

Investigation of Secondary Education Students' Views and Purposes of Use of EBA*

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ABSTRACT

With this research, it was aimed to determine the educational Informatics Network (EBA) [Eğitim Bilişim Ağı] usage purposes of 12th grade students in secondary education institutions and their views on EBA. 452 students attending the 12th grade at six secondary schools randomly selected in the city center of Kars in the 2015–2016 academic year participated in this research. The questionnaire "Students' Purposes of Using Educational Information Network (EBA) and Their Views on EBA" was used to collect the research data using the scanning model. According to the research, it is seen that the general views of the students about EBA are not very positive. However, it was determined that the scores for using EBA were lower than the scores for opinions about EBA. It has been determined that the students' purposes for using EBA are mostly to learn the lessons and subjects that they have the most difficulty with.

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INTRODUCTION

Along with the rapid development of technology over the years, there have been parallel developments in education. As a result of this, countries have sought to benefit from technology in order to increase efficiency in the education system and ensure easy accessibility, equality of opportunity, and permanence in education. While passing from an industrial society to an information society, global changes in technology have deeply affected the education system, as they have in many other fields (Akpınar and Aydın, 2007). An information society is a society in which people have the opportunity to access and use all kinds of information through new communication technologies (Selvi, 2012). As a result of the emergence of information societies, the ever-increasing desire for learning, creativity, and innovation is widely accepted (OECD, 2007; UNESCO, 2005a,b; Wagner, 2008).

In the 21st century education system, which is called the Information Society, with the ability to access and use information easily, human beings have searched for methods of accessing information. In the face of rapidly increasing information, instead of knowing everything, the profile of a person who knows where and how to obtain information acts selectively, that is, learns to learn (Esirgen, 1997, cited in Numanoğlu, 1999). The integration of technology into educational environments is seen as one of the most important innovations in education (Çakıroğlu et al., 2012). With the transition to the information society, innovations in education have been constant in our country for years, along with technology. The concepts of Education and Technology have become important tools that individuals resort to in their efforts to adapt to their

natural and social environments (Alkan, 1998). If we explain these concepts, Alkan (1998) defines technology as a product that covers many elements such as methods, machines, processes, management, systems, and control mechanisms and is a product that comes out of the combination of these elements, as well as a discipline that acts as a bridge between science and practice. Considering the use of technology in the field of education, Kaya (2005) defines technology as a tool that helps educators reach the target audience in a short time and acquire the necessary skills in a more qualified manner, especially with systematically developed educational materials. According to this definition, it can be said that technology acts as a bridge between research, conceptual explanations, and practitioners (Yalın, 2004). In addition, technology is the systematic application of scientific or systematic knowledge to practical fields (Heinich, Molenda, & Russell, 1993). If we define the concept of education as well as the concept of technology, Education has been defined as helping individuals acquire the necessary knowledge, skills, and understandings and develop their personalities in order to train, develop, and include them in daily life (TDK, 1988).

With these innovations in education, as a result of people's need to learn information, the relationship between technology and education has continuously improved, and the concept of "Educational Technology" has emerged. If we explain Educational Technology, it is a science that has gained a new quality with the use of research results in the field of learning and communication in the field of behavioral sciences in the field of education, together with the system approach (Alkan, 1984). The conceptual development of Educational Technology consists of four steps (Alkan, 1984). These are the tools, the environment, the technology, and the system. These concepts are explained as follows:

Media: Audio-visuals such as video, television, radio, and film machines.

Environment: Although it is thought of as a vehicle and an environment, the concept of technology has replaced the physical environment.

Technology: It is the combination of tools, environment, and technology.

System: Conceptually, it forms the basis of the components of technology.

With the spread of educational technology in the world and in our country, it can be said that individuals' access to information has become easier, and traditional educational materials have begun to be replaced by technology-integrated educational materials in teaching and learning environments. With the spread of educational technologies in our country, it can be said that various educational content has been designed, implemented, and shared in many online environments. Therefore, the Education Information Network (EBA) has been developed and put into use by the MEB in order to meet the e-content needs of students and teachers. EBA, which is an educational platform that provides the opportunity to socialize in an online environment developed with the aim of integrating technology into education, aims to use materials effectively with the help of information technology tools at school, at home, or wherever needed. According to EBA (2015), the opportunities offered by EBA to teachers and students are shown in Figure 1.

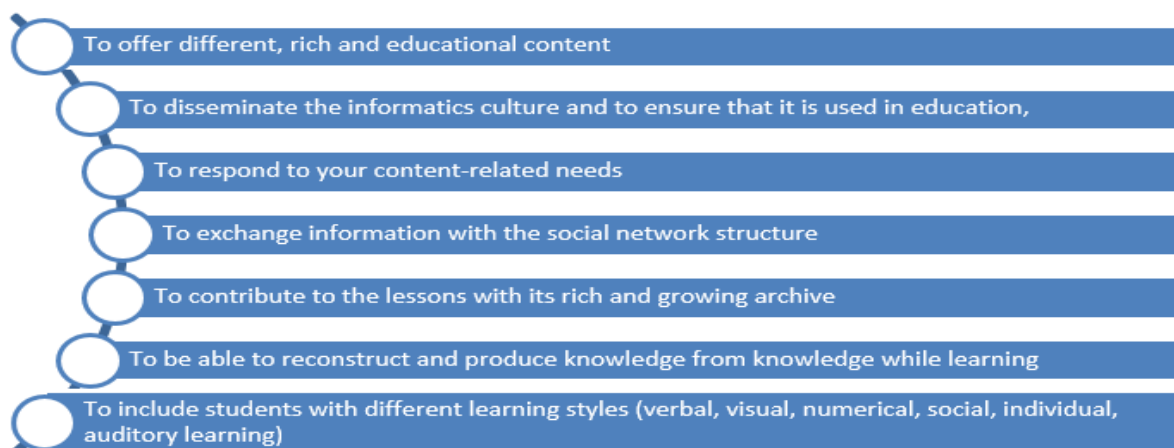


Figure 1. Opportunities Offered by EBA to Teachers and Students

When the literature is examined, Tutar (2015) used an online questionnaire consisting of 47 items and different question types in a study conducted by Tutar (2015) to determine the perspectives and use cases of teachers working in schools affiliated with the MEB. According to the data obtained as a result of the answers given by 203 teachers on the internet, It has been determined that teachers do not have enough information about EBA and they do not use EBA often, but they have the idea that EBA is a productive, effective, and useful site. By Ateş, Çerçi, and Derman (2015), 125 Turkish lesson videos at all grade levels in secondary school in EBA were examined in terms of seven pre-prepared questions. As a result of the examination;

1. More than half of the Turkish lesson videos are for 8th graders, and the distribution of the lesson videos according to the classes is not equal.
2. Considering the aims and course processes in the videos, the duration of the Turkish course videos is insufficient.
3. Considering the number of students studying at all grade levels in secondary schools in our country, the rate of watching the videos is extremely low.
4. A significant portion (43.20%) of the Turkish lesson videos are not suitable for the grade level in which they are included in the EBA.
5. Considering the achievements of the Turkish course, it is stated that listening/watching, reading, writing, and speaking skills are essential, and grammar skills should be considered together with these learning areas. However, when the Turkish lesson videos are examined, it is seen that each of the subjects in the videos is only handled within the framework of grammar acquisition.
6. The videos do not include the stages of "preparation, understanding, learning through text, self-expression, and measurement-evaluation", which are among the teaching processes.
7. It has been determined that the videos do not have the feature of being "effective material" in terms of teaching Turkish.

The frequency of EBA usage among 406 teachers working in schools affiliated with the MEB was examined by Güvendi (2014). Despite the fact that teachers frequently read news on the EBA website, file sharing remained at a minimum. The majority of teachers who use social media do not follow EBA. Kayahan and Özduvan (2016) examined the opinions of 5th grade students about EBA market mobile applications used in English lessons. While it was determined that the students had positive and negative opinions about EBA, when the students' opinions about tablet devices were examined, it was determined that they had positive opinions in general. Alabay (2015) examined the opinions of 208 teachers working at the secondary school level and 2011 students studying in these schools on the use of EBA.

1. The findings obtained from the teachers as a result of the research are:
2. There was no difference in the opinions of the students about EBA in terms of gender, class, or tablet computer proficiency.
3. According to the frequency of using EBA, students' views on the use of EBA in history and physics courses differ.
4. It has been determined that the students are under their own control of their learning with EBA, and they have the opportunity to practice what they have learned in EBA.

EBA, which is a project open to continuous development, is of great importance for our students as it is used in all schools across the country. In this direction, in parallel with the continuous development of the EBA, it is necessary to consider the views and needs of the students. For this reason, there are insufficient scientific studies on the use of secondary school students for EBA, which was developed by the MEB in order to increase the quality of education. Thanks to this research, the usage purposes of the 12th grade students in secondary education institutions regarding EBA, which is a reflection of the developing technology in education, and their perspectives on EBA will be examined. The research will seek answers to the following questions:

1. For what purpose do students use EBA?
2. What views do students have about EBA?
3. How do students' views on EBA change in terms of gender?
4. What are the opinions of students who have an internet connection at home and those who do not about EBA and its usage purposes?
5. How does the income status of the family affect the students' opinions about EBA and its purposes?

RESEARCH METHOD

Research Model

A scanning model was used in the research. The screening model, which allows comparison between groups, describes the past or present situation as it is. The person, event, or object considered the subject of the research is tried to be defined in the context of its own conditions without giving any opportunity for change. (Karasar, 2005).

Participants

The sample for the research consists of 12th grade students from six high schools operating in the city center of Kars. Since it is thought that it will facilitate the data collection process due to the region where one of the researchers lives, the appropriate sampling method was preferred. Printed questionnaires were distributed to 465 students who were reached during data collection. Since 13 of the distributed questionnaires were incomplete, they were not included in the study. The data collected within the scope of the research were obtained from the answers given to the questionnaire by a total of 452 students, 261 (57.7%) female and 191 (42.3%) male. Demographic information about the students participating in the research is given in Table 1.

Table 1. Demographic Information for Students

Variable	Group	f	%
Gender	Female	261	57,7
	Male	191	42,3
Family monthly income	0 and 500 TL	68	15,0
	501 and 1000 TL	95	21,0
	1001 and 1500 TL	99	21,9
	1501 and 2000 TL	83	18,4
	2001 TL and üstü	107	23,7
Internet at home	Yes	179	39,6
	No	273	60,4

Data Collection Tool

The research data were obtained by using the "Students' Purposes of Using EBA and Their Views on EBA Questionnaire," developed by Kalemkuş (2016). The questionnaire was developed in a five-point Likert type from 1 to 5. The questionnaire consists of two dimensions: "opinion dimension" and "purpose of use". The opinion dimension of the questionnaire, which consists of 20 items in total, is measured with 13 items, and the purpose of use dimension is measured with 7 items. While the general reliability of the questionnaire was calculated at 0.936, the reliability of the opinion dimension was 0.914, and the reliability of the intended use dimension was 0.840. Ethics committee approval and other permissions required for data collection were obtained.

Data Analysis

The collected data were analyzed using SPSS 18.0. Considering the purpose of the research and the determined limits, it was checked whether the data were erroneous. In addition, with the normalized test, it was determined that the data had a normal distribution. While interpreting the analysis of the data, it was considered significant at the .05 ($p < .05$) level. The following analyses were made on the research data.

1. Frequency (f) and percentage (%) values were examined for the demographic information of the students.
2. Standard deviation (sd) and mean (x) values were calculated according to students' perceptions and evaluations of EBA.
3. Unrelated (independent) groups A t-test was conducted to examine the changes in students' opinions, usage, and general attitude scores towards EBA according to gender and whether there is internet at home or not.
4. ANOVA (one-way variance) test was applied to examine the differences among the students according to the family income variable. The source of the differences was determined by the Hoc LSD test.
5. Before the analysis, the family income variable of the students was regrouped.

FINDINGS

In this part of the research, statistical analyses made in line with the aims discussed in order to determine the usage purposes and opinions of the students for the online education and sharing site EBA (Educational Information Network) designed for secondary education institutions are included. Findings and their results are presented below in tabular form, in accordance with the purposes and problems of the research, together with their explanations.

Students' Opinions on EBA and General Findings on the Purposes of Use

In this subsection, according to the perceptions of the secondary school students participating in the research, the views and purposes of using EBA were first examined in general (without looking at their personal characteristics), and then it was investigated whether the views and purposes of using EBA differed according to gender, the monthly income of the family, and having internet at home. The students' views (participation) regarding EBA were analyzed under one dimension with 13 items and their usage purposes under another dimension with 7 items (Figure 2, Figure 3, Table 2, Table 3, and Table 4).

Table 2. *Students' Views on EBA (N = 452)*

Matter		strongly disagree	I do not agree	Sometimes	I agree	Absolutely I agree	$\bar{X}$	Sd
1. EBA is a source of access to information for me.	F	45	67	154	110	76	3.23	1.19
	%	10.0	14.8	34.1	24.3	16.8		
2. EBA increases my motivation for the lessons.	F	42	97	143	107	63	3.12	1.17
	%	9.3	21.5	31.6	23.7	13.9		
3. Thanks to the EBA. It is easier for me to focus on the lesson.	F	39	118	143	94	58	3.03	1.15
	%	8.6	26.1	31.6	20.8	12.8		
4. Learning objects and materials in EBA support my learning.	F	50	102	150	95	55	3.01	1.17

		%	11.1	22.6	33.2	21.0	12.2	
6. I provide my needs related to the subjects of the courses (visual, auditory, and written sources) in EBA.	F	48	105	147	109	43	2.99	1.13
	%	10.6	23.2	32.5	24.1	9.5		
15. EBA increases my motivation as a student.	F	53	95	136	111	57	3.05	1.20
	%	11.7	21.0	30.1	24.6	12.6		
16. I find the EBA user interface simple and usable.	F	36	127	127	107	55	3.04	1.15
	%	8.0	28.1	28.1	23.7	12.2		
17. I find the content shared on the EBA appropriate for my level.	F	39	91	140	123	59	3.16	1.15
	%	8.6	20.1	31.0	27.2	13.1		
18. I think that EBA is suitable for the curriculum of our courses.	F	40	91	112	126	83	3.27	1.23
	%	8.8	20.1	24.8	27.9	18.4		
19. I think that EBA will positively affect my exam success, like YGS and LYS.	F	52	90	106	112	92	3.23	1.29
	%	11.5	19.9	23.5	24.8	20.4		
20. I find the technical infrastructure of the Fatih project in our school sufficient to use EBA.	F	69	104	126	86	67	2.95	1.28
	%	15.3	23.0	27.9	19.0	14.8		
21. I can access all of the resources related to the course content from the EEBA.	F	46	104	133	108	61	3.08	1.19
	%	10.2	23.0	29.4	23.9	13.5		
23. I think our teachers should benefit more from the Education Information Network (EBA).	F	53	101	142	97	59	3.23	1.30
	%	11.7	22.3	31.4	21.5	13.1		

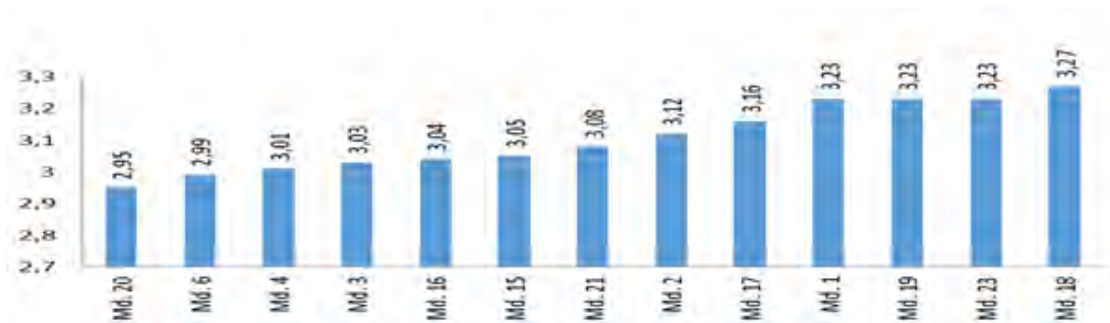


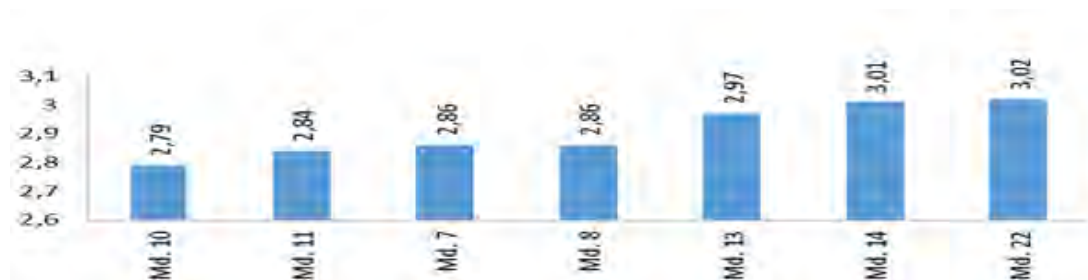
Figure 2. Average (ordered) Scores Given by the Students Regarding the Opinion Dimension Items of the EBA

Students evaluated their views on EBA with an option consisting of 13 items, ranging from 'I strongly disagree' to 'Absolutely I agree'. The arithmetic means calculated for the items were accepted as the level of evaluation of that feature or situation by the students regarding EBA. High average scores show that students agree with that feature, situation, or statement a lot, and low scores show that they agree less. Evaluation criteria for the scores are given in the Methods Section.

It is seen that secondary school students evaluate all of the Opinion Dimension items of the EBA at the level of 'I am undecided' and 'I agree' (Matter 20=2.95±1.28 and Matter 18=3.27±1.23) (Table 2 and Figure 2). As can be seen in Figure 2, the three highest average scores for the expressions in the opinion dimension of EBA were '18, respectively. I think that EBA is suitable for the curriculum of our courses.' (Matter 18=3.27±1.23, '23. I think that our teachers should benefit more from EBA.' (Matter 23=3.23±1.30), '19. I think that EBA will positively affect my exam success like YGS-LYS.' (Item 19=3.23±1.29) and '1. EBA is a source of access to information for me.' (Matter 19=3.23±1.19). The students participating in the research have the lowest three average scores of '20, respectively. I find the technical infrastructure (internet, etc.) of the Fatih project in our school sufficient to use the EBA.' (Matter 20=2.95±1.28), '6. I get my needs related to the subjects of the courses from the visual, audio, and written sources in the EBA.' (Matter 6=2.99±1.13) and '4. Learning objects and materials in the EBA support my learning.' (Matter 4=3.01±1.17). In general, it cannot be said that students' views on EBA are very positive. Although the students did not rate the given statements negatively, they did not score them positively either.

Table 3. Students' Purposes of Using EBA (N = 452)

Matter		I strongly disagree	I do not agree	Sometimes	I agree	Absolutely I agree	$\bar{X}$	Sd
7. I use the video, animation, and other visual materials in the EBA while studying.	f	60	127	123	99	43	2.86	1.18
	%	13.3	28.1	27.2	21.9	9.5		
8. I use simulation applications in EBA while studying.	f	62	121	132	93	44	2.86	1.18
	%	13.7	26.8	29.2	20.6	9.7		
10. I follow the news and developments about current events in EBA.	f	68	139	111	87	47	2.79	1.22
	%	15.0	30.8	24.6	19.2	10.4		
11. I examine the experiments in the Education EBA for the experimental applications in my classes.	f	61	131	126	89	45	2.84	1.18
	%	13.5	29.0	27.9	19.7	10.0		
13. I share the information in the EBA with my friends.	f	54	101	151	97	49	2.97	1.16
	%	11.9	22.3	33.4	21.5	10.8		
14. The EBA helps me compensate for the difficulties I face in learning.	f	44	118	137	96	57	3.01	1.17
	%	9.7	26.1	30.3	21.2	12.6		
22. I use EBA in the courses I have the most difficulty with.	f	53	101	142	97	59	3.02	1.20
	%	11.7	22.3	31.4	21.5	13.1		

**Figure 3.** The Average Scores Given by the Students Regarding the Dimension Items of Using EBA

The students made their evaluations about using EBA with an option consisting of 7 items and varying between 'I strongly disagree' and 'Absolutely I agree'. The arithmetic averages calculated for the expressions in the dimension were accepted as the students' purpose for using that feature or situation expressed in the item. High average scores indicate that students use EBA a lot for or because of that feature or situation, while low scores show that they use it less.

It is seen that the students who participated in the research made all their evaluations of the EBA's Using Dimension items at the level of 'I am Undecided' (Matter 10=2.79±1.22 and Matter 22=3.02±1.20) (Table 3 and Figure 3). As can be seen in Figure 3, the students, starting from the highest average score for the expressions in the using dimension of EBA, respectively, say, 22. I use EBA in the lessons that I have the most difficulty.' (Matter 22=3.02±1.20, '14. EBA helps me to compensate for the difficulties I encounter in learning.' (Matter 14=3.01±1.17), '13. I share the information on the EBA with my friends.' (Matter 13=2.97±1.16), '8. I use the simulation applications in the EBA while studying.' (Matter 8=2.86±1.18), '7. I use the video, animation, and other visual materials in the EBA while studying.' (Matter 7=2.86±1.18) and '11. I will examine the experiments in the EBA for the experimental applications in my lessons.' (Matter 11=2.84±1.18). The students evaluated all 7 statements in the dimension of using at the level of 'I am undecided'. Students' attitudes towards the use of EBA are neither positive nor negative.

Table 4. Descriptive statistics of students' opinions on EBA and their purposes of use

Dimension	N	$\bar{X}$	Ss
Opinion	452	3.09	0.84
Use	452	2.94	0.86
EBA (General)	452	3.01	0.80

As seen in Table 4, the average scores of the students showing their perspectives and purposes for using EBA are moderate. Parallel to the examination of the dimensions on an item basis, the dimensions remained at the level of Undecided (Opinion Dimension= 3.09 ± 0.84 and Usage Dimension= 2.94 ± 0.86). Although the average scores of the students' opinions are slightly higher than the usage scores, both scores are at the level of 'undecided'. Similarly, students' general attitudes towards EBA are neither positive nor negative (EBA General= 3.01 ± 0.80).

Findings on Examining Students' Opinions on EBA and Their Purposes of Use in Terms of Various Variables

The students' views and purposes regarding the use of EBA were examined according to gender, monthly income of the family, and whether there was internet at home, and the results were presented in this section, respectively.

Table 5. T-Test for Examining Students' Views of EBA in Terms of Gender and Purposes of Use (N = 452)

Dimension	Gender	Descriptive Statistics			T-Test		
		n	$\bar{X}$	ss	t	sd	p
Opinion	Female	261	3.10	0.83	0.31	450	0.754
	Male	191	3.07	0.85			
Use	Female	261	2.80	0.82	2.15	450	0.022*
	Male	191	3.09	0.91			
EBA General	Female	261	3.00	0.78	0.45	450	0.653
	Male	191	3.03	0.84			

* The difference is significant at the $p < .05$ level.

While there was no difference in the views and general attitudes of the students towards EBA in terms of gender ($p > .05$), it was determined that there was a difference in the purposes of use ($p < .05$) (Table 5). According to this,

There is no difference between the views of male and female students on EBA [$t(450) = 0.31$ and $p > .05$]. When the average scores of the groups are examined, it is seen that the opinions of female and male students about EBA are similar (Female=3.10 and Male=3.07).

It was determined that there was a difference between the attitudes of female and male students towards the use of EBA and this difference was caused by male students [$t(450) = 2.15$ and $p < .05$]. Considering the average scores of the groups, it is understood that male students tend to use EBA more than female students (Female=2.80 and Male=3.09).

Finally, it was determined that there was no difference in the general attitudes of male and female students towards EBA [$t(450) = 0.45$ and $p > .05$]. In addition, it is seen that the general attitudes of male and female students towards EBA are similar (Female=3.00 and Male=3.03).

Table 6. ANOVA test to determine students' EBA usage purposes and opinions in terms of family income level (N = 452)

Dimension	Family Income	Descriptive Statistics			ANOVA		Significant Difference Test (LSD)
		n	$\bar{X}$	ss	F	p	
Opinion	0-1000 TL (1)	163	3.18	0.93	5.03	0.029*	3 ile 1. 2
	1001-2000 TL (2)	182	3.20	0.75			
	2001 TL and above (3)	107	2.92	0.81			
Use	0-1000 TL (1)	163	3.04	0.92	4.53	0.034*	3 ile 1. 2
	1001-2000 TL (2)	182	2.98	0.77			
	2001 TL and above (3)	107	2.73	0.89			
EBA General	0-1000 TL (1)	163	3.07	0.89	5.01	0.030*	3 ile 1. 2
	1001-2000 TL (2)	182	3.09	0.70			
	2001 TL and above (3)	107	2.80	0.80			

* The difference is significant at the $p < .05$ level.

Table 7. LSD Test for Students' Family Income Variable (N = 452)

The dependent variable	(I) Family Income	(J) Family Income	Average Difference (I-J)	P
Opinion	0-1000 TL (1)	1001-2000 TL (2)	-0.020	0.800
		2001 TL and above (3)	0.263	0.040*
	1001-2000 TL (2)	0-1000 TL (1)	0.020	0.800
		2001 TL and above (3)	0.283	0.020*
	2001 TL and above (3)	0-1000 TL (1)	-0.263	0.040*
		1001-2000 TL (2)	-0.283	0.020*
Use	0- 1000 TL (1)	1001-2000 TL (2)	0.060	0.626
		2001 TL and above (3)	0.310	0.030*
	1001- 2000 TL (2)	0-1000 TL (1)	-0.060	0.626
		2001 TL and above (3)	0.250	0.044*
	2001 TL and above (3)	0-1000 TL (1)	-0.310	0.030*
		1001-2000 TL (2)	-0.250	0.044*
EBA (General)	0- 1000 TL (1)	1001-2000 TL (2)	-0.020	0.897
		2001 TL and above (3)	0.270	0.026*
	1001- 2000 TL (2)	0-1000 TL (1)	0.020	0.897
		2001 TL and above (3)	0.290	0.021*
	2001 TL and above (3)	0-1000 TL (1)	-0.270	0.026*
		1001-2000 TL (2)	-0.290	0.021*

* The difference is significant at the $p < .05$ level.

The ANOVA test (one-way analysis of variance) showed that students' family income caused a significant difference in their views on EBA, their purposes of using EBA, and their general attitudes towards EBA ($p < .05$) (Table 6). According to this;

It was determined that there was a difference [$F=5.03$ and $p < 0.05$] in terms of family income in the views of the students participating in the study about EBA. After the ANOVA test, the post-hoc LSD test (Table 7) was performed to determine which income groups caused the difference. Students with a family income of 2001 TL and above (Group 3) have less positive opinions about EBA compared to other students (Groups 1-2) (0-1000 TL = 3.18; 1001-2000 TL = 3.20; and 2001 TL and over = 2.92).

It was determined that the students' purposes for using EBA differed in terms of family income [$F=4.53$ and $p<0.05$]. A post-hoc LSD test (Table 7) was performed to determine the source of the difference. Students whose family income is 2001 TL and above (Group 3) have lower EBA usage purposes than other students (0-1000 TL = 3.04; 1001-2000 TL = 2.98; and 2001 TL and above) were found to have.

Finally, it was observed that there was a difference in the general attitudes of the students towards EBA in terms of family income. [$F=5.01$ and $p<0.05$]. According to the post-hoc LSD test (Table 7), It has been determined that students with a family income of 2001 TL and above (Group 3) have less positive attitudes towards EBA than other students (Groups 1-2).

Table 8. *T-Test to Determine the Differences of Students' Views and Usage Levels on EBA According to the Variable of Having Internet Connection at Home or Not (N = 452)*

Dimension	Internet home	at	Descriptive Statistics		T-test			
			N	$\overline{X}$	ss	t	sd	p
Opinion	Yes		179	3.19	0.79	2.06	450	0.037*
	No		272	2.96	0.86			
Use	Yes		179	3.09	0.85	2.05	450	0.039*
	No		272	2.87	0.86			
EBA (General)	Yes		179	3.17	0.77	2.11	450	0.021*
	No		272	2.88	0.82			

* The difference is significant at the $p<0.05$ level.

The existence of an internet connection at home caused a difference in students' views on EBA, their purposes of using EBA, and their general attitudes towards BA ($p<0.05$) (Table 8). According to this,

It was found that there was a significant difference between the views of students with and without internet at home regarding EBA, and this difference was in favor of students who had an internet connection at home [$t(450)=2.06$ and $p<0.05$]. Considering the average scores of the groups, it is seen that students who have internet access at home have more positive opinions about EBA (Yes=3.19 and No=2.96).

It has been determined that there is a difference between the attitudes of students with and without internet access at home towards the use of EBA. It was determined that students with an internet connection at home were more positive in terms of EBA use [$t(450)=2.05$ and $p<0.05$]. Considering the average score in the context of the group, it is seen that the students who have an internet connection at home have higher EBA usage purposes (Yes=3.09 and No=2.87).

It has been determined that there is a difference in the general attitudes of students with and without internet at home towards EBA. It has been observed that the attitudes of the students who have an internet connection at home towards EBA are more positive [$t(450)=2.11$ and $p<0.05$]. Considering the average scores in the context of the group, it is seen that the general attitudes of the students who have internet connection at home towards EBA are more positive than those of the students who do not have an internet connection at home (Yes=3.17 and No=2.88).

DISCUSSION AND CONCLUSION

Thanks to this research, the opinions of 12th grade students studying in secondary education institutions about EBA and their purposes for using EBA were determined. The research data were obtained by using the "Students Purpose of Using the EBA and Their Views on the EBA Questionnaire," developed by Kalemkuş (2016). As a result of the analysis of the data obtained through the questionnaires, the following results were obtained:

When the students' views on EBA are examined, they say, "I think the EBA is suitable for the curriculum of our courses," "I think our teachers should benefit more from the EBA," "Education Information Network (EBA); I think that YGS-LYS will positively affect my success in exams," and "EBA is a source of access to information for me." It was determined that they had a high level of participation in their statements. However, "I find the Fatih Project technical infrastructure (internet, etc.) in our school sufficient to use the EBA," and "Learning objects and materials in the EBA support my learning." It was determined that there was the lowest participation in the statements. Therefore, it cannot be said that students' views on EBA are very positive. As a result of the research conducted by Altın (2014), it was determined that the students thought that EBA was not sufficient at all, was not suitable for their age, and was an unnecessary site. Bahçeci and Efe (2018), on the other hand, also revealed that the students found EBA simple in terms of content and that it was not suitable for their age level. On the other hand, Tüysüz and Çümen (2016) and Atasoy and Yiğitcan Nayir (2019) students are evaluated negatively due to reasons such as encountering errors in logging into the site in EBA, videos and other attachments not opening slowly or not opening, and having problems focusing on the lecture. Durmuşçelebi and Temircan (2017) revealed that while some of the students found EBA useful, others found it unnecessary. Pamuk, Çakır, Ergun, Yılmaz, and Ayas (2013), on the other hand, revealed that EBA could not meet the needs of students. However, in the study conducted by Tüysüz and Cümen (2016), it was revealed that secondary school students found the EBA content useful in terms of reinforcing and repeating the subjects at their own level and that it was interesting. In addition, Aydınöz, Sözcü, and Akbaş (2016) and Timur, Yılmaz, and İşseven (2017) stated in their research that students found EBA useful. The majority of researchers support this research result. Balliel Ünal and Hastürk (2018) and Korkmaz and Kadirhan (2020) stated in their research that EBA positively affects the academic success of students. The different opinions of some researchers may be due to the different knowledge levels of different students and teachers in different regions about EBA. As a matter of fact, according to Demir, Özding, and Ünal (2018), teachers and students do not follow EBA's social networking accounts, although they are insufficient in terms of developing content for EBA or sharing existing content. Because, according to Çoşkunserçe and İciturk (2019), they stated that there was an increase in students' use of EBA with the introduction of EBA. In another study conducted by Tutar (2015), it was determined that teachers did not have sufficient knowledge about EBA. Therefore, it can be said that the low participation and negative opinions of the students are supported by the majority of the researchers. Considering the studies that show that EBA increases the academic achievement of students, it can be said that the negative opinions and low participation of students are due to the fact that EBA is not sufficiently introduced to them and that content production and sharing are not encouraged by their teachers.

When we look at the findings about the students' purposes of using EBA, the highest participation rate is "I use the EBA in the lessons I have the most difficulty with," "EBA helps me to compensate for the difficulties I encounter in learning," "I share the information on the EBA with my friends," "I use the simulation (simulation) applications in the EBA while studying," and "In the video on the Education Information Network (EBA), I use animation and other visual materials while studying." and "I examine the experiments in the EBA for experiment applications in my courses". It was determined that the students evaluated the expressions in the dimension of using EBA at the level of undecided. Therefore, students' attitudes towards using EBA are neither positive nor negative.

Although no significant difference was found between the views of female and male students regarding EBA, it was determined that there was a significant difference in favor of male students in their attitudes towards using EBA. According to Durmuşçelebi and Temircan (2017), male students expressed a negative opinion about EBA, while female students remained undecided. Çetin and Günay (2011) and Alabay (2015) stated that students' views on the use of EBA do not differ according to gender.

Considering the family income, it was determined that there was a significant difference in both the students' views on EBA and their purposes for using EBA. When this difference is examined, the views of the students with a family income of 2001 TL and above are less positive than those of the other students. At the same time, the purpose of these students to use of EBA is lower than that of other students. However, according to Durmuşçelebi and Temircan (2017), family income status does not affect their views on EBA.

When the situation of having an internet connection at home was examined, it was determined that there was a significant difference in the students' views on EBA and their purposes for using EBA. This difference was found to be in favor of students who have an internet connection at home, both for their views on EBA and their attitudes towards using EBA. According to Timur, Yılmaz, and İşseven (2017), students who have internet at home use the internet more to study or spend time on social networks. With the use of social networks and other web applications, educational technologies positively affect students' learning and other areas of life (Ring, 2001; Pan & Akay, 2016). Another reason is that applications with interactive games and activities increase students' participation and motivation and make them happy (Çetin & Günay, 2011; Uluçay & Çetin, 2014).

Suggestions

In line with these results, the following recommendations were made:

- EBA content should be enriched by taking into account all kinds of secondary education programs and in line with the curriculum of these secondary education institutions. In this way, students studying in all kinds of secondary education institutions will be able to benefit more from EBA. In order to achieve this, teachers should be informed about sharing on EBA.
- EBA content should be expanded to cover all course contents in schools and should be made attractive to students as an alternative course resource.
- EBA content should also be expanded to include activities and practices that will increase exam success, such as YGS-LYS. In this way, students will develop a positive attitude towards using EBA and increase their level of participation.
- The importance of technical infrastructure comes to the fore in the effective use of EBA. It is a fact that insufficient infrastructure negatively affects the use of EBA. Therefore, the technical infrastructure of the schools should be improved, and technical staff should be appointed to intervene in possible malfunctions.
- Considering that most of the out-of-school activities are carried out at home in order for students to reinforce their learning at school, it is necessary to facilitate the provision of internet access that students can use at home.
- Award-winning activities should be organized for students to share simulations, learning objects, and other materials in EBA and to add e-contents to EBA.

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