Using Educational Informatics Network (EBA) as an Educational Learning Platform in EFL Courses in Türkiye[1]

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Abstract

The FATIH Project, initiated by the Turkish Ministry of National Education in 2011, is a prominent global educational technology endeavor. Its initiatives include the widespread implementation of interactive whiteboards and the enhancement of school internet infrastructure. Among its components, the Educational Informatics Network (EIN/EBA) serves as a social learning platform, offering e-contents and course materials to bolster classroom instruction for teachers and students. This study employs an explanatory sequential research design to probe EFL teachers' perceptions of EBA, ascertain their usage levels, and explore their suggestions for improving the platform. Quantitative data from 547 EFL teachers in Hatay, Türkiye, gathered via convenience sampling, alongside semi-structured interviews with ten teachers using purposive sampling, constitute the two-stage data collection approach. Quantitative analysis, conducted using SPSS and AMOS software, reveals significant differences in EFL teachers' opinions and usage levels of EBA based on education level, registration status, and awareness of the FATIH Project. Additionally, qualitative findings highlight challenges such as infrastructure inadequacies and deficiencies in course materials and interactivity. These insights underscore the importance of incorporating teachers' suggestions to bolster EBA utilization and cultivate positive perceptions among educators.

Keywords: EBA, FATIH Project, EFL teachers in Türkiye, Educational Informatics Network, Educational Learning Platform

Türkiye'de Yabancı Dil Olarak İngilizce Derslerinde Eğitici Öğrenme Platformu olarak Eğitim Bilişim Ağı'nın (EBA) Kullanımı

Özet (Türkçe)

2011 yılında Türkiye Cumhuriyeti Millî Eğitim Bakanlığı tarafından başlatılan FATİH Projesi, önde gelen bir küresel eğitim teknolojisi girişimidir. Proje kapsamında, etkileşimli tahtaların yaygınlaştırılması ve okullardaki internet altyapısının geliştirilmesi hedeflenmiştir. Bu projenin ana bileşenlerinden biri olan Eğitim Bilişim Ağı (EBA), sınıf içi öğretimi desteklemek amacıyla e-içerikler ve ders materyalleri sunan bir sosyal öğrenme platformu olarak öğretmen ve öğrenciler tarafından kullanılmaktadır. Bu çalışmada, İngilizce öğretmenlerinin EBA'ya yönelik algılarını incelemek, kullanım düzeylerini belirlemek ve platformu geliştirmeye yönelik önerilerini araştırmak amacıyla açımlayıcı sıralı bir araştırma deseni kullanılmıştır. Araştırma, Hatay'da görev yapan 547 İngilizce öğretmeninden kolayda örnekleme yöntemiyle toplanan nicel veriler ve amaçlı örnekleme yöntemiyle seçilen 10 öğretmenle yapılan yarı yapılandırılmış görüşmelerle iki aşamalı bir veri toplama yaklaşımını içermektedir. SPSS ve AMOS yazılımları kullanılarak gerçekleştirilen nicel analizler, EFL öğretmenlerinin EBA'ya ilişkin görüşleri ve kullanım düzeylerinde eğitim seviyesi, kayıt durumu ve FATİH Projesi'ne ilişkin farkındalık düzeylerine göre anlamlı farklılıklar olduğunu ortaya koymaktadır. Ayrıca, nitel bulgular altyapı yetersizlikleri ile ders materyalleri ve etkileşimdeki eksiklikler gibi zorlukları vurgulamaktadır. Araştırma bulguları, EBA kullanımını artırmak ve öğretmenler arasında olumlu bir algı oluşturmak için öğretmenlerin önerilerinin mutlaka dikkate alınmasının önemini vurgulamaktadır.

Anahtar Kelimeler: EBA, FATİH Projesi, Türkiye'deki İngilizce öğretmenleri, Eğitim Bilişim Ağı, Eğitici Öğrenme Platformu

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Introduction

Due to recent technological advancements, technology integration has evolved into a crucial component of school instructional activities. As a result, many governments worldwide have begun to invest in technology and education (OECD, 2010). Besides, conventional teaching methods have become obsolete and inadequate for the current generations. Consequently, it has become imperative to adjust educational curricula and settings (Ellis, 2001). The primary objective of technological transformation is to educate individuals through technology-integrated teaching, fostering their freedom, creativity, scientific thinking, and self-reliance rather than relying on rote learning. Based on this fact, the cornerstone of the technological integration in Turkish education has been built by the "Project e-Transformation Turkey" and "Vision 2023 Certificate of Strategy" (Akıncı, Kurtoğlu, & Seferoğlu, 2012). As a part of these efforts, Türkiye designed the FATIH Project, a macro-level technology integration project in education (Kızılet & Özmen, 2017). The project was introduced in 2011 and is currently managed by the Ministry of National Education (MoNE) in cooperation with the Ministry of Transport, Maritime Affairs, and Communications.

The need for online education and the creation of course-specific digital materials has emerged as a result of the FATIH Project. Incorporating and using electronic educational materials encourages student engagement and makes new information more accessible. Students should have equal access to educational opportunities, and the FATIH project helps make that a reality. As part of the FATIH Project, the Turkish Ministry of National Education (MoNE) is working to ensure that all Turkish schools can access modern technology. The project aims to provide students and teachers with tablets, printers, e-mail addresses, cloud-based storage accounts, and high-speed internet connections for interactive whiteboards (FATIH Project, 2019). The project's overarching objective is to aid educators by providing instructional course e-contents and hardware upgrades in various formats and with diverse purposes. Therefore, the General Directorate of Innovation and Educational Technologies created EBA (*EIN - Educational Informatics Network*) as a social educational platform to use e-content with technologies integrated into learning-teaching environments (EBA, 2019).

EBA hosts many resources, including documents, exam papers, photographs, lecture videos, articles, visualizations, journals, contests, and course e-contents. On the platform, course e-contents are created and distributed by either the Ministry of National Education or volunteering teachers. Teachers who prefer to build their e-contents submit them for approval by EBA moderation. The 2016 Activity Report of the Ministry of National Education (MoNE) states that e-content materials for English courses at all levels are now being produced and developed. The objective is to finish this process and make the contents available on EBA in the coming years (MoNE, 2016).

The EBA platform plays a crucial role in the FATIH project by facilitating the creation, development, distribution, and management of learning content in schools that have already been equipped with the necessary physical resources. EBA commenced its activities in 2011 with the slogan "Gateway to the Future of Education" and consistently strives to create dependable, appropriate, and precise information that aligns with the curriculum requirements across all disciplines. The objectives related to the EBA platform in Türkiye's instruction Vision 2023 document are included among the goals of foreign language instruction. One of the objectives states that by utilizing new resources, students can immerse themselves in the English-speaking world (MoNE, 2018). The objective of the MoNE is to acquire cutting-edge digital resources from national and international publishers to enhance the variety and volume of the course content available on EBA. This suggests that EBA is expected to play a prominent role in the future of education nationwide.

In addition, the National Education Statistics report released in the 2018-2019 academic year reveals that there are 54.036 public schools in Türkiye. According to another figure by the

Ministry of National Education (MoNE), in 2018, 14.154 schools had internet network infrastructure in their classrooms. Out of them, only 6.904 were fully completed in 2016. Despite its initiation in 2011, this data indicates a significant scarcity of schools and classrooms with Internet connectivity. Furthermore, the Ministry of National Education (MoNE) strongly encourages and recommends using EBA in classrooms to enhance student autonomy and promote technology integration into educational courses. Nevertheless, the statistics indicate that around 26% of state schools nationwide are equipped with classroom internet connections under the FATIH Project (MoNE, 2018). This presents a prominent issue that must be tackled, as it adds more difficulties to the teaching process.

While the FATIH Project has been extensively studied for its technological infrastructure and general education applications (Demir, Özdinç & Ünal, 2018; Maden & Önal, 2018; Aktay & Keskin, 2016), there is limited research on its implications for English as a Foreign Language (EFL) education (Karanfil & Özet, 2021; Kılıç, 2020; Kuloğlu & Bay, 2019). However, recent studies often overlook how EBA supports or hinders the specific pedagogical practices required for effective language learning. In this respect, this research significantly addresses this critical gap by investigating EFL teachers' perceptions of EBA and provides in-depth perspectives into its utility and potential for improving language acquisition within Türkiye's current education system.

Besides, EBA serves as a critical instrument in Türkiye's effort to align with global educational trends emphasizing digital equity and technology integration. By providing students and teachers with access to digital resources, the platform aims to equalize opportunities and foster digital literacy (EBA, 2019). However, as previously discussed (Karabacak & Aktaş, 2024; Shaikh & Özdaş, 2022; Tuna, 2022; Cantürk & Cantürk, 2021, Kuloğlu, 2018; Kalemkuş, 2016), significant challenges might persist, including inadequate infrastructure in rural areas, limited internet access, and insufficient alignment of digital materials with curriculum goals in terms of teaching EFL in Türkiye. In line with these shortcomings, this study situates EBA within these broader challenges and focuses on its specific impact on EFL education, which is a field that uniquely relies on interactive and multimodal content to develop linguistic proficiency.

Moreover, teaching EFL necessitates specialized pedagogical strategies that often rely on multimodal and interactive content. Effective language instruction requires resources that engage students through audio-visual aids, real-world scenarios, and practice-based activities (Koehler & Mishra, 2009). Unlike subjects like mathematics or science, EFL teaching relies on fostering practical communication skills, which necessitate resources beyond standard course materials, such as videos, audio recordings, and gamified language exercises (Reber et al., 2020).

While EBA hosts a wide range of digital resources, its alignment with the unique needs of EFL teachers and learners remains underexplored. This study investigates how EBA addresses or falls short of these pedagogical demands and presents a comprehensive analysis of its potential to enhance language learning outcomes from the EFL teachers' point of views. Additionally, by uncovering EFL teachers' perceptions of EBA, this study aims to provide actionable insights for improving the platform's effectiveness in foreign language instruction. The findings are expected to inform policymakers on how to address critical challenges, such as infrastructure deficiencies and the alignment of digital resources with EFL curricula.

This study draws on the experiences of 547 EFL teachers from Hatay, a province with diverse educational contexts that reflect many of the challenges faced by educators in Türkiye, and it is limited to the academic year of 2019-2020. While this sample size is substantial and provides meaningful insights, regional factors such as disparities in infrastructure, teacher training, and socioeconomic conditions may influence the findings. As such, the results may not be fully generalizable to all EFL teachers across Türkiye.

Based on this background, this study examines how EFL teachers handle the scenario where EBA is encouraged for usage despite the possibility of lacking internet connectivity in specific classroom settings. To this end, this research aims to provide answers to the following research questions:

1. What are the EFL teachers' opinions about EBA?
2. What are the EFL teachers' usage levels of EBA?
3. What are the EFL teachers' suggestions for the improvement of EBA?

Method

Research Design

This three-faceted study aims to examine the opinions, usage levels, and suggestions of EFL teachers about using the EBA. The research analyzes the variables of gender, age, educational status, teaching experience, type of school, internet connection at home, interactive whiteboards in the classroom, internet connection in the interactive whiteboards, being a registered user on EBA, and having information about the FATIH Project. For this purpose, the research is designed with the explanatory sequential design of the mixed-method research design strategies. According to Creswell and Plano Clark (2011), the researcher collects qualitative and quantitative data using this research methodology. The primary goal of an explanatory sequential research design is to systematically investigate a phenomenon by initially gathering qualitative data to gain a complete understanding and subsequently analyzing quantitative data to elucidate and clarify the links identified in the qualitative data.

Within this framework, the study uses a questionnaire to collect quantitative data and a semi-structured interview to collect qualitative research data. The quantitative aspect of the study involves investigating EFL teachers' opinions, usage levels, and suggestions through questionnaire items tailored to their demographic characteristics. After collecting and analyzing quantitative data, the study proceeds to conduct the qualitative portion with EFL teachers who frequently utilize EBA in their courses. This method aims to comprehensively identify and examine the problems they encounter and gather their suggestions for enhancing the use of the platform.

Moreover, while this study does not specifically adopt the Technology Acceptance Model (TAM) as a framework, its constructs could provide a useful lens for interpreting the relationships among the variables studied. TAM posits that users' acceptance of technology is influenced by three antecedents: perceived usefulness, perceived ease of use, and behavioral intention (Chen & Zhao, 2022). Perceived usefulness pertains to individuals' conviction that utilizing technology can enhance their performance, whereas perceived ease of use refers to their idea that employing the technology requires minimal effort. The foundation of the Technology Acceptance Model (TAM) posits that users' perceived ease of use and perceived utility directly affect their behavioral intention, which then dictates actual usage behavior; additionally, perceived ease of use might influence perceived usefulness (Davis, 1989). In particular, the findings on technical barriers and resource limitations align with perceived ease of use, while teachers' feedback on EBA's pedagogical contributions may correspond to perceived usefulness. These constructs help contextualize the observed patterns in teachers' opinions, usage levels, and suggestions, and in this respect, while TAM is not the primary framework for data collection, it could provide a conceptual lens for understanding the interconnections among EFL teachers' opinions, usage levels, and practical suggestions for improvement.

Participants

This explanatory sequential mixed-methods study involves the participation of 547 English teachers working in the Hatay Province of Türkiye through a convenience sampling approach for the quantitative study stage in the 2019-2020 academic year. The researchers used the "Questionnaire on Teachers' Opinions about EBA Usage," developed by Alabay (2015), and adapted and redesigned for this study as a quantitative data collection instrument. This questionnaire consists of 10 close-ended items for demographic information and 34 items with a 5-point Likert scale for collecting data about the EFL teachers' general opinions about EBA, their opinions about EBA usage levels, and suggestions for the improvement of EBA. In the following qualitative stage of the study, semi-structured interviews were conducted to gather comprehensive data from 10 EFL teachers. The interview participants were chosen using purposive sampling, specifically targeting EFL teachers to acquire data that aligns with the study's objectives. The interview consists of 5 questions related to the participants' demographics and seven open-ended topics that specifically address their suggestions for EBA. These recommendations are categorized under difficulties, content development, motivation, and future implications.

Table 1 shows the general layout of the research questions, sampling, participants, and data collection tools:

Table 1. General Layout of Research Design

Research Questions	Sampling Technique	Participants	Data Collection Tools
1. What are the EFL teachers' opinions about EBA?	Convenience Sampling	547 EFL Teachers	Questionnaire on Teachers' Opinions about EBA Usage
2. What are the EFL teachers' usage levels of EBA?	Convenience Sampling	547 EFL Teachers	Questionnaire on Teachers' Opinions about EBA Usage
3. What are the EFL teachers' suggestions for the improvement of EBA?	Convenience Sampling	547 EFL Teachers	Questionnaire on Teachers' Opinions about EBA Usage
	Purposive Sampling	10 EFL Teachers	Semi-structured Interview

Table 2 displays the frequency (f) and percentage (%) distribution of demographic features among the participant EFL teachers who took part in the questionnaire section of the study.

Table 2. Frequency (f) and Percentage (%) Distribution of Teachers' Demographic Features in the Questionnaire (n=547)

Variable	Group	Frequency f	Percentage %
Gender	Male	128	23.4
	Female	419	76.6
Age	21-25	25	4.6
	26-30	139	25.4
	31-35	194	35.5
	36-40	118	21.6
	41 and more	71	13.0
Educational Status	Bachelor's degree	495	90.5
	Postgraduate degree	52	9.5
Teaching Experience	1-5 year(s)	128	23.4
	6-10 years	196	35.8
	11-15 years	124	22.7
	16-20 years	55	10.1
	21 years and more	44	8.0
Type of School	Primary School	64	11.7
	Secondary School	350	64.0
	High School	133	24.3
Internet Connection at Home	Yes	521	95.2
	No	26	4.8
Interactive Whiteboards in the Classroom	Yes	469	85.7
	No	78	14.3
Internet Connection in the Interactive Whiteboards	Yes	432	79.0
	No	115	21.0
Being a Registered User on EBA	Yes	522	95.4
	No	25	4.6
Having Information about the FATIH Project	Yes	440	80.4
	No	107	19.6

Table 3 presents the frequency (f) and percentage (%) distribution of demographic features among the EFL teachers who participated in the semi-structured interview section of the study.

Table 3. Frequency (f) and Percentage (%) Distribution of Teachers' Demographic Features in the Semi-structured Interview

Variable	Group	Frequency f	Percentage %
Gender	Male	3	30.0
	Female	7	70.0
Age	21-25	1	10.0
	26-30	3	30.0
	31-35	3	30.0
	36-40	2	20.0
	41 and more	1	10.0
Educational Status	Bachelor's degree	8	80.0
	Postgraduate	2	20.0
Teaching Experience	1-5 year(s)	4	40.0
	6-10 years	3	30.0
	11-15 years	1	10.0
	16-20 years	1	10.0
	21 years and more	1	10.0
Type of School	Secondary School	8	80.0
	High School	2	20.0

Data Collection

Questionnaire on Teachers' Opinions about EBA Usage

The "Questionnaire on Teachers' Opinions regarding EBA Usage," originally devised by Alabay (2015) and modified and revised for the present study, was employed by the researchers as a quantitative data collection tool. The questionnaire comprises 44 items, including 34 closed-ended items for demographic information and ten closed-ended items with a 5-point Likert scale, which gathers data on the EFL teachers' general opinions about EBA, their opinions about EBA usage levels, and suggestions for the improvement of EBA.

The questionnaire, which was adapted from Alabay (2015) for this study, was subjected to the exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to assess the construct validity. Before performing EFA, it is necessary to calculate the Kaiser Meyer Olkin (KMO) sampling adequacy value and the significant value of Bartlett's test of sphericity to assess the appropriateness of the data for factor analysis. When the KMO value exceeds .50, each variable within the scale could predict other variables (Field, 2009). The analysis undertaken in this study yielded a KMO sample adequacy score of .965, indicating a high level of adequacy. Additionally, Bartlett's test of sphericity yielded a significant result ($\chi2$=15877.799, *sd*=406; p<.01). Consequently, the data acquired from the scale was appropriate for factor analysis. Based on the results of the EFA, during the initial stage, it was seen that the factor loads of one item from the sub-dimension "general opinions about EBA" and four items from the sub-dimension "usage levels of EBA" were below the threshold of 0.32. Consequently, these items were eliminated from the dataset, and the analysis was repeated. The eigenvalues and variances of the factors obtained from the exploratory factor analysis (EFA) are presented in Table 2.

Table 4. Factor Structure of Questionnaire on Teachers' Opinions on EBA Usage

Factor Order	Factors	Factor Eigenvalue	Percentage of Variance (%)	Percentage of Total Variance (%)
1	Factor 1	7.534	25.981	25.981
2	Factor 2	6.987	24.093	50.074
3	Factor 3	6.126	21.124	71.198

Table 4 shows that the three-dimensional scale accounts for 71.20% of the variance. Separately, the first factor is responsible for 25.98% of the total variance, the second for 24.09%, and the third for 21.12%. According to Kline (2011), it is sufficient if the total variation explained in multidimensional scales exceeds 41%.

Table 5 displays the distribution of scale items based on factor loads and sizes.

Table 5. Item Factor Loads After Rotation and Scale Items of the Dimensions

Dimension	Item Number	1st Dimension	2nd Dimension	3rd Dimension
Opinions about EBA	b11	.845		
	d11	.840		
	e11	.822		
	c11	.822		
	f11	.820		
	g11	.778		
	a11	.752		
	h11	.715		
	j11	.662		
	k11	.651		
Usage levels of EBA	j12		.811	
	m12		.809	
	i12		.790	
	h12		.772	
	f12		.765	
	e12		.740	
	l12		.715	
	k12		.700	
	d12		.580	
	b12		.477	
Suggestions for EBA	c13			.815
	d13			.804
	b13			.801
	f13			.782
	e13			.775
	g13			.771
	a13			.770
	i13			.754
	h13			.740

Table 5 shows that the factor loads of items in the first dimension range from .65 to .84. In contrast, those in the second dimension range from .47 to .81. Items in the third dimension range from .74 to .81. The scale's reliability was tested by calculating the alpha internal consistency coefficients for each dimension. As a result, the alpha internal consistency coefficients for the first, second, and third dimensions are .96, .92, and .96, respectively. These results imply that the questionnaire scale is perfectly reliable.

Furthermore, CFA was applied to validate the factor structure obtained from EFA and control the interactions between the factors obtained during the research. The CFA model's compatibility was evaluated using chi-square divided by degree of freedom ($\chi2$/sd), general fit index (GFI), adjusted goodness fit index (AGFI), root mean square error of approximation (RMSEA), incremental fit index (IFI), and comparative fit index (CFI) values (Çelik & Yılmaz, 2013; Kline, 2011). In the CFA analysis, theoretically supported changes (error bindings) were made to the variables to enhance the fit index values for the applicable model.

Figure 1 shows the standardized value coefficients for the parameters in the established model.
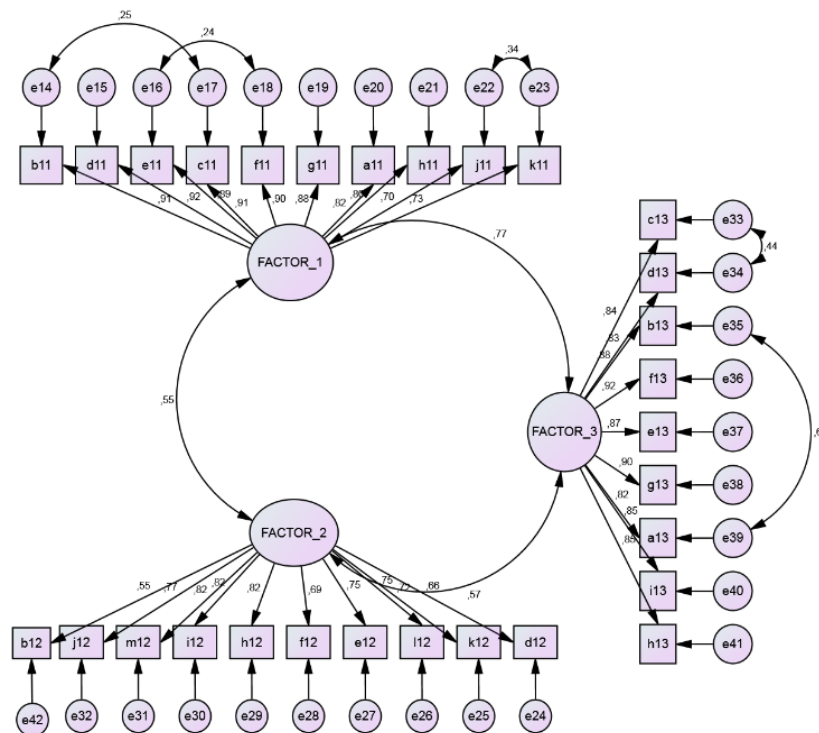

Figure 1. Standardized values for the model

The three-dimensional structure acquired using EFA was tested on the scale using CFA. The CFA results were similar to the EFA results, and the fit indices were at the recommended values ($\chi2$=1272.699, df=369, p<0.01, $\chi2$/df=3.449, RMSEA=0.06, AGFI=0.85, GFI=.85, IFI=.94, CFI=.94).

Table 6 shows the values of the fit indices used to assess the theoretical model's adequacy concerning the data received from the CFA analysis and the CFA model's fit values.

Table 6. Fit Values of the Fit Indices Used* and Fit Values of the Model

Fit Indices	Perfect Values	Acceptable Values	Model Fit Indices	Result
$\chi2/sd$	$0 \leq \chi2/sd \leq 2$	$2 \leq \chi2/sd \leq 5$	3,449	Acceptable Fit
RMSEA	$.00 \leq RMSEA \leq .05$	$.05 \leq RMSEA \leq .08$	.06	Acceptable Fit
CFI	$.95 \leq CFI \leq 1.00$	$.90 \leq CFI \leq .95$	.94	Acceptable Fit
GFI	$.95 \leq GFI \leq 1.00$	$.90 \leq GFI \leq .95$	.85	Acceptable Fit
AGFI	$.95 \leq AGFI \leq 1.00$	$.85 \leq AGFI \leq .90$	.85	Acceptable Fit
IFI	$.95 \leq IFI \leq 1.00$	$.90 \leq IFI \leq .95$	.94	Acceptable Fit

(Çelik & Yılmaz, 2013; Çokluk, Şekercioğlu, & Büyüköztürk, 2014)

Table 6 indicates that the tested theoretical model has a structure that matches the data set, and the model fit indices are satisfactory. According to Kline (2011), a $\chi2$ value between 2 and 5 indicates an appropriate level of model-data compatibility. Another compatibility criterion is an RMSEA value of less than .08, indicating an appropriate level of model compatibility with the data set. The fact that the other fit criteria were likewise acceptable indicated that the tested model fit well with the data.

Semi-structured Interview

The researchers designed the semi-structured interview, and it aims to gather comprehensive data from 10 EFL teachers. The interview participants were chosen using purposive sampling, specifically targeting EFL teachers to acquire data that aligns with the study's objectives. The interview consists of 5 questions related to the participants' demographics and seven open-ended topics that specifically address the EFL teachers' suggestions for EBA. These recommendations cover many aspects, including issues, content creation, motivation, and future implications. The researchers designed the interview questions with guidance from academic professionals and specialists. The form includes seven more questions that consist of sub-items. These sub-items were designed to be asked of participants depending on their replies to obtain clarification or more specific information since the interviews were designed as semi-structured.

Data Analysis

After the CFA and EFA were completed, trial versions of SPSS and AMOS software were utilized to evaluate the research data downloaded via Google Forms. The following values were employed in descriptive analysis: frequency (*f*), arithmetic mean ($\bar{X}$), percentage (*%*), and standard deviation (*sd*). The skewness and kurtosis data were used to determine if the scale scores met the assumption of normalcy. The scale scores were found to have a normal distribution. Answers to the scale's items were scored as (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; and (5) Strongly agree in the items related to the level of agreement, and as (1) Never; (2) Rarely; (3) Sometimes; (4) Often; and (5) Always in the items related to the frequency level.

Additionally, independent samples t-tests were used to determine whether there is a statistically significant difference in the sub-dimensions of the scale, including the scores of the variables of gender, educational status, internet connection at home, interactive whiteboards in the classroom, internet connection in the interactive whiteboards, being a registered user on EBA, and knowing about the FATIH Project. In addition, one-way analysis of variance (ANOVA) was used to see whether the mean scores obtained from the scale differed statistically significantly by age, teaching experience, and type of school.

The content analysis method was utilized to organize and understand the semi-structured interview material. Yıldırım and Şimşek (2013) describe this form of analysis as interpreting

and summarizing acquired data based on codes, categories, and themes. The findings are clearly expressed, carefully explained, and interpreted by reviewing and explaining the information supplied by the participants. In this context, face-to-face interviews with 10 EFL teachers were scheduled, with a maximum duration of 20 minutes. The interviewees were informed about the ethical considerations and agreed to participate and be recorded in the interviews. The audio recording was used during the interviews to ensure no research data went unnoticed. After all the interview meetings were completed, the interview material was first transcribed word for word from the recordings. The transcriptions were then shared with an academician from the Department of Education to confirm reliability and get feedback. The researchers familiarized themselves with the transcribed texts by reading them extensively. The coding technique was then done by finding the participants' most frequently repeated expressions. The coded data were examined to identify themes and categories based on the similarities and contrasts between the participants' choice of words, sentences, expressions, and phrases. As a result, the findings were presented in tables and explored in depth.

Findings

Analysis and Findings of the Questionnaire
The findings questionnaire was evaluated using several variables, and the findings of these evaluations are discussed in the subsequent sections. Hence, the independent t-tests were employed to examine the variables of gender, age, educational status, teaching experience, type of school, internet connection at home, interactive whiteboards in the classroom, internet connection in the interactive whiteboards, being a registered user on EBA, and having information about the FATIH Project. Conversely, a one-way analysis of variance was employed to examine the variables of age, teaching experience, and type of school. In the analysis of the results, Factor 1 indicates ELF teachers' opinions, Factor 2 reflects their EBA usage levels, and lastly, Factor 3 shows their suggestions for the improvement of EBA.

Table 7. T-Test Results by Gender

	Gender	N	$\bar{X}$	S	sd	t	p
Factor 1	Male	128	3.0648	1.13336	545	.814	.416
	Female	419	2.9779	1.03415			
Factor 2	Male	128	2.3305	.92469	545	2.470	.014
	Female	419	2.1059	.89252			
Factor 3	Male	128	3.1372	1.18433	545	.293	.769
	Female	419	3.1050	1.05333			

Table 7 highlights that the mean scores for Factor 1 exhibit no significant difference based on gender. The scores of male and female teachers are comparable, suggesting that gender does not significantly affect teachers' overall opinions about EBA. However, there is a significant difference in Factor 2, as male teachers exhibit higher scores ($\bar{X}=2.33$) than female teachers ($\bar{X}=2.10$), indicating more utilization of EBA among male teachers. In contrast, the mean scores for Factor 3 show no significant difference based on gender, suggesting that gender does not affect teachers' suggestions significantly.

Table 8. T-Test Results by Educational Status

	Educational Status	**N**	**$\bar{X}$**	**S**	**sd**	**t**	**p**
Factor 1	Bachelor's	495	2.9649	1.05234	545	-2.281	.023
	Postgraduate	52	3.3154	1.06704			
Factor 2	Bachelor's	495	2.1127	.87910	545	-.3.695	.000
	Postgraduate	52	2.5942	1.02735			
Factor 3	Bachelor's	495	3.0837	1.07187	545	-1.922	.065
	Postgraduate	52	3.3868	1.17269			

Table 8 demonstrates significant differences in mean scores for Factor 1 depending on the level of education. Teachers with postgraduate degrees achieved higher scores ($\bar{X}$=3.31) compared to those with bachelor's degrees ($\bar{X}$=2.96), demonstrating an influence of educational status on their opinions of EBA. Similarly, Factor 2 shows significant differences in mean scores, indicating that individuals with postgraduate degrees ($\bar{X}$=2.59) outperform those with bachelor's degrees ($\bar{X}$=2.11) regarding EBA usage levels. This suggests that EFL teachers with postgraduate qualifications exhibit higher EBA utilization. However, in the case of Factor 3, the mean scores do not show substantial differences based on educational status. This indicates that teachers, regardless of their level of education, have comparable suggestions.

Table 9. T-Test Results by Internet Connection at Home

	Internet Connection at Home	**N**	**$\bar{X}$**	**S**	**sd**	**t**	**p**
Factor 1	Yes	521	2.9841	1.06139	545	-1.397	.163
	No	26	3.2808	.95750			
Factor 2	Yes	521	2.1668	.91029	545	.960	.338
	No	26	1.9923	.77145			
Factor 3	Yes	521	3.1009	1.08549	545	-1.126	.261
	No	26	3.3462	1.05471			

As illustrated in Table 9, mean scores for Factor 1 reveal no significant difference based on the presence of an internet connection at home, with scores being similar regardless of internet access. This suggests that Internet availability at home does not notably influence teachers' general opinions regarding EBA. Similarly, for Factor 2, mean scores do not differ significantly depending on internet connectivity, indicating that the Internet at home does not significantly impact teachers' EBA usage levels. Additionally, the mean scores for Factor 3 also show no significant difference based on the Internet connection variable, suggesting that whether teachers have Internet access at home does not significantly affect their suggestions for EBA.

Table 10. T-Test Results by Interactive Whiteboard in the Classroom

	Interactive Whiteboard in the Classroom	**N**	**$\bar{X}$**	**S**	**sd**	**t**	**p**
Factor 1	Yes	469	3.0086	1.02185	545	.562	.574
	No	78	2.9359	1.25811			
Factor 2	Yes	469	2.1539	.88384	545	-.289	.773
	No	78	2.1859	1.02472			
Factor 3	Yes	469	3.1227	1.06688	545	.538	.591
	No	78	3.0513	1.18967			

Table 10 demonstrates that mean scores for Factor 1 show no significant difference based on the presence of an interactive whiteboard in the classroom, with similar scores observed regardless of interactive whiteboard availability, and this reflects that its presence does not significantly influence teachers' general opinions about EBA. Likewise, for Factor 2, mean scores do not significantly differ depending on the interactive whiteboard's presence, suggesting that its availability in the classroom does not notably impact teachers' EBA usage levels. Similarly, mean scores for Factor 3 do not significantly vary based on interactive whiteboard presence, which means that its availability in the classroom does not notably affect teachers' suggestions regarding EBA.

Table 11. T-Test Results by Internet Connection in the Interactive Whiteboard in the Classroom

	Internet Connection in the Classroom	N	$\bar{X}$	S	sd	t	p
Factor 1	Yes	432	3.0269	1.03632	545	1.230	.219
	No	115	2.8904	1.13300			
Factor 2	Yes	432	2.1740	.89931	545	.780	.436
	No	115	2.1000	.92452			
Factor 3	Yes	432	3.1335	1.07611	545	.876	.382
	No	115	3.0338	1.11609			

According to Table 11, mean scores for Factor 1 show no significant difference based on whether there is an internet connection in the interactive whiteboards in classrooms, with similar scores observed regardless of internet connectivity. This shows that the presence or absence of an internet connection in interactive whiteboards does not significantly affect teachers' opinions on EBA. Similarly, for Factor 2, mean scores do not significantly differ based on internet connectivity in interactive whiteboards, suggesting that its presence or absence does not notably impact teachers' EBA usage levels. Likewise, mean scores for Factor 3 do not significantly vary depending on internet connectivity in interactive whiteboards, indicating that its presence or absence does not significantly affect teachers' suggestions for the improvement of EBA.

Table 12. T-Test Results by Being a Registered User on EBA

	Registered User on EBA	N	$\bar{X}$	S	sd	t	p
Factor 1	Yes	522	3.0311	1.05050	545	3.352	.001
	No	25	2.3120	.99219			
Factor 2	Yes	522	2.1854	.90575	545	3.210	.001
	No	25	1.5960	.67112			
Factor 3	Yes	522	3.1482	1.06907	545	3.547	.000
	No	25	2.3689	1.15591			

Table 12 highlights significant differences in mean scores for Factor 1 based on EFL teachers' registration status on EBA, with registered users scoring higher ($\bar{X}=3.03$) compared to non-registered users ($\bar{X}=2.31$), indicating that registered users hold more favorable general opinions about EBA. Similarly, for Factor 2, significant differences in mean scores are evident, with registered users scoring higher ($\bar{X}=2.18$) than non-registered users ($\bar{X}=1.59$), suggesting higher EBA usage levels among registered users. Moreover, the mean scores for Factor 3 also vary significantly based on registration status, with registered users scoring higher ($\bar{X}=3.14$) than non-registered users ($\bar{X}=2.36$), indicating that registered users provide more sound suggestions related to EBA.

Table 13. T-Test Results by Having Information about the FATIH Project

	Having Information about the FATIH Project	N	$\bar{X}$	S	sd	t	p
Factor 1	Yes	440	3.0405	1.05613	545	1.901	.068
	No	107	2.8243	1.05158			
Factor 2	Yes	440	2.2186	.89414	545	3.179	.002
	No	107	1.9112	.90807			
Factor 3	Yes	440	3.1434	1.08292	545	1.353	.177
	No	107	2.9855	1.08610			

Table 13 reveals that mean scores for Factor 1 do not exhibit any significant difference based on teachers' knowledge about the FATIH Project, with similar scores observed regardless of their awareness of the project. Hence, this deduces that having information about FATIH does not significantly influence teachers' general opinions on EBA. However, for Factor 2, significant differences in mean scores are evident, with teachers informed about the FATIH Project scoring higher ($\bar{X}=2.21$) compared to those uninformed ($\bar{X}=1.91$), suggesting higher EBA usage levels among informed participants. Conversely, mean scores for Factor 3 do not significantly vary based on knowledge of the FATIH Project, indicating that teachers' suggestions for EBA remain unaffected by their awareness of the project.

One-Way Analysis of Variance Results by Age

Table 14. One-Way Analysis of Variance Results by Age

	Age	N	M	S	Source of Variation	Sum of squares	sd	Mean of squares	F	p
Factor 1	1	25	3.18	1.00	Between-group	.965	4	.241		
	2	139	2.99	1.04	Within-group	609.943	542	1.125		
	3	194	2.98	1.01	Total	610.908	546		.214	.931
	4	118	2.97	1.10						
	5	71	3.01	1.13						
Factor 2	Age	N	M	S	Source of Variation	Sum of squares	sd	Mean of squares	F	p
	1	25	2.57	.79	Between-group	6.489	4	1.622		
	2	139	2.17	.92	Within-group	440.025	542	.812		
	3	194	2.08	.82	Total	446.514	546		1.998	.093
	4	118	2.11	.99						
	5	71	2.25	.91						
Factor 3	Age	N	M	S	Source of Variation	Sum of squares	sd	Mean of squares	F	p
	1	25	3.64	1.03	Between-group	7.672	4	1.918		
	2	139	3.08	1.04	Within-group	634.340	542	1.170		
	3	194	3.10	1.08	Total	642.011	546		1.639	.163
	4	118	3.08	1.13						
	5	71	3.05	1.07						

1: 21-25 years old, 2: 26-30 years old, 3: 31-35 years old, 4: 36-40 years old, 5: 41 years and older

Table 14 indicates that there is no statistically significant difference observed in the first dimension of the scale concerning age group ($F_{(4, 542)}$=.214, p>.05), implying that the age groups of participating EFL teachers do not significantly differ in their total scores regarding general opinions about EBA. Similarly, no significant difference is found in the mean scores of the second dimension concerning age group ($F_{(4, 542)}$=1.998, p>.05), suggesting that age groups do not significantly vary in total scores related to EBA usage levels. Moreover, Table 14 demonstrates that there is no significant difference in the mean scores of the third dimension based on age group ($F_{(4, 542)}$=1.639, p>.05), indicating that age groups do not significantly differ in their total scores concerning teachers' suggestions for EBA.

One-Way Analysis of Variance Results by Teaching Experience

Table 15. One-Way Analysis of Variance Results by Teaching Experience

	Teaching Experience	N	M	S	Source of Variation	Sum of squares	sd	Mean of squares	F	p
Factor 1	1	323	2.99	1.02	Between-group	1.330	3	.443		
	2	124	2.98	1.15	Within-group	609.578	543	1.123	.395	.757
	3	55	2.90	.97	Total	610.908	546			
	4	45	3.13	1.14						
Factor 2	1	323	2.17	.88	Between-group	4.750	3	1.583		
	2	124	2.07	.97	Within-group	441.765	543	.814	1.946	.121
	3	55	2.03	.76	Total	446.514	546			
	4	45	2.41	.96						
Factor 3	1	323	3.11	1.06	Between-group	1.315	3	.438		
	2	124	3.13	1.16	Within-group	640.697	543	1.180	.371	.774
	3	55	2.98	1.10	Total	642.011	546			
	4	45	3.20	.98						

1: 1-5 year(s), 2: 11-15 years, 3: 16-20 years, 4: 21 years and more

Table 15 indicates that there is no statistically significant difference observed in the first dimension of the scale concerning teaching experience ($F_{(3, 543)}$=.395, p>.05), suggesting that the teaching experiences of participating EFL teachers do not significantly differ in their total scores regarding general opinions about EBA. Similarly, no significant difference is found in the mean scores of the second dimension concerning teaching experience ($F_{(4, 542)}$=1.946, p>.05), implying that teaching experiences do not significantly vary in total scores related to EBA usage levels. Moreover, Table 13 demonstrates that there is no significant difference in the mean scores of the third dimension based on teaching experience ($F_{(4, 542)}$=.371, p>.05), indicating that teaching experiences do not significantly differ in their total scores concerning teachers' suggestions for EBA.

One-Way Analysis of Variance Results by the Type of School

Table 16. One-Way Analysis of Variance Results by the Type of School

	Type of School	N	M	S	Source of Variation	Sum of squares	sd	Mean of squares	F	p
Factor 1	1	64	2.97	1.10	Between-group	.141	2	.071		
	2	350	3.01	1.05	Within-group	610.767	544	1.123	.063	.939
	3	133	2.98	1.05	Total	610.908	546			
Factor 2	Type of School	N	M	S	Source of Variation	Sum of squares	sd	Mean of squares	F	p
	1	64	2.28	.99	Between-group	1.237	2	.618		
	2	350	2.13	.89	Within-group	445.277	544	.819	.756	.470
	3	133	2.15	.87	Total	446.514	546			
Factor 3	Type of School	N	M	S	Source of Variation	Sum of squares	sd	Mean of squares	F	p
	1	64	3.12	1.12	Between-group	.389	2	.195		
	2	350	3.09	1.07	Within-group	641.622	544	1.179	.165	.848
	3	133	3.15	1.096	Total	642.011	546			

1: Primary School, 2: Secondary School, 3: High School

Table 16 concludes that there is no statistically significant difference observed in the first dimension of the scale concerning the type of school ($F_{(2, 544)}$=.063, p>.05), indicating that the type of school attended by participating EFL teachers does not significantly affect their total scores regarding general opinions about EBA. Similarly, no significant difference is found in the mean scores of the second dimension concerning the type of school ($F_{(2, 544)}$=.756, p>.05), suggesting that the type of school attended by participants does not significantly influence their total scores related to EBA usage levels. Furthermore, Table 14 also indicates that there is no significant difference in the mean scores of the third dimension based on the type of school ($F_{(2, 544)}$=.165, p>.05), implying that the type of school attended by participants does not significantly affect their total scores concerning teachers' suggestions for EBA.

Analysis and Findings of the Semi-structured Interview

The semi-structured interviews involved 10 EFL teachers to delve deeply into the third research question of the study, focusing on "*What are the EFL teachers' suggestions for the improvement of EBA?*" The interviews unveiled four key themes: "problems, content development, motivation, and future implications." These themes and their interrelated codes are elaborated in the subsequent tables, and the teachers' responses are substantiated by excerpts provided during the interviews. The frequencies documented in the tables indicate how frequently the participants articulated these codes.

EFL Teachers' Problems When Using EBA

Table 17. EFL Teachers' Problems When Using EBA

Codes	Frequency
Lack of adequate infrastructure on EBA	10
Taking a long time when accessing EBA	8
Incompatibility of curriculum objectives with materials on EBA	8
A limited number of course e-contents based on grades	7
Lack of course materials according to student level	6
Uninteresting and insufficient course materials	5
Problematic methods of logging into EBA	5
A long time of publishing of the self-designed materials	3
Irrelevant search results	3
Loss of time during the course	3

The findings from Table 17 indicate a unanimous agreement among the interviewed EFL teachers regarding the need for enhanced infrastructure within EBA to manage concurrent user demands. Additionally, they highlighted prolonged access times due to overloaded servers and inadequate website infrastructure.

> *"There are deficiencies in its technical infrastructure, and course materials are limited. The website was not very user-friendly, but it has become better with updates. Technical infrastructure and servers should be improved…" (Interviewee 1).*
> *"There may be times when we experience access problems during overload… EBA is a useless platform if schools are without a smartboard, students without a computer and the internet access …" (Interviewee 5)*

Most EFL teachers participating in the study found that the course materials and e-contents on EBA were insufficient for various grades and student levels, lacked alignment with curriculum objectives, and failed to engage students.

> *"Course contents must be kept updated. When the curriculum changes, the content should be updated instantly; the old content should not stay there for months. Overall, when compared to other courses, English course materials are slightly weaker in terms of content richness …" (Interviewee 8)*
> *"The website can be designed in a fun way, with more visual games for children and interactive activities. Primary, secondary, and high school levels require very different course contents…" (Interviewee 2)*
> *"Almost every year, our textbooks are changed. Last year, we had a different textbook for 6th graders, but this year it is a new one. Despite this, course activities on EBA are fixed …" (Interviewee 4)*

Less frequently mentioned issues include difficulties in sharing teachers' self-designed materials on the platform, perception of e-contents on EBA as time-consuming during lessons, and the platform providing irrelevant search results.

"I wanted to share the activities I prepared for my lessons several times in EBA. However, after five months, EBA moderation still has not been approved, and no feedback has been provided about approval or rejection ..." (Interviewee 7)

"I don't find the search bar and results very useful because it makes it difficult for me to access the materials I am looking for..." (Interviewee 9)

"I tried to integrate EBA into my lessons at some points in the past. We have an internet connection in the interactive whiteboards. That's a nice thing... but logging into EBA and reaching the relevant course materials cause a waste of time for me ..." (Interviewee 3)

In summary, the issues highlighted by teachers using EBA indicate the necessity for infrastructure enhancements, updates to course materials, and improvements in the moderation process for teachers' self-designed materials. Additionally, there is a need for the development of a more practical search algorithm to ensure access to relevant course materials.

EFL Teachers' Content Development Reflections When Using EBA

Table 18. EFL Teachers' Content Development Reflections When Using EBA

Codes	Frequency
Supporting courses with videos and animations	9
Integration of the interactive Web 2.0 applications	7
Agreement with private publishers for a variety of content	7
Practice-based activities aimed at listening and speaking	6
Sharing popular teachers' videos on EBA	5
Needing the gamification elements	5
The necessity of flashcard applications for vocabulary teaching	4

Table 18 presents an overview of the participant EFL teachers' opinions regarding content development on EBA. The predominant concern relates to the lack of interactivity in the course e-contents. Teachers noted a deficiency in interactive activities such as videos, animations, cartoons, songs, short films, and Web 2.0 applications.

"Students learn as they are exposed to language. So, I am sending links to different websites on EBA. Videos, online exercises, animations, and short films are very popular. I think it would be easier to send these activities to students if those materials were uploaded or available on EBA." (Interviewee 6)

"Game-based digital activities can be designed in cooperation with computer engineers and teachers. Certainly, video and animations should be added. Interactive applications are necessary." (Interviewee 10)

The participant teachers emphasize the significance of forming agreements with private publishers and facilitating teachers' ability to share course videos on video platforms. This would enable them to disseminate their ready-made materials as interactive content on EBA.

"I think EBA can cooperate with private publishers to use their course materials on the platform. So, we can access a great variety of course contents for our lessons, and thus, students' achievement can increase." (Interviewee 9)

"There are many popular teachers who record and share their videos on video-sharing platforms. If the Ministry can team up with them to transfer their course videos to EBA, that will make a big step." (Interviewee 1)

Additionally, the participant EFL teachers emphasized the importance of designing and sharing activities on EBA that focus on developing the four skills while teaching English to young learners.

> *"EBA should provide children with the opportunity to listen and read level books that are suitable for their grades. This should involve gamification elements, too. In this way, students' attention can be attracted to EBA." (Interviewee 2)*
>
> *"Since the portal does not have a feature of audio recording, I do not know how much it improves students in speaking skills." (Interviewee 10)*

An overview of the participant EFL teachers' reflections on English course content on EBA highlights the lack of interactive materials and the platform's limited usefulness for language practice. Consequently, there is a call to update the website to focus on teaching the four language skills and serving as an alternative learning and practice platform for EFL students.

EFL Teachers' Motivation When Using EBA

Table 19. EFL Teachers' Motivation When Using EBA

Codes	Frequency
Low participation in assignments given on EBA	9
The necessity of interesting contents to increase motivation	8
Insufficient number of course materials	7
Negative effects of students' demotivation on teachers' motivation	5

The content analysis of the discourse from participant EFL teachers in semi-structured interviews indicated a lack of motivation to use EBA. While teachers express motivation to assign homework on the platform and actively seek interesting course materials to engage students, they face challenges due to low student participation in assignments. This factor contributes to a decrease in teachers' overall motivation. Furthermore, participants emphasize the importance of engaging content to enhance student motivation. They also note that the quantity of content on EBA is inadequate and needs updating.

> *"I do not think it motivates me. I think it motivates the students very little because there are not so many activities to do when using EBA." (Interviewee 1)*
>
> *"As I said before, the course e-content must be more attractive and interesting to motivate the student… Although I tell students that I assigned homework on EBA during the lessons, there is not much interest. So, it is not a very motivating platform for now." (Interviewee 6)*

In addition to opinions about assignments and content, participant EFL teachers also addressed the issue of student demotivation. Despite their efforts to engage them, they expressed concerns about being negatively affected by students' lack of motivation for EBA.

> *"I allocate ten days when I send homework to a class of 30 in the semester. After ten days, I check the reports just to see that 3 or 4 students completed the homework in a 30-student classroom. So, I gave up assigning on EBA, and it is a loss of time." (Interviewee 3)*
>
> *"No way... It does not motivate me very much because there is no content that interests me, so there are no materials I think will attract my students. That's why my first job in the morning is not to visit EBA. I hope one day it will be like this." (Interviewee 7)*

EFL Teachers' Future Implications for EBA

Table 20. EFL Teachers' Future Implications for EBA

Codes	Frequency
Resolving the infrastructure problems	10
The necessity of Internet access in the classroom	10
The enrichment of the number of course contents	9
Game-based extracurricular activities	7
Dissemination of the features of the platform	6
Designing auxiliary activities for the textbook	6
Development of activities based on the four skills	4
Teachers' appreciation of student e-portfolios	2

The data on future implications for enhancing EBA in educational settings were obtained from EFL teachers. Table 20 presents the frequencies of their implication for the future. Analysis revealed that the immediate focus should be on resolving infrastructure and access issues, as emphasized by all EFL teachers, who indicated that the future of EBA hinges on the prompt implementation of solutions to these problems.

> *"The platform becomes permanent when parents and teachers believe in the necessity of EBA provided that it strengthens its infrastructure. In order for the platform to be sustainable, access problems of all socioeconomic students must be resolved." (Interviewee 5)*
>
> *"The internet connection of interactive whiteboards and infrastructure deficiencies must be addressed at all costs. Without these, EBA can't enter the classrooms and homes of students and teachers." (Interviewee 2)*
>
> *"... 3 GB of free access to EBA is, unfortunately, not enough. When students watch two or three videos, they spend almost half of it. So, there must be radical solutions to provide justice and opportunity for every student." (Interviewee 6)*

Furthermore, the EFL teachers in this research strongly advocate for developing high-quality content for English courses, which they perceive as currently insufficient. They stress the importance of aligning materials on EBA with textbooks.

> *"I also find it inadequate for students with different learning types and speeds because the contents on EBA are almost unavailable. So, we have to consult other materials that appeal to students." (Interviewee 7)*
>
> *"Homework assigned on the portal can be sent as a class. Individual differences between students are not considered. ... For example, I can't send fun games on EBA, but I need them badly because my students love playing. I hope there will be more games." (Interviewee 2)*

Discussion

This research aimed to investigate the potential influence of various variables, including gender, age, educational status, teaching experience, type of school, internet connectivity, presence of interactive whiteboards, EBA registration, and awareness of the FATIH Project, on EFL teachers' opinions, usage levels, and suggestions for the improvement of EBA. The discussion is structured into two sections. Firstly, the quantitative data from the questionnaire, collected from 547 participant EFL teachers, are analyzed. Throughout this section, the research variables are examined considering two previous studies in the literature: one by Kalemkuş (2016) and another by Alabay (2015), who conducted similar research with a relative research topic. Despite differences in research context, similarities and differences in findings are critically discussed. Secondly, the qualitative data from semi-structured interviews with 10 EFL teachers knowledgeable about EBA are discussed. These findings are critically analyzed in relation to

past research in the literature, including studies by Çakmak and Taşkıran (2017), Karalar and Doğan (2017), Karasu (2018), Kuloğlu and Bay (2019), Saklan and Ünal (2019), Şahin and Erman (2019), Türker and Güven (2016), Yıldız and Gündüz (2019), Cantürk and Cantürk (2021), Shaikh and Özdaş (2022), and Karabacak & Aktaş (2024).

In contrast to prior research, this study's findings diverge from those of Kalemkuş (2016) and Alabay (2015) regarding the impact of gender on usage levels, opinions, and suggestions for EBA among high school teachers. While Kalemkuş (2016) observed significant differences in usage levels and opinions but not in suggestions, Alabay (2015) found no significant differences based on gender. However, this study, focusing solely on EFL teachers across various school types, presents similarities and contradictions with prior research, potentially attributed to its narrower scope than previous studies encompassing teachers from diverse disciplines at the high school level.

In the study by Kalemkuş (2016), high school teachers holding a postgraduate degree exhibited higher scores across dimensions of opinions, usage levels, and suggestions for EBA. Conversely, Alabay (2015) found no significant difference between teachers with bachelor's and postgraduate degrees. In contrast to Alabay's findings, this study's results align more closely with Kalemkuş's study, particularly regarding opinions about EBA. In Kalemkuş's (2016) study, a significant difference was observed favoring high school teachers with an internet connection at home concerning opinions about EBA, although no significant difference was noted in usage levels and suggestions for EBA. However, Alabay (2015) did not investigate this variable in their study. Consequently, the findings of this study do not parallel those of Kalemkuş's (2016) study.

In the study, many participants, totaling 467 teachers (85.7%), reported having Interactive Whiteboards (IWBs) in their classrooms. Consequently, it was anticipated that teachers with and without IWBs would exhibit distinct opinions about EBA. However, the results did not indicate any notable differences. Unlike previous studies by Alabay (2015) and Kalemkuş (2016), this variable was introduced for the first time in this study. Moreover, no prior research in the literature review focused on this aspect of the FATIH Project. Among the participants, 432 EFL teachers (79%) reported having an Internet connection in the interactive whiteboards (IWBs) in their classrooms, while a significant number of 115 teachers (21%) lacked Internet access on their IWBs. Given that EBA, as discussed in the introduction chapter, relies on internet access for classroom use, this finding is surprising and requires further investigation.

While Kalemkuş (2016) did not explore this variable in his research, Alabay (2015) noted that 56 (26.9%) out of 208 high school teachers were not registered on EBA during his study. Alabay (2015) concluded that registered teachers showed higher agreement with opinions about EBA in the questionnaire. Additionally, their usage levels and suggestions for EBA significantly favored those registered on the platform. In alignment with these findings, the results of this study are consistent with those of Alabay (2015). The results also indicate that teachers who were informed about the FATIH Project exhibit higher EBA usage levels than those who are not. This suggests that awareness of the FATIH Project correlates with increased integration of EBA into teaching practices. However, no significant difference was observed in teachers' opinions and suggestions regarding EBA based on their level of information about the project. In contrast to Kalemkuş (2016), Alabay (2015) included the FATIH Project in their questionnaire, revealing a significant difference in high school teachers' EBA usage levels. This finding aligns with the outcomes of the present study, suggesting consistency with Alabay's findings.

While Alabay (2015) incorporated the age variable into their study, Kalemkuş (2016) did not. Alabay (2015) concluded that age did not significantly impact high school teachers' opinions and usage levels of EBA. This study's results align with those findings from the literature. In contrast to Kalemkuş (2016), who found a significant effect of teaching experience on high

school teachers' opinions and usage levels of EBA, this study did not find such a correlation among EFL teachers. The discrepancy in findings could be attributed to the different participant settings, with Kalemkuş (2016) focusing on high school teachers while this study targets EFL teachers. Additionally, Alabay (2015) reported no significant difference in EBA usage levels based on teaching experience, which is consistent with the results of this study.

In contrast to previous studies by Kalemkuş (2016) and Alabay (2015), which did not include the variable of school type, this study highlights significant differences in the quality and quantity of course materials on EBA across different school levels. As the first research to explore the impact of school type on EFL teachers' perceptions and usage of EBA, this study provides valuable insights for future investigations in this field. Previous studies corroborate this study's findings regarding teachers' challenges in using EBA. Yıldız and Gündüz (2019) highlighted the dependence of EBA usage on internet access, while Cantürk and Cantürk (2021) and Çakmak and Taşkıran (2017) and noted inadequacies in school infrastructure for EBA implementation. Similarly, Şahin and Erman (2019) emphasized the necessity of improving technological infrastructure for effective EBA utilization. Karasu (2018) and Saklan and Ünal (2019) also underscored the detrimental impact of insufficient infrastructure and internet connectivity on the usefulness of EBA.

The findings regarding the mismatch between EBA course materials and curriculum objectives echo similar conclusions from previous studies. Karalar and Doğan (2017) and Yıldız and Gündüz (2019) both highlighted the lack of suitable content tailored to students' needs and grade levels. Kuloğlu and Bay (2019) found that most teachers do not contribute course materials to EBA, exacerbating the issue. Moreover, Karasu (2018) observed that teachers perceive the listing of course materials on EBA as confusing, further compounding the challenges associated with content accessibility and usability.

The findings from the semi-structured interviews align with previous studies, indicating the necessity of preparing e-content and resources for use on interactive whiteboards through EBA (Anatürk, 2014). Additionally, concerns were raised about the lack of alignment between EBA videos and course objectives, as well as the non-interactive nature of e-content materials (Karabacak & Aktaş, 2024; Shaikh & Özdaş, 2022; Kızılet & Özmen, 2017; Ateş et al., 2015;). Similarly, Kuloğlu (2018) found that while there are enough e-contents on EBA, their quality is deemed inadequate by EFL teachers, who expect higher-quality materials in the future. However, the specific finding regarding the agreement with private publishers for synchronous sharing of course materials on EBA is unique to this study and warrants further consideration in content enrichment efforts for the platform.

In line with findings from other studies, some teachers in this research also expressed concerns about EBA's potential to decrease student motivation (Türker & Güven, 2016). However, the literature lacks previous research investigating teachers' motivation when using EBA. This highlights a significant gap in the literature regarding the relationship between EBA usage and teacher motivation, suggesting the need for further exploration in future studies. Given the limited research on EBA, addressing this gap could provide valuable insights into the dynamics of motivation within EBA usage contexts.

The concerns the participant EFL teachers voiced regarding the infrastructure and course materials on EBA echo findings from previous studies. These studies emphasize the need to strengthen the platform's infrastructure and enrich its course contents (Karabacak & Aktaş, 2024; Shaikh & Özdaş, 2022; Cantürk & Cantürk, 2021; Çakmak & Taşkıran, 2017; Kızılet & Özmen, 2017). They also highlight the importance of including only effective materials and addressing deficiencies in course materials such as realism, regularity, visuality, functionality, and usefulness (Cantürk & Cantürk, 2021; Karasu, 2018; Kuloğlu & Bay, 2019).

Besides, as a result of the research conducted with 10 EFL teachers during the COVID-19 period to reveal their opinions about the English live course conducted during the relevant

period, Karabacak and Aktaş (2024) reported that different methods and techniques should be integrated into distance education delivered through EBA to increase students' participation in English lessons. They also suggested that the use of interesting materials in distance education should be increased, and teachers should be supported in producing materials and content to increase students' motivation. They further underscored that necessary hardware and internet support should be provided and infrastructure problems should be eliminated to ensure equal opportunity in distance education.

Additionally, Shaikh and Özdaş (2022) evaluated the views of 80 EFL teachers in the distance education process. It was also deduced that the infrastructure of the EBA application should be strengthened, the content section should be updated with activities that will attract students' interest, and the class categorization option should be added to make it easier to understand whether students are doing the activities sent. They further emphasized that the planning and preparation of digital content on EBA by considering the pedagogical needs of students will enable the distance education process to be more qualified and efficient.

Despite the presence of some games on EBA currently, their quality and practicality are deemed insufficient. Embedding gamification elements within these games could enhance student engagement and provide more opportunities for language practice. This finding aligns with a study by Timur, Yılmaz, and İşseven (2017), underscoring the importance of incorporating interactive games and quizzes into EBA.

The findings of the current study align with previous research, indicating that the introduction activities of the EBA social education platform are perceived as insufficient by teachers. It was suggested that more memorable and active methods should be employed in promoting the platform, and teachers should be involved in more promotional meetings and in-service training to increase awareness of EBA. These recommendations correspond with the suggestions made in studies by Karabacak and Aktaş (2024), Shaikh and Özdaş (2022), Saklan and Ünal (2019), Kuloğlu and Bay (2019), and Ayan (2018), highlighting the importance of enhancing efforts for the publicity of the portal.

Consequently, the participating EFL teachers expressed concerns regarding the temporary solutions to EBA's problems, emphasizing the need for swift and comprehensive resolutions. They remain optimistic about EBA's future potential, contingent upon addressing infrastructure issues and diversifying course materials to enhance interactivity and alignment with curricular objectives. Their foremost demand is the permanent resolution of infrastructure challenges, including internet access and the availability of interactive whiteboards in schools. They believe that improving the quality of e-content will boost teacher and student motivation. Ultimately, their perceptions of EBA are shaped by individual experiences, underscoring the importance of maintaining updated content and professional platform management.

Conclusion

The study revealed significant gender differences, with male teachers demonstrating higher EBA usage levels than their female counterparts. EFL teachers with postgraduate degrees held more favorable opinions about EBA compared to those with bachelor's degrees. Registration on the platform and familiarity with the FATIH Project also emerged as critical factors influencing EBA usage and perceptions. EFL teachers who were registered on EBA or had more information about the FATIH Project displayed higher levels of engagement and more positive attitudes toward the platform.

Interestingly, age, teaching experience, and school type did not significantly impact EBA usage or perceptions. Similarly, variables such as having internet access at home, IWBs in classrooms, or internet connectivity in IWBs showed no significant effect. These findings suggest that infrastructure issues may not have been as influential in the context of this study, potentially due to the specific sampling methods used.

Qualitative insights from semi-structured interviews highlighted persistent challenges, including infrastructure deficiencies and limited internet access in classrooms. These issues were echoed in EFL teachers' feedback, which emphasized the adverse effects of such problems on EBA's efficacy. Additional challenges included misalignment between curricular goals and EBA materials, insufficient and unengaging course content, and a lack of differentiation based on student levels and learning speeds.

Implications

The study acknowledges several limitations that shape its findings and offer directions for future research. It was conducted solely with EFL teachers in Hatay, Türkiye, restricting its generalizability to other regions, educational contexts, or disciplines. Additionally, the data collection occurred during the 2019–2020 academic year, limiting its relevance to subsequent developments. The study's focus on teacher perspectives without significant exploration of students' views or learning outcomes further narrows its scope. The overlap with the early stages of the COVID-19 pandemic, when EBA became a crucial tool for distance education, also suggests the need for more targeted research on its role in remote learning environments. In this aspect, to enhance EBA's functionality and adoption, the study suggests the following:

Infrastructure Improvements: Addressing internet and technological infrastructure issues in classrooms is paramount. EFL teachers identified these as foundational barriers to effective platform use.

Content Development: EBA should expand its course offerings to include more interactive, engaging, and diverse materials. Suggestions included incorporating gamification, videos, animations, and interactive Web 2.0 tools. EFL teachers also recommended categorizing materials by grade level and catering to varying student needs.

Motivation and Support: EFL teachers' motivation to use EBA is heavily influenced by student engagement and the quality of available materials. Initiatives to increase teacher motivation might include competitions for content creation, collaboration on e-content design, and roles for EFL teachers in EBA's development.

Feedback and Training: EFL teachers emphasized the importance of regular updates, better search functionality on EBA, and timely feedback on shared materials. Practical, hands-on training programs about EBA and the FATIH Project were also recommended.

Consequently, future research should address these limitations by including diverse participant groups from various cities, subjects, and educational levels. Studies could explore the perspectives of students, as well as the impacts of EBA on their individual learning processes. Further investigations might also focus on teachers' content development competencies and the motivation factors for both teachers and students in using EBA. Expanding methodologies to include classroom observations would provide richer insights into how EBA is utilized across disciplines. Finally, examining the platform's effectiveness in distance education contexts could yield valuable findings to enhance its functionality and adaptability for future crises or evolving educational needs.

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