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NECMETTIN ERBAKAN UNIVERSITY  
INSTITUTE OF EDUCATIONAL SCIENCES**



The Department of Foreign Language Education  
English Language Teaching Program

Master Thesis

**THE EFFECT OF EDUCATION INFORMATION NETWORKS (EBA) ON  
VOCABULARY LEARNING ACHIEVEMENT AND LEARNER AUTONOMY  
DEVELOPMENT ON EFL STUDENTS**

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## TEZ ÇALIŞMASI ORJİNALLİK RAPORU

*The Effect of Education Information Networks (Eba) on Vocabulary Learning Achievement and Learner Autonomy Development on EFL Students* başlıklı tez çalışmamın toplam **73** sayfalık kısmına ilişkin, 3/01/2024 tarihinde tez danışmanım tarafından **Turnitin** adlı intihal tespit programından aşağıda belirtilen filtrelemeler uygulanarak alınmış olan orijinallik raporuna göre, tezimin benzerlik oranı **%21** olarak belirlenmiştir.

Uygulanan filtrelemeler:

1. Tez çalışması orijinallik raporu sayfası hariç
2. Bilimsel etik beyannamesi sayfası hariç
3. Önsöz hariç
4. İçindekiler hariç
5. Simgeler ve kısaltmalar hariç
6. Kaynaklar hariç
7. Alıntılar dahil
8. 7 kelimedenden daha az örtüşme içeren metin kısımları hariç

Necmettin Erbakan Üniversitesi Tez Çalışması Orijinallik Raporu Uygulama Esaslarını inceledim ve tez çalışmamın, bu uygulama esaslarında belirtilen azami benzerlik oranının (%30) altında olduğunu ve intihal içermediğini; aksinin tespit edileceği muhtemel durumda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve yukarıda vermiş olduğum bilgilerin doğru olduğunu beyan ederim.

4/01/2024

Şerife SERİN

Dr. Öğr. Üyesi Cemile DOĞAN

## **BİLİMSEL ETİK BEYANNAMESİ**

Bu tezin tamamının kendi çalışmam olduğunu, planlanmasından yazımına kadar tüm aşamalarında bilimsel etiğe ve akademik kurallara özenle riayet edildiğini, tez içindeki bütün bilgilerin etik davranış ve akademik kurallar çerçevesinde elde edilerek sunulduğunu, ayrıca tez hazırlama kurallarına uygun olarak hazırlanan bu çalışmada başkalarının eserlerinden yararlanılması durumunda bilimsel kurallara uygun olarak atıf yapıldığını ve bu kaynakların kaynaklar listesine eklendiğini beyan ederim.

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## LIST OF ABBREVIATIONS

**CALL** : Computer-Assisted Language Learning

**EBA (Eđitim Biliřim Ađı):** Education Information Network

**EFL** : English as a Foreign Language

**LAS** : Learner Autonomy Scale

**L2** : Second Language

**MoNE** : Ministry of National Education

**SPSS** : Statistical Package of Social Sciences

## ABSTRACT

Necmettin Erbakan University, Graduate School of Educational Sciences  
Department of Foreign Language Education  
English Language Education Program  
Master Thesis

### **THE EFFECT OF EDUCATION INFORMATION NETWORKS (EBA) ON VOCABULARY LEARNING ACHIEVEMENT AND LEARNER AUTONOMY DEVELOPMENT OF EFL STUDENTS**

Şerife SERİN

The study aimed to explore whether the use of Education Informatic Networks (EBA), a digital learning platform, affects vocabulary learning achievement and the learner autonomy development of EFL students. For the study which was conducted during the academic year of 2022-2023, 40 6th-grade students in two intact classes at a state secondary school in Konya were selected as participants and the two intact classes constitute the experimental and control groups of the study. Both groups consisted of 20 students. During the seven-week implementation process, the students in the control group received regular language instruction, while the experimental group students were required to follow the English activities on EBA after class in addition to the regular language instruction at the school. The study adopted a quantitative research design, and the pretest-posttest technique was used to obtain the data to identify differences between and within the groups and understand whether a remarkable effect occurred or not. The data was gathered from both groups through the implementation of pre- and post- vocabulary revision tests and a learner autonomy scale applied before and after the treatment. The data was analyzed through the SPSS 27 version. According to the findings of the study, the difference between the vocabulary revision pre-test and post-test results of the experimental and control groups was found to be statistically insignificant although both groups improved their vocabulary knowledge to a statistically significant degree. It revealed that the current English activities on the EBA have proven to be ineffective in improving students' vocabulary. Additionally, there were no statistically significant differences between the autonomy levels of the participants before and after the implementation, showing that the use of EBA did not generate different outcomes from the regular language instruction. These results suggest that the activities on EBA could be reevaluated and improved so that the students can receive better input for better outcomes. The limitations of the study that brought about the current results were discussed and some suggestions for future studies were provided.

**Keywords:** Vocabulary learning, Learner autonomy, EBA, EFL learners.

## ÖZET

Necmettin Erbakan Üniversitesi, Eğitim Bilimleri Enstitüsü  
Yabancı Diller Eğitimi Anabilim Dalı  
İngiliz Dili Eğitimi Bilim Dalı  
Yüksek Lisans Tezi

### EĞİTİM BİLİŞİM AĞI (EBA) KULLANIMININ YABANCI DİL OLARAK İNGİLİZCE ÖĞRENEN ÖĞRENCİLERİN KELİME ÖĞRENİM BAŞARILARI VE ÖĞRENEN ÖZERKLİĞİ GELİŞİMLERİ ÜZERİNE ETKİSİ

Şerife SERİN

Bu çalışmada bir dijital öğrenim platformu olan Eğitim Bilişim Ağı (EBA) kullanımının yabancı dili İngilizce öğrenen öğrencilerin kelime öğrenme başarıları ve öğrenci özerkliği gelişimleri üzerinde bir etkisi olup olmadığının ortaya çıkarılması amaçlanmıştır. 2022-2023 eğitim öğretim yılında yürütülen bu çalışma için Konya'da bir devlet orta okulunda iki bütün sınıftaki 40 6'ncı sınıf öğrencisi katılımcı olarak seçilmiş ve bu iki bütün sınıf çalışmanın deney ve kontrol gruplarını oluşturmuştur. Her iki grupta da katılımcı sayısı 20'dir. Yedi haftalık çalışma süresi boyunca, kontrol grubu olarak belirlenen öğrencilere standart dil öğrenimi sağlanırken, deney grubu olarak belirlenen öğrencilere yine okulda bu standart dil öğrenimi sağlanmasının yanında öğrencilerden ders sonrasında EBA'da bulunan belirlenmiş konular ile ilgili İngilizce aktiviteleri takip edip tamamlanmaları istenmiştir. Çalışmada nicel araştırma yöntemi benimsenmiş olup, veri elde etmek için de gruplar arası ve gruplar içi farklılığı belirlemek ve kayda değer bir etkinin gerçekleşip gerçekleşmediğini anlamak için öntest-sontest test tekniği uygulanmıştır. Veriler, her iki gruptan da ön-test ve son-test olarak uygulanan kelime revizyon testleri ve uygulama öncesinde ve sonrasında uygulanan öğrenci özerkliği ölçeği yoluyla toplanmıştır. Veriler SPSS-27 programı kullanılarak analiz edilmiştir. Araştırmanın bulgularına göre, deney ve kontrol gruplarının kelime bilgilerinde anlamlı derecede gelişme görülmesine rağmen bu grupların kelime bilgisi revizyonu hem ön-test sonuçları hem de son-test sonuçları arasındaki farkın istatistiksel olarak anlamlı olmadığı görülmüştür. Bu da EBA'daki mevcut İngilizce etkinliklerinin öğrencilerin kelime hazinesini geliştirmede belirgin bir etkisinin olmadığını göstermiştir. Ayrıca, katılımcıların uygulama öncesi ve uygulama sonrası öğrenci özerklik seviyeleri arasında istatistiksel olarak anlamlı bir fark bulunmamıştır. Yine bu da dil öğrenimi sürecinde EBA kullanımının normal dil öğrenme yönteminden farklı sonuçlar ortaya çıkarmadığını göstermektedir. Elde edilen bu sonuçlar, öğrencilerimizin mümkün olan en iyi öğrenme sonuçlarına ulaşması için daha iyi bir girdi almalarını sağlamak amacıyla EBA'daki mevcut olan etkinliklerin yeniden değerlendirilmesi ve geliştirilmesi gerektiğini göstermektedir. Araştırma sonunda bu sonuçların ortaya çıkmasında rol alan sınırlılıkları belirtilmiş olup, gelecekte yapılacak olan çalışmalar için bazı önerilerde bulunulmuştur.

**Anahtar Kelimeler:** Kelime öğrenimi, Öğrenci özerkliği, EBA, Yabancı dil olarak İngilizce öğrenenler.

## CHAPTER 1

### 1. INTRODUCTION

The following sections outline and give insight into the statement of the problem and research questions, the purpose of the study, the significance of the study, assumptions, limitations, and definitions of the study.

#### 1.1. Statement of the problem

Learning vocabulary is one of the essential components of learning a foreign language. It is not possible to communicate orally without sufficient vocabulary in any language. The acquisition of the English language necessitates the ability to perceive, comprehend, and interact using words and sentences (Ellis, 1994) as vocabulary is the body of all the words acquired and used by people in various contexts. Nation (1998) states that insufficient vocabulary knowledge is one of the biggest barriers to using the target language for learners and it “has strong relationship with the language skills” (Schmitt, 2010, p.4). This relationship is the support for how well learners talk, listen, read, and write because vocabulary is an essential element of language proficiency (Richards & Renadya, 2002). Thus, to comprehend the spoken or written language properly, it is necessary for all learners to have the necessary vocabulary knowledge to be able to communicate meanings in the target language. As noted in Tuan (2011) “the more vocabulary a language learner has, the better they are considered to master the language” (p. 1688).

Ellis (1995) introduces two major vocabulary instruction approaches as implicit and explicit vocabulary teaching. Implicit vocabulary teaching signifies learning vocabulary in context with repeated exposure and without any purpose to grab any specific word. It becomes naturally without any intention to learn. On the other hand, explicit vocabulary learning takes place consciously with intentional effort. According to Hulstijn (2003), learners are aware of the vocabulary they are learning during the explicit vocabulary learning process. Schmitt (2008) states that these two approaches are positively dependent on one another in addition to being complementary to each other. Therefore, these two approaches can be regarded as significant in the process of extending the lexical knowledge.

The process of extending one’s vocabulary necessitates a larger level of autonomy and accountability on the part of the learners (Sökmen, 1997). Learner autonomy is a valuable skill to acquire more vocabulary since it increases motivation and leads to more successful

vocabulary learning (Tuan, 2011). It is defined by Holec (1981) as “the ability to take charge of one’s own learning” (p. 3). Likewise, according to Macaro (1997), learner autonomy is the ability to perceive the importance of taking responsibility of learning. Balçıkanlı (2008) has referred to learner autonomy as a critical component of language acquisition. When learning a language, it is essential to be an autonomous learner as it allows the learner to have freedom and independence, guided by the educational curriculum (Almusharraf, 2021). Also, when combined with teachers’ assistance, one of the successful techniques for fostering students’ vocabulary growth is to increase learner autonomy (Tuan, 2011). Teachers may not have enough time to cover all the new words in the classroom. Although there may be an abundance of target words in a curriculum, the allotted time for language instruction may be insufficient. Therefore, a rational solution to address this problem is to provide teachers with methods to enhance student autonomy (Almusharraf, 2021). One of them is to use technology in and out of the classroom. Muchlis (2015) claims that using technology aids the development of learner autonomy in learning vocabulary.

Developments in information and communication technologies have led to a great deal of opportunities in education, especially in foreign language instruction (Delibaş & Günday, 2016). “Technology-based environment points to the use of new and modern technologies for vocabulary learning such as online and offline dictionaries, multimedia, social media, television, computer, smartphones, tablets, and mobile devices. Therefore, it may be proper to mention that fast-moving digital technology provides learners with limitless opportunities in vocabulary learning” (Haidari et al., 2020, p. 237). Hence, computer-assisted language learning (hereafter CALL) has become a popular approach of the last century in the field of English language education (Davies, 2006; Gündüz, 2005; Tick, 2006). With the help of visual and auditory computer-based materials, vocabulary acquisition would be easier, more attractive, and more motivating for the students. The vocabulary acquisition process would be more incidental compared to the traditional way of learning vocabulary. According to Kim and Gilman (2008), language learners prefer technology integrated vocabulary learning because of its positive impact on vocabulary acquisition and long-term retention than the regular classroom instruction.

Due to the evolving paradigm in education, numerous countries have actively endeavored to align themselves with this transformation, integrating advancing technology into their educational frameworks. In Türkiye, one of the computer-based tools used for

educational purposes to follow the technological advancements in the twenty-first century is Education Informatic Networks (EBA), which is a software enabling seamless and ubiquitous learning. It was founded within the scope of Movement of Enhancing Opportunities and Improving Technology (FATİH) in 2012 by Ministry of National Education (MoNE). The educational e-content of the project is hosted by EBA software for at least 2 million official online users (Kızılet & Özmen, 2017). It consists of e-courses for students and teachers, content modules of all school curriculum subjects, online learning applications, live class modules for distance education, e-content production modules, and many other supplementary materials for compulsory education. Kılıç (2020) states that the major goal of the platform is to incorporate technology into education and facilitate effective material utilization. It provides students and teachers with e-content materials, designed following the objectives of the curriculum. Also, plenty of course materials are available on the platform. These are video lectures, classroom activities, animations and songs, multiple-choice tests, interactive activities, and worksheets for main and sub-skills development (vocabulary, grammar, listening, reading, and writing), open-ended questions, and exams. Completing all these materials gives students the opportunity to be familiar with the target words available in the curriculum. All students and teachers are free to use these materials in and out of the classroom.

As for English vocabulary instruction in Türkiye, most of the students are expected to write the words many times with their meanings or create a word box to recycle them. These practices are regarded as beneficial but might not attract the 21st-century students who are keen on taking advantage of technology for their leisure activities. The use of any CALL-based vocabulary learning technique can enhance the motivation of students to improve their vocabulary and language skills. In the current study, the implementation of a CALL tool, EBA, is studied regarding its efficiency in the achievement of students' vocabulary learning and the development of learner autonomy. The previous research mainly focused on the opinions of teachers and students regarding their experience with the use of the platform. However, there is limited research on the correlation between the EBA platform use and the development of learner autonomy and language learning achievement, especially vocabulary learning. Hence, this present research aims to fill this gap by seeking answers to the following research questions:

1. What are the effects of EBA use on students' vocabulary learning achievement?

1.a. Is there a statistically significant difference between the vocabulary achievement of groups before and after the study?

2. What are the effects of EBA use on students' learner autonomy?

2.a. Is there a statistically significant difference between learner autonomy of groups before and after the study?

## **1.2. Purpose of the Study**

Learning a language requires taking responsibility for one's progress in the development of all skills from vocabulary learning to their appropriate use in context for effective communication. It is significant to know a sufficient number of vocabulary items to be able to communicate meanings in the target language. However, it requires learners to be autonomous not only in the classroom but also outside the language classroom to expand their vocabulary knowledge. One of the ways of supplying this environment for the students may be possible with the integration of technology into the learning progress. A remarkable number of research has revealed that the employment of technology is a medium to foster vocabulary teaching (Watts Taffe & Gwinn, 2007). Besides, the opportunity to incorporate online materials into language learning would most likely be inspiring and exciting; and it may offer learners a vast range of educational resources featuring various kinds of practice for vocabulary knowledge (Seljan et al., 2004). The main objective of the present study is to investigate whether utilizing the social learning tool EBA, developed by MoNE, contributes to the development of learner autonomy and vocabulary achievement. It aims to shed light on the effect of using the EBA platform, which is developed to be used as software for educational purposes in the primary, secondary, and high schools of Türkiye.

## **1.3. Significance of the Study**

With the incorporation of modern technology into language education, vocabulary learning has become more motivating (Yang et al., 2021). Through a variety of technological tools, students can acquire the meaning and definitions of unfamiliar words or expressions along with examples attached to their definitions or visual representations. As a result, they become aware of multiple uses of a word in a short time (Haidari et al., 2020). Students mostly choose to learn vocabulary on their own rather than being taught (Oxford & Scarcella, 1994). Hence, any vocabulary learning software that learners use on their own would enhance student autonomy and would enable them to learn vocabulary more quickly and effectively

(Kocaman & Cumaoglu, 2014). As a content provider, EBA has recently been used by teachers and students in and out of the classrooms in Türkiye. There is limited classroom time for all vocabulary items; thus, students may have restricted exposure to vocabulary instruction in the classroom (Almusharraf, 2018; Sökmen, 1997). In this case, they could be required to take some responsibility to learn and reinforce unfamiliar vocabulary. The activities on the EBA platform can be utilized to foster vocabulary learning along with learner autonomy. The current study sets out to evaluate the platform's efficiency on the aforementioned issues.

EBA platform has been used as a technology tool for all subjects including language teaching. As Richards (2015) states, such platforms provide students with significant language learning opportunities without limiting their study to in-class instruction. There are numerous studies that evaluate the efficiency of integrating technological tools in teaching vocabulary or developing learner autonomy (Hazar, 2020; Kocaman & Cumaoglu, 2014; Oberg, 2011; Quiroz et al., 2021; Sanosi, 2018; Shams, 2013; Toy, 2019). The recent studies conducted on EBA software are generally on examining the perceptions of teachers and attitudes of students towards the use of the platform and its efficiency (Karagöz, 2022; Karanfil & Özet, 2021; Kurnaz, 2020; Yıldız & Gündüz, 2019). However, there are not enough quantitative studies conducted to examine the effect of EBA usage on a specific area such as vocabulary or learner autonomy. Thus, the current study may be significant in revealing the efficiency of using EBA activities for vocabulary learning and development of learner autonomy. Besides, it may reveal insights for future innovations in English EBA content, especially regarding the exercises supporting vocabulary knowledge of students and features increasing learner autonomy.

#### **1.4. Assumptions**

The assumptions made for the current study are as follows:

- All the students were assumed to take part in the research procedure willingly and to provide sufficient data for the researcher to observe the entire process correctly.
- The experimental group students were assumed to have access to EBA platform out of the classroom.
- The students of the control and experimental group were assumed to be at same academic level.
- The vocabulary revision test was assumed to measure students' vocabulary level in a valid and reliable way.

- The learner autonomy scale was assumed to measure students' autonomy level in a valid and reliable way.
- It was assumed that all students answer both vocabulary achievement tests and learner autonomy questionnaires with full concentration and effort. They were assumed to provide in-depth and relevant data for the research.

### 1.5. Limitations

The study;

- was limited to the spring semester of the 2022-2023 academic year,
- was conducted in a secondary school in Konya, hence it was limited to 40 participants.
- was limited to a vocabulary retention test and a learner autonomy scale.
- was limited to EBA social learning platform during the research process.

### 1.6. Definitions

**EBA:** It is a social learning and teaching platform founded by Turkish MoNE to catch up with the changes in the technologically developing world. The explanation of this abbreviation is “Eğitim Bilişim Ağı” which means in English “Educational Information Network”.

**CALL:** The abbreviation of computer-assisted language learning. It is “the development and use of technology applications in language teaching and learning” (Levy & Hubbard, 2005).

**Vocabulary achievement:** The students' learning outcomes on knowledge of words or expressions.

**Vocabulary retention test:** It is a test evaluating the knowledge of students on newly learned words or expressions instructed through the research process.

**Learner autonomy:** The capability of taking responsibility for a person's own learning (Holec, 1981).

**Learner autonomy scale:** A scale developed by Orakçı and Gelişli (2017) to bring to light students' ability to control their own learning.

## CHAPTER 2

### 2. LITERATURE REVIEW

#### 2.1. Vocabulary Knowledge Defined

Vocabulary is seen as one of the most indispensable parts of a language. When starting to learn a foreign language, people generally tend to be familiar with the basic vocabulary to be able to progress in the other areas of that language. Learners, educators, and researchers are aware of the connection between the word knowledge and four main language skills. They consider vocabulary as one of the essential parts to comprehend the target language. Richards and Renadya state that “vocabulary is a core component of language proficiency and provides much of the basis for how well learners speak, listen, read, and write “(2002, p. 255). Lewis defines vocabulary as ‘the core or heart of a language.’ (1993, p.89). In one of the dictionary definitions, it is stated that “all the words in a particular language that someone knows or uses” (Longman, n.d., definitions 1). In the same vein, McCarthy et al. (2010) state that vocabulary is about only words we use all the time when we use the language. They refer to knowing a language well as knowing how to write and say its words. However, Neuman and Dwyer (2009) relate vocabulary as knowledge, more than words. They define vocabulary as words to be learned for effective communication. In a similar vein, Vygotsky defines words as ‘a microcosm of human consciousness’ (as cited in Thornbury, 2002, p.1). Knowing a word requires understanding the meaning and form (Godfroid, 2019; Milton, 2013; Schmitt, 2008, 2014; Thornbury, 2002; Webb, 2005; Webb & Nation, 2012). Richards (1976) presents a rich statement with eight assumptions clarifying the inherent meaning of knowing a word as in the following:

- In contrast to the stability of it is their grammar knowledge, the vocabulary knowledge of native speakers keeps growing in adult life,
- Knowing a word means being familiar with the level of probability of running into that lexis and knowing the probably associated sorts of words,
- Knowing a word entails being aware of the limited usages of that word in terms of diversities of function and situations,
- Knowing a word implies knowing its grammatical behavior related to the word,
- Knowing a word means being aware of its derivations and underlying structures,
- Knowing a word means understanding the relationships that exist between that word and other words in a particular language,

- Knowing a word entails knowledge of its semantic value,
- Knowing a word implies knowing different meanings of a word (Richards, 1976).

Although Meara (1996) estimates that these assumptions might not really provide a comprehensive explanation of what it means to know a word; according to Read (2000), these group of assumptions is accounted for the general framework of vocabulary knowledge that emphasizes the challenging nature of vocabulary learning. Nevertheless, Nation (1990) put forward the most accepted description of word knowledge listing eight aspects of it, and later he broadened and added one another aspect, word parts (Nation, 2001). These nine aspects are on the knowledges of:

- 1) words in spoken form,
- 2) words in written form,
- 3) parts of words having meanings,
- 4) form and meaning relevance,
- 5) concepts that a word could have and the things it could relate to,
- 6) vocabulary used to describe a word (association),
- 7) grammatical functions of a word,
- 8) collocations of a word,
- 9) word limitation and frequency in use.

Besides, this complex and extending nature of vocabulary leads to the separation of the notion into categories for understanding the depth of knowledge a person has. Nation (1990) defines vocabulary knowledge as receptive and productive knowledge. He refers to receptive knowledge of a word as being aware of the meaning when we hear or see and anticipating the grammatical pattern that the word would take; while he assigns productive knowledge of a word to be acquainted with how to pronounce, write and spell that word, how to utilize it in appropriate grammatical structures as well as the words it commonly collocates with (p. 32). Accordingly, McCarthy et al. (2010) clarify the discriminations of these concepts as; receptive use of knowledge of a word stands for being able to identify it and comprehend it in a text without having to be familiar with how to utilize it; while productive use of knowledge of a word entails the competence to use a word properly while speaking or writing and to apply our knowledge of it effectively in the relevant context. Besides, scholars state that the receptive vocabulary of a learner or native speaker is much broader than the productive knowledge of vocabulary (Channell, 1988; Karakoç & Köse, 2017; Laufer, 2005;

G. Mutlu & Kaşlıoğlu, 2016; Nation, 1990; Webb, 2008, 2013; Zhong & Hirsh, 2009). Transmitting meaning through words requires a higher level of knowledge than passive vocabulary and the ability to use lexicon appropriately involves a more complicated process than simply recognizing the words (Thornbury, 2002). Also, Nation (1990) mentions that “productive knowledge of a word includes receptive knowledge and extends it” and he further states that the challenges of comprehending and using the language correctly are associated with users’ inadequate engagement with new vocabulary that they are not familiar with (p. 32-33).

### **2.1.1. The importance of vocabulary in foreign language learning**

Although learning vocabulary was underpinned in language teaching, it had been a neglected area of for quite a long time (Allen, 1983; Carter, 2012; Meara, 1980). For many decades in the 20<sup>th</sup> century, vocabulary was misjudged as not requiring any specialized instruction to be learned in the language teaching programs. Thus, vocabulary teaching was not seen as essential and popular (Nation, 1990). According to Allen (1983), vocabulary instruction was neglected during the last decades of the 20<sup>th</sup> century since language teaching programs mainly focus on teaching grammar rather than vocabulary. Carter (2012) maintained that vocabulary was neglected because of the emphasis on grammar and phonology in language research. Nevertheless, teaching and learning vocabulary has gained interest in the field recently (Alemi & Tayebi, 2011; Richards & Renadya, 2002; Thornbury, 2002). Similarly, Elyas and Alfaki (2014) state that vocabulary has long been given a low priority in the field of language learning and teaching, but during the past few decades’ attitudes concerning vocabulary have changed. According to Krashen (1989), there are remarkable reasons for learners to give attention to vocabulary learning, some of which are; sufficient vocabulary is an indicator of one’s proficiency in a language, and language learners who are aware of this importance generally prefer benefiting from dictionaries rather than grammar books. Accordingly, Hatch and Brown (1995) point out that language learners need to have a sufficient number of lexical knowledge in both the early stage and later stage of the learning process rather than grammatical rules, for this reason, travelers take dictionaries with them instead of grammar books when going abroad. Also, Wilkins (1972) emphasizes the importance of vocabulary in meaningful language use with his famous words “... while without grammar very little can be conveyed, without vocabulary nothing can be conveyed” (p. 111). Similar to Wilkins, Allen (1983) states that learners need to learn grammar along with vocabulary to be able to use the language for communication. Barcroft (2004) supports

these views and lists three remarkable points emphasizing the importance of vocabulary without denying the importance of language structures as follows:

- the relationship between communication skills and vocabulary,
- student opinions on the relative significance of vocabulary,
- the critical role of vocabulary knowledge in the advancement of grammatical proficiency.

It can be concluded from the literature above that teaching and learning vocabulary have been considered as essential as providing and acquiring language structures; as a matter of fact, for meaningful comprehension, vocabulary has been seen by some as a primary area.

One of the crucial prerequisites for successful language learning is the achievement of specific lexical knowledge levels. Studies inquiring the factors that influence communication provide additional confirmation on the important role of vocabulary knowledge in language learning (Qian & Lin, 2019). According to scholars, learners struggle during the learning process when they lack adequate vocabulary knowledge (Nation, 1990). Therefore, the development of vocabulary should be regarded as essential to learning a foreign language because it allows new ways of communication (Balcı & Çakır, 2012).

The relationship between second language (L2 from now on) overall proficiency and vocabulary knowledge is widely accepted (Karakoç & Köse, 2017; Meara, 1996; Qian & Lin, 2019). Researchers, material designers, language learners, and educators support the idea that one of the significant tasks of achieving a second language is learning adequate vocabulary (Read, 2000; Schmitt, 2008). Therefore, learners tend to allocate a great deal of time for memorizing the meaning of words to be able to progress in their overall language abilities. Nation (2001) holds the opinion that vocabulary and language use affect each other in such a way that the development of vocabulary knowledge leads to better use of language and vice versa. Accordingly, Zareva et al. (2005) state that when learners' language proficiency improves, their vocabulary knowledge increases. Besides this, Neuman and Dwyer (2009) state that "the more words you know, the easier it is to learn more words" (p.384) which suggests that expanding one's vocabulary knowledge facilitates learning new words.

To conclude, learning, teaching, and developing vocabulary of a foreign language has been regarded as crucial because of its contributions to a sufficient level of communication ability and overall language proficiency. However, the most suitable instruction and learning

method of vocabulary has been questioned, and various perspectives have emerged and been debated lately.

### **2.1.2. Implicit and explicit vocabulary learning**

To know a foreign language primarily means learning and using the words of that language and searching for the best and quickest way to learn vocabulary is inevitable. Jenkins and Dixon (1983) state that continuous exposure to new words leads to ample growth in vocabulary knowledge. Nation (2001) and Laufer (2005) support the idea that only one exposure to the words is inefficient because of the vast amount of usages and meanings a single word contains. Hence, it is crucial to recycle the new words from time to time to. However, the real question is how to complete this proper learning as efficiently and successfully as possible, making researchers and instructors search for the best alternatives (Jenkins & Dixon, 1983). Within this context, two major perspectives on vocabulary learning and teaching called explicit and implicit learning (Ellis, 2005) have become prominent in recent instructional methodologies. The researchers have studied which technique provides more efficient and permanent vocabulary learning.

Implicit vocabulary learning means learning words from contexts with repeated exposure and unconsciously understanding the meaning (Dörnyei, 2009; Ellis, 2005; Ender, 2016). Hulstijn (2003) defines implicit vocabulary learning as ‘picking up’ words and phrases from a range of communicative settings, especially reading and listening activities, while focusing on the meaning of the language instead of form. It is generally accepted by most people in literate societies that vocabulary knowledge is enlarged through reading and focusing on the meaning of words and texts rather than by consciously and purposefully memorizing word forms lists and their meanings (Hulstijn, 2003, p.358). Krashen (1989) clarifies this implicit learning process with his input hypothesis, which supposes that we acquire language by understanding messages. It asserts that “language is subconsciously acquired - while you are acquiring it, you do not know you are acquiring; your conscious focus is on the message, not form.” (p. 440). Likewise, Ellis (2005) states that most of our cognitive processing has happened implicitly. Liu (2021) puts implicit vocabulary learning simply as promoting the understanding of word meaning in context and increasing exposure to L2 input that encourages students to discover linguistic constructs independently rather than having direct teacher instruction.

Explicit vocabulary learning holds that students can learn unfamiliar words or phrases through various metacognitive strategies like recognizing the word's unfamiliarity, attempting to understand the meaning from the context or dictionaries, and paying attention to reinforce this new knowledge through repetition and practice (Ellis, 1994). Hulstijn (2003) states that students are aware of the vocabulary they are learning during the explicit vocabulary learning process. In other words, more conscious learning takes place in contrast to implicit learning. Schmidt's (1990) noticing hypothesis forms the basis of explicit learning which sees noticing as a prerequisite for second language acquisition. Researchers who support this hypothesis claim that vocabulary learning is a symbolic and declarative process and thus must be explicit (Hulstijn, 2007; Sonbul & Schmitt, 2013). Milton (2009) and Allan (2010) state that explicitly instructed vocabulary is acquired better while students' focus is directed to unknown words. Furthermore, it is argued that explicit vocabulary learning has the benefit of greater vocabulary gains in a shorter period with a higher potential for retention (Elgort, 2011; Hung, 2015; Schmitt, 2008).

Both approaches are essential in language learning, and which is more effective for lexical knowledge is still a debate. According to Ellis (2005), the comprehension and production of a language occur fluently in implicit learning while our deliberate attempts to negotiate the meaning and develop communication result through explicit language learning. Researchers claim that a balance between explicit and implicit practices is required for the most effective and efficient vocabulary development (Hunt & Beglar, 2005; Schmitt, 2008). Ellis (1994) states that phonological features of vocabulary are learned best implicitly while explicit instruction is needed for learning the meaning of the words. According to Schmitt (2008), recycling newly learned words and learning contextual word knowledge is more possible with implicit learning while an extra focus to learn the words to a level of productivity may be necessary with explicit learning. Thus, he states that these two approaches are positively dependent on one another in addition to being complementary. It reinforces what Dakun (2000) said: "The tunings of the implicit learning can be guided and governed by explicit learning and explicit learning can be consolidated and reinforced by implicit learning, Thus, implicit learning and explicit learning are, as it were, two sides of a coin in vocabulary acquisition" (p.18). It can be concluded that these two techniques have significance from different aspects, and they have been still applied in the process of unknown vocabulary learning and teaching. Hence, regarding implicit or explicit learning to be more efficient than the other would be incorrect.

## **2.2. Technology in Language Learning**

Technology has been an inseparable part of our lives since the beginning of the millennium. The vast and rapid innovations in technological breakthroughs have enabled people to involve technology in many aspects of their lives. Language education methodology has followed a similar path for decades. Teachers have considered technology as a useful pedagogical tool and a powerful learning resource at the same time (Khezrlou, 2019). Also, it allows for proper access to linguistic and cultural resources (Ghanizadeh et al., 2015) while providing enriched inputs, interactions, and immediate feedback by enhancing motivation and efficacy in the language learning environment (Golonka et al., 2014). The innovations in technology cover a wide range of devices and processes, including audio conferencing, videotapes, the Internet, multimedia computers, and diverse web pages (Zhao, 2003), all of which have huge potential of facilitating language learning (İlter, 2015; Walker & White, 2013; Zhang & Zou, 2022; Zhao, 2003; Zou Haoran Xie et al., 2018). The availability of current technology has led teachers and researchers to seek an appropriate tool to make the learning experience more meaningful while motivating learners and enhancing language learning (Warschauer & Healey, 1998) and leading to CALL.

### **2.2.1. CALL**

#### ***Definition and History***

Computer-assisted language learning has drawn great attention in recent decades, which resulted in a great number of CALL studies. Initially, the term was defined by (Levy, 1997) as “the search for and study of the computer applications in language teaching and learning” (p.1). After the revolutionary changes in the use of various digital tools and resources in and out of language classes, Levy and Hubbard (2005) re-defined the term as “the development and use of technology applications in language teaching and learning” (p. 143). Any other broad definition of CALL refers to “any process in which a learner uses a computer and as a result, improves his or her language” and it covers a wide range of modern practices for computer-based education (Beatty, 2013, p.7). According to Davies (2006), CALL is a language instruction and learning approach in which computer technology is employed to facilitate the presentation, reinforcement, and evaluation of the learning material.

In fact, the evolutionary development of computers dates back to before the 1970s. From this time onwards, the trends in language pedagogy and SLA theories have influenced computer-assisted language learning (Davies et al., 2012). Warschauer and Healey (1998)

categorize the historical development of CALL into three phases as: behavioristic or structural CALL, communicative CALL, and integrative CALL, considering the most prevalent learning theory of each period and their specific characteristics. The behavioristic or structural CALL was implemented mainly in the 1960s and 1970s under the influence of the Audio-lingual method. The principal characteristics of this era are emphasized by many scholars as consisting of repetitive grammar and vocabulary tutorials and drill and practice exercises through negative and positive feedback (Davies et al., 2012; Taylor & Gitsaki, 2004; Tick, 2006; Warschauer & Healey, 1998; Warschauer & Kern, 2000). Computers were seen as mechanical tutors which never allowed learners to study at their own pace (Gündüz, 2005) and never became tired. Additionally, repeated exposure to the same language forms and structures was viewed as a primary condition for learning a language. According to Tick (2006), its feature of providing explicit rules and guidelines on how to learn languages make a stage of programmed instruction.

The second phase, Communicative CALL, was introduced in the late 1970s and early 1980s. It was the time when the behavioristic language teaching approach was being rejected theoretically and pedagogically and affordable personal computers emerged with the individual working opportunity. Communicative CALL is in line with the cognitive theories suggesting “learning is a process of discovery, expression, and development” (Warschauer & Healey, 1998, p. 57). Tick (2006) discusses the new types of provided exercises in which grammar was taught implicitly like text reconstruction and simulations, the use of structures and forms. He further states that learners were encouraged to create their own sentences; and errors were accepted as inevitable outcomes of learning. By means of some software programs based on this approach, language was introduced in meaningful contexts and students had the opportunity of constructing their own knowledge about the target language (Warschauer & Meskill, 2000). Accordingly, new computer activities were created to provide learners to construct their own knowledge for meaningful communication instead of repeated exercises at the core of the learning process.

In the mid-1990s, Integrative CALL emerged as the last stage with the advent of internet technology and multimedia computers in the mid-1990s (Warschauer, 2000). It is consistent with the socio-cognitive theories which stress language use in meaningful and authentic social contexts through interaction and negotiation with others (Jarvis & Achilleos, 2013; Lee, 2000; Warschauer & Healey, 1998). According to this view, using task-based,

project-based, and content-based approaches in language classes has resulted in authentic learning environments, which is essential for the integration of various language skills like reading, speaking, reading, and writing by means of computer and internet technology in the process of language education (Davies et al., 2012; Tick, 2006; Warschauer & Healey, 1998). It combines multimedia, hypermedia, and interactive technologies to develop skills (Benson, 2011). Consequently, any authentic tasks or projects integrated with computer technology sustained learners a maximum chance for authentic social interaction, offering them comprehensible input through limitless online activities and preparing them for the types of communication they might have outside the classroom (Rahimpour, 2011; Warschauer & Meskill, 2000).

Warschauer and Kern (2000) summarized the history of CALL development as “originated on the mainframe as a tutor that delivers language drills or skill practice. With the advent of multimedia technology on the personal computer, it serves as a space in which to explore and creatively influence microworlds. And with the development of computer networks, it now serves as a medium of local and global communication and a source of authentic materials” (p.13). All in all, the efficacy of computers in education was ascertained and they have been used for various reasons in language teaching and learning.

### ***CALL in language education***

Currently, teachers and learners are aware of the opportunities the Internet and computer technology offer. Today’s devices offer diverse activities to develop language skills as effectively as possible in a shorter time. According to Chen et al. (2020), the main objective of the contemporary CALL is to find the best ways to employ current technologies in language learning. Hence, the developers of CALL will always be seeking the most effective method for pedagogically benefiting from technological improvements, as long as technology keeps developing and new devices are released (Gimeno-Sanz, 2016). As Kern (2006) states, “Technology offers us a means by which to make the familiar unfamiliar, to reframe and rethink our conceptions of language, communication, and society” (p. 203). However, he emphasizes that the appropriate way of using any technological tool is important for educational outcomes. Zhao (2003) supports this idea by stating “a specific technology may hold great educational potential, but, until it is used properly, it may not have any positive impact at all on learning. Thus, assessing the effectiveness of a technology is assessing the effectiveness of its uses rather than the technology itself” (p.8). Butler-Pascoe

(2011) supports this idea, stating that the benefit of language acquisition is not gained from what the computers offer but from the language used by students and teachers surrounding the device (p.22). Hence, it should be emphasized that computers are only mechanical devices, not language teaching and learning methods.

The proper use of computers in language learning can be implemented with the guidance of teachers both inside and outside of the classrooms. Understanding the potential of the internet and computer technology in language learning enables teachers and students to adapt to a variety of learning settings. According to Kremenska (2007), technology cannot be so effective in language learning on its own, hence language teachers must play a key role in implementing the technology in the learning environment to develop motivated and independent learners. Altun (2015) asserts that “technology can assist the teachers ‘what to teach’, ‘how to teach’, when to teach’, or how to integrate all these to the curriculum framework” (p.23). Thus, teachers need to think carefully when choosing the most appropriate technology-based activities for the learners and guiding them in everyday smart classrooms, in computer labs where language is practiced, and outside the classrooms where learners use their technologies (Garrett, 2009).

With the advent of technology, students would participate in activities that involved them listening to the input, negotiating the message, and answering with a suitable output (Pascoe, 2011). It is evident from the widespread use of computer-integrated learning methodologies that students prefer to be instructed through visual and audial techniques that incorporate the idea of CALL, which is offering an entertaining, interactive, and adaptable environment (İnce, 2017). Besides, it is suggested that CALL influences students’ motivation and autonomy (Dashdestani, 2013; Farivar & Rahimi, 2015; Kızmaz, 2019) by allowing learners to be able to access the knowledge they need without relying on others. From these points of view, it can be suggested that computer-based language education is favored by teachers and learners of the target languages as well as many field scholars.

Throughout recent decades, the positive aspects of computer usage in language education have been emphasized by many scholars. In his research study, Bush (2008) states that computer technology has the advantage of facilitating learning when responding to the real needs of the students at the right time and determining the types of activities that are more effective than others. The study conducted by Macaro et al. (2012) reviewed 47 articles

written after the 2000s and revealed that technology may indirectly influence learner attitudes and behaviors for the better and encourage collaboration.

The empirical study carried out by Almekhlafi (2006) to examine the effect of CALL on elementary school students' English language learning performance revealed a significant difference between the success of participant groups in favor of CALL users. Besides that, it was clarified that these experimental group students had a positive attitude towards CALL regarding its usefulness and a strong eagerness to continue to gain from CALL in future classes. Another empirical study conducted by Jafarian et al. (2012) investigated the effectiveness of writing feedback software "WordPerfect" on the writing achievement of a group of high school students. According to the results, the experimental group who were exposed to CALL in the process showed more competence in EFL and improved their knowledge regarding having more accuracy in their compositions.

Vu et al. (2022) investigated the effectiveness of a CALL software "Listening Hack" on the development of EFL listening comprehension. In the study, 53 students were randomly divided into two groups. The experimental group did listening practice on the platform by watching English-speaking movies and completed paused transcription assignments, while the control group students followed traditional listening practices with comprehension questions in Google Classroom. The results of the study demonstrated a significant progression in the EFL listening performance of the experimental group, which is counted as a sign of students' growing capacity for spoken word recognition and learner autonomy. According to Hoopingarner (2009), in accordance with the best practices, the implementation of CALL in the EFL can support language instruction and learning by enhancing input while presenting extra opportunities for linguistic practice and acting as a basis for student interaction. All the studies indicate the positive effect of CALL on the development of learning languages.

### ***CALL and vocabulary learning and teaching***

Knowing sufficient vocabulary is one of the preliminary necessities for communicating in the target language. It is well-known that vocabulary and grammar are the language areas that need to be repeated and practiced several times to improve. Zimmerman (1997) asserts that knowing a word needs varied experiences providing learners with repeated exposure in meaningful settings and leading them to interact in the learning process. Regarding the substantial amount of vocabulary learners must acquire and the restricted time available in language classrooms, CALL is becoming progressively more prevalent as a

learning method (Miles & Kwon, 2008). With the evolution of computers, practitioners and scholars of the field have been seeking efficient innovative ways of teaching and learning foreign languages for quite some time. Regarding the importance of knowing enough words and phrases for acquiring a target language, there has been a noticeable increase in the use of CALL for vocabulary teaching and learning. Accordingly, many studies have investigated the relationship between vocabulary development and the use of CALL in the last few years.

In their empirical study, Hirschel and Fritz (2013) compared the short-term and long-term effectiveness of two vocabulary learning techniques which are using a vocabulary notebook and a CALL software. The participants of the study consisted of 140 English language students at a university in Japan. The vocabulary notebook treatment group was required to complete the included part in the notebook such as the second language definition and example sentence of a target word. CALL treatment group learners were asked to use a vocabulary recycling program defined by the researchers. According to the result of the study, both groups had nearly the same achievement in short-term vocabulary knowledge, whereas the CALL treatment group performed slightly better results for long-term retention due to likely providing more receptive learning. Another study on the comparison of two vocabulary study methods is conducted by Oberg (2011). The participants of the study were comprised of 71 freshmen students at a university in Japan. They were divided randomly into experimental and control groups. In the experimental group, students were asked to use the CALL interface while control group students were supposed to use representative picture cards to study the targeted 10 words. After the treatment, the results of the tests revealed that there were not any significant differences between the level of success of both groups in the retention of the target words. However, it was suggested that both methods provided learners to improve their vocabulary knowledge and had positive attitudes.

Bagheri et al. (2012) conducted a study to investigate the more efficient way of teaching L2 vocabulary between CALL-based and non-CALL-based methods for both short-term and long-term retention. 61 female participants of the study were randomly assigned into the two groups. CALL-based learning group students learned the target vocabulary in a software program named *Phonics* that offers vocabulary activities and games to learn pronunciation and vocabulary. The other group learned the target words in the classroom using flashcards, paper pictures, a cassette player, and other realia. To determine the effectiveness of methods over the level of short-term and long-term successes of students,

immediate and delayed posttests on a multiple-choice vocabulary test were performed. According to the results of the study, no significant difference was found between the short-term and long-term vocabulary learning scores of both groups. Nonetheless, the study demonstrated that both methods were proven to have the potential to actively involve EFL students in learning vocabulary.

Sanosi (2018) studied the effect of using Quizlet on vocabulary learning through an experimental research design incorporated 42 university students in Saudi Arabia. The participants were divided into experimental and control groups in equal numbers. Experimental group students performed using Quizlet during a month of investigation process while the control group had standard vocabulary instruction. Before and after the treatment both groups were assigned to have vocabulary achievement tests to assess their learning of assigned words or expressions that were extracted from their syllabus. According to the findings, the experimental group students outperformed the control group students' scores in the post-test. It was revealed that using Quizlet in the teaching and learning vocabulary process had a significant effect on the achievement of the learners.

Hajebi et al. (2018) carried out research on the impact of web-based language (WBL) learning on the vocabulary learning achievement of EFL learners. The participants of the study consisted of 66 intermediate-level students who were divided into two groups; the experimental group involved 33 students and the control group included 33 students. For 8 weeks of intervention, experimental group students practiced vocabulary every day using free vocabulary learning sites of IELTS English language learning site while the control group received standard vocabulary instruction. The quantitative data collecting method was adopted and pre-and post- vocabulary size tests were implemented. The results demonstrated a significant difference in vocabulary knowledge between the experimental and control groups. It was deduced that WBL-based vocabulary instruction fostered the vocabulary knowledge of EFL learners.

Enayati and Gilakjani (2020) has investigated the impact of 'Tell Me More'(TEM) software on intermediate-level learners' vocabulary learning. The participants of this quasi-experimental study consisted of intermediate-level female students at Saye English Institute in Tehran, and they were divided into experimental and control groups. During 12 sessions of intervention, both groups were taught the same vocabulary. In the experimental group, the TEM software was utilized as treatment while the control group receives the traditional way

of vocabulary instruction. The quantitative data collection method was adopted and teacher-made pre and post vocabulary tests were administered as instruments of the study. The findings of the study revealed that the results of the experimental group had significantly better than the scores of the control group. It showed that using the TMM software had a positive impact on the vocabulary learning of Iranian EFL learners.

Başöz (2013) conducted a study to comprehend the effectiveness of computer-assisted vocabulary instruction with the communicative language teaching method. The participants of this quasi-experimental study consisting of 52 ELT Department students at a state university in Türkiye were randomly chosen into experimental and control groups. The experimental group students were instructed 20 target words using an e-learning software program “Moodle” in a computer laboratory for five weeks, while the control group students learned the same words from their teacher in a communicative learning environment. Administering both groups the same pre-test, post-test, and delayed test of the target words, the results of the study showed that both groups experience nearly the same good level of vocabulary growth, which means there were no significant differences between the achievement of student groups. However, it was revealed that the students had a positive attitude towards computer-based vocabulary learning.

Bakla and Çekiç (2017) carried on an experimental study to investigate the effectiveness of an online learning tool *Memrise* on the vocabulary learning achievement of upper-intermediate EFL learners. 80 students randomly assigned to two groups constituted the participants of the study. After the implementation of a pre-test, the same target vocabulary in the same reading passage was introduced to both groups. While the experimental group was supposed to produce target vocabulary sets to study in the platform, control group students followed traditional vocabulary learning exercises. After the study, the post-test scores of the participants proved that the flashcard software *Memrise* enhanced the vocabulary success of students when providing them with a variety of exercises as means for the individual pace of study, monitoring learners’ performance, and giving immediate feedback in a stress-free atmosphere.

In their quasi-experimental study, Korlu and Mede (2018) investigated the effectiveness of Quizlet on EFL learners' vocabulary achievement and learner autonomy. Also, they shed light on the perceptions of the student and teacher participants about the implementation of the tool when teaching and learning English vocabulary in a preparatory

classroom. The participants of the study, who were 40 pre-intermediate students studying English for academic purposes at the Preparatory Program of a foundation university in İstanbul, Türkiye, were nonrandomly divided into experimental and control groups. The mixed method design was applied during the data collecting procedure. For the qualitative data, pre- and post-vocabulary tests and an online survey were administered. The qualitative data was gathered through interviews of experimental group students and the teacher's reflective journals. The results of the analysis showed that the tool had a positive effect on the performance of students and their autonomy in vocabulary acquisition. Besides, the general attitudes of participant students and their teachers toward utilizing Quizlet to teach and learn English vocabulary were favorable. Likewise, in his dissertation, Toy (2019) also examined the effect of using Quizlet on vocabulary learning achievement and the regard of teachers and students for the tool. The participants consist of 200 8<sup>th</sup> grade students and 24 English teachers, and they were randomly divided into experimental and control groups in equal numbers. During the 8 weeks of implementation, the experimental group performed Quizlet for vocabulary instruction while the control group used traditional instruction of vocabulary. Before and after the treatment, students of both groups were assigned to have pre and post vocabulary achievement tests. The qualitative data of this study adopted a mixed method design gathered through a survey about perceptions of experimental group students and teachers and focal interview with 8 teachers. To analyze the data, independent samples t-test was employed, and it was revealed that the experimental group outperformed the control group in the vocabulary achievement test. Besides, descriptive frequency analysis was carried out to analyze the qualitative data and its results showed that students and teachers had positive perceptions toward the use of Quizlet in learning vocabulary.

In their study, Çakmak et al. (2021) investigated the efficiency of CALL software on the vocabulary improvements of pre-intermediate EFL students. 76 EFL students constituting the participants of the study were randomly divided into experimental and control groups. After the implementation of a pre-test, the experimental group was supposed to use the flashcard software called *Mnemosyne* in which they can construct and use a variety of flashcards, while the control group students followed only traditional language instruction without any computer-enhanced practice. After the intervention, a post-test was assigned to both groups and the experiment group scores outperformed the control group. The results of the study demonstrated that CALL-enhanced vocabulary learning experiences had significantly positive effects on the development of learning regarding fostering motivation

for learning with various activities and tasks and providing control of learners on their development.

Accordingly, most of the mentioned studies have positive results on the relationship between the use of CALL and vocabulary learning success. Moreover, in the other studies that have not found any difference between the two variables, the CALL enhanced vocabulary learning is suggested due to leading to slightly better progression and positive attitudes of learners. Nevertheless, it is needed to be kept in mind that, CALL enhanced learning is not flawless. The outcomes of the learning may change because of many variables such as the learners, the features of the software to be used, the tasks, and the evaluation tools. Zhao (2003) asserts that even the same use of certain technology in various learning contexts could provide different learning results.

### ***Seamless and ubiquitous learning***

The idea that CALL could move beyond traditional classrooms to become flexible regarding time and space has been seen as a future direction for CALL. This vision has gained momentum with the emergence of technologies that enable people to send, receive, and carry data (Stockwell, 2007). Thus, the idea of blending CALL with seamless and ubiquitous learning can be seen as a proper solution that encourages advancement toward this goal (Wong & Looi, 2010). CALL and seamless and ubiquitous learning share a common thread in their emphasis on the integration of technology to provide flexible, personalized, and continuous language learning experiences across various contexts and resources (Chen et al., 2020). Looi et al. (2015) clarify that seamless and ubiquitous learning refers to educational concepts driven or facilitated by mobility, ubiquity, and awareness afforded by digital and networked technologies.

In seamless learning, learning is a continuous experience across technology and different settings (Chan et al., 2006; Milrad et al., 2013), and learners are supported and empowered to learn whenever they encounter a stimulus (Wong & Looi, 2011). It breaks down the barriers between formal and informal learning, creating a smooth transition between various learning environments, such as in-class and out-of-class language learning (Chan et al., 2006; Milrad et al., 2013; Mouri et al., 2018; Looi et al., 2015). On the other hand, in ubiquitous learning, learners benefit from the persuasive and embedded technologies that surround them (Looi et al., 2015). It enables learning anytime and anywhere through wireless networks, leveraging context-aware technology to offer learners more appropriate teaching

materials, as well as effective learning support and guidance (Ye & Hung, 2010; Hwang et al., 2008).

Accordingly, the methods and experiences of language teaching and learning have been continuously evolving due to various technological advancements. Also, language learning requires the support of various learning tools, and recently innovative methods have been proposed to enhance language learning experiences through resources that could be used anytime and anywhere (Chen & Li, 2010). Thus, seamless and ubiquitous technologies could facilitate the transition from classroom-based learning to a format that is unrestricted by time and space in the learning process (Ogata et al., 2010). In this respect, EBA can be considered a CALL tool in the notion of seamless and ubiquitous learning, providing students with the opportunities to engage in several activities that could help improve their target language beyond the classroom.

### **2.3. EBA (Educational Information Network)**

In Türkiye, technology integration into education to keep up with the century has proceeded with the foundation of the Movement of Enhancing Opportunities and Improving Technology (hereafter FATİH project) in 2011 by the Ministry of National Education (hereafter MoNE). According to Kızılet and Özmen (2017), the FATİH project is a macro-level project launched for incorporating technology into education. The main intent of the project is to provide every student with equal opportunity and the highest quality educational content in Türkiye (MEB, 2023). For these purposes, it promises economic support for hardware infrastructure and broadband internet to every classroom, and supply of educational e-content related to the curriculum. Within the scope of the project, an instruction software called Educational Information Network (EBA) has been developed to meet the needs of educational e-contents supporting teaching and learning activities both in and out of the classrooms.

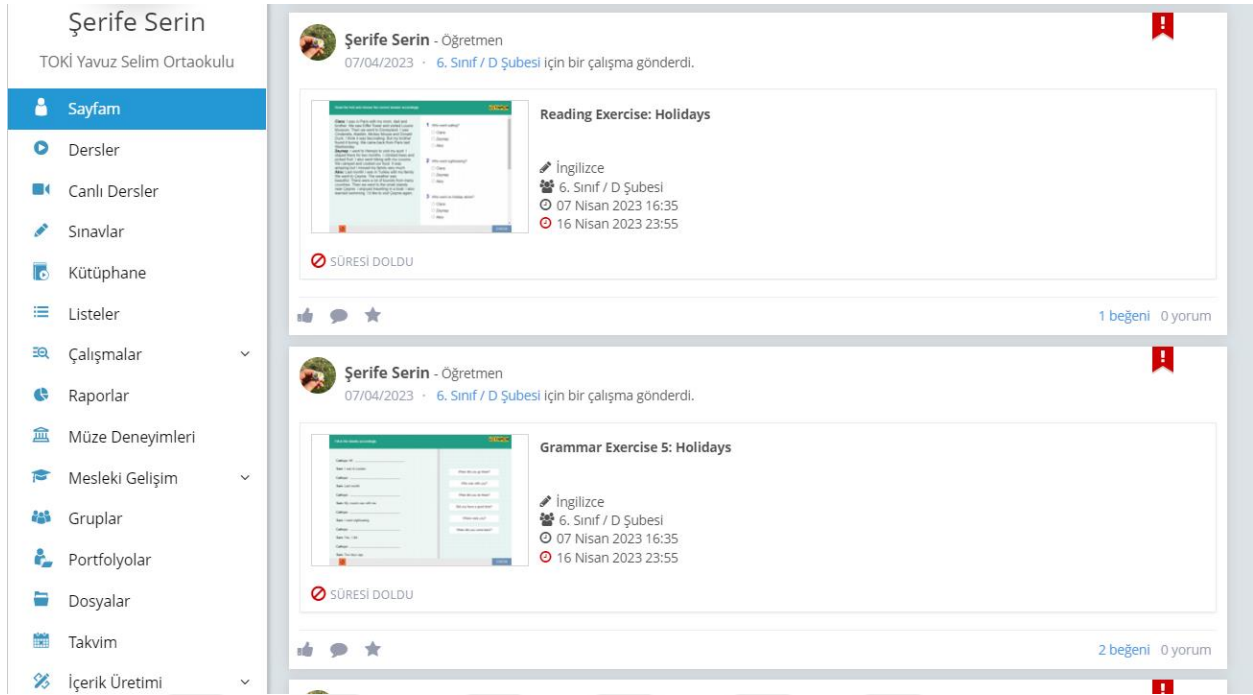
EBA is a social education platform providing a reliable and individualized learning atmosphere that teachers and students can use free of charge (MEB, 2023). It enables seamless and ubiquitous learning, allowing individuals to learn anytime and anywhere. There are various modules presented in EBA such as curriculum-based EBA courses, EBA library, EBA live lessons, EBA market, EBA search, EBA e-portfolio, EBA academic support, content module, and exam center. Besides these, it provides the users the opportunity of interacting with one another in terms of sharing messages and creating discussions, and

voting. Teachers can give tasks to their students on the platform and evaluate students' success on those assignments and in other subjects depending on how well they used the EBA (MEB, 2023). In this context, EBA is encouraged and promoted to adopt during classes by MoNE because of its contributions to learner autonomy and technological integration into the lessons (Karanfil & Özet, 2021).

EBA started broadcasting in 2012 in the name of EBA Test to serve with the test version. Öner (2017) states that “in order to provide and conduct educative e-content which is a component of the project, and to offer accurate and reliable e-content in accordance with every class level, Education Information Network (EBA) was put into service in 2012” (p.227). In 2015 and 2016, the test version was replaced by new different interfaces (Pala et al., 2017), and the last version is delivered in 2019. The main goals of the platform, which supplies individuals with continuing learning processes outside the classroom with reliable and controlled e-content, are mentioned as;

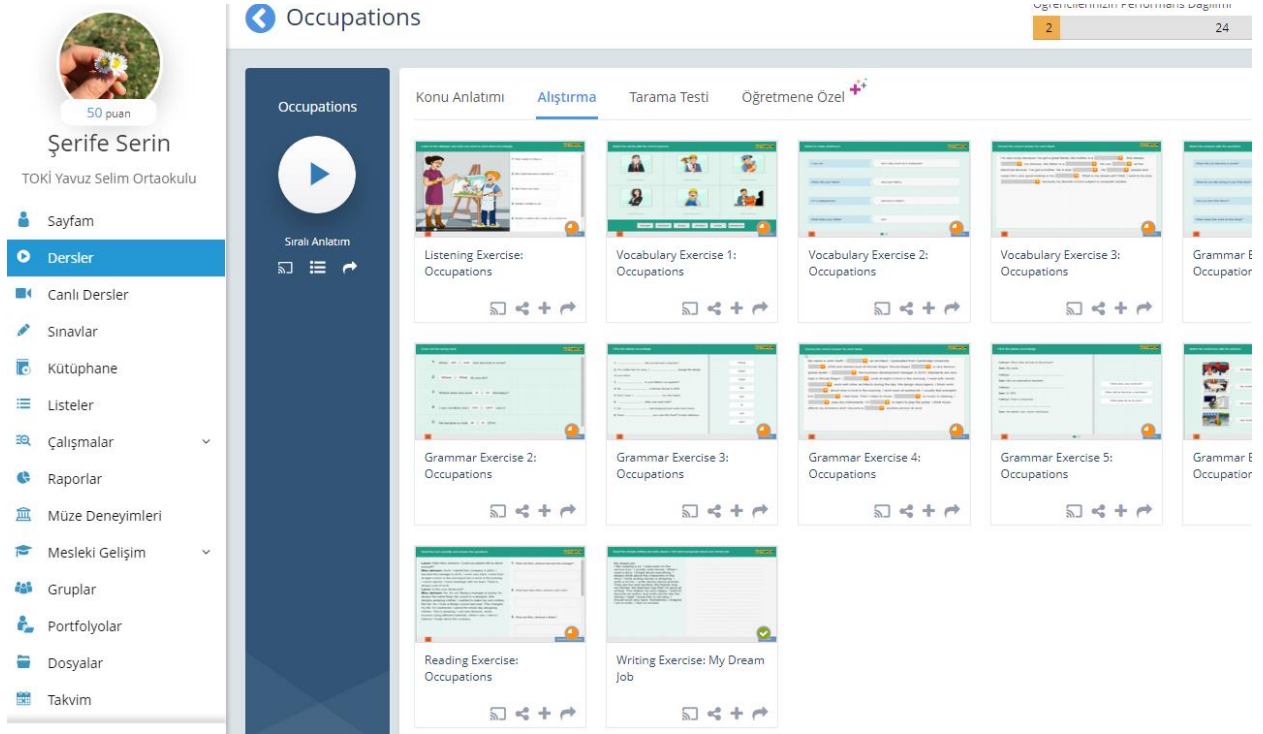
- offering different, rich, and educative content,
- expanding the knowledge of informatics in the education process,
- meeting the needs of educational e-content,
- exchanging information under favour of the social network infrastructure,
- contributing to the lessons with the help of its expanding archive,
- regenerating knowledge while learning it,
- including all the students who have learning differences,
- and taking advantage of technology as a tool not as a purpose (Pala et al., 2017, p.25).

EBA is an educational web page in which students and teachers at the state schools can log in free of charge through a username and password, and study in the platform. They can reach the main module of the EBA, the EBA course. In the teachers' home page, there are links entitled “my wall”, “courses”, “live lessons”, “exams”, “library”, “works”, “reports”, “groups” (See Figure 1). The e-contents of the lessons can be found under the link of “courses”.



**Figure 2. 1.** A screenshot taken from the homepage of EBA and the links to the contents.

In the “courses” page, there are videos of lectures, interactive activities, tests and exams of every course available in the school curriculum for every grades. (See Figure 2) Besides, e-books, interactive books, supplementary materials, EBA TV records, applications and unit tests are available in the page for all users. With the help of this efficient digital learning platform, teachers can create classroom groups, prepare and teach a course through presented contents. They can send their students assignments and follow their learning progress. And students can share posts and comment on those posts, finish the assignment their teachers sent and do any other activities they want. After the deadlines of the assignment is over, teachers can get the report of the studies of the learners.



**Figure 2. 2.** A screenshot taken from EBA web page showing the contents of the course module.

Also, the platform gives the opportunity to the teachers to create e-contents they can use in their lessons and share with their students. They can watch videos and attend many courses on the “EBA career development” page to progress in their career. According to Yıldız and Gündüz (2019), teachers are regarded as the project’s primary practitioners with their substantial responsibility for the implementation of the FATİH project. When they use the platform actively and lead their students, the sustainability of the project would be possible.

In the literature, plenty of studies are conducted on EBA and EBA e-contents of varied courses. Most of these studies focus on determine the perceptions of the teachers and students on EBA usage in teaching and learning various subjects (Ergin, 2021; Tanrikulu, 2017; Timur et al., 2017; Tüysüz & Çümen, 2016; Yerli, 2018; Yıldız & Gündüz, 2019), some of them are on the attitudes of users on EBA e-contents (Çobanoğlu, 2022; Erbay, 2018; Varışoğlu, 2019) and some of them are on the EBA usage level and awareness of teachers in their classes (Çardak & Güler, 2021; Demir et al., 2018; Kuyubaşoğlu & Kılıç, 2019). In the study of Yıldız and Gündüz (2019), the views of secondary school teachers on the EBA e-contents were examined. According to the results, the teachers found the designs of contents insufficient in raising the attention of the students besides having short duration and outdated activities. Çakmak and Taşkiran (2017) examined the opinions of Social Studies teachers on

EBA content. The result of the study reveals that teachers found EBA as an aid for students to review the subjects and to provide them with long-term learning while increasing their interest. However, the participants stated that e-contents should be improved.

There are only a few studies conducted on EBA use in English language education. Kayahan and Özduran (2016) investigated the views of the students and Erbay (2018) studied the opinions of the teachers on the use of EBA platform and e-contents in English language learning and teaching. According to the study results of Erbay (2018), teachers stated that the parallelism between the EBA contents and the objective of the curriculum is insufficient, so they suggested the contents be revised and adjusted to the demands of the learners.

In her dissertation, Pehlivan (2020) studied the effect of the online activities conducted through EBA on the vocabulary and grammar achievement of primary school students and she has tried to identify their attitudes and perceptions. Participants of this experimental study were 32 4<sup>th</sup> grade students, 17 of whom were in the experimental group and 15 in the control group. Experimental group students were required to perform EBA activities while control group students followed traditional activities. The data of this mixed-method design study were collected through pre, post, and delayed vocabulary and grammar achievement tests and semi-structured interviews for students. SPSS 22.0 program with independent and paired t-tests was used to analyze the quantitative data and content analysis was utilized to analyze the qualitative data. At the end of the process, it was concluded that the experimental group students' levels of achievement tests were not statistically significantly higher than the levels of the control group. However, the delayed test results of the experimental group were significantly better than their post-test whereas those of the control group students were not. Hence, it was understood that using online activities was more efficient in the retention of words and structures than using traditional ones. Also, according to the qualitative data findings, the ideas about English of students were affected positively by online follow-up activities on EBA, and it provided an enjoyable learning opportunity for young learners.

Kılıç (2020) investigated the improvement of learners' listening skills through using EBA and identified their perceptions about the platform. 44 6<sup>th</sup> grade students were divided into experimental and control groups in equal numbers for the investigation. While the experimental group students followed materials of the EBA platform to study listening, the control group students followed the listening materials of the course book. In this mixed-method design study, the pre-and post-listening achievement tests were administered to

collect the quantitative data and for the qualitative data, the semi-structured interviews with five successful and five unsuccessful students were applied to reach general perceptions of learners on the software. The findings of the study revealed that using the EBA material resulted in a statistically significant difference between the groups' scores. Also, it was understood that the attitudes of the students toward the EBA were positive because they found it attractive and enjoyable.

Accordingly, although the importance of incorporating technology into the field, the number of studies conducted on the effect of EBA on English language education is insufficient. Especially, there is not much research that studied the skill and subskill developments by means of using EBA and e-content. Thus, whether EBA has efficiency on vocabulary achievement and autonomy development of secondary school students is examined in the current study.

#### **2.4. Learner Autonomy**

Learner autonomy is a key feature of the learner-centered understanding of language education context. According to Benson (2016), following more than forty years of studies on autonomy in language learning and teaching, it may be considered a significant and desirable language learner characteristic that must be considered when teaching languages. Therefore, learner autonomy has recently been a major area of focus in language education (Han, 2014, 2022; Lamb, 2017; Little, 1991; Little et al., 2017; Ou, 2017; Reinders, 2010; Shi & Han, 2019; R. Smith et al., 2017), and many L2 scholars defined the term to determine what an exact independent behavior could be. Holec (1981) defines autonomy as “the ability to take charge of one’s learning” (p. 3), which indicates having the responsibility for all the decisions over every facet of this learning, such as determining the learning goals, describing the topics and learning sequences, determining the most appropriate learning methods, reviewing the learning procedure, and evaluating the obtained information (as cited in Little, 1991, p.7). Similarly, Dickinson (1987) describes the autonomous learner as competent in carrying out all of the choices related to their own education. According to him, students’ flexibility outside the classroom in their learning constitutes the central concept of learner autonomy. Together with these, many other scholars summarized the basis of learner autonomy in general as learners’ independence and willingness to set goals for learning, accepting the responsibility for their learning, and eventually evaluating the learning progress to decide the next step (Crocki, 2016; Dickinson, 1993; Hardy-Gould, 2013; Lamb, 2017; Lamb & Reinders, 2008;

Little, 1991; Murray et al., 2011; Ushioda, 2011). According to provided descriptions, it can be deduced that learner autonomy is not natural talent students are born with; rather it is an earnable ability to figure out what and how to learn a specific knowledge, including language learning.

Learner autonomy has begun to be emphasized due to the importance of learners' freedom to select the most appropriate learning method. According to Little (1991), the belief that "autonomy is a steady state achieved by certain learners" is sometimes a mistake. He claims that learners can show a different level of autonomy in different situations because autonomy is hard-won and its permanence cannot be guaranteed. Wang (2011) states that the level of autonomy depends on some factors including the personality and motivation of the learners, their requirements and preferences for learning a language, and the setting in which the learning takes place. When providing definite freedom for learners in their own learning, the changing level of their autonomy should not be ignored. Almusharraf (2021) states that, according to learner autonomy, students should be free to pursue their studies independently on their own under the guidance of teachers' prescribed courses of study. Little (1991) states that students do not always take responsibility for their education, and they may struggle to reflect on their learning progress critically; hence instructors must assist the learners while supporting proper resources and the chance of practice. On the other hand, he claims that finding resources for learning is one of the crucial abilities of an autonomous learner. Jacobs and Farrell (2001) state that when it comes to lifelong learning, the concept of autonomy places more emphasis on students' roles than those of teachers. To sum up, having autonomy in one's learning is an individual ability that can change from one situation to another; however, when a proper environment is supplied, the learners who have the least autonomy can be fostered to engage in their learning. That is to say, the teacher acts as a resource, acting as a learning manager while autonomous learners' study mainly being independent of the teacher (Higgs, 1988).

In a foreign language learning context, being independent of the teacher to learn things requires different learning resources both inside and outside of the classroom. Thus, the availability of resources significantly impacts autonomous language learning methods. A considerable increase in internet-based access has made the chance of development of proficiency more reachable (Benson, 2013). Schmenk (2005) claims to support this effect, stating that "the popularity of learner autonomy may be at least partially related to the rise of

computer technology and the growing importance of computers in language learning environments worldwide.” (p.107). Reinders and White (2016) studied how computer technology and learner autonomy have developed in twenty years and they found that technological advancements place a lot of pressure on how we think about learning and teaching languages while providing students with newer tools and possibilities at their disposal for use in the context of their own life. They also state that the accessibility of computers and networks, particularly in the institutional context, led to several initiatives to use technology to support students in enhancing interdependent learning skills. Some researchers confirm the prominent benefit of these materials providing excellent resources for autonomous language learning that allow students to make choices on the material to use, decide what to learn, and control the strategies to use (Benson, 2011; Figura & Jarvis, 2007; Kalyaniwala & Ciekanski, 2021; Monteverde & Gaona, 2011).

The potential impact of technology, both for students to have control over their learning process more efficient and for instructors to have more chances to be in touch with their students in and outside of the classroom, has frequently been acknowledged (Reinders & Hubbard, 2013). According to Benson (2011), there are three primary ways that computer-assisted approaches could support autonomy which are;

- “1) they place the learner (as controller of the technological device) in direct control of key aspects of the learning process,
  - 2) they allow wider access to authentic target language sources; and
  - 3) they also allow wider access to authentic interactive use of the target language”
- (p.152).

Students must learn how to use the technological resources to their maximum advantage and instructors assist them in developing this understanding (Monteverde & Gaona, 2011). In this sense, Shetzer and Warschauer (2000) define autonomous learners who pursue online and offline learning materials and resources and make use of them properly to be able to find answers to their questions. It is implied by many scholars that students who acknowledge the most suitable devices among limitless resources for language learning and have the skills to use them according to their needs are revealed to have more increased autonomy (Figura & Jarvis, 2007; Kern, 2006; Reinders & Hubbard, 2013; Reinders & White, 2016; Warni et al., 2018).

Smith and Craig (2013) carried out a study at a Japanese university to investigate the efficiency of a learner training program on the autonomous use of CALL. These three pieces of training consist of the Learner Passports which aid in determining the study habits of students, the e-Learning Portfolio which stores learners' studies during the course, and the e-Learner self-reflection diary. 180 university students participate in the study, and they are required to appear in a 90-minute training class every week. Data is gathered through students' weekly self-reflection, interviews, and end-of-course evaluation questionnaires. According to the findings, CALL is proven to enhance the learners' self-management study skills in language learning. Students' ability to plan, coordinate, monitor, and evaluate their independent use of CALL resources has improved. Besides, the expectations of users in the autonomous use of CALL in a classroom setting become clearer.

The study by Ghufron and Nurdianingsih (2019) investigates how flipped language instruction method using CALL functions to teach EFL writing affects learner autonomy. The participants are five writing teachers and 150 learners from five different private universities in Indonesia. The teachers separated activities into two categories: outside and inside the class. Data were obtained through questionnaires, focus group interviews, analysis of the lesson plans, and in-class observations. The findings of the study indicate that CALL-enhanced flip-class environment encourages improved learner autonomy and fosters students' communication skills.

Farivar and Rahimi (2015) examined the effect of CALL on learner autonomy in their study. 60 language institute students were divided into experimental and control groups. During 20 sessions, both groups received the same instruction of language while the experimental group students were supposed to use English software (BBC course) additionally. The data were collected from a five-scale Likert questionnaire before and after the treatment. According to the results of the study, the implementation of CALL is proven to be significantly efficient in facilitating the autonomy of EFL learners. Similarly, Mutlu and Eröz-Tuğa (2013) conducted a study to investigate the role of CALL in developing learner autonomy. The participants of the study consisted of 48 intermediate English-level university students. They were divided into two groups in equal numbers. In one of the groups, students participated in language learning training for five weeks. The other group of students adhered to the standard curriculum of the university. Data were collected through five different instruments; surveys, in-class observations, e-learning diaries, face-to-face interviews with a

semi-structured format, and the five-week language learning technique training provided with CALL. According to the study results, the use of computers was proven to involve students actively out of classroom studies and increase their autonomy levels. By means of CALL, students in the training group are revealed to have a higher level of motivation for learning and a willingness to take responsibility for their learning outside the classroom.

In her dissertation, Kızmaz (2019) investigated the effectiveness of CALL on learner autonomy. The participants of this quasi-experimental study consisted of 50 English learners in a preparatory classroom of a state university in Türkiye. They were divided into two groups as experimental and control groups. The experimental group received seven weeks of CALL intervention as out-of-class studies, while the control group of students followed the regular curriculum of the preparatory class. Data were collected through a questionnaire assigned to both groups before and after the treatment, and a semi-structured interview with nine experimental group students. The results of the study reveal that the self-perceived autonomy level of students meaningfully increased with the help of CALL use. Besides, CALL treatment had a positive impact on students' perceptions in terms of supplying enormous resources, providing flexibility to make decisions, and enhancing their English language abilities.

Ceylan (2019) conducted a study to identify the perception of students about their language learning processes regarding themselves, their teacher, their classmates, and the opportunity they receive during the process in order to gain a better understanding of their autonomy. During the intervention, students were required to use a computer software program *Quartet* which allowed students to work independently. 100 randomly chosen university students were the participants and a 46-item questionnaire was administered to gather the data to explore the opinions of students on learner autonomy and the usefulness of the software. Findings revealed students' beliefs on teachers as the ones who should set goals and give guidance and feedback in the language learning process through the CALL program, although they accepted taking responsibility for their learning. They disliked the preferred software and they believed that any computer program appealing to their interest might have been more beneficial for improving language learning skills.

Consequently, the studies above prove that CALL implementation has a significant effect on facilitating learner autonomy, and computer-based implementation in language learning context could provide students with control over their learning, using an infinite

number of resources as long as f learners have the knowledge, or they are guided on how to make use of it appropriately in line with their contextual needs.

#### **2.4.1. Culture of learning**

Enhancing students' learner autonomy depends on several factors that need to be considered. Culture of learning might be one of the determining factors influencing the learner autonomy of students. According to Palfreyman and Smith (2003), the significance of culture in language education is primary, as the entire educational process unfolds within a culture. Some scholars assert that the concept of learner autonomy, widely advocated by Western instructors and scholars, encounters challenges when attempting to implement it beyond Western contexts because of cultural differences (Ming, 2009; Palfreyman & Smith, 2003; Pennycook, 2003). According to them, students in Eastern countries often view the teacher as the authority figure and take on a more passive role in the classroom, therefore their learner autonomy cannot be supported. However, others argue that it might stem from differences in educational cultures, rather than the national cultures of the countries (Takagi & Chu), and learner autonomy could be supported with effective learner training irrespective of students' cultures (Littlewood, 1999). They state that students in East Asian countries may be discouraged from exhibiting autonomous learning behavior by educational norms. The national culture of learning is a significant factor in creating an environment that fosters autonomy. Promoting autonomy in language learning requires considering the cultural context of students (Pennycook, 2003) and the customary way of education in a country (Palfreyman, 2003).

As for the culture of learning in Türkiye, the education system is often regarded as teacher-centered and the teacher is viewed as an authority (Balçıklı, 2010; Oktay, 2015). Therefore, students might be hindered from developing autonomous learning behavior (Çakıcı, 2017). As Balçıklı (2010) states "... schools are formed in a structure where the authority is not shared, individuality and creativity are less encouraged. As a result of this system, learners tend not to take responsibility for their own learning during their educational process" (p. 99). Besides, the fixed syllabuses the teachers must adhere to, and compulsory examinations increase pressure on learners; this might lead students to view language more as a subject to be studied rather than one to be learned both within and outside the classroom (Doğan & Mirici, 2017). Accordingly, the scholars in Türkiye claim that Turkish students generally lack in taking responsibility of their learning and do not have a willingness to

pursue the language learning process autonomously due to the hinders to autonomous learning in the learning environments (Dođan & Mirici, 2017; akıcı, 2017; Karabıyık, 2008; Kartal & Balıkanlı, 2019; zer & Ykselir, 2021). All in all, Turkish educational culture might not offer an environment that supports autonomous language learning. However, the present research studies whether utilizing a technological tool, such as EBA, could be a suitable solution for addressing the mentioned issue by providing students with autonomous learning environments, allowing learning to occur at any time and in any location.



## CHAPTER 3

### 3. METHODOLOGY

This chapter provides information about the overall research model adopted in the study, the sampling method used to determine the participants, and information about the participants of the study. It also presents the data collection instruments utilized during the implementation process and data collection procedures, including the steps the researcher took during the process followed by the analysis of the gathered data.

#### 3.1. Research Model

This study aims to explore whether EBA affects students' vocabulary learning achievement and learner autonomy. Based on these variables, it seeks to measure the extent of EBA's effectiveness on students' vocabulary learning and the development of learner autonomy. A pre-test and post-test experimental design with a control group was applied in this study.

A quantitative research model is embedded in the current study with pre-and post-vocabulary revision tests and a learner autonomy scale in a five-point Likert scale model. Quantitative research is a study that centers around variables instead of individuals and aims to determine the correlations between the variables by measuring them and in some cases manipulating them (Dörnyei, 2007). There are two forms of quantitative research in terms of concept: correlational and experimental. In experimental studies, researchers purposefully manipulate one or more variables (Mackey & Gass, 2022). The current study adopted a quasi-experimental study (pre-test post-test control group) design in which a separate treatment is given to non-equivalent comparison groups (Creswell & Creswell, 2018) which are formed with a non-random assignment (Mackey & Gass, 2022). Quasi-experimental study model is advised when it is necessary for a researcher to employ pre-determined groups of participants (Creswell, 2009). According to Seliger and Shohamy (1989), the quasi-experimental study design is regarded as having higher validity because it is undertaken in settings that resemble educational contexts, and it is excellent for teacher-conducted research due to being the easier way of accessing the subject population (p.149). Hence, in the present study, two intact classes of 6th grades of a state secondary school in which the researcher teaches English were employed as two comparison groups of a quasi-experimental study design.

To seek the answers to the research questions, the experimental group received treatment and the control group obtained no treatment. Before the implementation, a pilot study was conducted to find out whether the questions of the data collection instruments are suitable for the level of the students and to determine the reliability of the tests. After that, all the participants were administered a vocabulary achievement test, and they filled in the learner autonomy scale. Then, for seven weeks, the experimental group followed and completed the instructions and activity posts on the learning platform (EBA) in addition to traditional vocabulary instructions and activities in their coursebooks during class hours, while the control group worked on regular vocabulary instruction and activities in their coursebooks. Finally, the students took the same vocabulary achievement post-test and the learner autonomy questionnaire to enable the researcher to determine the difference between the participant groups through analyzing the collected data statistically (see Table 3.1.).

**Table 3. 1.** The Overview of Research Questions, Instruments, and Data Analysis.

<b>Research Questions</b>	<b>Data Collecting Instruments</b>	<b>Data Analysis</b>
RQ1. Is there a statistically significant difference between the vocabulary achievement of groups before and after the study?	Pre- and Post- Revision Tests on Vocabulary Achievement	The Mann Whitney-U test The Wilcoxon Signed-Rank test The paired-samples t-test
RQ2. Is there a statistically significant difference between learner autonomy of groups before and after the study?	Pre- and Post-Treatment Learner Autonomy Scale	The Mann Whitney-U test The Wilcoxon Signed-Rank test The paired-samples t-test

### **3.2. Sampling and Participants**

The study was conducted in the Spring semester of the 2022-2023 academic year at a state secondary school in Konya. The participants of the study were 40 EFL 6th graders students from two classes of in the school. They were chosen as the experimental group and control group of the study. Both groups consisted of 20 students. When constituting the groups, the intact class sampling method was used. Intact class sampling is preferred in research, particularly in educational contexts, where entire intact groups or classes are selected as units of analysis rather than individual participants (Best & Kahn, 1998; Millan & Schumacher, 1984).

There are four 6th grade classes at the school, and two of them were chosen for the study. They were informed that this process was not compulsory and would not affect their

school grades. In addition, some students from both classes did not want to attend the study; hence, the researcher maintained the study with a total number of 40 students. The students of both classes were Turkish native speakers and had been learning English for four years. Their English level varied from A1 to A2 level. The students aged between 11 and 12 and all of them have studied at state schools throughout their education. The coursebooks determined by the Turkish Ministry of National Education have been used in the English lessons. Besides, all students at the school had been supposed to register and use the EBA platform for a while. They all had internet connection at home to log in and follow the assignments regularly and they were already accustomed to using EBA for learning.

### **3.3. Data Collection Instruments**

The study benefited from quantitative data collection tools to determine the effect of EBA use on vocabulary learning and learner autonomy. A pre-test and a post-test were administered to two different groups of students to identify the differences in terms of vocabulary achievement. Besides, a learner autonomy questionnaire was applied to both groups before and after the treatment to be able to identify the effect of the software on the levels of autonomy.

#### **3.3.1. Vocabulary revision test**

A vocabulary retention test was used as a pre-and post-test (see Appendix 1) to measure the effect of using EBA through online activities on secondary students' vocabulary achievement. These pre-and post-tests employed in the study were identical. The test was developed by the researcher in accordance with Unit 6 "Occupations" and Unit 7 "Holiday" in the annual plan of the lesson curriculum (see Appendix 2) to ensure content validity. The test was separated into 2 sections based on the mentioned two different units.

The test was comprised of 30 questions; each part had 15 questions worth 50 points and therefore the maximum overall score a student could get from the tests was 100. Both sections involved 6 multiple-choice items, 4 incomplete sentences to match, and 5 gaps to fill. Before administering the pre-test, a check and revision of the test items are provided by two experts from Necmettin Erbakan University and three teachers at the same school with the researcher for the validity and reliability of the test. The test was revised according to their feedback. After the corrections were made, a pilot study was conducted with 14 6th grades students excluding the study groups, and the Cronbach's Alpha analysis was counted to assess

and determine the reliability of the test. The reliability of the pilot test was found to be 0.804, which was highly reliable.

The test was administered as a pre-test prior to the seven-week implementation procedure to find out the pre-existing vocabulary knowledge of the students in both control and experimental groups. After the completion of the seven weeks of implementation, the same vocabulary revision test was conducted without any adjustment as the post-test of the study to find out whether there were any significant differences in the vocabulary achievement of the participant groups. The data gathered from both administrations were analyzed and compared through Statistical Package for the Social Sciences 27.0 program (SPSS).

### **3.3.2. Learner autonomy scale**

The Learner Autonomy Scale, the 14-item autonomy questionnaire, was administered to both participant groups to explore the impact of using EBA activities on participants' autonomy levels (See Appendix 3). The scale adopted in the study was originally developed by Orakçı and Gelişli (2017). When developing it, the researchers studied with two groups of 6th grade students to calculate the construct validity and reliability of the scale. After confirming its reliability and validity, they named the scale "LAS", the abbreviation of "Learner Autonomy Scale". Its calculated Cronbach's Alpha reliability value was reported by the researchers as above 0.95. The value suggests that the result was above acceptable values in terms of reliability level.

The items constituting the scale were based on the themes of responsible and independent English learning, self-awareness, and language learning activities. Also, the autonomy scale is designed in a five-point Likert scale model of which options are "Strongly disagree (1)", "Disagree (2)", "Neutral (3)", "Agree (4)", and "Strongly agree (5)". The scale comprising of these 14 items demonstrated a single factor structure. The scale's maximum possible score is 70, and its lowest possible score is 14. Item 9 and 14 on the scale involve reverse coding. A high score indicates a high degree of learner autonomy among students, while a low score suggests a lower level of learner autonomy.

The items in the scale were already in Turkish because the researchers had intended to investigate Turkish students' autonomous learning. The researchers stated that the scale was developed to identify the autonomy level of the 6th-grade students which makes it appropriate

for the current study. After receiving the consent of the researchers, the scale was administered to the target groups.

### **3.4. Data Collection Procedure**

The study was implemented in the second term of the 2022-2023 academic year, during which the English lessons of two 6th grade classrooms: 6-C and 6-D. There were four 6th-grade classrooms at the school in which the study was employed. Two of them were chosen as intact classes because the researcher was instructing their English lessons. According to Johnson and Christensen (2004), a common characteristic of experimental designs is that certain intentionally manipulated processes occur in a carefully controlled setting where only the target variables are changed while others are maintained constant. Considering this suggestion, two intact groups as experimental and control were formed. Class 6-C was chosen as the control group and class 6-D was determined as the experimental group. The students in the later classroom had an internet connection at their home and the responsibility to check and complete the assignments on the platform. Hence, the experimental phase of the study was carried out without confronting any difficult situation.

After the approval of the thesis proposal, the necessary permission was obtained from the Provincial Directorate of National Education (See Appendix 3). In the last weeks of the first term of the academic year, all the students in both groups were informed about the research process that the researcher would implement, and consent forms (See Appendix 4) were required to fill out by their parents for voluntary participation. All the volunteer students and their parents who permitted their children permission to participate in the study received the necessary guidelines and explanations. Before the implementation phase, the temporary passwords of the platform were provided to each experimental group of students. All students were familiar with the platform because they had been using it for approximately two years, during which the Covid-19 pandemic obliged the students to carry on their education at home. However, they participated in a pilot study before the study process to ensure that there were not any possible problems or obstacles in using the platform and completing any activity.

The treatment was planned to last for seven weeks. The beginning of the second term was delayed for two weeks because of the major earthquake that occurred in the country on the 6th of February, hence the implementation of the study started two weeks later than planned. For seven weeks of treatment, besides the coursebook of the lesson, experimental group students followed online EBA activities, which were designed in accordance with the

coursebook units, out of the classroom as assignments. Meanwhile, control group students received regular language instruction with the same coursebook only. The mentioned course books used in state schools were delivered by MoNE at the beginning of the education year and there were 10 units in it. In the yearly plan, three or four weeks were allocated to instruct these units. For four weeks of the treatment, the experimental group of students was supposed to complete the activities of Unit 6 “Occupations” sent on EBA, and activities of Unit 7 “Holidays” (See Appendix 5) were to be completed for the other three weeks. Within this time, they received regular language instruction in English courses using the coursebook as the control group of students did for five hours a week. The researcher sent various skill-based activities (vocabulary, grammar, reading, and listening) on the platform to familiarize the experimental group of students with the unit words. The students were asked to complete the posted activities at home after school.

At the beginning of the first week of the research, the pre-test of vocabulary achievement and the pre- treatment learner autonomy scale were administered to both groups. Following this initial assessment, the implementation phase began, and throughout the same week, both groups focused on learning unfamiliar words related to occupations during school hours. Following classes, the experimental group engaged in vocabulary activities on EBA. Moving into the second week, the experimental group was provided with both vocabulary and grammar activities on EBA to be completed at their own pace over the week. Simultaneously, both groups received instruction at school on a grammar structure and completed the concurrent coursebook activities. During weeks three and four, the experimental group was assigned various activities, including grammar, reading, and listening tasks on the platform to be completed independently. Meanwhile, they received in-school instruction using the school coursebook that contained exercises to develop all skills, as the control group did.

A three-week period was allotted for the other unit named “holiday”. In the fifth week of the process, both groups were taught new unit words at school using the coursebook, followed by completing associated exercises. Post-school hours, the experimental group engaged in vocabulary and grammar activities on EBA at their own pace within a week. In the following week, both groups were instructed on a grammar structure at school and followed the coursebook activities. However, the experimental group was additionally assigned to follow the vocabulary, grammar, and listening activities on the platform after school. In the seventh week of the implementation, the researcher provided the experimental group with

grammar activities and reading activities on the platform to complete at their own pace. Simultaneously, both groups continued to complete coursebook activities during regular school hours.

Once the seven weeks of the treatment process were completed, the post-test of the same vocabulary revision test and the same Learner Autonomy Scale were applied to students of both groups on the same day. Following the end of the research process, the data gathered from the pre-and post-vocabulary tests and learner autonomy scales were analyzed and compared with the help of SPSS 27.0. The weekly procedures of the study are listed in Table 3.2 below.

**Table 3.2.** Weekly stages of the research.

<b>Week</b>	<b>The description</b>	<b>Group</b>
1	The first implementation of the vocabulary revision test and the Learner Autonomy Scale, Unit 6 regular in-class instruction utilizing the coursebook Activities on EBA for Unit 6	Both groups Both groups Both groups Experimental group
2-3-4	Unit 6 regular in-class instruction utilizing the coursebook Activities on EBA for Unit 6	Both groups Experimental group
5-6	Unit 7 regular in-class instruction utilizing the coursebook Activities on EBA for Unit 7	Both groups Experimental group
7	Unit 7 regular in-class instruction utilizing the coursebook Activities on EBA for Unit 7 Vocabulary revision post-test Post-Treatment Learner Autonomy Scale	Both groups Experimental group Both groups Both groups

### **3.5. Data Analysis**

The quantitative analysis was used in the present study to see whether there was a meaningful difference in student groups' vocabulary gain and autonomy level before and after the treatment. The data collected through the vocabulary revision test and learner autonomy scale were analyzed and compared via Statistical Package for the Social Sciences (SPSS) version 27. For the results of each analysis, frequency tables were created for the experimental and control groups. Before analyzing the data, the normality of the vocabulary revision test and learner autonomy scale were inquired to determine the ideal statistical analysis methods.

### 3.5.1. Normality Analysis of Pre-test and Post-test Scores of Vocabulary Revision Test

At the beginning of the analysis of the data gathered from the vocabulary revision test, the Kolmogrov-Smirnow test was applied to all test scores of two groups in order to see whether the data was normally distributed. The table below (See Table 3.3.) demonstrates the distribution of data.

**Table 3. 3.** Normality test results of pre-and post- vocabulary revision test.

Variables	n	Mean	SD	Min.	Max.	Kolmogorov Smirnov (p)	Skewness	Kurtosis
Pre-test Total Score	40	34,55	14,672	10,00	62,00	,138*	-,001	-1,087
Post-test Total Score	40	68,35	18,364	31,00	100,00	,200*	,088	-,597
Post- and Pre-Test Difference	40	33,80	17,169	1,00	70,00	,200*	-,084	-,827
Experimental Group Post- and Pre-Test Difference	20	29,05	17,324	1,00	58,00	,200*	,097	-1,071
Control Group Post- and Pre-Test Difference	20	38,55	16,044	11,00	70,00	,200*	-,181	-,379

\* p <0,05

According to the Kolmogrov-Smirnow Analysis results, all the variables demonstrated normal distribution ( $p > 0,05$ ). As Dörnyei (2007) states, to use one of the parametric tests in the analyzing procedure the data must be normally distributed. However, when dealing with a small sample size non-parametric tests can provide more powerful results compared to parametric tests that require larger sample sizes ( $n > 30$ ) to meet assumptions. In the light of provided information, in order to see the differences in the group means of the 2-group pre-test and post-test variables, non-parametric Mann Whitney-U analysis was employed since there were not enough observations in these variables for the parametric tests. To see the differences in the group means of the variables, paired-samples t-test analysis was applied, and when there was not enough observation number, the Wilcoxon Signed-Rank test which is the non-parametric alternative to the paired-simple t-test (Dörnyei, 2007) was used.

### 3.5.2. Normality Analysis of Pre- and Post-Learner Autonomy Scale Results

As for the Likert-scale for learner autonomy level that was applied before and after the study, the obtained mean scores were examined through the Kolmogrov-Smirnow test to decide the appropriate statistical tests for data analysis. The following table (See Table 3.4) presents the distribution of the data.

**Table 3. 4.** Normality test results and reliability analysis of pre- and post-treatment learner autonomy scale.

<b>Variables</b>	<b>n</b>	<b>Min.</b>	<b>Max.</b>	<b>Mean</b>	<b>SD</b>	<b>Kolmogorov Smirnov (p)</b>	<b>Skewness</b>	<b>Kurtosis</b>
Pre-Treatment Scale Total Score	40	32,00	67,00	53,27	7,520	,200*	-,706	,496
Post-Treatment Scale Total Score	40	39,00	63,00	53,90	6,452	,200*	-,453	-,624
Post- and Pre-Treatment Scale Difference	40	-25,00	21,00	,62	8,154	,072*	-,091	2,200
Experimental Group Post- and Pre-Treatment Scale Difference	20	-9,00	21,00	1,70	8,706	,081*	,827	,027
Control group Post- and Pre-Treatment Scale Difference	20	-25,00	12,00	-,45	7,632	,107*	-1,609	5,209

\* p <0,05

In the same way as the previous results, the Kolmogorov-Smirnow Analysis results indicated that all the variables demonstrated normal distribution ( $p > 0,05$ ). Considering the above-mentioned information, the same analysis methods were used in the analysis of the results of pre-and post-treatment learner autonomy scales. In that, the non-parametric Mann Whitney-U test was used to reveal the differences in the group means of the 2-group pre-test and post-test variables; and to see the differences in the group means of the variables, paired-samples t-test analysis or the Wilcoxon Signed-Rank test were employed according to the observation number.

## CHAPTER 4

### 4. FINDINGS

This chapter presents the findings of the current study which aims to reveal the effect of using the EBA activities on vocabulary knowledge improvement and the learner autonomy development of students. The results of the pre-and post-vocabulary revision tests and learner autonomy scale applied before and after the treatment are presented in separate sections through statistical analysis.

#### 4.1. Findings on Vocabulary Revision Test

The first research question of the study was formed to find out whether there is a statistically significant difference between the vocabulary achievement of the students who practice the language through EBA activities and those who do not. To reveal the outcomes a set of vocabulary revision tests were applied to both groups of students before and after the treatment. In the pre-revision test, similar results regarding vocabulary knowledge from both groups were expected. After the treatment, the results of the post-vocabulary revision test revealed the outcomes of the study. Table 4.1. shows the numbers of the students taking the pre- and post-vocabulary revision test.

**Table 4. 1.** Vocabulary revision test group participation.

		<b>n</b>	<b>Percentage (%)</b>
Pre-test Group	Experimental	20	%50,0
	Control	20	%50,0
Post-test Group	Experimental	20	%50,0
	Control	20	%50,0

#### 4.1.1. Comparison of pre-test results of the groups

The independent samples Mann Whitney-U test was conducted to compare the pre-test scores of the experimental and control group students. In table 4.2. the two groups' pre-test total scores are compared.

**Table 4. 2.** Mann Whitney-U Test results of the pre-test scores of the groups.

<b>Scale</b>	<b>Group</b>	<b>n</b>	<b>Mean</b>	<b>SD</b>	<b>z</b>	<b>df</b>	<b>p</b>
Pre-Test Total Score	Experimental	20	34,85	13,071	-,054	38	,957
	Control	20	34,25	16,456			

\*p<0,05

Independent Sample Mann Whitney-U Test Analysis results for the pretest groups are presented in Table 4.3. According to the analysis, there was no significant difference between the experimental group ( $M=34.85$ ,  $SD=13.071$ ) and the control group ( $M=34.25$ ,  $SD=16.456$ ), ( $p=.957>0,05$ ). The two groups did not vary regarding their previous vocabulary knowledge. It can be deduced that the individuals in both groups were similar in terms of vocabulary knowledge at the beginning of the study.

#### 4.1.2. Comparison of post-test results of the groups

Similar to the comparison of the 2 group pre-test results, the Mann Whitney-U Test for independent samples was conducted to find out the difference between the post-test scores of the participants in the experimental and control groups. Table 4.3. below presents the comparison between the post-test scores of the groups.

**Table 4. 3.** Mann Whitney-U Test results of the post-test scores of the groups.

Scale	Group	n	Mean	SD	z	df	p
Post-Test Total Score	Experimental	20	63,90	21,459	-1,908	38	,056
	Control	20	72,80	13,786			

\* $p<0,05$

The results indicated that there was no statistically significant difference between the post-test total scores of the experimental group ( $M=63.90$ ,  $SD=21.459$ ) and the control group ( $M=72.80$ ,  $SD=13.786$ ), ( $p=.056>0,05$ ). It reveals that the experimental and control groups were similar regarding their vocabulary learning achievement at the end of the implementation. It can be deduced that both groups have enhanced their vocabulary as a result of the learning process based on the course curriculum.

#### 4.1.3. Experimental group test scores comparison

The Wilcoxon Signed-Rank test was employed to find out the difference in the vocabulary knowledge of the experimental group of students before and after the study. The comparison of the pre-and post-test scores of the experimental group is presented in Table 4.4.

**Table 4. 4.** The Wilcoxon Signed-Rank Test results of the experimental group.

Variable	Group	n	Mean	SD	MD	z	df	p
Experimental Group Post-Test Pre-Test	Experimental Group Post-Test	20	63,90	21,459	29,05	-3,921	19	,000*
	Experimental Group Pre-Test	20	34,85	13,071				

\*p<0,05

According to the results, there is a statistically significant difference in the test total scores of the experimental group in terms of pre-test and post-test scores ( $p=,000<0,05$ ). The post-test mean scores ( $M=63.90$ ,  $SD=21.459$ ) are significantly different and higher than the exam pre-test mean scores ( $M=34.85$ ,  $SD=13.071$ ). This indicates that the vocabulary learning achievement of the experimental group of students was affected positively and their vocabulary knowledge was improved.

#### 4.1.4. Control group test scores comparison

To find out the difference in the vocabulary test scores of the control group of students before and after the study, the Wilcoxon Signed-Rank test was conducted. The comparison of the pre-and post-test scores of the control group is presented in Table 4.5.

**Table 4. 5.** The Wilcoxon Signed-Rank Test results of the control group.

Variable	Group	n	Mean	SD	MD	z	df	p
Control Group Post-Test Pre-Test	Control Group Post- Test	20	72,80	13,786	38,55	-3,923	19	,000*
	Control Group Pre-Test	20	34,25	16,456				

\*p<0,05

The test results revealed a statistically significant difference in the test total scores of the control group regarding the pre-test and post-test scores ( $p=,000<0,05$ ). The mean values of the post-test ( $M=72.80$ ,  $SD=13.786$ ) are significantly different and higher than the pre-test mean values ( $M=34.25$ ,  $SD=16.456$ ) of the group. It shows that also the control group of students improved their vocabulary as an outcome of the standard language learning process.

#### 4.1.5. Comparison of pre-test and post-test total scores of the participants

A paired-sample t-test was conducted to see the differences in the group means of variables in terms of the pre-test and post-test. Table 4.6. shows the difference in the test total scores of the participants before and after the implementation.

**Table 4. 6.** The experimental and control group posttest – pretest variable paired-samples t-test results.

Variable	Group	n	Mean	SD	MD	t	df	p
Post-Test – Pre-Test of Experimental and Control Groups	Post-Test of Experimental and Control Groups	40	68,35	18,364	33,80	12,451	39	,000*
	Pre-Test of Experimental and Control Groups	40	34,55	14,672				

\*p<0,05

According to the paired samples t-test results, the test total scores demonstrate statistical significance differences in terms of the pre-test and post-test ( $p=,000<0,05$ ). The mean values of the post-test scores ( $M=68.35$ ) are significantly different and higher than the mean values of the pre-test scores ( $M=34.55$ ) of the two groups of participants. It can be concluded that the vocabulary achievement of both groups of students has been positively affected by the learning process regardless of the instructional differences.

#### 4.2. Findings on Learner Autonomy Scale

The second research question seeks to reveal whether the use of EBA activities has an effect on the students' learner autonomy. To answer this question, a 5-Likert learner autonomy scale with 14 items was applied to the experimental and control groups before and after the study. A number of significance tests were employed to determine the development of the students' learner autonomy level. The following table (Table 4.7.) displays the number of the students for the pre-and-post-treatment implementation of the scale.

**Table 4. 7.** Learner autonomy scale group participation.

		n	Percentage (%)
Pre-Treatment Scale Group	Experimental	20	%50,0
	Control	20	%50,0
Post-Treatment Scale Group	Experimental	20	%50,0
	Control	20	%50,0

##### 4.2.1. Comparison of pre-scale results of the groups

The independent samples Mann Whitney-U test was employed to compare the pre-treatment scale scores of the experimental and control groups. The pre-scale total scores of the two groups are compared in the table below. (See Table 4.8.).

**Table 4. 8.** Mann Whitney-U Test results of the pre-treatment learner autonomy scale.

Scale	Group	n	Mean	SD	z	df	p
Pre-Treatment Scale Total Scores	Experimental	20	51,70	8,712	-1,002	38	,316
	Control	20	54,85	5,914			

\*p<0,05

According to the Mann Whitney-U Test results, there is no statistically significant difference between the pre-treatment learner autonomy scale total scores of the groups ( $p=,316>0,05$ ). The aim of employing such a test was to identify whether there was any statistical difference between the groups at the beginning of the implementation. And similar results from both groups was identified as expected in the current study. The results of the post-treatment learner autonomy scale revealed the outcomes of the study, which found out whether the use of EBA influenced the learner autonomy level of the students.

#### 4.2.2. Comparison of post-treatment learner autonomy scale results

The Mann Whitney-U Test for independent samples was employed to find out the difference between the post-treatment learner autonomy scale scores of the participants in the experimental and control groups. In the Table 4.9. the post-treatment scale scores of the groups are presented.

**Table 4. 9.** Mann Whitney-U Test results of the post-treatment learner autonomy scale.

Variable	Group	n	Mean	SD	z	df	p
Post-Treatment Scale Total Score	Experimental	20	53,40	6,193	-,677	38	,498
	Control	20	54,40	6,824			

\*p<0,05

According to the results, there is no statistically significant difference in the post-treatment scale total scores of the posttest groups ( $p=,498>0,05$ ). The mean value of the experimental group ( $M=53.40$ ,  $SD=6.193$ ) does not significantly differ from the mean value of the control group ( $M=54.40$ ,  $SD=6.824$ ). It shows that the experimental and control groups were similar regarding their learner autonomy level at the end of the study. When the mean scores of the groups were compared to the pre-treatment scale results, the experimental group of students showed slightly more progress in their autonomy level. It seems that the use of EBA activities might have been helpful in improving the learner autonomy of the students to a certain degree. The significance of this effect is presented in the following section.

### 4.2.3. Comparison of the experimental group pre-and post-scale scores

The Wilcoxon Signed-Rank test was conducted to reveal the difference in the learner autonomy level of the experimental group of students before and after the study. The comparison of the pre-treatment and post-treatment scale scores of the experimental group is presented in Table 4.10.

**Table 4. 10.** The Wilcoxon Singed-Rank test results of the experimental group.

Variable	Group	n	Mean	SD	MD	z	df	p
Experimental Group Post-Treatment Scale and Pre-Treatment Scale	Experimental Group Post-Treatment Scale	20	53,40	6,19	1,70	-,605	19	,545
	Experimental Group Pre-Treatment Scale	20	51,70	8,71				

\*p<0,05

The results reveal that there is not a statistically significant difference in the learner autonomy scale total scores of the experimental group in terms of pre-treatment and post-treatment scale scores ( $p=,545>0,05$ ). Nevertheless, there was a slight increase in the score obtained from the post-treatment scale of the experimental group ( $M=53.40$ ) when compared to the score obtained from the pre-treatment learner autonomy scale ( $M=51.70$ ). It can be reported that the use of EBA activities had no remarkable positive effect on the students' level of learner autonomy.

### 4.2.4. Comparison of the control group pre-and post-scale scores

To find out the difference in the learner autonomy level of the control group students before and after the study, the Wilcoxon Signed-Rank test was conducted. The comparison of the pre-treatment and post-treatment scale scores of the control group is presented in Table 4.11.

**Table 4. 11.** The Wilcoxon Singed-Rank test results of the control group.

Variable	Group	n	Mean	SD	MD	z	df	p
Control Group Post-Treatment Scale and Pre-Treatment Scale	Control Group Post-Treatment Scale	20	54,40	6,19	-,45	-,225	19	,822
	Control Group Pre-Treatment Scale	20	54,85	5,91				

\*p<0,05

According to the Wilcoxon Singed-Rank test results, there is no statistically significant difference in the scale total scores of the control group regarding the pre- and post-treatment

scale scores ( $p=,822>0,05$ ). These results suggest that the autonomy levels of the control group did not differ significantly during the seven-week regular language instruction period.

#### 4.2.5. Comparison of pre-scale and post-scale total scores of the participants

A paired-sample t-test was employed to see the differences in the group means of variables in terms of the pre-treatment and post-treatment learner autonomy scale. Table 4.12. shows the difference in the scale total scores of the participants at the beginning and at the end of the seven-week implementation period.

**Table 4. 12.** The experimental and control group post – pre-treatment scale variable paired- samples t-test results.

Variable	Group	n	Mean	SD	MD	z	df	p
Post – Pre-Treatment Scale of Experimental and Control Groups	Post-Treatment Scale of Experimental and Control Groups	40	53,90	6,45	,625	-,364	39	,716
	Pre-Treatment Scale of Experimental and Control Groups	40	52,28	7,52				

\* $p<0,05$

The paired-sample t-test results revealed that there was no statistically significant difference between the test total scores of the participants regarding the post- and pre-treatment learner autonomy scale. The mean score of the participants at the beginning of the treatment ( $M=52.28$ ) is nearly similar to their mean score at the end of the treatment ( $M=53.90$ ). In other words, the overall gain scores revealed that the learner autonomy level of the students was not meaningfully affected by the seven-week of the learning process regardless of the instructional differences.

## CHAPTER 5

### 5. DISCUSSION, CONCLUSION AND SUGGESTIONS

This chapter includes a discussion of the findings and results that have been revealed related to the research questions and a brief summary of the study. Additionally, the implications of the research and suggestions for further studies will be provided in the following sections.

#### 5.1. Discussion

This study was conducted with the purpose of examining the effects of using EBA learning platform activities on the vocabulary learning and autonomy level of the students. To achieve this aim, two research questions with two sub-questions were formed. The first research question with its sub-question investigated whether the use of EBA had a positive impact on the vocabulary growth of the students. The second research question with its sub-question was to explore the effect of EBA activities on the autonomy development of the students. The researchers made use of two different quantitative data collection instruments which include a vocabulary revision test and a learner autonomy scale to answer the questions as follows:

**RQ 1.** What are the effects of EBA use on students' vocabulary learning achievement?

**RQ 1.a.** Is there a statistically significant difference between the vocabulary achievement of groups before and after the study?

**RQ 2.** What are the effects of EBA use on students' learner autonomy?

**RQ 2.a.** Is there a statistically significant difference between the learner autonomy of groups before and after the study?

In the following sections, the findings of the research questions will be discussed in separate sub-titles.

##### 5.1.1. The effects of EBA use on students' vocabulary learning achievement

The first research question and its sub-question attempted to identify whether the use of EBA had an influence on the vocabulary gain of the students. To answer these questions, the students in the experimental group were asked to complete EBA activities on the platform

in addition to their regular language instruction in the classroom while the students in the control group only received regular language instruction for seven weeks. The vocabulary revision test that comprises the determined units was applied to both groups at the beginning and the end of the study. According to the analysis of the gathered data, the students of both groups showed considerable vocabulary growth after the seven-week learning process. At the beginning of the study, students in both groups had similar levels of vocabulary knowledge as expected, there was no statistically significant difference between the scores they received from the pre-revision test. After the treatment, the mean value of the post-test scores of the two groups significantly outperformed the mean value of the pre-test scores. However, no significant difference was identified between the achievement of the students who used the EBA and those who did not. It appears that the results of the revision test conducted after the treatment phase showed that both the experimental and control groups achieved similar scores. Students in both groups showed progress in their vocabulary knowledge regardless of the way of instruction they received. This concludes that the use of EBA activities in addition to regular language instruction had no remarkable effect on the students' vocabulary improvement.

These findings are in line with some previous studies (Bagheri et al., 2012; Başöz, 2013; Hirschel & Fritz, 2013; Oberg, 2011; Pehlivan, 2020). In the study of Bagheri et al. (2012), CALL-based and non-CALL-based language learning methods were compared to identify more efficient ways of learning. The study revealed that there was no statistically significant difference between the vocabulary learning achievement of both learning groups. Nevertheless, it is suggested that both learning methods were effective in engaging students and helping them learn vocabulary actively. Similarly, Oberg (2011) investigated the effectiveness of two different vocabulary learning methods. He divided the participants into experimental and control groups. In the experimental group, students studied targeted words with a CALL-based program while control group students used representative picture cards to learn the same words. The statistical results of the study displayed no statistically significant difference between the vocabulary growth of both groups. However, it has been suggested that both methods are effective in aiding learners foster their vocabulary knowledge and develop a positive attitude toward learning. These results are consistent with Başöz's (2013) argument that computer-assisted vocabulary instruction may not always provide a better learning experience for students contrary to popular belief.

In the studies of Hirschel and Fritz (2013), and Pehlivan (2020), the effectiveness of CALL-based software on the short-term and long-term vocabulary retention of the students. The statistical results of these two studies revealed that there were no significant differences in the short-term vocabulary achievement of the CALL treatment groups and control groups that received traditional vocabulary instruction. However, the experimental groups showed better results for long-term retention than control groups. Hirschel and Fritz (2013) attribute these results to using computers in the learning process may provide more receptive learning including multiple item types, spaced repetition, and feedback for the CALL group. Pehlivan (2020) argues that using educational technology made the retention of words and structures more efficient while providing students with more enjoyable learning opportunities. However, in the current study, the delayed test was not used to identify the difference in the students' long-term vocabulary retention. Hence, the current research coincides with the studies of Pehlivan (2020) and Hirschel and Fritz (2013) regarding the short-term vocabulary retention achievement of the participants.

On the other hand, the several studies in the literature found that the experimental group students significantly enhanced their vocabulary knowledge by means of CALL-based learning platforms (Bakla & Çekiç, 2017; Çakmak et al., 2021; Enayati & Gilakjani, 2020; Hajebi et al., 2018; Korlu & Mede, 2018; Sanosi, 2018; Toy, 2019). In this research, the experimental groups outperformed the control groups regarding language proficiency, and there were statistically significant differences between two groups' scores on the achievement tests contrary to the results of the current study.

Bakla and Çekiç (2017) state that the CALL-based platform they used in their study provided learners with a range of activities that monitored the learners' progress and gave prompt feedback; thus, the experimental group's vocabulary growth was significantly better than the control group at the end of the treatment. Çakmak et al. (2021) stated that the CALL platform provided learners with diverse forms of vocabulary learning immersive games and tasks which can enhance their motivation to study. As a result, they proposed that EFL students should be given more opportunities to utilize a visual vocabulary training platform to communicate efficiently.

Enayati and Gilakjani (2020) and Hajebi et al. (2018) concluded that CALL-enhanced language instruction had a positive impact on the vocabulary development of the learners. Korlu and Mede (2018), Toy (2017), and Sanosi (2018) investigated the effectiveness of a

flashcard program on the vocabulary achievement of EFL students. They all expressed that practicing unknown words with the help of an e-learning program had a significant effect on the lexical growth of the students.

When it comes to studies on investigating the effects of EBA on language learning, they displayed dissimilar results with the current research. Kılıç (2020) investigated the platform to find out whether it improves the listening abilities of the students. According to the results of the study, EBA had a significant positive effect on the development of the listening skills of the students. Also, the qualitative results revealed that students had positive attitudes toward EBA because they found it enjoyable and motivating. In the study of Pehlivan (2020), the results of the delayed test revealed that using EBA follow-up activities has significantly improved the long-term vocabulary retention of students. Thus, the current research contradicts the study of Pehlivan (2020) in terms of the long-term vocabulary retention development of the students.

In the current study, EBA also allowed students to participate in a variety of activities contributing lexical knowledge when providing feedback. The statistical test results of the experimental group revealed that there was a significant difference within the group before and after the implementation regarding vocabulary achievement, however, contrary to the extensive literature it did not generate a significant difference from the traditional way of learning. Because the pre-and post-test results of the control group also demonstrated a statistically significant difference within the group before and after the treatment. Hence, it can be deduced that the vocabulary growth of both groups improved similarly without considering the learning way of vocabulary. These results might stem from the limited amount of time during which the study was implemented or due to the lack of available sufficient content on the platform. Yıldız and Gündüz (2019) examined the views of secondary school teachers on the EBA e-contents. According to the results, the teachers discovered that the content designs were insufficient in capturing the attention of the students, as well as being too short and outdated in terms of activities. Similarly, Çakmak and Taşkıran (2017) stated that the quality of e-content should be improved. Additionally, according to the research of Erbay (2018), EBA content should be revised and adjusted according to the learners' needs.

### **5.1.2. The effects of EBA use on students' learner autonomy development**

The second research question and its sub-question were constructed to reveal the effect of EBA on the students' learner autonomy development. A learner autonomy scale was administered to both groups at the beginning and end of the implementation to seek answer to the relevant research question. Afterwards, the differences in the level of autonomy between the groups and within the groups were identified. According to the statistical analysis results, there were no statistically significant differences between the groups and within the groups regarding their level of autonomy before and after the study. The comparison within the groups through the use of the Wilcoxon Signed-Rank test demonstrated that there was a slight increase in the autonomy level of the experimental group, however, the treatment did not generate a statistically significant difference in terms of learner autonomy levels of the experimental group. Indeed, the autonomy levels of both groups did not differ remarkably during the seven weeks. These results suggest that using EBA in the language learning process did not have a significant positive effect on the learner autonomy level of the students.

These findings are inconsistent with the numerous research studies which found that CALL has a remarkable effect on the improvement of learner autonomy (Ceylan, 2019; Farivar & Rahimi, 2015; Ghufon & Nurdianingsih, 2019; Kızmaz, 2019; A. Mutlu & Eröz-Tuğa, 2013; K. Smith & Craig, 2013). For instance, Smith and Craig (2013) suggested that CALL enhanced the students' self-management study skills in language learning while improving their ability to plan, coordinate, monitor, and evaluate their use of CALL resources independently. Similarly, Farivar and Rahimi (2015) found that implementing English software (BBC course) significantly enhanced the autonomy of EFL learners. Among the studies conducted in Türkiye context, Kızmaz (2019) also argued that using CALL in the language learning process was beneficial in increasing the level of learner autonomy. Also, Mutlu and Eröz-Tuğa investigated the role of CALL on learner autonomy, and they stated that the use of computers actively involved students in out-of-class studies and increased their autonomy.

In the present study, a possible reason for the lack of a significant difference between the obtained scores may be due to the limited duration of the CALL treatment. The period during which the experimental group used EBA activities might not have been sufficient to develop the autonomy of the students. Nevertheless, the slight increase in the mean scores of

the experimental group is higher than the mean scores differences of the control group. Thus, a longer duration of the CALL treatment could have resulted in a remarkable outcome on behalf of the experimental group. Also, available e-contents on EBA software may not have been sufficient and attractive enough to motivate students to engage in out-of-class learning and interactions. The students found the usage of EBA platform inadequate in the study conducted by Timur et al. (2017). The researchers suggested that the overall quality of the website should be enriched by adding relevant and informative content and creating an appealing homepage that can attract more students. Similarly, Tüysüz and Çümen (2016) explored the view of secondary school students on EBA and it was suggested that the website should include more content, tests, and entertaining games.

To focus more on language learning, MoNE has recently introduced “Diyalekt” web and mobile application developed for all Turkish citizens. There are several resources available on the platform to develop four language skills, including books, videos, games, interactive worksheets, and activities. By incorporating a range of more engaging content, students are likely to be motivated to learn autonomously.

Additionally, one of the reasons for the obtained results could be that Turkish students are not accustomed to being autonomous in their language learning process as stated in several studies (Doğan & Mirici, 2017; Çakıcı, 2017; Karabıyık, 2008; Kartal & Balçıkkanlı, 2019). The customary way of learning and the role of the students and teachers in the country, along with the exam oriented national education system, could be considered as obstacles to the creation of an autonomous learning atmosphere (Doğan & Mirici, 2017). Despite having access to technological learning tools outside the classroom, the students might still have required teacher guidance and support in the language learning process.

Consequently, the results of the present study did not overlap with the aforementioned studies regarding the enhancement of learner autonomy of participants. As Reinders and White (2011) suggested, although technology has the potential to provide enriched affordances for autonomous learning, it does not necessarily improve learners’ sense of responsibility or learning management skills. They state that the quality of provided input and materials is essential in the development of learner autonomy. Additionally, Reinders and Hubbard (2013) argues that the opportunities that technology creates for the development of learner autonomy are undeniable, but it is up to the developers to identify effective language-learning ways and procedures for engaging students in technology-mediated language

learning tasks and activities. The results obtained in the present study may have been influenced by the limited time allocated for treatment and the insufficient content on EBA software. EBA English courses and activities could be updated and improved in line with the curriculum and students' needs. It is possible that the research findings may be subject to change once these limitations are eliminated.

## **5.2. Conclusion**

Technology-integrated English learning method has become a necessity all over the world in this evolving digital era. The present study focused on English learning activities of EBA, a recent production of MoNE in Türkiye that integrates technology into education. The purpose of the study was to investigate the effects of using EBA on students' vocabulary growth and learner autonomy development. To reach this aim, an experimental group and a control group were constructed at the beginning. Each group consisted of 20 6th-grade students studying at a secondary school in Konya, Türkiye. At the beginning of the study, a vocabulary revision test and a learner autonomy scale were administered to both groups. After that, the control group students received only regular language instruction at school while the experimental group was required to follow EBA English activities at home besides the regular language instructions at school for seven weeks. Finally, both groups took the same vocabulary revision test and learner autonomy scale as post-tests to identify the differences between the scores before and after the study. The obtained data were analyzed through SPSS version 27.

The findings of the pre-and post-vocabulary revision tests of the students showed that both the experimental and control groups significantly improved their vocabulary on specific units. According to the results, there were no statistically significant differences between the groups in terms of vocabulary learning achievements. That indicated that both groups enhanced their language knowledge regardless of the learning method they received. It was concluded that the English activities provided on the EBA website failed to yield any substantial improvement in the vocabulary knowledge of the students.

Similarly, according to the results of the pre-treatment and post-treatment learner autonomy scale, there were no significant differences in students' autonomy levels between or within groups before and after the study. Despite a slight increase in the autonomy level of the experimental group, the treatment failed to produce a statistically significant difference regarding learner autonomy levels. The autonomy levels of both groups did not significantly

differ over a seven-week period. It was revealed that using EBA did not have a remarkable effect on the development of learner autonomy in language learning.

The present study hopefully contributes to the literature by revealing whether using EBA has an impact on vocabulary achievement and learner autonomy development of EFL students. Considering the findings, it can be concluded that using EBA activities in the seven-week English learning process did not have any significant effect on the students' vocabulary learning achievement and development of learner autonomy level. The limited amount of time allotted for the implementation, the inadequate website content and students' culture of learning were stated as the possible reasons for these results. The suggestions for the better results are presented in the following sections for the future research.

### **5.3. Implications and Suggestions for Further Research**

This study aimed to contribute to the current state of literature by investigating the use of EBA English activities for students' gain of vocabulary and learner autonomy development. To this end, a seven-week CALL treatment was implemented. The results revealed that EBA had no remarkable effect on the enhancement of these determined skills. Hence, the findings carry some recommendations that need to be considered by researchers in the field and the stakeholders who are English language teachers, and the curriculum and program designers.

To start with, the implementation was conducted within a short period; of seven weeks for two units. It would be most probable that working on more units within a longer process contrary to the current study could be more efficient in investigating the effects of EBA on students' success. In other words, it is advisable for further research to be carried out for a longer duration to be able to reveal different results. Besides that, the number of participants in the study is 40. Conducting further studies with a larger sample size could provide a diverse result. Furthermore, a delayed posttest which identifies the long-term vocabulary recognition of the students can be designed to get deeper insight into the effects of the use of EBA on vocabulary learning. The study also lacked qualitative data to investigate the views of the users on the website. The perspectives of the students could be included in further studies to be able to reach in-depth data revealing the attitudes of the students on the website.

Additionally, the contents available on EBA might be insufficient for students' language learning. Language activities on EBA could be regulated and enriched according to the needs of the students. Diverse online materials, activities, videos, interactive games, and

songs would satisfy the needs of students in the language learning process. Besides, English teachers should be trained in the ways to integrate online materials and activities into their lessons and equipped to prepare their online activities on EBA. Also, further studies can be conducted to investigate the effect of EBA on other language skills and subskills to extend the scope of the research. The present study focused on the students' achievement in retaining target vocabulary. Conducting additional research to explore the impact of EBA on students' vocabulary usage could offer deeper insights.

Lastly, the current study focused on the vocabulary learning achievement and learner autonomy of the students through the use of EBA English activities designed by MoNE. Further research can be conducted on the correlation between the use of any other technological tools, such as Diyalekt, and the acquisition of other language skills beyond the scope of this study. It would be worth integrating the use of such technological tools during the language-learning process.

## GENİŞLETİLMİŞ TÜRKÇE ÖZET

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### EĞİTİM BİLİŞİM AĞI (EBA) KULLANIMININ YABANCI DİL OLARAK İNGİLİZCE ÖĞRENEN ÖĞRENCİLERİN KELİME ÖĞRENİM BAŞARILARI VE ÖĞRENEN ÖZERKLİĞİ GELİŞİMLERİ ÜZERİNE ETKİSİ

Şerife SERİN

Kelime öğrenimi yabancı dil öğrenmenin temel unsurlarından biridir. Yabancı dil öğrenenler belirli bir dilde yeterli kelime dağarcığı olmadan sözlü olarak iletişim kuramazlar. Ellis'in (1994) belirttiği gibi İngilizce dilinin edinimi, algılama, kavrama ve kelime ve cümleleri kullanarak etkileşimde bulunma becerisini gerektirir. Kelime bilmenin bir yabancı dil öğrenmede ne kadar önemli olduğu birçok araştırmacı tarafından vurgulanmıştır (Nation, 2003; Richards ve Renadya, 2002; Schmitt, 2010; Tuan, 2011). Bu nedenle, öğrenenlerin ihtiyaçlarına veya öğrenmenin gerçekleştiği bağlama göre en uygun kelime öğrenme ve öğretme yolunun belirlenmesi çok önemlidir. Ellis (1995) örtülü ve açık kelime öğrenimi olmak üzere iki temel kelime öğretimi yaklaşımından bahseder. Örtülü kelime öğrenme herhangi bir kelimeyi açıkça ezberleme amacı olmadan, kelime dağarcığının bir bağlamdan sürekli maruz kalınarak doğal yolla öğrenilmesidir. Açık kelime öğrenimi ise öğrencilerin öğrenmekte oldukları kelimenin farkında olduğu bilinçli bir öğrenme yöntemidir. Bu iki yaklaşımın sözcük bilgisinin genişletilmesi sürecinde farklı yönlerden önemli olduğu düşünülebilir. Ders esnasında müfredattaki bütün kelimelerin öğrenimi için yeterli süre olmayabilmektedir. Bu yüzden öğrencilerin öğrenme özerkliğini de artıracak olan sınıfta dil öğretimine de başka alternatifler gerekli olmaktadır. Muchlis (2015) teknoloji kullanmanın kelime öğreniminde öğrenen özerkliğinin de geliştirilmesine yardımcı olduğunu vurgulamaktadır.

Bilgi ve iletişim teknolojilerindeki gelişmeler eğitimde, özellikle de yabancı dil öğretiminde büyük fırsatlar doğurmuştur (Delibaş ve Günday, 2016). Bu nedenle, bilgisayar tabanlı dil öğrenimi, İngilizce dili eğitimi alanında geçen yüzyılın popüler bir yaklaşımı haline gelmiştir. Görsel ve işitsel bilgisayar destekli materyaller yardımıyla kelime kazanımı öğrenciler için daha kolay, daha ilgi çekici ve daha motive edici olmaktadır. Bu yöntem ile sağlanan kelime edinme süreci, geleneksel kelime öğrenme yöntemiyle karşılaştırıldığında

daha tesadüfi olmaktadır. Kim ve Gilman'a (2008) göre, dil öğrencileri, geleneksel öğrenme yöntemi yerine, kelime edinimi ve bunun uzun vadeli akılda kalıcılık üzerindeki olumlu etkisi nedeniyle teknolojiyle bütünleştirilmiş kelime öğrenmeyi tercih ederler. Değişen bu öğretim ve öğrenme metodolojisi sayesinde çoğu ülke buna ayak uydurmaya çalışmış ve teknolojiyi eğitim sistemlerine entegre etmeye başlamıştır. Türkiye'de yirmi birinci yüzyıldaki değişimleri yakalamak için eğitim amaçlı kullanılan bilgisayar tabanlı araçlardan biri de bireylerin her zaman ve her yerde öğrenmesine olanak tanıyan Eğitim Bilişim Ağları (EBA)'dır. EBA öğrenci ve öğretmenlere yönelik e-dersler, okul müfredatının tüm konularına ilişkin içerik modülleri, çevrimiçi öğrenme uygulamaları, uzaktan eğitim için canlı ders modülleri, e-içerik üretim modülleri ve zorunlu eğitime yönelik birçok ek materyalden oluşmaktadır. Ayrıca platformda çok sayıda ders materyali mevcuttur. Öğrencilere ve öğretmenlere müfredatın hedeflerine göre tasarlanmış e-içerik materyalleri sağlar. Tüm bu materyalleri tamamlamak öğrencilere İngilizce dersi müfredatında yer alan kelimelere aşina olma fırsatı verebilir.

Türkiye'de okullardaki kelime öğrenme pratikleri için çoğu öğrencinin tercih ettiği kelime ve anlamını defalarca yazarak çalışma veya bir kelime kutusu oluşturarak tekrar etme yöntemleri yararlı bulunmaktadır fakat teknoloji kullanmaya meraklı olan 21. yüzyıl öğrencileri için bu yöntemler ilgi çekici olmayabilir. Herhangi bir bilgisayar destekli kelime öğrenme tekniğinin kullanılması, öğrencilerin kelime dağarcığını ve dil becerilerini geliştirme motivasyonunu artırabilir. Bu çalışmada, bir bilgisayar destekli öğrenme aracı olan EBA'nın öğrencilerin kelime öğrenimindeki başarısı ve öğrenmede öğrenen özerkliğinin geliştirilmesindeki etkinliği araştırılmıştır. Literatürdeki önceki araştırmalar ağırlıklı olarak öğretmen ve öğrencilerin yazılımların kullanımıyla ilgili deneyimlerine ilişkin görüşlerine odaklanmıştır. Ancak EBA platformu kullanımı ile öğrenen özerkliğinin gelişimi ve dil öğrenme başarısı, özellikle de kelime öğrenimi arasındaki ilişki üzerine sınırlı araştırma bulunmaktadır. Bu yüzden, bu çalışmada aşağıdaki araştırma sorularına cevap aranarak bu boşluğun doldurulabilmesi amaçlanmıştır:

1. EBA kullanımının öğrencilerin kelime öğrenim başarılarına etkileri nelerdir?
  - 1.a. Grupların çalışma öncesi ve sonrası kelime başarıları arasında istatistiksel olarak anlamlı bir fark var mı?
2. EBA kullanımının öğrencilerin öğrenen özerkliğine etkileri nelerdir?

2.a. Grupların çalışma öncesi ve sonrası öğrenen özerklik düzeyleri arasında istatistiksel olarak anlamlı bir fark var mı?

Hedeflenen dilin düzgün bir şekilde öğrenilebilmesi için yeterli düzeyde kelime bilmek önem arz eder. Ancak bu, öğrencilerin kelime bilgilerini genişletmek için sadece sınıfta değil dil sınıfı dışında da özerk olmalarını gerektirir. Öğrencilere bu ortamı sağlamanın yollarından biri teknolojinin öğrenme süreçlerine entegrasyonu ile mümkün olabilir. Ayrıca, bilgisayar destekli öğrenme araçlarını dil öğrenimine dahil etme fırsatı büyük olasılıkla ilham verici ve heyecan verici olacaktır ve öğrencilere kelime bilgisi için çeşitli pratik türlerini içeren çok çeşitli eğitim kaynakları sunabilir (Seljan vd., 2004). Öğrenciler, çeşitli teknolojik materyaller aracılığıyla, yabancı kelime veya ifadelerin anlamlarını ve tanımlarını, bunların görsel temsilleri ile ve diğer çeşitli örneklerle edinebilirler. Literatüre baktığımızda birçok araştırmada bilgisayar destekli dil öğrenme yöntemlerinin kullanılmasının öğrencilerin kelime bilgilerini artırmada ve pekiştirmede etkili olduğu sonucuna ulaşılmıştır (Bakla ve Çekiç, 2017; Çakmak et al., 2021; Enayati ve Gilakjani, 2020; Hajebi vd., 2018; Korlu ve Mede, 2018; Sanosi, 2018; Toy, 2019). Bunun yanı sıra hem teknolojinin entegre edildiği öğrenme yöntemi hem de standart dil öğrenim yöntemlerinin de aynı sonucu verdiği bazı araştırmalar da mevcuttur (Bagheri vd., 2012; Başöz, 2013; Oberg, 2011).

Bu çalışmanın temel amacı MEB tarafından geliştirilen EBA teknoloji tabanlı öğrenme aracının kullanımının öğrenen özerkliğinin ve İngilizce kelime başarısının geliştirilmesine katkı sağlayıp sağlamadığını araştırmaktır. İçerik sağlayıcı olarak EBA, Türkiye'de son dönemde öğretmen ve öğrenciler tarafından sınıf içinde ve dışında kullanılmaktadır. İngilizce dersi müfredatında yer alan bütün kelimelerin edinimi için ders süreleri yeterli olmayabilmektedir. Bu sebeple öğrencilerin de bilmedikleri kelimelerin edinimi ve pekiştirilmesi konusunda sorumluluk almaları gerekebilir. Richards'ın (2015) belirttiği gibi bu tür bilgisayar destekli materyaller, öğrencilere çalışmalarını sınıf içi eğitimle sınırlamadan önemli dil öğrenme fırsatları sunmaktadır. Kelime öğretiminde olduğu gibi öğrenci özerkliğinin geliştirilmesinde teknolojik araçların entegrasyonunun etkinliğini değerlendiren çok sayıda çalışma vardır (Ceylan, 2019; Farivar ve Rahimi, 2015; Ghufon ve Nurdianingsih, 2019; Kızmaz, 2019; Mutlu ve Eröz-Tuğa, 2013; Smith ve Craig, 2013).

EBA platformundaki etkinlikler, öğrenen özerkliğini geliştirmenin yanı sıra kelime öğrenmede başarıyı sağlamak için de kullanılabilir. Dolayısıyla bu çalışma, platformun kelime başarısının ve öğrenen özerkliğinin artırılması konusunda yeterliliğinin

değerlendirilmesi açısından önemli olabilir. Literatüre bakıldığında İngilizce öğretimi ve EBA kullanımı ile ilgili araştırmalar sınırlıdır. Kayahan ve Özdüran (2016) İngilizce öğrenen öğrencilerin EBA ile ilgili görüşlerini incelerken Erbay (2018) ise İngilizce öğretmenlerinin EBA platformu ve İngilizce dil öğrenimi için sunulan e-içerikler hakkında düşüncelerini araştırmıştır. Erbay (2018)'ın araştırma sonuçlarına göre, katılımcı İngilizce öğretmenleri EBA içerikleri ile müfredat kazanımları arasındaki paralelliğin yetersiz olduğunu belirterek içeriklerin revize edilip öğrencilerin ihtiyaçlarına göre düzenlenmesini önermektedirler. EBA'nın dinleme becerisi üzerine etkilerini araştıran Kılıç (2020), EBA kullanımının öğrencilerin başarıları üzerinde olumlu sonuçları olduğunu belirtmiştir. Pehlivan (2020) ise araştırmasında EBA kullanımının ilkökul öğrencilerinin gramer ve kelime başarıları üzerine etkili olup olmadığını incelemiştir. Ön-test ve son-test sonuçları karşılaştırıldığında EBA destekli dil öğretiminin standart dil öğretimine göre öğrencilerin gramer ve kelime başarısında anlamlı olarak büyük bir etkisi olmamasına karşın kalıcılık testi uygulandığında bu farkın EBA kullanan öğrenciler lehinde anlamlı olarak büyük olduğu sonucuna ulaşılmıştır. Sonuç olarak EBA kullanımının kelime bilgisi veya öğrenen özerkliği gelişimi gibi belirli bir dil öğrenme alanına etkisini incelemek için gerçekleştirilmiş yeterli niceliksel çalışma bulunmamaktadır. Dolayısıyla bu çalışma EBA'daki İngilizce dersi etkinliklerinin öğrencilerin kelime öğrenme başarıları ve öğrenen özerkliği seviyesinin gelişimi üzerindeki etkinliğini ortaya çıkarmak açısından önemli olabilir. Ayrıca EBA'da bulunan İngilizce dersi içeriğinde öğrencilerin kelime bilgisini destekleyen alıştırmalar ve öğrenen özerkliğini artırıcı özellikler konusunda gelecekte yapılabilecek yeniliklere dair fikir verebilir.

Bu çalışma kelime bilgisi ön ve son revizyon testlerini ve beşli Likert ölçekli öğrenen özerkliği ölçeğini ölçme aracı olarak kullanılan bir nicel araştırmadır. Mackey ve Gass (2022)' e göre nicel araştırmaların iki türü vardır: korelasyonel ve deneysel. Deneysel araştırmalarda, araştırmacılar bir veya birden fazla değişken üzerinde bilinçli olarak oynama yapar. Bu çalışmada ön test-son test kontrol gruplu yarı deneysel bir tasarım benimsenmiştir. Seliger ve Shohamy'ye (1989) göre yarı deneysel çalışma tasarımı, eğitimsel bağlamlara benzeyen ortamlarda gerçekleştirildiği için daha yüksek geçerliliğe sahip olarak kabul edilir ve verilere ulaşmak daha kolay olduğu için öğretmenler tarafından yürütülen araştırmalar için mükemmeldir (s.149). Dolayısıyla bu çalışmada, araştırmacının İngilizce öğrettiği bir devlet ortaokulunun 6. sınıflarındaki iki sınıf, yarı deneysel bir çalışma tasarımının iki karşılaştırma grubu olarak kullanılmıştır. Araştırma sorularına cevap bulmak amacıyla deney grubuna EBA kullanımını uygulanırken, kontrol grubuna sadece standart dil eğitimi uygulandı. Uygulama

öncesinde veri toplama araçlarında yer alan soruların öğrenci seviyesine uygun olup olmadığının belirlenmesi ve testlerin güvenilirliğinin belirlenmesi amacıyla pilot çalışma yapılmıştır.

Araştırma 2022-2023 eğitim öğretim yılının bahar döneminde Konya’da bir devlet ortaokulunda uygulanmıştır. Katılımcılar 6’ncı sınıfta öğrenim gören iki bütün sınıftaki 40 öğrenciden oluşmaktadır. 4 adet 6’ncı sınıf şubesi mevcut olan bu okuldan iki 6’ncı sınıf şubesi çalışma için seçilmiştir. Bu sınıflardan birisindeki öğrenciler deney grubu öğrencileri olarak belirlenirken diğer sınıftaki öğrenciler kontrol grubu öğrencileri olarak belirlenmiştir. Her iki grupta da 20 katılımcı öğrenci mevcuttur. Katılımcıların seçiminde, bütün sınıf örnekleme yöntemi kullanılmıştır. Bütün sınıf örnekleme, özellikle eğitim bağlamındaki araştırmalarda katılımcılar olarak tüm grupların veya sınıfların seçildiği durumlarda tercih edilmektedir (Millan ve Schumacher, 1984).

Araştırmada EBA kullanımının kelime öğrenimi ve öğrenen özerkliği üzerindeki etkisini belirlemek için nicel veri toplama araçlarından yararlanılmıştır. Kelime öğrenim başarıları açısından farklılıkları belirlemek için iki farklı katılımcı grubuna bir ön test ve bir son test olarak aynı kelime revizyon testi uygulandı. Bu revizyon testi araştırmacı tarafından 6’ncı sınıf İngilizce müfredatında yer alan “meslekler” ve “tatil” konulu ünitelerine uygun olarak kapsam geçerliliğini sağlayacak şekilde geliştirilmiştir. Testin geçerlilik ve güvenilirliği için ön test uygulanmadan önce test maddelerinin kontrolü ve revizyonu için Necmettin Erbakan Üniversitesi’nde görev yapan iki uzmana ve araştırmacı ile aynı okulda görev yapan üç İngilizce öğretmenine danışılmıştır. Düzeltmeler yapıldıktan sonra testin güvenilirliğinin hesaplanması için araştırma dışında kalan 14 öğrenci ile bir pilot çalışma yapılmıştır. Testin Cronbach Alfa değeri 0.804 bulunmuştur.

Ayrıca EBA’nın öğrencilerin özerklik düzeylerine etkisini belirleyebilmek amacıyla her iki gruba da uygulama öncesi ve sonrası 14 maddeden oluşan bir öğrenen özerkliği ölçeği uygulanmıştır. Kullanılan bu ölçek Şenol ve Orakçı (2017) tarafından 6’ncı sınıf seviyesi öğrencilerin İngilizce dersinde özerkliklerini test etmek için oluşturulmuştur. Ölçeği oluşturan 14 madde, bağımsız ve sorumluluk olarak İngilizce öğrenme, öz farkındalık ve dil öğrenme etkinlikleri temalarına dayanmaktadır. Bahsedilen araştırmacılar Türk öğrencilerin İngilizce dersinde özerk öğrenmelerini araştırmayı amaçladıkları için ölçekteki maddelerin yazım dili Türkçedir. Böylece ölçeğin mevcut çalışma için son derece uygun olduğu düşünülmüştür.

Akademik yılın ilk döneminde her iki gruptaki tüm öğrencilere araştırma süreci hakkında bilgi verildi ve sadece araştırmada yer almak isten öğrencilerin velilerinden onam formları doldurmaları istendi. Katılımcı olmak isteyen öğrencilere ve velilerine süreç ile ilgili gerekli yönergeler ve açıklamalar sağlandı. Sonrasında deney grubu öğrencilere geçici EBA şifreleri verildi. Bütün öğrenciler zaten yaklaşık olarak iki yıldır sistemi kullanmaya alışkınlardı.

Araştırmanın en başında öğrencilere kelime revizyon testinin ve öğrenen özerkliği ölçeğinin ön testi uygulandı. Yedi haftalık araştırma süreci boyunca deney grubu öğrenciler Millî Eğitim Bakanlığı tarafından dağıtılan ders kitabı dışında, bu ders kitabından seçilen iki ünite ile uyumlu EBA etkinliklerini takip edip tamamlamadılar. Bu esnada kontrol grubu öğrencileri sadece ders kitabı ile standart eğitime devam ettiler. Araştırmacı, deney grubu öğrencilerine ünite sözcüklerini tanıtmak için platform üzerinden çeşitli beceri temelli etkinlikler (kelime bilgisi, dil bilgisi, okuma ve dinleme) göndermiştir. Öğrencilerden okuldan sonra bu yayınlanan etkinlikleri tamamlamaları istenmiştir. Yedi haftalık uygulama süreci tamamlandıktan sonra her iki gruptaki öğrencilere son test olarak aynı kelime revizyon testi ve öğrenen özerklik ölçeği aynı gün içinde uygulandı.

Kelime revizyon testi ve öğrenen özerkliği ölçeği yardımı ile toplanan veriler SPSS-27 programı kullanılarak analiz edilip karşılaştırılmıştır. Veriler analiz edilmeden önce ideal istatistiksel analiz yöntemlerinin belirlenmesi amacıyla normallik testi uygulanmıştır. Her iki testin verilerinin normal dağıldığı gözlenmiştir. Dörnyei'nin (2007) belirttiği gibi analiz sürecinde parametrik testlerden birinin kullanılabilmesi için verilerin normal dağılması gerekmektedir. Bununla birlikte, araştırmada az sayıda bir örneklem varsa parametrik olmayan testler, daha büyük örneklem büyüklüğü ( $n>30$ ) gerektiren parametrik testlere kıyasla daha güçlü sonuçlar sağlayabilir. Bu bilgiler ışığında değişkenlerin grup ortalamalarındaki farklılıkları görebilmek için 2 gruplu ön-test ve son-test değişkenlerinde parametrik testler için yeterli gözlem sayısı olmadığından non-parametrik Mann Whitney-U analizi uygulanmıştır. Değişkenlerin grup ortalamalarındaki farklılıkları görebilmek için bağımlı örneklem t-test analizi, yeterli gözlem sayısı olmadığına ise bağımlı örneklem Wilcoxon test analizi uygulanmıştır. Analizler  $\alpha=0,05$  seviyesinde uygulanmıştır.

Çalışma öncesinde öğrenci gruplarına uygulanan kelime revizyon ön testi puanları ile çalışma sonrası uygulanan kelime revizyon son testi puanları bağımsız örneklem Mann Whitney-U testi ile analiz edilmiştir. Ön test analiz sonuçlarına göre deney grubu ve kontrol

grubu toplam puanları istatistiksel olarak anlamlı bir şekilde farklılık göstermemiştir ( $p=,957>0,05$ ). Yani, iki grup kelime ön bilgisi açısından farklılık göstermemiştir. Araştırmanın başında her iki gruptaki bireylerin benzer kelime bilgisine sahip olduğu sonucuna varılabilir. Son test analiz sonuçlarına bakıldığında ise grupların son test gruplarına göre son test toplam puanı yine istatistiksel olarak anlamlı bir şekilde farklılık göstermemiştir ( $p=,056>0,05$ ). Bu durum her iki grubun da uygulama sonunda kelime öğrenme başarıları açısından benzer olduğunu göstermektedir. Her iki gruptaki öğrenme süreci sonunda iki grubun da kelime bilgilerinin arttığı söylenebilir.

Grupların kendi içinde kelime bilgisi gelişimine bakacak olursak, her iki grup için son test- ön test değişkeni Bağımlı Örneklem Wilcoxon Analizi yapılmıştır. Analiz sonuçlarına göre hem deney grubu hem de kontrol grubu sınav toplam puanları, ön test ve son test puanları açısından istatistiksel olarak anlamlı farklılık göstermiştir ( $p=,000<0,05$ ). Sınav Son test puan ortalamaları, sınav ön test puan ortalamalarından anlamlı bir şekilde farklı ve büyüktür. Bu durumda, dil öğrenim yöntemi fark etmeksizin iki grubun da kelime bilgilerinde gelişme olmuştur.

Öğrenen özerklik ölçeğinde de kelime revizyon testinde olduğu gibi çalışma öncesinde ve çalışma sonrasında iki gruba da uygulanan ölçeklerin ön test ve son test puanları bağımsız örneklem Mann Whitney-U testi ile analiz edilmiştir. Uygulama öncesi özerklik ölçeği analiz sonuçlarına göre ön test gruplarına göre ön test toplam puanı istatistiksel olarak anlamlı bir şekilde farklılık göstermemiştir ( $p=,316>0,05$ ). Uygulama sonrası öğrenen özerkliği ölçeğinin sonuçları, EBA kullanımının öğrencilerin öğrenen özerkliği seviyesini etkileyip etkilemediğini ortaya çıkarmıştır. Uygulama sonrasında uygulanan öğrenen özerkliği ölçeği sonuçları analizine bakılırsa yine son test gruplarına göre son test toplam puanı istatistiksel olarak anlamlı bir şekilde farklılık göstermemiştir ( $p=,498>0,05$ ). Araştırma sonunda deney ve kontrol gruplarının öğrenen özerkliği düzeyleri açısından benzer olduğu görülmektedir.

Gruplar içinde öğrenen özerkliği düzeyleri gelişimini ortaya çıkarmak için hem deney hem kontrol grubu için son test- ön test değişkeni Bağımlı Örneklem Wilcoxon analizi yapılmıştır. Analiz sonuçlarına göre hem deney grubu hem de kontrol grubu sınav toplam puanları, ön test ve son test puanları açısından istatistiksel olarak anlamlı farklılık göstermemiştir ( $p>0,05$ ). Deney grubu çalışma sonrası özerklik ölçeği ortalama puanında ( $M=53.40$ ) çalışma öncesi alınan puana ( $M=51.70$ ) kıyasla hafif bir artış olmasına rağmen

EBA aktivitelerinin kullanımının öğrencilerin öğrenen özerkliği düzeyi üzerinde kayda değer bir olumlu etkisinin olmadığı söylenebilir.

İlk araştırma sorusu ve onun alt sorusu, EBA kullanımının öğrencilerin kelime kazanımı üzerinde etkisinin olup olmadığına cevap aramaktadır. Kelime revizyon testi sonuçlarında bahsedildiği gibi, EBA kullanan öğrenci grubu ile kullanmayan öğrenci grubunun kelime öğrenme başarı düzeyleri arasında istatistiksel olarak anlamlı bir fark tespit edilememiştir. Her iki grubun da araştırma sonucunda benzer düzeyde başarı yakaladığı ortaya konulmuştur. Öğrenciler aldıkları dil eğitimi yöntemine bakılmaksızın kelime kazanımlarında başarı göstermişlerdir. Bu sonuçlara göre, standart dil öğretimine destek olarak EBA aktivitelerinin kullanılmasının, öğrencilerin kelime öğrenmelerinde kayda değer bir etkisinin olmadığı söylenebilir. Bu bulgular daha önce gerçekleştirilen bazı araştırma sonuçları ile uyumludur (Baghari vd., 2012; Başöz, 2013; Oberg, 2011). Başöz'e (2013) göre yaygın inanın aksine bilgisayar destekli kelime öğretimi her zaman daha iyi bir öğrenme deneyimi sağlayamayabilir.

Hischel ve Frits (2013)'in ve Pehlivan (2020)'in araştırmalarının istatistiksel sonuçları, bilgisayar destekli dil öğrenme uygulanan deney grubunun ve geleneksel kelime öğretimi alan kontrol grubunun son test puan sonuçlarına göre öğrencilerin kısa süreli kelime başarısında anlamlı bir fark bulunamamıştır. Yine de deney grubunun kalıcılık test gruplarına göre toplam puanının, kelimeleri uzun süreli akılda tutma açısından kontrol grubu puanından daha iyi olduğu görülmüştür. Ancak bu çalışmada, öğrencilerin uzun süreli kelime akılda tutma başarısını ölçen kalıcılık testi kullanılmamıştır.

Diğer yandan, önceki çalışmaların büyük çoğunluğunda, deney grubu öğrencilerin bilgisayar destekli dil öğrenme tabanlı öğrenme platformları sayesinde kelime bilgilerini önemli ölçüde artırdığı; deney grubunun dil yeterliliği açısından kontrol grubuna göre daha iyi performans gösterdiği ve bu çalışmanın sonuçlarının aksine iki grubun başarı testleri puanları arasında istatistiksel olarak anlamlı farklılıklar olduğu ortaya çıkmıştır (Bakla ve Çekiç, 2017; Çakmak vd., 2021; Enayati ve Gilakjani, 2020; Hajebi vd., 2018; Korlu ve Mede, 2018; Sanosi, 2018; Toy, 2019). EBA'nın dil öğrenimi üzerindeki etkilerini araştırmayı amaçlayan önceki çalışmalara bakıldığında ise mevcut araştırma ile çelişen sonuçlar ortaya çıkmıştır (Kılıç, 2020; Pehlivan, 2020).

Mevcut çalışmada da EBA, öğrencilere geribildirim verirken onların kelime öğrenmelerine katkıda bulunan çeşitli etkinliklere katılmalarına da olanak tanımıştır. Deney grubunun istatistiksel test sonuçları, uygulama öncesi ve uygulama sonrasında grup içinde kelime öğrenme başarısı açısından anlamlı bir fark olduğunu, ancak literatürün çoğunluğunun aksine geleneksel dil öğrenme yönteminden anlamlı bir fark yaratmadığını ortaya koymuştur. Dolayısıyla öğrenme yöntemi farklılıklarına rağmen her iki grubun kelime dağarcığının benzer şekilde geliştiği sonucuna varılabilir. Bu sonuçlar, çalışmanın uygulandığı sürenin sınırlı olmasından ya da platformda yeterli içeriğin bulunmamasından kaynaklanıyor olabilir. Yıldız ve Gündüz (2019) ortaokul öğretmenlerinin EBA e-içeriklerine ilişkin görüşlerini incelemişlerdir ve öğretmenlerin EBA içerik tasarımlarının öğrencilerin dikkatini çekmede yetersiz olduğunu, içeriklerin çok kısa ve güncelden uzak olduğunu tespit ettikleri sonucuna varmışlardır. Aynı şekilde Çakmak ve Taşkiran (2017) da e-içerik kalitesinin artırılması gerektiğini savunmaktadır. Ayrıca Erbay'ın (2018) araştırmasında EBA içeriğinin öğrenenlerin ihtiyaçlarına göre düzenlenmesi ve yenilenmesi gerektiği tartışılmıştır.

İkinci araştırma sorusu ve onun alt sorusu ise, EBA kullanımının öğrencilerin öğrenen özerkliği gelişimine etkisini ortaya çıkarmak amacıyla oluşturulmuştur. Araştırma sonuçlarında uygulama öncesi ve sonrası öğrenen özerkliği düzeyleri bakımından gruplar arasında ve gruplar içinde istatistiksel olarak anlamlı bir farklılık bulunmamıştır. Deney grubu öğrencilerinin özerklik düzeyinde hafif bir artış olduğu yine de EBA kullanımının grubun öğrenen özerklik düzeyleri açısından istatistiksel olarak anlamlı bir fark yaratmadığı görülmüştür. Öğrenme yöntemi fark etmeksizin, yedi hafta boyunca her iki grubun özerklik düzeyleri kayda değer bir farklılık göstermemiştir. Bulgular, dil öğrenme sürecinde EBA kullanımının öğrencilerin öğrenen özerkliği seviyeleri üzerinde kayda değer bir olumlu etkisi olmadığını göstermektedir.

Bulunan sonuçlar, bilgisayar destekli dil öğretiminin öğrenen özerkliğinin geliştirilmesinde önemli bir etkiye sahip olduğunu ortaya koyan araştırma çalışmalarının birçoğu ile çelişmektedir (Ceylan, 2019; Farivar ve Rahimi, 2015; Ghufron ve Nurdianingsih, 2019; Kızmaz, 2019; Mutlu ve Eröz-Tuğa, 2013; Smith ve Craig, 2013). Bunun olası nedeninin bilgisayar destekli öğretim süresinin kısıtlı olması olabilir çünkü deney grubunun EBA etkinlikleri ile çalışması gereken süre öğrencilerin özerkliğini geliştirmede yeterli olmayabilir. Yine de deney grubu ortalama puanları arasındaki fark, kontrol grubu ortalama puan farkından biraz daha yüksektir. Bu da bilgisayar destekli dil öğrenimi uygulamasının

daha uzun süreli olmasının, deney grubu puanlarında daha önemli bir fark ortaya çıkarabileceğini göstermektedir. Buna ek olarak, EBA'daki mevcut e-içerikler, öğrencileri sınıf dışı öğrenme ve etkileşimlere katılmaya motive edecek kadar yeterli ve çekici olmayabilir. Timur vd. (2017) çalışmasında öğrencilerin EBA web sitesinin yararlı olduğunu düşünmelerine rağmen çoğunluğu platform kullanımını yetersiz bulduğunu belirtmiştir. Konu ile ilgili ve bilgilendirici daha çok içerik eklenerek ve daha fazla öğrenci çekebilecek ilgi çekici bir ana sayfa oluşturularak web sitesinin genel kalitesinin zenginleştirilmesi gerektiğini önermişlerdir. Aynı şekilde Tüysüz ve Çümen (2016) ortaokul öğrencilerinin EBA hakkındaki düşüncelerini araştırmış ve EBA'da daha fazla içerik, test ve eğlenceli oyunlara yer verilmesinin önerildiği görülmüştür.

Son olarak, bir diğer olası etken de Türk öğrencilerin özerk öğrenim yöntemine alışkın olmamaları olabilir. Ülkedeki alışılmış öğrenme biçimi ve öğretmenin rolü ile öğrenciler üzerindeki aşırı sınav baskısı, Türk öğrenciler için özerk bir öğrenme atmosferinin oluşturulmasının önündeki engeller olarak görülebilir (Doğan ve Mirici, 2017). Sonuç olarak, bu araştırmanın sonuçları, katılımcıların öğrenen özerkliğinin geliştirilmesine ilişkin önceki çalışmalarla örtüşmemektedir. Reinders ve White'in (2011) söylediği gibi, teknoloji özerk öğrenme için gerekli olanağı sağlasa da öğrencilerin öğrenmede sorumluluk alma duygularını ve öğrenme becerilerini geliştiremeyebilir ve sağlanan materyaller ve girdilerin kalitesi öğrenen özerkliği gelişiminde büyük rol oynar.

Bu çalışmada elde edilen sonuçlardan daha farklı sonuçlar ortaya konabilmesi için daha uzun süreli ve daha fazla katılımcının yer aldığı araştırmaların yapılması tavsiye edilir. Ayrıca EBA kullanımının kelime öğrenim başarısı üzerindeki etkilerini daha derinlemesine anlayabilmek adına, öğrencilerin öğrendiklerini uzun vadede hatırlama başarılarını belirleyen bir kalıcılık testi uygulanabilir. Bunun yanında, bu araştırma kullanıcıların web sitesi hakkında fikirlerini araştırmaya yönelik nitel verilerden de yoksundur. Öğrencilerin web sitesine olan tutumlarını ortaya koyan derinlemesine verilere ulaşabilmek için daha sonraki çalışmalarda öğrencilerin bakış açılarına da yer verilebilir. Ayrıca EBA'daki İngilizce dersi aktiviteleri öğrencilerin ihtiyaçlarına göre düzenlenebilir ve zenginleştirilebilir. Çevrimiçi materyal ve etkinliklerin derse nasıl entegre edileceğinin İngilizce öğretmenleri tarafından öğrenilmesi ve EBA üzerinde kullanacakları etkinlikleri hazırlayabilme becerisine sahip olmaları gerekmektedir. İlave olarak, araştırmanın kapsamını genişletmek amacıyla EBA'nın diğer İngilizce dil becerileri ve alt becerileri üzerindeki etkisini araştıran yeni çalışmalar da

uygulanabilir. Yine bu çalışmanın kapsamı dışında, başka bir teknolojik aracın kullanımı ile dil becerilerinin kazanılması arasındaki ilişki konusunda daha fazla araştırma yapılabilir. Bu tür teknolojik araçların kullanımını dil öğrenme sürecine entegre etmek faydalı olacaktır.



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**APPENDICES**

**Appendix-1: Vocabulary Revision Test for 6<sup>th</sup> Grades (Unit 6 and 7)**

**A. Choose the best option to fill in the blanks.**

1. I am a ..... I can cut and sew fabrics.

- a) barber
- b) doctor
- c) tailor
- d) mechanic

2. There is decay here. I'm sorry but I need to ..... your tooth.

- a) pull out
- b) extinguish
- c) design
- d) dye

3. Alex: I think I have a problem with my car.

Ben: A mechanic can.....it for you.

- a) take order
- b) repair
- c) plan
- d) defend

4. My uncle is a ....., he can deliver letter.

- a) salesman
- b) tailor
- c) soldier
- d) postman

5. Teacher: Who can build bridges?

Student: A .....

- a) architect
- b) dentist
- c) soldier
- d) manager.

6) Alfred: What is your job?

Lily: .....

- a) I'm a teacher
- b) I'm a dentist
- c) I'm a doctor
- d) I'm a vet



**B. Match the unfinished sentences with the correct options.**

- |                         |                                |
|-------------------------|--------------------------------|
| 1. I take orders and    | a. become a doctor?            |
| 2. I'm an architect     | b. serve food.                 |
| 3. When did your sister | c. do?                         |
| 4. What do you          | d. but I also can design hair. |

1.	2.	3.	4.

**C. Fill in the blanks choosing the correct words in the box. Use each word only once.**

<b>put out</b>	<b>barber</b>	<b>nurse</b>	<b>manager</b>	<b>salesman</b>
----------------	---------------	--------------	----------------	-----------------

- 1. Your hair looks amazing. Who is your .....
- 2. The service is not good. I want to speak to the hotel .....
- 3. Jacob is the best ..... because he sells more than 100 cars every month.
- 4. My mother is a ..... She looks after ill people.
- 5. Firemen can ..... fire.

**D. Choose the best option to fill in the blanks.**

1. **Alice:** How was your holiday?

**Michael:** It was great, we joined a ..... tour.

- a) cable car
- b) gardening
- c) campsite
- d) sightseeing

2. My brother and I went camping in the forest. We ..... in a tent.

- a) stay
- b) go
- c) take
- d) learn

3. **Nick:** We went to Ağrı last summer.

**Ben:** Really? Did you ..... Mount Ağrı?

- a) stay
- b) pick up
- c) join
- d) climb

4. Look outside! It's snowing. How about making a ..... ?

- a) sandcastle
- b) river
- c) snowman
- d) campsite

5. I like walking on the beach and .....

- a) playing snowball.
- b) picking up shells.
- c) climbing a tree.
- d) walking my dog



6) Turkey is a great country. There are many ..... to travel.

- a) holidays
- b) campfires
- c) famous places
- d) cable cars

**E. Match the unfinished sentences with the correct options.**

1. My family went to Italy

a. in the lake.

2. In Cappadocia you can take

b. fruits in the garden.

3. Yesterday, Cindy pick

c. a balloon tour.

4. My father likes fishing

d. and travel ancient places.

1.	2.	3.	4.

**F. Fill in the blanks choosing the correct words in the box. Use each word only once.**

ancient	vacation	skiing	visit	seaside
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1. It was great to learn .....

2. Lisa ..... her grandparents yesterday.

3. Do you know a good ..... hotel in Bodrum?

4. Where did you go on your .....

5. There are many ..... places to visit in Istanbul.

## Appendix-2: 6<sup>th</sup> Grade English Lesson Annual Plan

2022-2023 EĞİTİM ÖĞRETİM YILI TOKİ YAVUZ SELİM ORTAOKULU					
6. SINIFLAR İNGİLİZCE / SEÇMELİ İNGİLİZCE DERSİ YILLIK PLANI					
Month / Week	Hour	Unit / Theme	Functions & Useful Language	Language Skills and Learning Outcomes	Suggested Contexts, Tasks and Assignments
19.HAFTA 06 - 10 Şubat	3	<b>Unit 6: Occupations</b>	<b>Talking about occupations</b> What does your uncle do? -He's a salesman, but he also works at a restaurant on Fridays. What do you do? -I am a nurse. Can you build a house? -No, I can't! What can you do? -I can make dresses. I can cut and sew fabric.	<b>Listening</b> E6.6.L1. Students will be able to understand familiar words and simple phrases concerning people's occupations in clear oral texts. E6.6.L2. Students will be able to understand the time, days and dates.	<b>Contexts</b> Advertisements Brochures Cartoons Conversations Illustrations Magazines Postcards Posters Songs Stories Videos  <b>Tasks/Activities</b> Drama (Role Play, Simulation, Pantomime) Find Someone Who ... Games Information/Opinion Gap Information Transfer Matching Labeling Questions and Answers Reordering Storytelling True/False/No information <b>Assignments</b> • Students keep expanding their visual dictionary by including new vocabulary items. • Students find out the occupations of their family members and write what they do.
20.HAFTA 13 - 17 Şubat	3		<b>Asking personal questions</b> Was s/he in İstanbul last week? Were you at school yesterday? When were you born? Where was s/he born?	<b>Spoken Interaction</b> E6.6.SI1. Students will be able to talk about occupations.  <b>Spoken Production</b> E6.6.SP1. Students will be able to ask personal questions. E6.6.SP2. Students will be able to state the dates.	
21.HAFTA 20 - 24 Şubat	3		<b>Telling the time, days and dates</b> -S/he was in İstanbul in May. -I was at school yesterday. -I was born on 10th of February, 2005. -S/he was born in Malatya in 1990.	<b>Reading</b> E6.6.R1. Students will be able to understand familiar words and simple sentences about occupations and the dates.  <b>Writing</b> E6.6.W1. Students will be able to produce a piece of writing about occupations and the dates.	
22.HAFTA 27 Şubat - 03 Mart	3		*Vergi Haftası *Sivil Savunma Günü *Yeşilay Haftası *Girişimcilik Haftası	architect, -s cook, -s dentist, -s driver, -s engineer, -s farmer, -s hairstylist, -s lawyer, -s manager, -s mechanic, -s salesman/saleswoman	

2022-2023 EĞİTİM ÖĞRETİM YILI TOKİ YAVUZ SELİM ORTAOKULU						
6. SINIFLAR İNGİLİZCE / SEÇMELİ İNGİLİZCE DERSİ YILLIK PLANI						
Month / Week	Hour	Unit / Theme	Functions & Useful Language	Language Skills and Learning Outcomes	Suggested Contexts, Tasks and Assignments	
23.HAFTA 06 - 10 Mart	3	<b>Unit 7: Holidays</b>	<b>Talking about past events (Making simple inquiries)</b> What did you do in your holiday? -I played with my friends, and I learned skiing. -My brother and I climbed trees and picked fruit. I enjoyed it. -We walked in the forest yesterday. What did s/he do in the holiday? -S/he studied English. -S/he visited her/his grandparents last week.	<b>Listening</b> E6.7.L1. Students will be able to spot the activities about holidays in oral texts.  <b>Spoken Interaction</b> E6.7.SI1. Students will be able to talk about their holidays.  <b>Spoken Production</b> E6.7.SP1. Students will be able to describe past activities and personal experiences.	<b>Contexts</b> Advertisements Brochures Cartoons Conversations Illustrations Maps Magazines Postcards Posters Songs Stories Videos  <b>Tasks/Activities</b> Drama (Role Play, Simulation, Pantomime) Find Someone Who ... Games Information/Opinion Gap Information Transfer Making Puppets Matching Labeling Questions and Answers Reordering Storytelling True/False/No information  <b>Assignments</b> • Students prepare a postcard and write about what they did on their holiday. • Students prepare a pamphlet showing different places for different holiday activities in their country.	
24.HAFTA 13 - 17 Mart	3		*Dünya Kadınlar Günü *İstiklâl Marşı'nın Kabulü ve Mehmet Akif Ersoy'u Anma Günü  *Şehitler Günü	forest, -s flower, -s fruit lake, -s mountain, -s pick river, -s sailing seaside sightseeing skiing snowball snowman tree, -s		<b>Reading</b> E6.7.R1. Students will be able to understand short, simple sentences and expressions related to past activities.  <b>Writing</b> E6.7.W1. Students will be able to write short and simple pieces in various forms about holidays.
25.HAFTA 20 - 24 Mart	3		*Yaşlılar Haftası *Türk Dünyası ve Toplulukları Haftası	*Dünya Kadınlar Günü *İstiklâl Marşı'nın Kabulü ve Mehmet Akif Ersoy'u Anma Günü *Şehitler Günü *Yaşlılar Haftası *Türk Dünyası ve Toplulukları Haftası		

## Appendix-3: Learner Autonomy Scale

### Özerklik Ölçeği

#### Learner Autonomy Scale (LAS)

Aşağıda eğitim sürecine ilişkin özerklik durumlarını betimlemeye yönelik ifadelere yer verilmiştir. Lütfen sorularınızı cevaplarken **İNGİLİZCE ÖĞRENMEYİ** düşününüz. Her bir madde ile tanımlanan davranışı gösterme sıklığınızı, aşağıda belirtilen beşli derecelendirme ölçeği üzerinde uygun gelen seçeneği (ölçek noktasını) işaretleyerek (X) belirtmeniz beklenmektedir.

Sıra	İfadeler	Hiç Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Tamamen katılıyorum
1	İngilizce öğrenmemi sağlayacak en uygun aktiviteyi seçmek isterim.	①	②	③	④	⑤
2	İngilizce öğrenirken sorumluluk almak isterim.	①	②	③	④	⑤
3	İngilizce öğrenirken benim görüşlerimin alınmasını isterim	①	②	③	④	⑤
4	İngilizce dersinde öğretilen konularda söz sahibi olmak isterim	①	②	③	④	⑤
5	İngilizce öğrenirken zayıf taraflarımı tespit edebilirim.	①	②	③	④	⑤
6	İngilizce öğrenirken güçlü taraflarımı tespit edebilirim.	①	②	③	④	⑤
7	İngilizce derslerimle ilgili video/CD' leri sınıf dışında kullanmak isterim.	①	②	③	④	⑤
8	İngilizce iletişim kurmak için risk almayı severim.	①	②	③	④	⑤
9	İngilizceyi sadece öğretmenin yardımıyla öğrenebilirim.	①	②	③	④	⑤
10	Seviyeme göre yazılmış İngilizce kitapları kendi isteğimle okurum.	①	②	③	④	⑤
11	Kendi öğrenme ihtiyaçlarımı belirleyebilirim.	①	②	③	④	⑤
12	İngilizcede yaptığım çalışmalarımı kendim değerlendirebilirim.	①	②	③	④	⑤
13	Yapılan aktivitelerde bana da seçim hakkı verilmesini isterim.	①	②	③	④	⑤
14	İngilizce bir konuyu öğretmen anlatmazsa, onu öğrenemeyeceğim diye korkarım.	①	②	③	④	⑤

## Appendix-4: Permit for the Present Study from Provincial Directorate of National Education



T.C.  
KONYA VALİLİĞİ  
İl Millî Eğitim Müdürlüğü



Sayı : E-83688308-605.99-65906710  
Konu : Araştırma İzni (Şerife SERİN)

15.12.2022

### DAĞITIM YERLERİNE

- İlgi : a) Millî Eğitim Bakanlığının (Yenilik ve Eğitim Teknolojileri Genel Müdürlüğü) 21.01.2020 tarihli ve 2020/2 sayılı Genelgesi.  
b) 29/11/2022 tarihli ve E.48178250-300-274924 sayılı yazımız.  
c) 12/12/2022 tarihli Araştırma İzinleri Değerlendirme Komisyonu Tutanağı.

Necmettin Erbakan Üniversitesi Eğitimi Bilimleri Enstitüsü Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili Eğitimi Bilim Dalı Tezli Yüksek Lisans Programı öğrencisi Şerife SERİN'in "Eğitim Bilişim Ağı (EBA) Kullanımının Yabancı Dil Olarak İngilizce Öğrenen Öğrencilerin Kelime Öğrenim Başarıları ve Öğrenen Özerkliği Gelişimleri Üzerine Etkisi" konulu araştırmasını uygulama talebi incelenmiştir.

Araştırmanın, Karapınar Toki Yavuz Selim Ortaokulu Müdürlüğünde eğitim gören 6. sınıf öğrencilerine eğitim öğretimi aksatmamak ve ilgi (a) Genelgede belirtilen açıklamalara uyulması kaydıyla gerçekleştirilmesi ilgi (c) komisyon tutanağı ile uygun görülmektedir. Müdürlüğümüze bağlı eğitim kurumlarındaki çalışmaların 2022-2023 eğitim öğretim yılı içerisinde tamamlanması zorunludur. Araştırma kapsamında yürütülecek çalışmaların 2022-2023 eğitim öğretim yılında tamamlanmaması durumunda Müdürlüğümüzden tekrar izin alınması gerekmektedir.

Araştırmada Müdürlüğümüz tarafından onaylanarak gönderilen veri toplama araçlarının kullanılması, elde edilecek kişisel verilerin gizliliği hususuna dikkat edilmesi ve araştırma sonucunun çalışma bitiminden itibaren 30 gün içerisinde elektronik ortamda Müdürlüğümüz istatistik42@meb.gov.tr e-posta adresine gönderilmesi gerekmektedir.

Arz/Rica ederim.

Murat YİĞİT  
İl Millî Eğitim Müdürü

Ek:

- 1-Genelge (3 Sayfa)
- 2-Veli Onam Formu (1 Sayfa)
- 3-Kelime Revizyon Testi (2 Sayfa)
- 4-Özerklik Ölçeği (1 Sayfa)

Dağıtım:

Gereği:  
Necmettin Erbakan Üniversitesi Rektörlüğüne

Bilgi:  
Karapınar İlçe Millî Eğitim Müdürlüğüne

## Appendix-5: English Activities on EBA

### Unit 6 “Occupations”

eba Ne aramıştınız? Q ✉

10 puan

Şerife Serin

TOKİ Yavuz Selim Ortaokulu

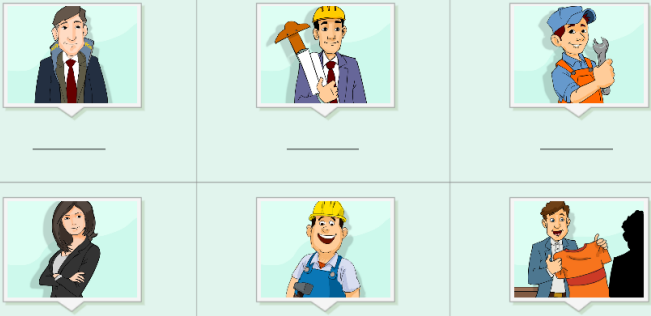
- Sayfam
- Dersler
- Canlı Dersler
- Sınavlar
- Kütüphane
- Listeler
- Çalışmalar
- Raporlar
- Müze Deneyimleri
- Mesleki Gelişim

SEBİT

Vocabulary Exercise 1: Occupations

Match the words with the correct pictures.

VİTAMİN



manager worker architect salesperson lawyer mechanic

CHECK

Cross out the wrong word.

VİTAMİN

1 When **did** / **was** she become a nurse?

2 **Where** / **What** do you do?

3 Where does she work **in** / **on** Mondays?

4 I can cut fabric but I **can** / **can't** sew it.

5 He became a cook **at** / **in** 2014.



CHECK

### ◀ Vocabulary Exercise 3: Occupations

Choose the correct answer for each blank. ViTAMjN

I'm very lucky because I've got a great family. My mother is a  . She always  my dresses. My father is a  . He can  all the electrical devices. I've got a brother. He is  . He  people and cargo. He's very good-looking in his  . Is my dream job? Well, I want to be a/an  because my favorite school subject is computer studies.

manager  
 technician  
 self-employed

  CHECK

### ◀ Vocabulary Exercise 2: Occupations




Match to make sentences. ViTAMjN

I can cut  and sew fabric.

When did your father  do?

I'm a salesperson  but I also work at a restaurant.

What does your father  become a tailor?


   CHECK




## Grammar Exercise 6: Holidays

Match the sentences with the pictures.


VITAMİN




She learned swimming in Side.



She was on her grandparents' farm.



They came back from holiday yesterday.



We climbed trees and picked fruit.

⚙️ ↻ CHECK

## Reading Exercise: Holidays

Read the text and choose the correct answer accordingly.

VITAMİN

**Clara:** I was in Paris with my mom, dad and brother. We saw Eiffel Tower and visited Louvre Museum. Then we went to Disneyland. I saw Cinderella, Aladdin, Mickey Mouse and Donald Duck. I think it was fascinating. But my brother found it boring. We came back from Paris last Wednesday.

**Zeynep:** I went to Hemşin to visit my aunt. I stayed there for two months. I climbed trees and picked fruit. I also went hiking with my cousins. We camped and cooked our food. It was amazing but I missed my family very much.

**Akio:** Last month I was in Turkey with my family. We went to Çeşme. The weather was beautiful. There were a lot of tourists from many countries. Then we went to the small islands near Çeşme. I enjoyed travelling in a boat. I also learned swimming. I'd like to visit Çeşme again.

**1** Who went sailing?  
 Clara  
 Zeynep  
 Akio

**2** Who went sightseeing?  
 Clara  
 Zeynep  
 Akio

**3** Who went on holiday alone?  
 Clara  
 Zeynep  
 Akio

⚙️ ↻ CHECK