Teachers' Views Regarding the Implementation of Education Programs in Distance Education through the EBA Platform During the Covid-19 Pandemic

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Abstract: The purpose of this study is to evaluate the implementation of the programs in distance education through the Education Information Network (EBA) platform due to the Covid-19 pandemic according to teachers' opinions. In the study, the case study method, one of the qualitative research methods, was used. A semi-structured questionnaire with open-ended questions was given to 107 teachers. The data obtained were examined using content analysis. According to the study results, in "EBA Internet" and "EBA Live Class," teachers stated that not having information about activities suitable for distance education and limited interaction with students were the difficulties they have faced. The teachers stated that the contents in the EBA are suitable for the targeted learning outcomes. Still, they are qualitatively simple, insufficient, and most of them cannot be accessed. They also stated that they had difficulty carrying out assessment and evaluation in their teaching activities due to insufficient measurement content suitable for the class level in the EBA platform. The students did not want to answer the questions in distance education courses. In addition, teachers suggested that learning with games, movies, songs, visuals, experiments, and STEM activities should be added for the programs to be implemented more efficiently on the EBA platform. Furthermore, an application that makes the board more practical and useful in live lessons should be created.

Keywords: Covid-19 pandemic, EBA, education program, teacher.

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Introduction

The Covid-19 epidemic, which affected Turkey quickly, has become a critical public health problem worldwide. On the other hand, the epidemic should not be considered only as a public health issue. Restrictions have seriously affected and continue to affect social, economic, educational, professional, and political life (OECD, 2020).). The Covid-19 pandemic and the crisis dynamics triggered by the pandemic have started to show their effect in all areas of social life (Dogan, 2020). Education has been one of the most affected areas in this process.

In many countries, educational institutions have been temporarily closed to contain the spread of the disease. UNESCO announced the closure of schools in thirteen countries on 4 March 2020. UNESCO Director-General Audrey Azoulay warned that the global scale and speed of the current educational interruption caused by the temporary closure of schools is unexampled. Its continuation for a long time may threaten the right to education; therefore, Azoulay suggested distance education in this process (UNESCO, 2020a). She also announced that they would support distance education practices to reduce the negative effects of school closures and ensure the continuity of education for all (UNESCO, 2020b).

With the effect of the virus spreading all over the world, the discussions of "is it possible or not", "is it applicable or not", "is it useful or not" continues. Distance education has entered our lives as a solution in this process to prevent education from being completely interrupted and to ensure its sustainability (Telli Yamamoto & Altun, 2020). Countries have faced an unprecedented challenge due to school closures; therefore, they have shown great efforts to quickly start their distance education exercise (UNESCO, 2020c). Depending on their level of exposure to the virus and their own conditions, countries constantly implement various new decisions and practices such as opening and closing schools regionally and/or across the country, continuing education online or interrupting education (Ozturk, 2020). According to UNESCO data, as of 22 March 2021, schools are fully open in 112 of 210 countries, partially open in 72 and closed in 26 (TEDMEM). Schools are partially open in Canada, America, Germany, Sweden, and England depending on the region and grade level. They continue distance education for non-open grade levels.

Distance education is the realisation of learning-teaching activities by teachers and students in different physical places with various communication technologies to provide education services to large masses and provide equal opportunity in education (Yalin, 2001). With the developments in information and communication technologies, the concept of distance education has started to have an important place in learning and teaching activities (Hakkari, 2018). With the decision to suspend face-to-face education as an emergency measure due to the Covid-19 pandemic, countries quickly implemented various distance education applications. Although digital/online technology-oriented applications gain weight considering the applications made around the world, more traditional applications such as radio, television, and printed content

are also used (Bozkurt et al., 2020). Italy shares a knowledge portal while China uses "Rain Classroom," an advanced and effective online platform developed in 2016. In the USA, the process is carried out by opening free and paid training to access education platforms such as Edx (2020) and Coursera (2020) (Telli Yamamato & Altun, 2020). Countries with a distance learning platform and content have been advantageous in easily adapting to this process. In Turkey, distance education activities in pre-school, primary, secondary, and high schools carried out with the Ministry of National Education's TRT EBA TV and Education Information Network (EBA) platform (MEB, 2020a); universities started with distance education, open education, and digital education systems (YÖK, 2020).

The distance education process started on 23 March 2020; for primary, secondary, and high school students, students followed their classes on EBA TV and used EBA's internet platform for lesson reviews, missed classes, and questions. In addition, teachers have assigned homework, conducted tests and question-answer activities, and sent practices to their students on EBA's internet platform (MoNe, 2020b). Distance education studies, which started with "TRT-EBA TV" and EBA internet application, continued with the "EBA Live Classroom" application on 13 April 2020, which is primarily open to the use of 8th, 12th grade, and preparatory class students (Ozer & Suna, 2020). The "EBA Live Classroom" application allows students to interact with their teachers instantly. It was opened to all students on the 3rd and after 23 April 2020 for 12th grade. In the "EBA Live Classroom" application, school administrators planned and applied the lessons (MoNe, 2020c). During the distance education process, which continued until 19 June 2020, the end date of the 2019-2020 academic year, the EBA platform has been made available for all grade levels, the "EBA Internet" and the "EBA Live Classroom" applications have been constantly renewed and developed. It is constantly improving thanks to the support of teachers and students (Gacanoglu & Nakiboglu 2019). The EBA platform, which was previously used to support face-to-face education by providing e-contents to students and teachers for curriculum, has quickly become the operator of all education programs. It has not yet been possible to integrate the curricula prepared for face-to-face education into distance education. Determining whether the curriculum and each of its elements prepared for face-to-face education can be applied and used in the distance education process is important in determining the sustainability of the education and ensuring that the education provided is accurate and of high quality.

Issues such as "widening the use of the EBA platform", "enriching the content on the platform", "innovations brought by the application", and "its place in education and training environments" have attracted the attention of education researchers and many literature studies have been conducted on this subject. All studies on the EBA platform have pointed out that it supports face-to-face education. These studies include, Coskunserce and Isisturk (2019): Fifth grade students' obstacles while using the EBA platform, activities to increase the recognation of the platform; Gezer and Durdu (2020): Examination of theses related to EBA; Ankay (2019), Hacioglu (2019), and Vahit (2019): The effect of using EBA on students' academic success; Atasoy and Yigitcan Nayir (2019): Students' use of video modules in EBA in mathematics lessons; Demircelik

(2019): Social Studies teachers' views on EBA; Elcicek (2019): Frequency of use of EBA by teachers; Kilic Kocak (2019): Teachers' views on the use and functionality of the EBA platform's biology course e-contents; Sezer and Korucu (2019): EBA's achievement and student motivation oriented effect; Arkan and Kaya (2018): E-learning in world applications and the function of EBA in education and aspects that need to be developed; Bahceci and Efe (2018): Opinions of high school students on EBA; Cuya and the Strap (2018): Usability level of EBA by students; Demir, Ozdinc and Unal (2018): EBA participation; Erensayin (2018): Evaluation of online course materials in EBA; Kartal (2017): Social Studies teachers' views on EBA; Kolburan Gecer, Deveci Topal, and Solmaz (2017): teachers' competencies for using EBA; Aktay and Keskin (2016): EBA features; Kurtdede Fidan, Erbasan, and Kolsuz (2016): Teachers' views on using EBA; Turker and Guven (2016): High school teachers' level of benefit from EBA; Tuysuz and Cumen (2016): Secondary school students' views on EBA; Alabay (2015): Opinions of high school teachers and students on the use of EBA.

It is seen in the literature that there are studies discussing the practices during the Covid-19 pandemic, education policies, and the effects of the Covid-19 pandemic on education (Basilaia & Kvavadze, 2020; Can, 2020; Daniel, 2020; Dhawan, 2020; Eren, 2020; Erkut, 2020; Gencoglu & Ciftci, 2020; Huang, Tlili, Chang, Zhang, Nascimbeni & Burgos, 2020; Hero, 2020; Kirmizigul, 2020; Mohmmed, Khidhir, Nazeer & Vijayan, 2020; Nuer & Miguel, 2020; Ozer, 2020a; Ozer, 2020b; Petretto, Masala & Masala, 2020) and studies on distance education and digital skills (Bozkurt, 2020; Gecgel, Kana & Eren, 2020; Karadag & Yucel, 2020; Kocoglu, Ulu Kalin, Tekdal & Yigin, 2020; Kurnaz & Sercemeli , 2020; Pinar & Donel Akgul, 2020; Sari & Sari, 2020; Sun, Tang & Zuo, 2020; Telli Yamamoto & Altun, 2020; Tzifopoulos, 2020; Zhou, Li, Wu & Zhou, 2020). However, no study was found among the studies regarding the difficulties encountered during distance education over EBA. The purpose of this study is to identify the current situation regarding the integration and implementation of each element of the programs in the distance education studies carried out over "EBA Internet" and "EBA Live Classroom" according to teachers' views. The study is important in revealing the situation in question and creating an idea about how the application should be carried out and how it should be revised in the ongoing process or when a similar process is encountered again. In this respect, it is expected that the research will guide future improvement and development studies by revealing the current situation and determining the difficulties encountered in "EBA Internet" and "EBA Live Classroom" applications, which are effectively used in distance education studies due to the Covid-19 epidemic.

In the MEB distance education studies conducted due to the Covid-19 pandemic, the following problem sentences were created to determine the teachers' opinions on the "EBA Internet" and "EBA Live Classroom" applications.

- What are the teachers' views on the difficulties they encounter in planning teaching activities in the "EBA Internet" and "EBA Live Classroom" applications?

- What are their comments on the difficulties they faced in implementing the planned teaching activities in the "EBA Internet" and "EBA Live Classroom" applications?
- What are their views on the content on the EBA platform and the difficulties they encountered while preparing/uploading content to the EBA platform?
- What are their views on the difficulties they encounter in assessment and evaluation of teaching activities in the applications of "EBA Internet" and "EBA Live Classroom"?
- What are their suggestions to implement the curriculum more effectively in "EBA Internet" and "EBA Live Classroom" applications?

Method

Research Model

The research is qualitative research conducted descriptively by using a case study design. In case studies that allow complex issues to be understood and explored (Merriam, 2013), an event or phenomenon is examined in-depth, its actual situation is observed, data is systematically collected, analysed, and results are revealed (Davey, 1991). Case studies are widely used in educational research as they reveal the existing situation by addressing many elements in the real environment and their interactions with each other. The results obtained by defining and explaining the existing issues or problems in teaching practices with case studies provide practical information to educational researchers, new research and educators, and allow the development of a holistic view of causality related to the situation. Thus, by revealing the cause and effect relations of the existing situation, it is ensured that the programs are evaluated, innovations are researched, and relevant educational policies are developed (Ozan Leylum, Odabasi & Yurdakul, 2017). Accordingly, in this research, the difficulties encountered in using the Education Information Network (EBA) platform during the transition to distance education is evaluated from teachers' point of view.

Study Group

The study was conducted with kindergarten, primary, secondary, and high school teachers working in a district in Sakarya in March-April-May-June 2020 when face-to-face education was suspended in schools and distance education started. The study group was established using the maximum diversity sampling method, one of the purposeful sampling methods. Different situations are selected as much as possible while determining the sample with the maximum variation sampling method. Thus, the basic and variable characteristics of the phenomenon and the experiences of different stakeholders are determined from various perspectives (Suri, 2011). It is found whether there are common phenomena among various situations, and in this way, different dimensions of the problem are examined (as cited in Marczyk, DeMatteo & Festinger, 2005; Baltaci, 2018). Findings and results obtained from a study conducted with the

maximum diversity sampling method could be richer than findings and results obtained with other sampling methods (Yildirim & Simsek, 2018). 107 teachers, including at least 2 female and 2 male volunteer teachers from each official school (2 kindergartens, 9 primary schools, 7 secondary schools, and 5 high schools), were included in the study group to ensure diversity that reflects the population. A total of 462 teachers work in the schools where the research was conducted. Of the teachers participating in the research, 10 work in kindergartens, 38 in primary schools, 33 in secondary schools, and 26 in high schools. Information on the demographic characteristics of the teachers participating in the research is presented in Table 1 below.

Table 1.

Demographic Characteristics of Teachers

Demographic Characteristics		*(n=107)*
Sex	Female	57
	Male	50
The type of school they work in	Kindergarten	10
	Primary School	38
	Secondary School	33
	High School	26
Whether they used the EBA platform before the MEB distance education process due to the Covid-19 pandemic	Frequently	34
	Occasionally	59
	Never	14

Data Collection Tools

Research data were obtained using semi-structured interview forms consisting of open-ended questions developed by the researcher. The form consists of two parts. There are 5 open-ended questions about the demographic information of the teachers in the first part and distance education studies in the second part. While preparing the interview form, written information was requested from the teachers about distance education studies. In line with the similar information obtained and the literature, themes related to the distance education process were created. A questionnaire consisting of 10 open-ended questions was created from the determined themes suitable for the research problem. The draft questions prepared were presented to the views of an educational sciences lecturer, an education administrator working as the EBA District Coordinator, an information technologies teacher working as the EBA District Coordinator assistant, two information technologies teachers, a Turkish teacher, and a form teacher. The questions on which consensus was reached were selected and rearranged following the participants' feedback and suggestions. Five teachers were interviewed for the pilot application of the resulting 6-question interview form. It was tested whether the teachers understood the questions and whether they were suitable for the research. Two questions with the same answers were combined, and a final 5-question interview form was obtained. Thus, the validity of the content, appearance and quality of the interview form tried to be ensured. With the interview form created, the teachers' experiences,

difficulties faced, and solution proposals regarding using the EBA (Educational Information Network) platform during the distance education studies of the Ministry of National Education can be analysed in depth. While the semi-structured interview technique provides convenience in a systematic structure by making a pre-prepared interview form, the researcher can direct the interview by asking sub-questions related to the course and enable individuals to further elaborate on their answers (Turnuklu, 2000; Yildirim & Simsek, 2018).

Data Collection

All teachers working in 23 public schools, where the research was conducted, were informed about the study via online live interview platforms. It was determined that 107 teachers wanted to participate in the research voluntarily, and an interview form containing the necessary explanations was sent to these teachers via the online platform. In this process, communication was established with the teachers through online live interview platforms when they did not understand the study or the questions in the interview form. The teachers answered the questions in the interview form by writing them on the online form. The researcher stated that if the participants did not prefer to answer the questions by writing, they could be interviewed via online video programs. However, all participants chose to answer the questions via the online form.

Data Analysis

Content analysis technique was used in the analysis of the research data. In content analysis, similar data are brought together within the framework of certain concepts and themes, organised and interpreted so that the reader can understand (Yildirim & Simsek, 2018). During the data analysis, first of all, to ensure the reliability of the answers given by the participants to the questions, researcher triangulation was made and coded independently by each researcher in different environments and times. The codings were evaluated together by the researchers. A consensus was reached on the codings that showed similarity, and the codings that did not match were removed. The formula (Reliability=Consensus/ (Consensus+ Dissensus)) developed by Miles and Huberman (1994) was used for similar and non-similar opinions, and the reliability of agreement among researchers was found to be 0.80. It can be assumed that this reliability value obtained is at an acceptable level. It is recommended for the intercoder reliability to be close to 80% (Miles & Huberman, 1994). Using the last code list, the data were tabulated by determining which participant expressed an opinion on which theme and sub-theme within the framework of certain themes and sub-themes. Direct quotations were made from the answers given to each question to interpret the participants' views under themes and sub-themes by the readers. The findings from the raw data and the analysis results were presented to an independent researcher who is an expert in qualitative research to ensure the reliability of the results. With the feedback received from the independent researcher, the findings were reported in their final form.

Findings

Findings on the Opinions of Teachers Regarding the Difficulties They Encounter in Planning Teaching Activities in the "EBA Internet" and "EBA Live Classroom" Applications.

Table 2.

Teachers' Opinions on the Difficulties They Encountered in Planning the Teaching Activities in the Application of "EBA İnternet" and "EBA Live Class"

	Theme (Source of Difficulty)	The Encountered Difficulties
EBA Internet Application	EBA Platform	Insufficient content on the EBA platform
		Problems in uploading activities prepared by teachers to the EBA platform
	The Teachers	Teachers' lack of knowledge about activities suitable for distance education
		The fact that teachers need more time to plan their teaching activities in distance education
		The fact that teachers cannot complete the planned activities for various reasons and have to update them constantly
		The inability of teachers to determine students' individual differences and readiness in distance education
	Decisions of Ministry of National Education	Announcement of 8th-grade exam topics after the start of distance education
EBA Live Classroom Application	The Teachers	Teachers' lack of knowledge about activities suitable for distance education
		The fact that teachers cannot complete the planned activities for various reasons and have to update them constantly
		The fact that teachers need more time to plan their teaching activities in distance education
	Decisions of Ministry of National Education	The inability to plan the desired activities due to the limited number of lesson hours determined by the Ministry of National Education.

The findings regarding the first research question are presented in Table 2 above. In Table 2, there are findings regarding teachers' views on the difficulties they encountered in planning teaching activities in the "EBA Internet" and "EBA Live Class" applications. Additionally, Figure 1 below shows the general distribution of the difficulties encountered.

37 (34.6%) of 107 teachers who participated in the study stated difficulties planning teaching activities in the "EBA Internet" application. The answers given by 37 teachers who expressed their opinions about the difficulties they faced were examined; it was observed that 24 teachers (22.4%) faced difficulties due to the EBA platform, 13 teachers (12.1%) due to themselves, and 1 teacher (0.9%) due to the decisions of the Ministry of National Education. Some expressions from the views of the participants are quoted and presented below.

Since there is not enough course and lecture content in the EBA internet application, I had to prepare content such as material and visuals that would form the basis of planning. This created problems in terms of time and quality of content.

Failure to upload data in all formats to EBA internet.

We had to be very flexible when planning the teaching activities for various reasons, we were constantly updating the plans, of course, this is a dynamic process, but it was too much.

I had difficulties in planning the teaching activities. Since we always work with one-to-one activities in lessons (listening, vocabulary practice, speaking, albeit limited), I had a hard time finding activities that would be productive over the internet.

Yes, there have been various problems. Since I was teaching 8th grades, we had to wait for the exam subjects to be determined. Thus, we could have been able to focus on the exam topics.

12 (11.2%) of 107 teachers who participated in the study stated difficulties planning teaching activities in the "EBA Live Classroom" application. The answers of 12 teachers who expressed their opinions about the difficulties they faced were examined. It was found that 7 teachers (6.5%) faced difficulties due to themselves, and 5 teachers (4.7%) due to the decisions of the Ministry of National Education. Some expressions from the views of the participants are quoted and presented below.

I could not complete the lessons I planned in EBA live lessons due to time and connection problems, so I had to update the plans again.

Activities that could be conducted through the Internet were limited. I had to think before class about which ones to choose. It took a lot of time to plan how to do these activities on the EBA live classroom application and how to involve students in the process.

I had to give many skills and activities superficially because the class time was limited.

The most important problem I encountered in the EBA live class application was the access problem. Since not everyone has access to live lessons, there was a time constraint in scheduling the lessons. An hour a week for each lesson made it difficult to work out our plans.

Figure 1.

General Distribution of Difficulties Encountered in Planning Instructional Activities
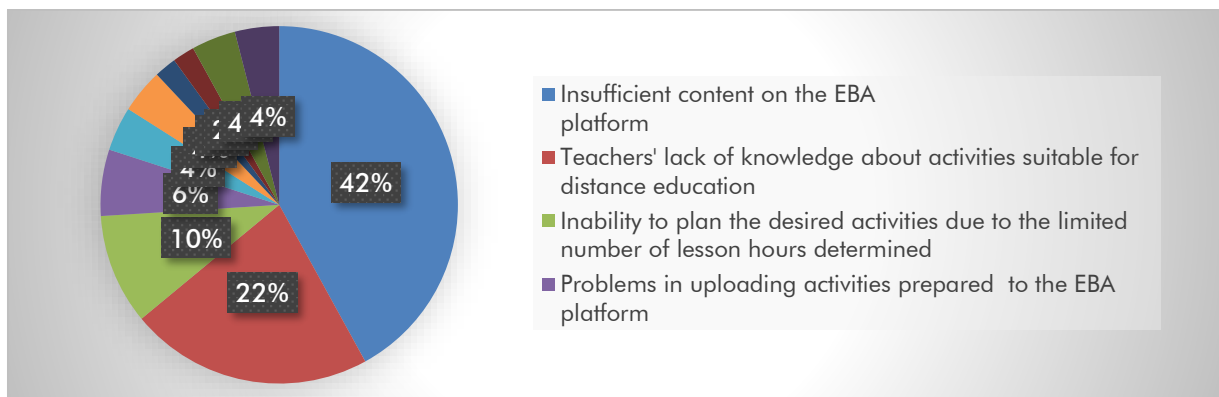
Figure 1 above shows the general distribution of the difficulties encountered in the EBA internet and EBA live class applications. The most encountered difficulties are "the inadequacy of the contents on the EBA platform", "teachers' lack of knowledge about the activities suitable for distance education", "the inability to plan the desired activities due to the limited course hours", and "problems in uploading the prepared activities to the EBA platform".

Findings on Teachers' Opinions Regarding the Difficulties They Encounter in Planning the Teaching Activities in the "EBA Internet" and "EBA Live Classroom" Applications.

Table 3.

Opinions of Teachers on the Difficulties They Encountered in Implementing the Teaching Activities They Planned in "EBA İnternet" and "EBA Live Classroom" Application

	Theme (Source of Difficulty)	Encountered Difficulties
EBA Internet Application	EBA Platform	Systemic problems in the EBA platform
	Students	Lack of student participation
		Students' technological hardware (computer, tablet, mobile phone, internet connection, etc.) inadequacies
		Inadequacies in students' ability to use information technologies
		Individual differences of students
EBA Live Classroom Application	EBA live class system	Technical problems in the EBA live class system
		Insufficient course hours (30 minutes) for live class application
	Students	Lack of student participation
		Students' technological hardware (computer, tablet, mobile phone, internet connection, etc.) inadequacies
		Individual differences of students
	The Teachers	Limited interaction with students
		Teachers' technological equipment (computer, internet connection, etc.) inadequacies
		Teachers' inexperience in live lesson applications
		The inability of teachers to manage the classroom
		Inability to motivate the students to learn

The findings of the second research question are presented in Table 3 above. In Table 3, there are findings regarding the teachers' opinions regarding the difficulties they encountered in implementing the teaching activities they planned in the "EBA Internet" and the "EBA Live Classroom" applications. Additionally, Figure 2 below shows the general distribution of the difficulties encountered.

Of the 107 teachers who participated in the study, 76 (71%) stated difficulties implementing the teaching activities they planned in the "EBA Internet" application. In Table 3, it is seen that 45 teachers (42.1%) face difficulties because of the EBA platform and 48 teachers (44.9%) due to students.

Constant disconnection.

Since EBA had difficulties in accessing the internet, there were difficulties in sharing assignments and activities at the scheduled time. Since the students could not enter to the application due to the busyness, they could not complete their homework sent over EBA internet on time.

I did not have any problems other than the fact that the majority of the students did not want to use the EBA internet knowingly and willingly even though it was accessible.

The biggest problem was not being able to reach all students while I was doing the activities I planned in the EBA internet application. I had students who could not participate in the application at all because not all of the children have internet and computer equipment.

77 (72%) of 107 teachers who participated in the study stated difficulties implementing the teaching activities they planned in the "EBA Live Classroom" application. Table 3 shows that 35 teachers (42.1%) have encountered difficulties caused by EBA live class system, 33 teachers (30.8%) due to students, and 29 teachers (27.1%) due to themselves. In addition, it is seen that teachers encounter difficulties mostly arising from the EBA platform and EBA live class system while implementing the teaching activities they have planned. Some expressions from the views of the participants are quoted and presented below.

Inability to log in due to lack of infrastructure.

Due to time constraints in the live class application, I had to make one-way presentations. This caused the students to remain passive.

Despite all precautions being taken for EBA live classes (whatsapp groups, messages to parents), participation could not be achieved at a sufficient level.

Students had difficulty in seeing and reading the texts because they attended the lesson from the phone screen. Since the students did not have earphones, the sound of their environment prevented us from concentrating on the lesson. I could not complete the courses due to technical problems such as students' cameras and sounds turned off.

Limited student-student and student-teacher communication.

I faced difficulties in using the live classroom application as I did not have enough experience beforehand. It was my priority to use time sparingly while implementing the activities. In addition, it was more difficult to motivate the students to the lesson than face-to-face education.

Figure 2.

General Distribution of Difficulties Encountered in Planning Instructional Activities
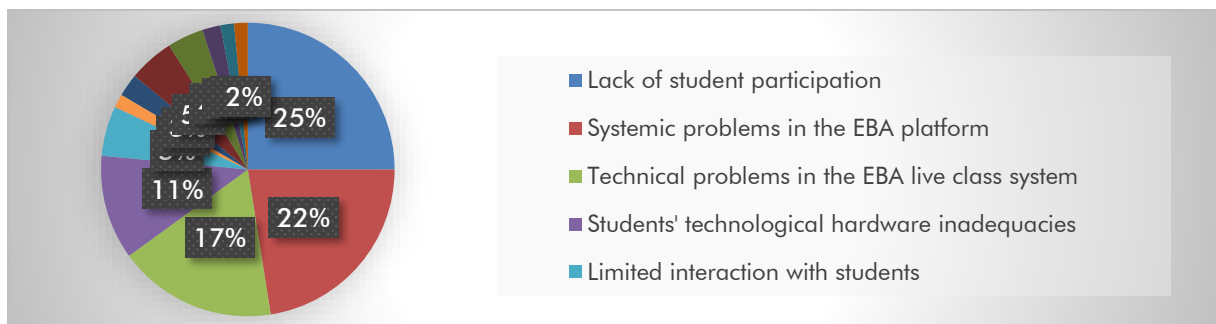
Figure 2 shows the general distribution of the difficulties encountered in implementing learning activities in the EBA internet and EBA live class applications. It is seen that the most encountered difficulties in applications are "insufficiency of student participation", "systemic problems experienced in EBA platform", "technical problems in EBA live class system", "technological hardware inadequacies of students", and "limited interaction with students".

Findings Regarding Teachers' Opinions on the Contents of EBA Platform Used in the Distance Education Process of the Ministry of National Education Due to the Covid-19 Pandemic.

Table 4.

Opinions of Teachers on the Contents on the EBA Platform

	Theme (Source of Difficulty)	The contents on the EBA platform
EBA Platform Ready-made Contents	Content Quality	They were simple and inadequate.
		They were adequate and appropriate.
	System	Not all were available.
	Achievement-content relationship	They were in line with the achievements.
		They were not suitable for the achievements.
Creating New Content for the EBA Platform	EBA Platform	I encountered technical problems while uploading the content I prepared.
	Teacher	I had a hard time because I didn't have enough knowledge about content preparation.
		I had a hard time preparing it because I cannot use technology well.
	Time	It took me a lot of time to prepare and upload content.

Findings for the third research question are presented in Table 4 above. Table 4 shows the findings regarding the teachers' views on the contents of the EBA platform. Additionally, Figure 3 shows the general distribution of opinions.

Of the 107 teachers participating in the study, 78 (72.9%) expressed that the content on the EBA platform is simple and insufficient, and 29 (29%) stated that the content is sufficient and appropriate. Furthermore, 6 teachers (5.6%) stated that not all content is available.

> The contents of pre-school education to support all development areas (cognitive, motor, social-emotional, self-care, language development) were insufficient. And some existing content was simple for my class' level.

> I think that the EBA middle school section is sufficient in terms of lectures, videos, tests and interactive exercises in the mathematics course.

> Not all the content I wanted was available.

> Due to the constant updates in EBA, I had difficulties in reaching the content I was looking for.

107 teachers who participated in the research were asked whether the EBA contents were suitable for the course outcomes. Table 4 shows that 85 (79.4%) teachers stated that EBA contents are suitable for course outcomes, while 22 (20.6%) stated that contents are unsuitable.

> I was already using these contents during the education process. It is definitely a program suitable for achievements for my branch.

> It was totally appropriate.

> There were deficiencies and inadequacies in the 1st-grade Turkish learning outcomes.

> There are narrations in the lecture videos on some subjects that do not comply with the changed coursebook or academic resources in the curriculum. In addition, some questions are not compatible with the subjects removed from the curriculum or changed academic information in the achievement assessment tests used in the EBA and EBA courses. This causes confusion among students. Updating the textbooks and EBA lecture videos should be done before the begining of the academic year. The differences in the Science and Anatolian High School curricula in some biology subjects also cause this confusion.

Of the 107 teachers participating in the study, 86 (80.4%) stated that they prepared content to upload to the EBA platform. In contrast, 21 (19.6%) stated that they did not prepare content to upload to the EBA platform and used the existing content in the system. 48 out of 86 teachers who created/uploaded content stated difficulties when preparing/uploading content. In Table 4, 30 (28%) teachers who create/upload content had difficulties related to the EBA platform, 12 (11.2%) related to themselves, and 11 (10.3%) were time-related. Some expressions from the views of the participants are quoted and presented below.

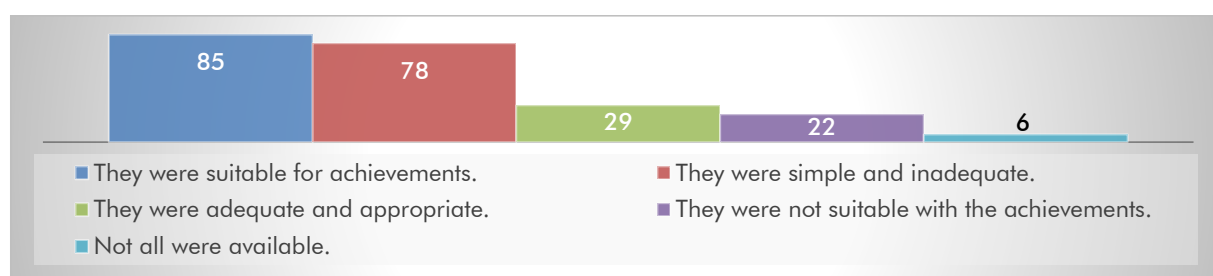> It was a bit of a hassle when uploading videos and images because of their sizes.

> I had insufficient information and lack of knowledge about how to use the application.

> I couldn't prepare anything because I didn't know how to use some computer programs. I would like to prepare animations and make the subject interesting.

> Due to my branch (mathematics), it is very time-consuming to prepare content in the computer environment. To prevent this, I have created conveniences such as writing some works on A-3 size paper and showing them to the children on the camera or using the photos of the works I prepared before, and sometimes I turned them into slides.

Figure 3.

General Distribution of Views on EBA Contents

85	78	29	22	6

■ They were suitable for achievements. ■ They were simple and inadequate.
■ They were adequate and appropriate. ■ They were not suitable with the achievements.
■ Not all were available.

In Figure 3, the general distribution of teachers' opinions about the content in the EBA platform is given. It is observed that the majority of the teachers (85%) think the contents are suitable for the learning outcomes. Yet the majority (78%) think that the contents are simple and inadequate.

Findings on the Opinions of Teachers' about the Difficulties They Faced in Measuring and Evaluating the Teaching Activities in "EBA Internet" and "EBA Live Classroom" Applications During the Distance Education Process of the Ministry of National Education Due to the Covid-19 Pandemic.

Table 5.

Opinions of Teachers about the Difficulties They Encountered in Measuring and Evaluating Teaching Activities in the Application of "EBA Internet" and "EBA Live Classroom"

	Theme (Source of Difficulty)	Encountered Difficulties
EBA Internet Application	EBA Platform	Systemic problems in the EBA platform The EBA platform does not have adequate or sufficient assessment and evaluation content.
	Students	Lack of student participation Students' technological hardware (computer, tablet, mobile phone, internet connection, etc.) inadequacies Inadequacies in students' ability to use information technologies
EBA Live Classroom Application	Students	Lack of student participation Students' technological hardware (computer, tablet, mobile phone, internet connection, etc.) inadequacies Inadequacies in students' ability to use information technologies
	EBA live class system	Insufficient live course hours Technical problems in the EBA live classroom system

The findings regarding the fourth research question are presented in Table 5 above. In Table 5, opinions of teachers "about the difficulties they encountered in measuring and evaluating teaching activities in the application of "EBA internet" and "EBA live classroom" are presented. Additionally, Figure 2 shows the general distribution of the difficulties encountered.

11 (10.3%) out of 107 teachers participating in the study stated that they did not carry out assessment and evaluation studies of teaching activities in the "EBA Internet" application, 96 (89.7%) of them stated that they did. 26 out of 96 teachers carried out assessment and evaluation studies without any difficulties; whereas, 70 of them faced some difficulties. The answers given by 70 teachers who expressed their opinions about the difficulties they faced were examined; the answers given were grouped under two themes 'EBA platform' and 'students'. Table 5 shows that 44 (41.1%) who carried out assessment and evaluation studies EBA platform, and 34 (31.8%) of the teachers

encounter difficulties arising from students. Some expressions from the views of the participants are quoted and presented below.

I could not make good use of the reports section. In general, I received feedback from my students who did the activities, but they did not appear in the reports.

Assessment and evaluation activities were very inadequate. For this reason, I did not receive sufficient feedback on the evaluation.

The activities I gave were not done by most of the students. This caused me to not be able to make a healthy scale assessment.

It is very nice that we have the reports of the tests and exercises sent on the EBA and that we can review the results, but it was not possible to ensure the participation of all students.

35 (32.7%) of 107 the teachers participating in the study stated that they did not carry out assessment and evaluation studies of teaching activities in the "EBA Live Class" application, 72 (67.3%) of them stated that they did. 23 out of 72 teachers carried out assessment and evaluation studies without any difficulties 49 of them stated they faced some difficulties. The answers given by 49 teachers were examined, and their answers were grouped under two themes 'students' and 'EBA live class system'. In Table 5, 30 (28.0%) teachers who carried out assessment and evaluation studies appear to have encountered difficulties caused by students, and 21 (19.6%) from EBA live classroom systems. Some expressions from the views of the participants are quoted and presented below.

The fact that the students do not want to participate in the lesson during the assessment and evaluation phase in live classes and do not answer questions when asked are among the difficulties I encountered.

I didn't encounter any other difficulties other than students' connection problems.

It is not possible to understand whether the students understand the subject or not due to the lack of immediate feedback or no feedback at all from the students' in-class oral questions, due to technical difficulties.

Since I first gave lectures with the powerpoint application in a course hour, there was not much time left for assessment and evaluation.

Figure 4.

General Distribution of Difficulties Encountered in Assessment and Evaluation

- Lack of student participation
- Systemic problems in the EBA platform
- The EBA platform does not have adequate or sufficient assessment and evaluation content.
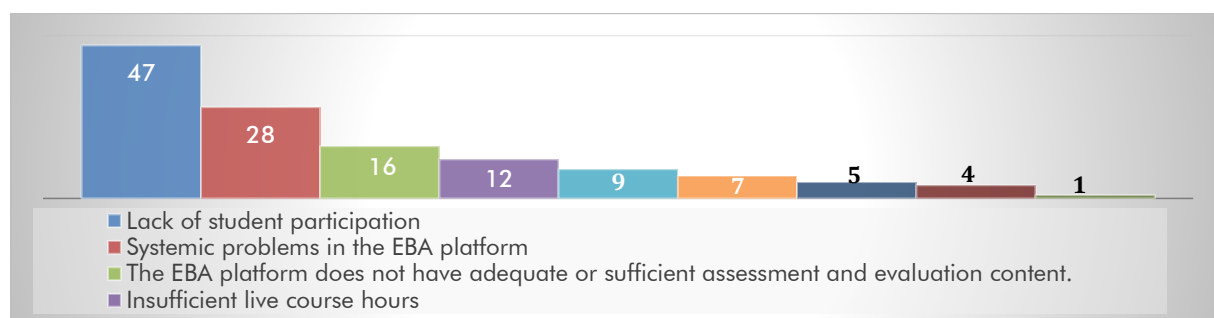- Insufficient live course hours

Figure 4 shows the general distribution of difficulties encountered in measuring and evaluating teaching activities in EBA internet and EBA live classroom applications. The most common difficulties in assessment and evaluation practice are "insufficiency of student participation", "lack of appropriate or sufficient assessment and evaluation content in the EBA platform", "systemic problems in the EBA platform", and "insufficiency of live course hours".

Results Regarding Teachers' Suggestions for a More Efficient Implementation of the Curriculum in "EBA Internet" and "EBA Live Classroom" Applications for the Distance Education Process.

Table 6.

Teachers' Suggestions for More Efficient Implementation of Curriculum in the "EBA Internet" and "EBA Live Classroom" Application

Theme (Source of Difficulty)	Suggestions
EBA Platform	The content on the EBA platform should be enriched.
	Learning with games, fun activities, movies, songs, visuals, experiment activities, STEM activities can be added to the EBA platform.
	Access to the EBA platform should be simpler and faster
	Motivating elements such as emoji, symbols instead of points, educational contents as gifts, star collection can be added to the system for students.
	There may be a section in the system that measures and evaluates students' activities and leads the teacher accordingly.
	Parents can also be included in the EBA platform and can be informed periodically about the work done by the students.
	Forum-like sharing/discussion platforms can be added to the EBA platform to increase peer communication.
	Content preparation templates for teachers should be added to the EBA platform.
	Adding a source or address link for content uploaded to the EBA platform should be made easier.
Decisions of Ministry of National Education	Participation must be mandatory.
	School timetables should be planned to consider the hours students spend in front of the screen during the day.
EBA live classroom system	Assessments should be done, and student success should be evaluated with a grading system.
	An application can be developed that makes the blackboard more practical and useful during the live lesson.
	Events on the EBA platform should be available to be shared in live lessons.
	A chat section can be created for written communication in the live lesson.
	Videos and diagrams can be prepared for live lessons.

Findings for the fifth research question are presented in Table 6 above. Table 6 contains the teachers' suggestions for more efficient curriculum implementation in the "EBA Live Classroom" and "EBA Internet" applications. Furthermore, Figure 5 below shows the general distribution of the suggestions.

Table 6 shows that 67 (62.6%) of 107 teachers participating in the study have suggestions regarding the EBA platform, 7 (6.5%) regarding decisions of the Ministry of National Education, and 16 (14.9%) regarding EBA Live Class system. Some expressions from the views of the participants are quoted and presented below.

> Content can be enriched. There should be activities from easy to difficult, suitable for every school level, and there should be studies and tests that can attract the attention of students from all levels. Studies that will give students more opportunities to practice should be prepared.

> Competitive course activities for children, puzzles, online problem-solving exercises with friends, online exams and competitions, computer games where students can play, have fun and learn about their lessons can be uploaded.

> Timetables should be planned considering the total time spent in front of the screen by the student during the day.

> Attendance should be used as a good sanction.

> If the students were active and could share their screen, draw and mark on the screen, we would teach more actively during the live lessons". If applications such as Mentimeter come as add-ons, the board can be used more effectively.

> I think that if assessment and evaluation were applied to students, they would follow the lessons more seriously.

Figure 5.

General Distribution of Suggestions for More Efficient Implementation of Teaching Activities
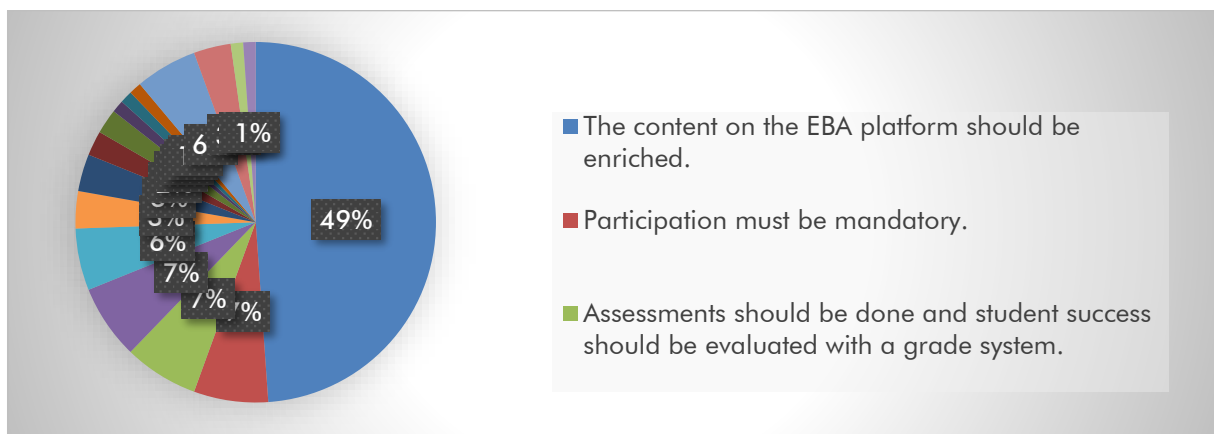

Figure 5 shows the general distribution of suggestions regarding the more efficient implementation of curricula in EBA internet and EBA live classroom application. The most common suggestions were "Enriching the content on the EBA platform", "mandatory participation", "assessment and evaluation of student success with the grading system", and "learning with games, fun activities, movies, songs, visuals, experiment activities and STEM activities on the EBA platform".

Discussion and Conclusion

The following results were obtained in line with the opinions received from the teachers regarding the use of the EBA platform in the scope of MEB's distance education practices, which were conducted by interrupting face-to-face education in schools due to the Covid-19 pandemic in March-April-May-June 2020 in Turkey.

In the research results, the teachers stated that in the "EBA Internet" application, the inadequacy of the content on the EBA platform and not having information about the activities suitable for distance education were the most common difficulties they have faced. This result coincides with the studies in the literature. In the studies conducted, it was also observed that the content in EBA was insufficient to meet the needs of teachers (Alabay, 2015; Oner, 2017; Saklan & Unal, 2018; Sahin & Erman, 2019), they are not in line with the curriculum (Altin, 2014), there is not enough content, and the content is not in line with targeted learning outcomes (Kilic Kocak, 2019; Sezgin, 2014). This shows that the teaching activities of the programs are not planned to be integrated into distance education.

In the "EBA live classroom" application, the teachers stated that not having information about the activities suitable for distance education in planning their teaching activities was the most difficult problem. Considering that teachers did not have live course experiences with students before the Covid-19 pandemic, it can be said that this result of the research is natural. However, in the age of rapid change and development in information and technology, teachers must learn contemporary teaching environments, methods, and techniques. According to Genc & Genc (2013), teachers have an important role in education, which has a dynamic structure constantly changing with new developments. Teachers need to follow developments closely, keep up with innovations and train their students to keep up with these developments.

Teachers expressed the systemic problems experienced in conducting the teaching activities they planned in the "EBA Internet" application, the inadequacy of student participation, and the lack of technological equipment (computer, tablet, mobile phone, internet connection, etc.) of students as the difficulties they faced the most. In the study conducted by Turker & Guven (2016), it was found that teachers did not use the EBA platform due to a lack of infrastructure. In the study conducted by Tuysuz and Cumen (2016), most students have a computer at home and have internet access. However, it has been concluded that when they login to EBA, they encounter systemic problems such as not being able to view the content, slow opening, being kicked out of the system, and resetting the scores. Systemic problems can be found in other studies in the literature; Aksoy, 2017; Arkan & Kaya, 2018; Cuya & Kayis, 2018; Coskunserce & Isciturk, 2019; Hiyilmaz & Kayserili, 2017. This shows that the infrastructure of the EBA platform is insufficient to support the implementation of teaching activities. It can be said that the system and hardware problems affect the teaching processes negatively. Furthermore, it is seen that the result about the inadequacy of student participation also coincides with the results of many studies in the literature (Adnan & Anwar, 2020; Altin, 2014; Bahceci

& Efe, 2018; Demir, Ozdinc & Unal, 2018; Kana & Saygili, 2016; Tuysuz & Cumen, 2016). In the study conducted by Adnan and Anwar (2020), it was determined that it not being mandatory to attend the courses was abused. Therefore the participation in the courses was very low. This may be due to the rapid transition to the online system, which students are not accustomed to, especially during the Covid-19 pandemic. Students' inability to adapt fully and not being ready to accept online education makes the process harder.

Teachers stated that the technical problems experienced in the EBA live classroom system, the inadequacy of student participation, and the limited interaction teachers can establish with the students during the live classes are the difficulties they encountered the most in implementing the teaching activities they planned for the "EBA Live Classroom" application. In the literature, some studies have determined systemic problems and problems about internet access and connection in distance education (Hakkari, 2018; Kirmaci & Acar, 2018; Oztas & Kilic, 2017; Ozyurek, Begde, Yavuz & Ozkan, 2016; Tuncer & Bahadir, 2017). However, Petretto, Masala, and Masala (2020) determined that internet connection and the necessary information tools are the most important need in distance education during the Covid-19 process. In the studies conducted by Sun, Tang, and Zuo (2020) and Tzifopoulus (2020), the importance of information tools in distance education applications during the Covid-19 epidemic was emphasised. Furthermore, the reasons for student participation inadequacy in live lessons might be due to technological equipment (such as computer, tablet, smartphone deficiencies required to access the system, lack of internet connection with sufficient speed or connection problems, and young students not having individual learning habits yet). Furthermore, the lack of direct communication between the instructor and the learner in distance education prevents the realisation of many elements and makes teaching difficult. For example, a simple emphasis on the tone of voice or a moving expression can easily express the importance of the subject, but this cannot be achieved in distance education (Stang, 1981; Birkok, 2004).

When the teachers' opinions about the ready-made content in the EBA platform are examined, the teachers have stated that the content is suitable for the targeted learning outcomes but qualitatively simple and insufficient, and most of them cannot be accessed. Similar to this result, there are studies in the literature that emphasise the inadequacy of the content in the EBA platform, it being unsuitable for grade levels, and for not including all the achievements (Aksoy, 2017; Arkan & Kaya, 2018; Arslan, 2016; Ates, Cerci & Derman, 2015; Bahceci & Efe, 2018; Cakmak & Taskiran, 2017; Erbay, 2018; Keles & Turan, 2015; Kana & Aydin, 2017; Tanrikulu, 2017; Tutar, 2015). Contrary to these results, there are also studies in the literature in which opinions such as the contents of the EBA platform do not show similarities with the curriculum (Bahceci & Efe, 2018) and another stating that it is appropriate for the grade level (Turker & Guven, 2016). However, the inadequacies of the EBA platform have become more striking as the content of the EBA platform has started to be used in practice in the education system before it has become fully sufficient.

Concerning creating content for the EBA platform, the teachers stated that they do not have enough knowledge about preparing content. They encounter technical problems while uploading the content, and it takes a lot of time to prepare and upload content. There are studies in the literature that coincide with these results. Studies have shown that teachers rarely develop content for EBA (Alabay, 2015; Guvendi, 2014; Kaya, 2019). They did not develop content, download and modify course materials in EBA, and share the activities they prepared and the videos they shot on EBA (Kurtdede Fidan, Erbasan & Kolsuz, 2016). The number of teachers contributing to content production is low (Saklan & Unal, 2018). The lack of contribution is that teachers do not have time, they have not received training on content production, and their computer skills are not good (Ozdinc & Unal, 2018). Most of the teachers do not share content on the EBA platform due to the insufficient training they receive on this subject (Turker & Guven, 2016). Teachers need special training in producing content (Arkan & Kaya, 2018), and they cannot use EBA competently due to insufficient in-service training (Aksoy, 2017). There are results of technical problems related to the slow loading of content in EBA (Arkan & Kaya, 2018). In the study conducted by Eren and Yurtseven Avci (2016), it was concluded that teachers' lack of time and technological knowledge is an important obstacle for preparing content. This result is in line with the findings of the present study. However, in the study conducted by Zhou, Li, Wu, and Zhou (2020), it was determined that teachers' use of content that is not their own production causes a decrease in the quality of distance education. In general, when all findings are considered, it is obvious that the teachers have difficulties using the content they did not produce themselves and need training on this subject. In this regard, it can be said that teachers need to be encouraged and trained to produce content.

Regarding the "EBA Internet" application, teachers stated that the platform does not have suitable or sufficient assessment and evaluation content for the class levels. The study conducted by Arkan and Kaya (2018) concludes that it is necessary to add exercises, study questions, and leaf tests to the EBA system that the students use to evaluate themselves coincides with this result. During the Covid-19 pandemic, there were great problems and deficiencies in the EBA regarding measurement and evaluation. It is seen that the integration of the measurement and evaluation process into online education and the preparation of alternative measurement tools are insufficient.

For the "EBA Live Classroom" application, the teachers stated that the live course time was insufficient, and the students did not want to answer verbal questions. This situation may be that the students' effective participation in the lessons and their motivation cannot be ensured. In a study conducted with university students by Yadigâr (2010), it was found that there are problems in ensuring the effective participation of students in distance education. The study conducted by Karatepe, Kucukgencay, and Peker (2020), determined that students have difficulties maintaining their motivation in online lessons.

Teachers suggested that the content on the EBA platform should be enriched, and games, entertaining activities, movies, songs, visuals, experiment activities, and STEM

activities should be added. In the study conducted by Turker and Guven (2018), the views that the content on the EBA platform should be improved, edited and updated, and the number of applied exercises that cannot be done in the classroom, such as experiments and animation, should be increased support this result. In the study conducted by Kana and Saygili (2016), there are views that creative and attractive content should be developed on EBA. The content should support student participation, and the number of activities such as competition should be increased. In the study conducted by Sahin and Erman (2019), it was found that teachers think that the technological infrastructure should be improved, the number of animations should be increased, there should not be standard lecturing, the quality of the lecture videos should be increased, and the complications in EBA design should be eliminated. Again, in other studies conducted with teachers and students in the literature, opinions are stating the necessity to add content that is visually richer, fun, understandable and suitable for the student level (Erbay, 2018); the development and enrichment of the content of the EBA platform (Aksoy, 2017; Alabay, 2015; Altin, 2014; Arkan & Kaya, 2018; Bahceci & Efe, 2018; Coskunserce & Isturk, 2019; Cucu, 2014); Kana & Aydin, 2017; Oner, 2017; Tanrikulu, 2019), adding more interactive content (Alabay, 2015; Cucu, 2014; Timur, Yilmaz & Isseven, 2017), adding more entertaining videos to the EBA platform, making it richer in terms of video and visuals (Cuya & Kayis, 2018), having more game-entertainment activities (Tuysuz & Cumen, 2016), supporting content with interactive applications, virtual experiments, 3D visuals (Kilic Kocak, 2019). According to Basarmak and Mahiroglu (2015), teaching with animations effects students' learning process positively. According to Erensayin (2018), animations and videos ensure that abstract concepts are learned more quickly, thereby making them permanent.

Teachers suggested that in the "EBA live classroom" application, assessment and evaluations should be carried out, student achievement should be evaluated with a grading system, and an application that makes the board more practical and useful in live lessons should be created. The study conducted by Bayram (2021) determined that measurement and evaluation constitute an important problem in teachers' distance education applications. Burgess and Sievertsen (2020) stated that different methods are used in the measurement and evaluation applications of this process, which will cause uncertainties and problems in terms of equality of opportunity in the long run. According to Odabas (2003), "assessment and evaluation" should not be ignored in education programs designed based on the internet and computer technology.

Recommendations

In this new process experienced, remedial/developmental studies for the problems encountered in distance education studies are important in making the ongoing distance education activities more efficient. Several suggestions have been made for education planners and practitioners regarding the results obtained within the scope of the research. This study especially observed that it is difficult to implement the existing

programs with the EBA platform and live classes, making it important to work on developing a training program that can be more easily integrated with the EBA platform and live lessons in the future. In this regard, it is recommended to focus on program development studies. In addition, the quality of the content of the EBA platform can be increased and enriched by revising it. Furthermore, alternative assessment and evaluation studies should be carried out by giving importance to measurement and evaluation practices in distance education.

Moreover, based on the finding that teachers feel inadequate about integrating their education with technology, it can be suggested that in-service training should be concentrated on this issue, especially to support teachers' knowledge and skills regarding technology. Teachers can be trained on digital content creation, technological tools and computer programs to be used in live lessons, and alternative assessment and evaluation that can be used with distance education.

References

Adnan, M. & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students' perspectives. *Online Submission, 2*(1), 45-51. https://doi.org/10.33902/jpsp.2020261309

Aksoy, N. (2017). *EBA (Educational information network) 's intended use, problems and solutions proposed* (Master Dissertation). Kahramanmaraş Sütçü İmam University, Social Sciences Institute, Kahramanmaraş.

Aktay, S. & Keskin, T. (2016). Analysis of educational information network (EBA). *Journal of Education Theory and Practical Research, 2*(3), 27-44. https://dergipark.org.tr/tr/pub/ekuad/issue/28248/300311

Alabay, A. (2015). *A research into secondary education teachers' and students' views on EBA (education information network) usage* (Master Dissertation). İstanbul Aydın University, Social Sciences Institute, İstanbul.

Altin, H. M. (2014). *Investigation of Fatih Project based on the perceptions of student, teachers, school administrators and parents* (Master Dissertation). Başkent University, Education Sciences Institute, Ankara.

Ankay, E. (2019). *The effect of using educational informatics network (EBA) based on 5e teaching model on 5th grade students' the subject of addition and substraction of fractions success, attitude and the persistence of knowledge* (Master Dissertation). Gazi University, Education Sciences Institute, Ankara.

Arkan, A. & Kaya, E. (2018). Educational informatics network (EBA) and 2023 Education Vision. *Seta Perspektif, 221*, 1-6. https://setav.org/assets/uploads/2018/12/221_Eg%CC%86itimBilis%CC%A7im.pdf

Arslan, Z. (2016). Teachers' opinions about the mathematic content in the education informatics network: Trabzon sample. (Master Dissertation). Gazi University, Education Sciences Institute, Ankara.

Atasoy, M. & Yigitcan Nayır, Ö. (2019). Students' opinions regarding the use of educational and ınformation network video modules in math courses. *International Journal of Science and Education, 2*(1), 24-37. https://dergipark.org.tr/tr/pub/ubed/issue/48031/576936

Ates, M., Cerci, A. & Derman, S. (2015). Content Analysis of Turkish Course Videos in Educational Informatics Network. *Sakarya University Journal of Education, 5*(3), 105-117. https://dergipark.org.tr/tr/pub/suje/issue/20640/220103

Bahceci, F. & Efe B. (2018). Lise evaluation of high school students' opinions on educational ınformatics network (EBA) site. *Journal of Theoretical Educational Science, 11*(4), 676-692. https://doi.org/10.30831/akukeg.387055

Baltaci, A. (2018). A Conceptual Review of Sampling Methods and Sample Size Problems in Qualitative Research. *Journal of Bitlis Eren University Institute of Social Sciences, 7*(1), 231-274. https://dergipark.org.tr/tr/download/article-file/497090

Basilaia, G. & Kvavadzee, D. (2020). Transition to online education in schools during a SARS-CoV-2 coronavirus (COVID-19) pandemic in Georgia. *Pedagogical Research, 5*(4), 1-9. https://doi.org/10.29333/pr/7937

Basarmak, U. & Mahiroglu, A. (2015). Student opınıons on the anımated cartoons used ın onlıne learnıng envıronment. *International Journal Of Eurasia Social Sciences, 6*(19), 234-253. http://www.ijoess.com/DergiTamDetay.aspx?ID=349&Detay=Ozet

Bayram, H. (2021). Challenges secondary school teachers face during the distance education process. *International Journal of Eurasian Education and Culture, 6*(12), 613-658. https://doi.org/10.35826/ijoecc.306

Birkok, M. C. (2004). Analysis of distance education with sociological concepts. *International Journal of Human Sciences, 1*(2), 1-8. https://www.j-humansciences.com/ojs/index.php/IJHS/article/download/156/156/

Bozkurt, A. (2020). The coronavirus (Covid-19) pandemic process and evaluations on education in the post-pandemic world: New normal and new education paradigm. *Journal of Open Education*

Applications and Research, 6(3), 112-142. https://dergipark.org.tr/en/download/article-file/1215818

Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G., …Paskevicius, M. (2020). A global outlook to the interruption of education due to COVID-19 Pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education,15*(1), 1-126. https://doi.org/10.5281/zenodo.3878572

Burgess, S. & Sievertsen, H. H. (2020). *Schools, skills, and learning: The impact of COVID-19 on education.* https://voxeu.org/article/impact-covid-19-education

Can, E. (2020). Coronavirus (Covid-19) pandemic and its pedagogical reflections: Open and distance education practices in Turkey. *Journal of Open Education Applications and Research, 6*(2), 11-53. https://dergipark.org.tr/tr/download/article-file/1179832

Coskunserce, O. & Isciturk, G. B. (2019). Eğitim A case study on ıncreasing students' awareness about the educational ınformation network (eba) platform. *Journal of Qualitative Research in Education, 7*(1), 260-276. https://doi.org/10.14689/issn.2148-2624.1.7c1s.12m

Cuya, B. & Kayis, E. (2018). Usage level of EBA portal according to students. MoNE General Directorate of Innovation and Educational Technologies, Department of Educational Technologies Development and Projects. http://yegitek.meb.gov.tr/meb_iys_dosyalar/2018_11/06102811_EsraBilhan.pdf

Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects, 49*, 91-96. https://doi.org/10.1007/s11125-020-09464-3

Davey, L. (1991). The application of case study evaluations. *ERIC Clearinghouse on Tests Measurement and Evaluation Washington DC.* 1-5. https://files.eric.ed.gov/fulltext/ED338706.pdf

Demir, D. Ozdinc, F. & Unal, E. (2018). An Examination of Participation to the Education Information Network (EBA) Portal. *Erzincan University Journal of Education Faculty, 20*(2), 407-422. https://doi.org/10.17556/erziefd.402125

Demircelik, D. A. (2019). *Opinions of social students teachers on the EBA by the components: Yozgat town samples (Master Dissertation). Tokat Gaziosmanpaşa University, Education Sciences Institute, Tokat.*

Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems, 49*(1), 5-22. https://doi.org/10.1177/0047239520934018

Dogan, O. (2020). *Suggestions for a self-sufficient and crisis-resistant agri-food system in Turkey within the framework of the covid-19 pandemic. TESEV Evaluation Notes.* https://www.tesev.org.tr/tr/research/krizlere-dayanikli-tarim-gida-sistemi-kovid-19/

Elcicek, A. (2019). *The study of the usage freqency of the website education information technologies network (Eba): Mardin province Kızıltepe town samples (Master Dissertation).* Sakarya University, Education Sciences Institute, Sakarya.

Erbay, A. (2018). *Examination of EBA English contents, supplied on the internet as a part of Fatih Project, in terms of secondary schools English curriculum (Master Dissertation).* Erciyes University, Education Sciences Institute, Kayseri.

Eren, E. & Yurtseven Avci, Z. (2016). E-Content Development Under School-University Collaboration: A Case Study Analysis Based on Technology Integration Planning Model. *Uşak University Journal of Social Sciences, 9*(26/2). https://dergipark.org.tr/tr/pub/usaksosbil/issue/21663/233107

Eren, E. (2020). The Impact of the New Coronavirus on the Turkish Education Policy Practices: New Regulations of the Ministry of National Education and the Council of Higher Education. *Journal of Higher Education, 10*(2), 153–162. https://doi.org/10.2399/yod.20.716645

Erensayin, E. (2018). *Evaluation of online course materials: EBA course case (Master Dissertation).* Yüzüncü Yıl University, Education Sciences Institute, Van.

Erkut, E. (2020). Higher education after Covid-19. *Journal of Higher Education, 10*(2), 125–133. https://doi.org/10.2399/yod.20.002

Gacanoglu, Ş. & Nakiboglu, C. (2019). Examination of experienced chemistry teachers' usage of education information network (EIN) contents in their chemistry courses. *Necatibey Faculty of*

Education Journal of Electronic Science and Mathematics Education, 13(2), 1141-1165. https://doi.org/10.17522/balikesirnef.633128

Gecgel, H., Kana, F. & Eren, D. (2020). Investigation of the concept of digital competence in terms of different variables in Turkish education. *Journal of Mother Tongue Education, 8*(3), 886-904. https://doi.org/10.16916/aded.742352

Genc, M. & Genc, T. (2013). Monitoring the skills of teachers' vocational development by themselves: Fatih project sample. *Kırşehir Journal of Education Faculty (KEFAD), 14*(2), 61-78. https://kefad2.ahievran.edu.tr/archieve/pdfler/Cilt14Sayi2/JKEF_14_2_2013_61-78.pdf

Gencoğlu, C. & Çiftçi, M. (2020). Education during Covid-19 pandemic: An analysis on Turkey. *Journal of History School, 13*(46), 1648-1673. https://doi.org/10.29228/joh.44212

Gezer, M. & Durdu, L. (2020). Systematic analysis of the theses related to education ınformation network (EIN). *Başkent University Journal of Education, 7*(2), 393-408. file:///C:/Users/%C3%87i%C4%9Fdem/Downloads/345-1-1754-1-10-20200801.pdf

Guvendi, 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).* (Master Dissertation). Sakarya University, Education Sciences Institute, Sakarya.

Hacioglu, A. (2019). *Effect of EBA assisted instruction on student achievement in teaching the topography and rocks subject at the 10th grade geography lesson* (Master Dissertation). Gazi University, Education Sciences Institute, Ankara.

Hakkari, F. (2018). Vocational high school students' views towards distance education courses. *Journal of Social and Humanities Sciences Research, 5*(23), 1140-1151. http://www.jshsr.org/DergiTamDetay.aspx?ID=467&Detay=Ozet

Hicyılmaz, Y. & Kayserili, M. (2017). Examining teachers' views about using smart boards in visual arts lesson. *Journal of Atatürk University Kazım Karabekir Faculty of Education,* (35), 56-75. https://dergipark.org.tr/tr/pub/ataunikkefd/issue/33367/339952

Huang, R., Tlili, A., Chang, T. W., Zhang, X., Nascimbeni, F. & Burgos, D. (2020). Disrupted classes, undisrupted learning during COVID-19 outbreak in China: Application of open educational practices and resources. *Smart Learning Environments, 7*(1), 1-15. https://doi.org/10.1186/s40561-020-00125-8

Ilgaz, H. (2014). The problems of distance educatıon students on synchronised learning applications and suggestions for solutions. *Educational Sciences and Practice, 13*(26), 187-204. http://ebuline.com/pdfs/26Sayi/26_4.pdf

Kahraman, M. E. (2020). The effect of COVID-19 epidemic on applied courses and the implementation of these courses by distance education: Example of basic design course. *Journal of IMU Faculty of Art, Design and Architecture, 6*(1), 44-56. https://doi.org/ 10.46641/medeniyetsanat.741737

Kana, F. & Aydin, V. (2017). Secondary school teachers and students visions on Educational Information Network. *Journal of Social and Humanities Sciences Research, 4*(13), 1494-1504. https://doi.org/10.26450/jshsr.230

Kana, F. & Saygili, D. (2016). A case study on student opinions on the use of the Education Information Network in the Turkish language and literature lesson of secondary education. *Mediterranean Journal of Educational Research, 10*(20), 11-23. https://mjer.penpublishing.net/makale/359

Karadag, E. & Yucel, C. (2020). Distance education at universities during the novel coronavirus pandemic: An analysis of undergraduate students' perceptions. *Journal of Higher Education, 10*(2), 181–192. https://doi.org/10.2399/yod.20.730688

Karatepe, F., Kuçukgencay, N. & Peker, B. (2020). What are the perspectives of teacher candidates on synchronous distance education?: A survey study. *International Journal of Social Humanities Sciences Research, 7*(53), 1262-1274. https://doi.org/10.26450/jshsr.1868

Kartal, M. (2017). *Social studies teachers' opinions regarding Educational Information Network (EBA)* (Master Dissertation). Gaziosmanpaşa University, Education Sciences Institute, Tokat.

Kaya, O. (2019). *Opinions of teachers and students of vocational high school on Educational It Network* (Master Dissertation). Gazi University, Education Sciences Institute, Ankara.

Keles, E. & Turan, E. (2015). Teachers views on increasing opportunities and improving technology movement (FATİH). *Turkish Journal of Education, 4*(2), 17-28. https://doi.org/10.19128/turje.181112

Kilic Kocak, P. (2019). *Evaluation of electronic content of biology course in the Ministry of National Education Information Network (EBA)* (Master Dissertation). Hacettepe University, Education Sciences Institute, Ankara.

Kirmaci, O. & Acar, S. (2018). The problems of campus students in simultaneous online distance education. *Journal of Theory and Practice in Education, 14*(3), 276-291. https://doi.org/10.17244/eku.378138

Kırmizigul, H. G. (2020). The Covid-19 pandemic and the resulting education process. *Eurasian Journal of Researches in Social and Economics, 7*(5), 283-289. https://dergipark.org.tr/tr/pub/asead/issue/54658/725274

Kocoglu, E., Ulu Kalin, Ö., Tekdal, D. & Yigen, V. (2020). Covid-19 pandemic process, education at a glance in Turkey. *International Social Sciences Studies Journal, 6*(65), 2956-2966. https://doi.org/10.26449/sssj.2448

Kolburan Gecer, A., Deveci Topal, A. & Solmaz, I. (2017). Determining teacher competency levels for the use of Educational and Informatics Network: Sample of Kocaeli. *Kalem International Journal Of Education And Human Sciences 8*(1), 63-86, https://doi.org/10.23863/kalem.2017.84

Kurnaz, E. & Sercemeli, M. (2020). A research on academicans' perspectives on distance education and distance accountng education in the Covid-19 pandemia period. *International Journal of Social Sciences Academy, 2*(3), 262-288. https://dergipark.org.tr/tr/download/article-file/1163428

Kurtdede Fidan, N., Erbasan, Ö. & Kolsuz, S. (2016). Views of classroom teachers about the use of Education Information Network. *The Journal of International Social Research, 9*(45), 626-637. https://doi.org/10.17719/jisr.20164520642

Merriam, S. B. (2013). *Qualitative research: A guide to design and implementation*. Selahattin Turan (Trans.), Nobel.

Miles, M. B. & Huberman, A. M. (1994). *An Expanded Sourcebook: Qualitative data analysis (Second edition)*. Thousand Oaks, Sage.

Mohmmed, A. O., Khidhir, B. A., Nazeer, A. & Vijayan, V. J. (2020). Emergency remote teaching during Coronavirus pandemic: The current trend and future directive at Middle East College Oman. *Innovative Infrastructure Solutions, 5*(3), 1-11. https://doi.org/10.1007/s41062-020-00326-7.

MoNe, (2020a). *Distance education started with the lesson given by Minister Selçuk.* https://yegitek.meb.gov.tr/www/ilkokul-ortaokul-ve-lise-ogrencileri-icin-eba-ve-trt-eba-tv-ile-uzaktan-egitim-suruyor/icerik/3037

MoNe, (2020b). *Distance education continues with EBA and TRT-EBA TV for primary, secondary and high school students.* https://www.meb.gov.tr/uzaktan-egitim-bakan-selcukun-verdigi-dersle-basladi/haber/20578/tr

MoNe, (2020c). *EBA live class is now available to more students.* https://yegitek.meb.gov.tr/www/eba-canli-sinif-artik-daha-fazla-ogrencinin kullaniminda/icerik/3039

Nuere, S. & Miguel, L. (2020). The digital/technological connection with Covid-19: An unprecedented challenge in university teaching. Technology, *Knowledge and Learning*, 1-13. https://doi.org/10.1007/s10758-020-09454-6

Odabas, H. (2003). Internet based distance education and departments of information and records management. *Turkish Librarianship*, 17-1, 22-36. http://eprints.rclis.org/8221/

OECD (2020). *A framework to guide an education response to the COVID-19 Pandemic of 2020. OECD Publishing.* https://www.hm.ee/sites/default/files/framework_guide_v1_002_harward.pdf

Ozan Leylum, Ş., Odabasi, H. F. & Kabakci Yurdakul, I. (2017). The importance of case study research in educational settings. *Journal of Qualitative Research in Education, 5*(3), 369-385. https://doi.org/10.14689/issn.2148- 2624.1.5c3s16m

Oner, G. (2017). An alternative source for social studies and history lessons: eba.gov.tr. *International Journal Of Turkish Education Sciences, 5*(9), 227. https://dergipark.org.tr/tr/pub/goputeb/issue/34356/380609

Ozer, M. (2020a). Educational policy actions by the ministry of national education in the times of COVID-19. *Kastamonu Education Journal, 28*(3), 1124-1129. https://doi.org/10.24106/kefdergi.722280

Ozer, M. (2020b). The contribution of the strengthened capacity of vocational education and training system in Turkey to the fight against Covid-19. *Journal of Higher Education, 10*(2), 134–140. https://doi.org/10.2399/yod.20.726951

Ozer, M., & Suna, H. E. (2020). Covid-19 pandemic and education. *Anatomy of global society: In the future of man and society*, 171-192. Turkish Academy of Sciences. https://www.researchgate.net/publication/342978325

Oztaş, S. & Kilic, B. (2017). The evaluation of university students' opinions of teaching the Atatürk's principles and history of revolution course with distance education (Kırklareli University sample). *Turkish History Education Journal, 6*(2), 268-293. https://doi.org/10.17497/tuhed.327979

Ozturk, N. (2020). Education in the world during the pandemic process. *Criterion Journal, 5*(50). https://kriterdergi.com/dosya-egitimde-koronavirus-etkisi/pandemi-surecinde-dunyada-egitim

Ozyurek, A., Begde, Z., Yavuz, N. & Ozkan, I. (2016). Evaluation of Distance Education Applications from Students' Perspective. *Karabük University Journal of Social Sciences Institute, 6*(2), 592-605. https://dergipark.org.tr/tr/pub/joiss/issue/30780/323661

Petretto, D. R., Masala, I. & Masala, C. (2020). Special educational needs, distance learning, inclusion and Covid-19. *Education Sciences, 10*, 154. https://doi.org/10.3390/educsci10060154

Pinar, M. A. & Donel Akgul, G. (2020). The opinions of secondary school students about giving science courses with distance education during the Covid-19 pandemic. *Journal of Current Researches on Social Sciences,10*(2), 461-486. https://doi.org/10.26579/jocress.377

Saklan, H. & Ünal, C. (2018). Opinions of technology-friendly science teachers about Education Information Network (EBA). *Necatibey Faculty of Education Journal of Electronic Science and Mathematics Education, 12*(1), 493-526. https://doi.org/10.17522/balikesirnef.437847

Sari, E. & Sari, B. (2020). Education Management in Times of Crisis: The Case of COVID-19. *International Journal of Leadership Studies: Theory and Practice, 3*(2), 49-63. https://dergipark.org.tr/tr/pub/ijls/issue/56102/742188

Sezer, C. & Korucu, A. G. (2019). The effect of using learning management system in information technologies and software course on student academic success. *Gazi Journal of Educational Sciences,5*(Özel Sayı), 157-176. https://doi.org/10.30855/gjes.2019.os.01.009

Sezgin, Y. (2014). *Examining the opinions of school administrators and teachers about Fatih Project in terms of various variables* (Master Dissertation). Okan Unversity, Social Sciences Institute, İstanbul.

Sun, L., Tang, Y. & Zuo, W. (2020). Coronavirus pushes education online. *Nature Materials, 19*(6), 687-687. https://doi.org/10.1038/s41563-020-0678-8

Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal 11*(2), 63-75. https://doi.org/10.3316/QRJ1102063

Sumer, M. (2016). Examination of students' opinions about virtual lessons. *Uşak University Journal of Social Sciences, 9*(3), 181-200. https://dergipark.org.tr/tr/pub/usaksosbil/issue/24734/261547

Sahin, M. & Erman, E. (2019). Evaluation of the views of history lesson teachers about the Educational Information Network (eba). *Journal of Mehmet Akif Ersoy University Faculty of Education,49*, 256-275. https://doi.org/10.21764/ maeuefd.425608

Tanrikulu, F. (2017). Teachers' opinions on the competence of EBA to meet the learning areas of Turkish lessons. *Journal of Mother Tongue Education, 5*(3), 395-416. https://doi.org/10.16916/aded.331244

Telli Yamamoto, G. & Altun, D. (2020). The coronavirus and the unstoppable rise of online education. *Journal of University Studies, 3*(1), 25-34. https://doi.org/10.26701/uad.711110

Timur, B., Yilmaz, Ş. & İsseven, A. (2017). Opinions of secondary school students on the use of the Education Information Network (EBA) system, Asian Journal of Teaching, *5*(1), 44-54. https://dergipark.org.tr/en/pub/aji/issue/31255/340400

Tzifopoulos, M. (2020). In the shadow of Coronavirus: Distance education and digital literacy skillsin Greece. *International Journal of Social Science and Technology, 5*(2), 1–14. http://www.ijsstr.com/data/frontImages/1.April_2020.pdf.

Tuncer, M. & Bahadir, F. (2017). Evaluation of the distance education programs according to student views that learned in these programs. *Journal of Educational Reflections, 1*(2), 29-38. http://hdl.handle.net/11508/12147

Tutar, M. (2015). *The evaluation of teachers' perceptions towards education information network (EIN)*. (Master Dissertation). Karadeniz Technical University, Social Sciences Institute, Trabzon.

Turker, A. & Guven, C. (2016). The level of high school teachers' benefit from the Educational Information Network (EBA) project and their opinions about the project. *Journal of Education and Training Research,* 5(1), 244-254. http://www.jret.org/FileUpload/ks281142/File/27a.abdullah_turker_.pdf

Turnuklu, A. (2000). A qualitative research technique that can be used effectively in educational science research: Interview. *Journal of Education Theory and Practical Research, 6*(4), 543-559. https://dergipark.org.tr/tr/pub/kuey/issue/10372/126941.

Tuysuz, C. & Cumen, V. (2016). Opinions of secondary school students about eba course website. *Uşak University Journal of Social Sciences, 9*(3), 278-296. https://dergipark.org.tr/tr/download/article-file/228043

UNESCO, (2020a). *COVİD-19 impact on education*. https://en.unesco.org/covid19/educationresponse.

UNESCO, (2020b). *290 million students out of school due to COVID-19: UNESCO releases first global numbers and mobilises response.* https://en.unesco.org/news/290-million-students-out-school-due-covid-19-unesco-releases-first-global-numbers-and-mobilizes

UNESCO, (2020c). *National education responses to COVID-19 summary report of UNESCO's online survey.* Summer Report, UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000373322

Vahit, H. R. (2019). *The effect of mathematics teaching with EBA activities on success and attitude* (Master Dissertation). Kastamonu University, Science Institute, Kastamonu.

Yadigar, G. (2010). *The evaluation of the efficiency of distance education programs* (Master Dissertation). Gazi University, Education Sciences Institute, Ankara.

Yalin, H. İ. (2001). *Instructional Technologies and Material Development*. Nobel.

Yildirim, A. & Simsek, H. (2018). *Qualitative research methods in the social sciences*, (11. Edition), Seçkin.

YÖK. (2020). *Press Release (26.03.2020) President of the Council of Higher Education Prof. Dr. M. A. Yektasarac*.https://www.yok.gov.tr/Sayfalar/Haberler/2020/YKS%20Ertelenmesi%20Bas%C4%B1n%20A%C3%A7%C4%B1klamas%C4%B1.aspx

Zhou, L., Li, F., Wu, S., & Zhou, M. (2020). "School's out, but class's on", the largest online education in the world today: Taking China's practical exploration during the Covid-19 epidemic prevention and control as an example. Best Evidence of Chinese Education, 4(2), 501–519. https://doi.org/10.1017/ CBO9781107415324.004

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