	55.23
The broadcast is constantly freezing and often fails.	82	47.67
We cannot login to EBA when we need it.	65	37.79
There are audio issues.	63	36.63
I cannot understand English classes.	62	36.05
The classes are not very attractive, teacher presentations are boring.	62	36.05
My internet quota do not last.	40	23.26
The time of the classes are not appropriate.	38	22.09
The class durations are not sufficient.	24	13.95

The total frequency exceeded the number of 172 students since the students stated more than one problem. It was expressed that the leading problem of students faced during the distance education activities was the lack of interactive courses 55,23(%) causing students not to understand the subjects.

This problem was followed by video and audio issues on the system infrastructure. Students stated that they could not interact with their teachers in distance education activities like they did in school classrooms. The other three problems having a high percentage were about the EBA system's infrastructure. We can see that most of the students complained about the freezing on the broadcast and the audio problems while some of them stated that they even had problems logging in to EBA (see Table 6).

59.9% of the students participating in the research were girls. This proves that girls had more interest in the distance education activities. When we look at the grade variable, we can see that 36% of the participating students were eighth graders. The LGS (high school entrance exam) may be the main reason for this. The eighth graders who were preparing for an exam to pass high school still valued the educational processes more than those in the other grades and took on the responsibility of their own learning processes even though they were away from schools.

When we check the interest of students on lessons, these results revealed that only very small number of students indicated that they did not follow any lessons (see Figure 1). This revealed that the students used the EBA to follow at least one lesson and showed interest in the activities during the distance education period.

TV and smartphone were used equally( $f=70$ ) to access EBA (see Figure 2). Both had a 40,7% preference rate and it showed that despite the advanced technology and the widespread internet use, MoNE had made the right decision by providing students a channel by which to follow distance education classes on TV.

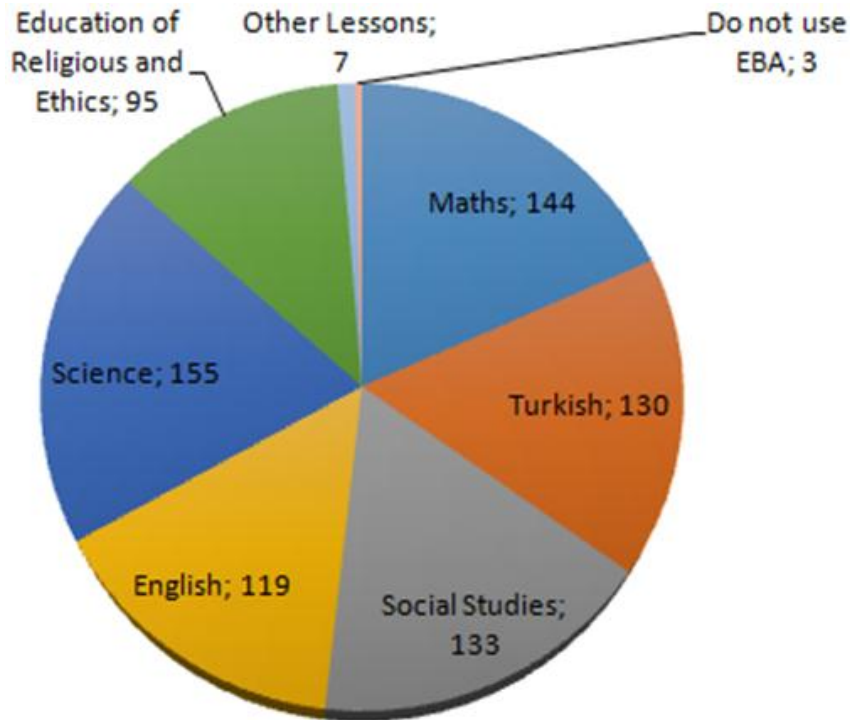


Figure-1. The lessons followed by students on EBA.

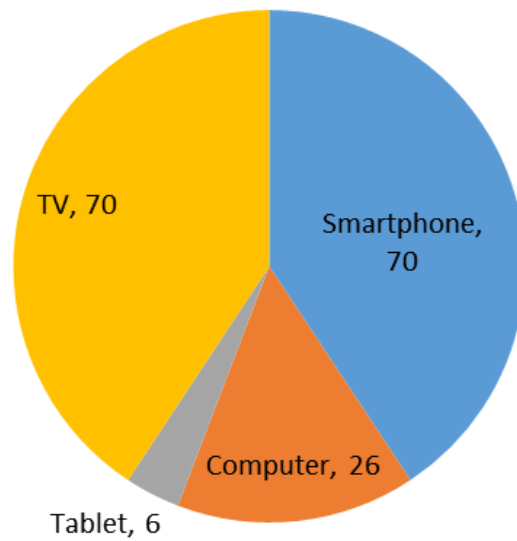


Figure-2. How do students access to EBA.

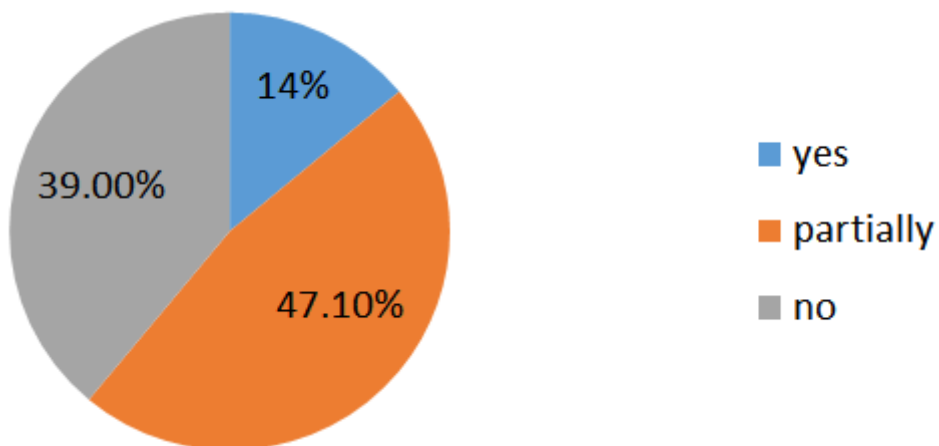


Figure-3. Do you think distance education activities are sufficient enough?.

The fact that 39% of them did not understand the lessons and that 47,1% of the students thought that distance education (see Figure 3) was only partially effective revealed that students considered distance education useful but that it still had some aspects to be improved. Only 14% of the students said yes and this shows that there was a problem about the lesson process. Students thought that the educational activities were not very effective in this period.

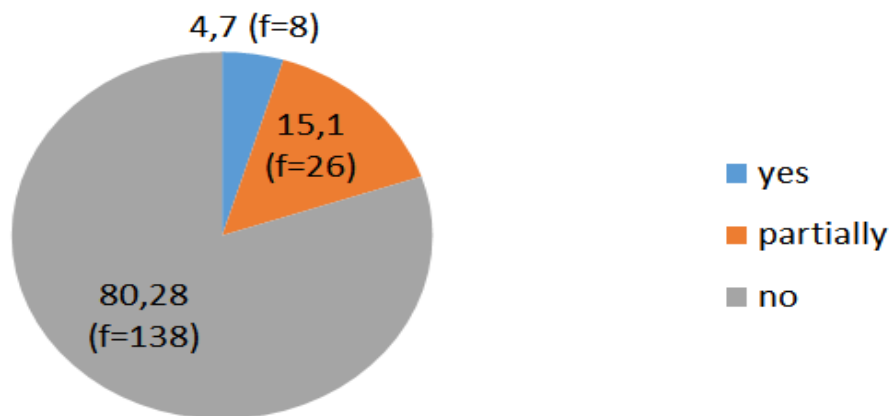


Figure-4. Do you think your teachers are competent enough for the distance education?.

Approximately 80% of the students thought (see Figure 4) that the teachers were not competent enough to use EBA. This is a problem for both teachers and MoNE. This showed that teachers did not have enough knowledge and skills about distance education. Considering that EBA was built in 2012, it showed that even though MoNE took the necessary steps at an early date, it lacked teacher training and that teachers did not attempt to improve themselves in EBA.

## 5. Discussion

According to the findings of the research, there are meaningful differences between the sub-dimensions of students' opinions on distance education. It can be said the students were most satisfied about EBA in functional and communication dimensions, while they were least satisfied in motivation dimension. This shows that the students find EBA satisfactory in terms of function and teaching but less satisfactory in terms of motivation.

The results of the research showed that the girls' opinions on distance education in communication dimension were more positive than the boys' opinions. The differences depending on gender are thought to result from the characteristics of sample. In this sense, it is necessary to analyze the subject with qualitative research in order to find out whether there is a significant difference.

The results of the analysis of variance points out there was no significant difference in functional and motivation dimensions but there was a significant difference in communication dimension which is ( $f=4.709$ )  $p<.05$  in terms of grade. Accordingly, there was a significant difference between fifth, sixth and eighth grades on behalf of sixth and eighth grades which means they had more positive opinions on distance education. LGS could be one of the reasons for this. The eighth graders preparing for an exam to pass high school valued the educational processes more than the other grades and took the responsibility of their own learning processes even though they are away from schools.

The lesson content prepared for different grades could be a reason for this, too. For example, the study conducted by Ince. (2018) shows that the amount of lesson content and the questions increases gradually from fifth grade to eighth grade and, similarly, the amount of contents and questions in the EBA E-Course module increases gradually from fifth grade to eighth grade. In this sense, the findings of Ince. (2018) can be seen to support our study's findings. Similarly, Arslan (2019) found that there were significant differences in the use of EBA between each grade in secondary school. It should be noted, however, the difference was not from grade five to grade eight unlike our study. The results of the study conducted by Ateş, Cerci & Derman (2015) showed that when the videos are analyzed, the distribution of the videos in EBA was not equal for each grade and that the duration of the videos could be insufficient, the video view numbers were not very satisfying and some of the videos were not suitable for these grades.

The leading problem students faced during the distance education activities was the lack of interactive courses (55,23%) causing students not to understand the subjects. This problem was followed by video and audio issues with the system infrastructure.

It was found by Yılmaz (2019) that visual arts teachers did not use EBA to download and upload course materials, did not share information with colleagues on EBA and did not assign homework to students on this platform. This tallies with this study's findings. Similarly, according to the findings of Ozbey (2019)'s qualitative data, several students stated that they had difficulties while using the EBA platform, performing the activities in EBA and understanding the lectures. As a result of Pala, Arslan, and Özdiñç (2016) studies, it was determined that the usability of e-content was problematical and there were deficiencies in visual contents. In Pala et al. (2016)'s study testing the usability of EBA, it was concluded that although there were improvements compared to the first versions of EBA, the content was insufficient and the search engine was inefficient. In the Tüysüz and Cümen (2016)'s study aiming to determine the opinions of secondary school students on the EBA web site, although they were not often, students sometimes encountered problems such as not accepting passwords and getting errors while using the site, playing the video or viewing homework. They also noticed problems such as getting kicked out of the site and resetting the points.

The research data indicates that students need more teacher interaction and support in quantitative lessons. These lessons have more questions and the values of these questions are fairly high compared to other lessons in entrance exams to high schools and universities and this leads students to show more interest in these lessons. According to Işseven, Timur, and Yılmaz (2017) students don't use EBA too often and when they use it, they do homework, practice tests and subjects on EBA. So it is necessary to develop content, design a more attractive web page, enhance the number of interactive games, fix the internet problems to use it in classes and find urgent solutions to technical problems. It was stated by Arslan (2019) that secondary school teachers use EBA mostly for its content, lesson and course sections and EBA is useful and vital but lacks in some aspects. These findings are the same as those in this study.

According to our findings, TV and mobile phone were preferred at the same rate ( $f = 70$ ) and at high frequency. This makes it clear that despite the widespread internet use, TV is still a popular means of reaching people.

The results of the study showed that 47,1% of the students picked the 'partially' option about the efficiency of the distance education classes (see [Figure 3](#)). This shows that students found distance education classes useful but that some aspects of this education needed to be improved. According to the study of [Kayahan and Özduran \(2016\)](#), students had both positive and negative views about EBA and this supported our findings.

Only %14 of the students said yes to the item about the understanding the lessons, so it is understood that there are problems with the teaching processes. [Yorgancı Keskin \(2019\)](#) found out that math teachers thought EBA was useful in educational processes but that it was insufficient or partially sufficient in terms of content. These are similar to the findings in this study. In the research conducted by [Aksoy \(2017\)](#) it was found that teachers working in secondary schools used EBA contents for purposes such as enriching the teaching environment, solving questions and having fun. In the study conducted by [Tüysüz and Cümen \(2016\)](#) the students' opinions that they found EBA useful in terms of reinforcing the topics, preparing for exams and reviving the subject overlapped with the findings of this study.

80,2% of the students said no to the item about the teachers' EBA use. In this case, it can be referred that teachers didn't have enough knowledge and skills on distance education. These are close to the findings of [Yılmaz \(2019\)](#). [Yılmaz \(2019\)](#) found that visual arts teachers' use of course materials in EBA platform was low. It was determined that most of the teachers who participated in the survey did not prefer to share the materials they prepared for their lessons on the EBA platform. Similarly, [Yorgancı Keskin \(2019\)](#) stated that math teachers did not frequently use EBA in their course processes. [Cavuş's \(2006\)](#) study concluded that math teachers did not use computer and math programs very efficiently while performing their profession.

[Arslan... \(2019\)](#) stated that secondary school teachers did not frequently use EBA and when they used it, they used content which was present on the platform rather than producing and sharing content in EBA. According to the results obtained by [Kuloğlu \(2018\)](#) English teachers' frequency of EBA use was below the desired level. In the research conducted by [Aksoy \(2017\)](#), it was found that teachers in secondary schools did not frequently use EBA content, encountered infrastructure and hardware problems with EBA and found EBA content insufficient. In the research carried out by [Saklan \(2017\)](#), it was concluded that some science teachers experienced problems related to internet while accessing to EBA, EBA content was insufficient and they were not very effective enough to be necessary in teaching processes.

In a study conducted by [Kurtdele Fidan, Erbasan, and Kolsuz \(2016\)](#) it was stated that form teachers did not frequently use EBA. In the research conducted by [Arslan \(2016\)](#) it was revealed that mathematics teachers did not have sufficient knowledge about the math contents in EBA. [Tutar \(2015\)](#) stated that teachers did not have enough knowledge about EBA and they rarely used it. Similarly, [Alabay \(2015\)](#) concluded that secondary school teachers did not use EBA adequately in the course processes. [Güvendi \(2014\)](#) found that the frequency of teachers' EBA use was below the desired level and teachers did not follow EBA on social media. All these findings reveal that there are problems of teachers' EBA use not only at the secondary school level but also at all levels. The recommendation to update the content shared on the platform and to give introductory seminars to all teachers and students across the country in [Güvendi \(2014\)'s](#) study about the high school teachers' level of benefiting from the EBA project.

## 6. Conclusion

To sum up, according to our findings, students are most satisfied about EBA in the functional and communication dimensions, while they are least satisfied in motivation dimension. The results of the research show that girls' opinions on distance education in communication dimension were more positive than the boys's opinions. The results of the variance analysis suggested the functional and motivational dimensions are not significantly different but there was a considerable difference in the communication dimensions in terms of grade variable. The research data showed that more teacher interaction is required and quantitative lessons are supported for distance education. The research showed that 47.1% of students have chosen the 'partial' choice on the efficiency of distance learning classes. This indicated that distance learning classes were helpful, but certain aspects of that training had to be improved.

## 7. Suggestions

This study revealed the problems encountered in the distance education period and the students' opinions on activities done in this period. The majority of students in the district where the study was conducted are living in the countryside. It may also be helpful to carry out this study in regions with a majority of students residing in the city center in order to get more significant results. The universe of this study comprises secondary school students. A similar study can be carried out at the high school level regarding the functioning of the distance education process in secondary education.

The recommendations about improving EBA can be summarized like this:

- Content with different activities for all courses should be presented in EBA. The CMS (content management systems) application in EBA should be more simplified and encouraging implementations such as success award for EBA content development should be organized.
- In-service training about EBA should be rearranged to be more beneficial in terms of quality. In this training, the numbers of activities can be increased in which teachers are encouraged to be active participants rather than being passive listeners.
- Faster EBA content sharing and enabling students to have easier instant communication can increase EBA use.
- It can be ensured that people working as managers take more responsibility in processes such as th presentation, use and development of EBA. In this sense, it can be said that it may be useful for each school to have information technologies teachers fixing smart board hardware-software problems and guiding the teachers on how to use EBA.

- The data obtained in this study can be used as a resource for MoNE in distance education activities and can be used to improve distance education activities.

## 8. Limitations

The first limitation of this research is that it is a quantitative research study rather than a mixed design research. Therefore, a deeper understanding regarding the distance education during the Covid-19 pandemic might not fully be grasped in this paper. The second limitation of our study is the population. In order to fully understand the problems and issues regarding the distance education during the Covid-19 pandemic, the sample should be taken as to represent the whole country or some specific regions or at least bigger cities. The third limitation of this study is also the population selection. Population can be expanded to include teachers and families so that it can give us a richer picture.

## References

- Adıyaman, Z. (2002). Foreign language teaching through distance education. *The Turkish Online Journal of Educational Technology*, 1(1), 92-97.
- Aksoy, N. (2017). *EBA (Educational information network) 's intended use, problems and solutions proposed*. Unpublished Master's Thesis, Kahramanmaraş Sütçü İmam University.
- Alabay, A. (2015). *A research into secondary education teachers' and students' views on EBA (education information network) usage*. Unpublished Master's Thesis, Istanbul Aydın University.
- Arslan, Z. (2016). *Teachers' opinions about the mathematic content in the education informatics network: Trabzon sample*. Unpublished Master's Thesis, Gazi University.
- Arslan, E. (2019). *Middle school teachers and students opinions about the educational informatics network platform: The example of Hatay province*. Unpublished Master's Thesis, Cukurova University.
- Bahçeci, F., & Efe, B. (2018). Evaluation of high school students' views on education informatics Network (EBA) site. *Journal of Theoretical Educational Science*, 11(4), 676-692.
- Bozkuş, K., & Karacabey, M. F. (2019). Use of information technologies in education with FATİH project: How far has been achieved? *Education as I Live*, 33(1), 17-32.
- Cavuş, H. (2006). *Mathematics teachers' usage level of the computer and mathematics programs at the educational contexts in Turkey*. Unpublished Doctoral Dissertation, Yüzüncü Yıl University.
- Eygü, H., & Karaman, S. (2013). A study on the satisfaction perceptions of distance education students. *Kırıkkale University Journal of Social Sciences*, 3(1), 36-59.
- Güvendi, G. M. (2014). *Determination of teachers' usage frequency of online education and sharing websites supplied by the ministry of education: An example of Education Information Technologies Network (EBA)*. Unpublished Master's Thesis, Sakarya University.
- Ince, V. (2018). *Comparison the questions in Eğitim Bilişim Ağı (EBA) and Turkish teaching programme*. Unpublished master's thesis, Fırat University.
- İşseven, A., Timur, B., & Yılmaz, Ş. (2017). Secondary school students' opinion for using the system of education information network (EBA). *Asian Journal of Education*, 5(1), 44-54.
- Karasar, N. (1991). *Scientific research methods*: Nobel Academic Publishing.
- Kayahan, S., & Özduran, K. (2016). *Students' opinions about EBA market mobile software applied in English lesson [Students' opinions about EBA market mobile software applied in English class]*. Paper presented at the Academic Computing Conference, February 30 Ocak5, Adnan Menderes University, Aydın, Turkey.
- Kuloğlu, M. E. (2018). *Analysing the usage of educational informatics network (EBA) by elt teachers*. Unpublished Master's Thesis, Gaziantep University.
- Kurtdede Fidan, N., Erbasan, Ö., & Kolsuz, S. (2016). The views of the classroom teachers on benefiting from the Education Information Network (EBA). *9(45)*, 626-637.
- Ozbey, A. (2019). *The impact of the EBA-supported learning environment on the success, attitudes and motivations of secondary school students in equity and the equation*. Unpublished Master's Thesis, Zonguldak University.
- Pala, F. K., Arslan, H., & Özding, F. (2016). Investigation the usability of education information network (Eim) Web site by eye tracking and authentic tasks. *Ihlara Educational Research Journal*, 2(1), 24-38.
- Saklan, H. (2017). *Teachers' opinions about education information network (EBA)*. Unpublished Master's Thesis, Gaziosmanpaşa University.
- Sentürk, S., & Duran, V. (2020). Validity and reliability study of the opinion scale for distance education. *Publishing Process*.
- Tutar, M. (2015). *The evaluation of teachers' perceptions towards education information network (EIN)*. Unpublished Master's Thesis, Gaziosmanpaşa University.
- Tüysüz, C., & Cümen, V. (2016). Secondary school students' Views on Eba ders web site. *Uşak University Journal of Social Sciences*, 9(3), 278-296.
- Yılmaz, N. Ş. (2019). *The views of secondary school visual arts teachers on the use of the EBA*. Unpublished Master's Thesis, Ondokuz Mayıs University.
- Yorgancı Keskin, F. (2019). *Middle school mathematics teachers's levels of utilization the Education Informatics Network (EBA) Project and their opinions about the project*. Unpublished Master's Thesis, Van Yüzüncü Yıl University.