



Ufuk University

Graduate School of Social Sciences

Department of English Language Teaching

THE EFFECTS OF TABLETS ON STUDENTS' ENGLISH  
VOCABULARY LEARNING

Gül DOĞAN

Master's Thesis

Ankara, 2017

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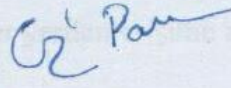
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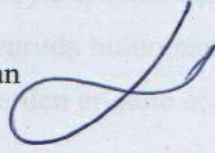
**KABUL VE ONAY**

Gül DOĞAN tarafından hazırlanan "Tabletlerin Öğrencilerin İngilizce Kelime Öğrenmeleri Üzerindeki Etkisi" başlıklı bu çalışma, 02/02/2017 tarihinde yapılan savunma sınavı sonucunda başarılı bulunarak jürimiz tarafından Yüksek Lisans Tezi olarak kabul edilmiştir.

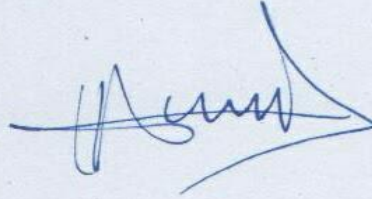
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Yukarıdaki imzaların adı geçen öğretim üyelerine ait olduğunu onaylarım.



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02.02.2017

Gül DOĞAN





*For my family...*

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## ABSTRACT

DOGAN, Gül, “*The Effects of Tablets on Students’ English Vocabulary Learning*”, Master’s Thesis, Ankara, 2017.

In this study, in addition to the examination of the opinions of the students towards Interactive whiteboards and Tablets presented to the education field within the scope of the Project for Increasing Educational Opportunities and Technological Improvement (FATİH) Project, a mixed research method was carried out to study the place of the tablets on vocabulary teaching in English language lesson which was taught as a foreign language. The sample group of the study constitutes 112 secondary school students with the same conditions determined by the level examinations in the province of Erzincan. Half of these students represent the control group and the other half represents the experimental group. The data were collected as a result of the questionnaires in which the students gave their opinions about the use of tablets and interactive whiteboards in the lessons, the statistical results were gathered in vocabulary knowledge scale, the applications used for vocabulary teaching, classroom observations and semi-structured interviews. The 12-item questionnaire on students' opinions about tablet use in English classes was administered twice before and after the study of vocabulary teaching. With this method it is intended to see when they are used according to the aim the effect of the tablets on vocabulary learning. The main purpose of this study is; to determine the importance and permanence of mobile learning. As the study examined the use of tablets to support mobile learning, the 24-item questionnaire for smart board use was conducted only once. Vocabulary knowledge scales for the experiment group were applied 3 times pre, post and follow-up. This study involves both quantitative and qualitative research and therefore has a mixed method. Statistical methods were used in the analysis of data collected with quantitative research methods. It has been determined that the use of tablets in the English lessons in the light of the statistical evaluations and qualitative observations have significant positive effects on students' learning and remembering of words in English.

Keywords: Tablets, Interactive Whiteboards, English Vocabulary Learning, FATİH Project.

## ÖZET

DOGAN, Gül, “*Tabletlerin Öğrencilerin İngilizce Kelime Öğrenmeleri Üzerindeki Etkisi*”, Yüksek Lisans Tezi, Ankara, 2017.

Bu çalışmada, Eğitimde Fırsatları Artırma ve Teknolojiyi İyileştirme (FATİH) Projesi kapsamında eğitim öğretim hayatına sunulan akıllı tahta ve tablet bilgisayara karşı öğrencilerin görüşlerinin incelenmesinin yanı sıra yabancı dil olarak öğretimi yapılan İngilizce derslerinde tabletlerin İngilizce kelime öğrenimindeki yerine ilişkin bir karışık method çalışması yürütülmüştür. Çalışmanın örneklem grubunu Erzincan ilinde seviyeleri sınav ile tespit edilmiş aynı şartlara sahip 112 ortaöğretim öğrencisi oluşturmaktadır. Bu öğrencilerin yarısı kontrol grubunu diğer yarısı da deney grubunu temsil etmektedir. Veriler, öğrencilerin derslerde tablet ve akıllı tahta kullanımına ilişkin görüşlerini belirttikleri anketler, kelime bilgi ölçeğinden toplanan istatistiksel sonuçlar, kelime öğrenimine yönelik yapılan uygulamalar, sınıf içi gözlemler ve yarı yapılandırılmış anketler sonucunda elde edilmiştir. Öğrencilerin İngilizce derslerinde tablet kullanımına ilişkin görüşleri ile ilgili 12 maddelik anket kelime öğretime yönelik çalışmanın öncesinde ve sonrasında olmak üzere iki kere uygulanmıştır. Bu yöntem ile amaca yönelik kullanıldığında tabletlerin kelime öğrenme üzerindeki etkisini görmek niyetlenmiştir. Bu çalışmada asıl amaç; mobil öğrenmenin önemini ve kalıcılığını tespit etmektir. Çalışma daha çok mobil öğrenmeyi destekleyen tablet kullanımını incelediğinden akıllı tahta kullanımına yönelik 24 maddelik anket sadece bir kere uygulanmıştır. Deney grubu üzerinde tabletler kullanılarak yapılan kelime bilgi ölçekleri önce, sonra ve takip olmak üzere 3 kere uygulanmıştır. Bu çalışma hem nicel hem de nitel araştırmaları içerdiğinden karışık bir methoda sahiptir. Nicel araştırma yöntemleri ile elde edilen verilerin analizinde istatistiksel yöntemler kullanılmıştır. Yapılan istatistiksel değerlendirmeler ve nitel gözlemler ışığında İngilizce derslerinde tablet kullanımının öğrencilerin İngilizce kelime öğrenmelerinde ve de kelimeleri hatırlamalarında önemli derecede olumlu etkileri olduğu tespit edilmiştir.

Anahtar Kelimeler: Tabletler, Akıllı Tahtalar, İngilizce Kelime Öğrenimi, FATİH Projesi.

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## LIST OF ABBREVIATIONS

GEN.....	.....	Generation
MALL .....	.....	Mobile Assisted Language Learning
FATIH.....	.....	Movement to Increase Opportunities and Technology
CALL .....	.....	Computer Assisted Language Learning
IWB.....	.....	Interactive Whiteboard
PC.....	.....	Personal Computer
EBA.....	.....	Education Information Network
EFL.....	.....	English as a Foreign Language
MoNE.....	.....	Ministry of National Education
ICT .....	.....	Information Communication
VKS.....	.....	Vocabulary Knowledge Scale
SPSS: .....	.....	Statistical Package for Social Sciences
F: .....	.....	Frequency
SD: .....	.....	Strongly disagree
D: .....	.....	Disagree
N: .....	.....	Neutral
A: .....	.....	Agree
SA: .....	.....	Strongly agree
STD: .....	.....	Standard deviation

# **CHAPTER I**

## **INTRODUCTION**

### **1. INTRODUCTION**

In this chapter, the background of the study, statement of the problem, research questions and scope of the study and importance of the study will be discussed followed by brief operational definitions of the terms used in the study.

#### **1.1. BACKGROUND OF THE STUDY**

We live in a world in which every single electronic device has an access to Internet. Recently, there have been major changes in education. Traditional teaching techniques are supported and sometimes transformed by the techniques based on technology. The education in a four-wall classroom with one single knowledge source has had to transform into the education beyond the walls with multi-dimensions and various sources. Mobile technology products have become indispensable components in our daily lives, working environment, and education-teaching fields. Especially generation Z who was born between 1995 and 2015 are going to rule the future. They are born and will be born into highly sophisticated media and computer based environment. They will be more expert than the former generation Y. As Gen Z will be more Internet and computer savvy, today's education system needs to be shaped around the modern and mobile technologies. Paper and pen based education has started to take a new form with the booming advances in technology. Arts and crafts of the past have become today's

modern engineering. It would be a shame not to use these engineering wonders in the field of education. Mobile technology has decreased the burdens of traditional learning carried out via heavy and demanding styles. Interactive whiteboards (IWBs) have been one of the most popular computer based technologies. According to recent studies and reports, tablets and IWBs are the mostly used tools which make the learning and teaching more enjoyable and efficient in education field. Mobile Assisted Language Learning (MALL) provides many advantages for today's learners who use mobile technologies all day for every errand. The governments do high-budget investments to integrate the computer technology into the public education field. Movement to Increase Opportunities and Technology (FATIH) Project is the national example which has been carried in Turkey since 2010.

As the impact of computer technologies on learning is vast and requires a long time to observe, this study has just focused on the impacts of technology on English Language vocabulary learning using the technological devices and the mobile applications. Education has been shaped according to the needs and wishes of humanity. Since 1960s computer based instructions have been actively used in education. That's why computer assisted language learning (CALL) has been an important aspect in language teaching.

“Communicative competence refers to the interactive process in which meanings are produced dynamically between information technology and the world in which we live.” (Rassool, 1999 as cited in Chappelle, 2001).

It is a fact that technological advances and their adaption to English classes can increase the quality of learning and the retention of the words. That's why FATIH Project presents an opportunity as it has introduced technological devices into the classes and equipped students and teachers with tablets. However, having the latest technologies cannot solve the effective language learning problem all alone. Government-supported books for English lessons do not come in software versions to be used on tablets. There are not enough applications to revise the new words of the coursebooks. As each learner learns in a unique way, the teaching atmosphere has to be updated in terms of the needs of the day and students' wishes. Even though FATIH Project has enriched the classes with technical supports and provided teachers and students with tablets, the expected benefits cannot be held because of the insufficient software support. IWBs are

seen just wide screen televisions and tablets are only used for game purposes. Education Information Network (EBA) does not provide coherent materials or e-books for language lessons. Just portable document format (PDF) forms of the books without audio or visual aids cannot solve the interaction problem.

## **1.2. STATEMENT OF THE PROBLEM**

It is generally assumed that vocabulary learning is one of the most challenging skills in language learning. Turkish learners spend at least ten years at schools to learn English as a foreign language (EFL), however at the end of all these years most of the learners barely remember or use what they have learnt. According to Laufer (1997), one should learn and use nearly 3000 high frequency words for effective oral and written communication. As it is stated in Common European Framework of Reference (CEFR) for languages (Council of Europe, 2001), the more words one know the more they can communicate in the society of the target language. If the traditional vocabulary teaching methods had been very effective in our country, after all these school years students would have been the perfect users of the target language. Not being able to use the language outside the classrooms also affects the language learning adversely. Yet, it should also be kept in mind that the needs of the global world should at least be met at the end of those schools years. When the students comprehend the benefits of learning a language, they self-motivate themselves to learn more and faster. Intrinsic motivation and individual learning play very important roles in learning.

In Turkey, the use of mobile technologies and interactive white board technology is pretty a fresh concept and the numbers of EFL teachers who use them frequently for vocabulary teaching purposes are not many. English language levels of most high school students in Turkey are generally at elementary levels. As research in this field can be helpful to stakeholders of education in terms of deciding whether or not to invest in mobile technologies, this study will be a good example to illustrate the

comprehensive picture of IWBs and tablets use in Turkey, students' both qualitative and quantitative opinions about their use, and their place in language education.

Barab and Plucker (2002) claims that "One of the critical problems in traditional schooling practices is the excessive amount of decontextualized information, informal and abstract knowledge, and second hand experiences confined in classroom contexts."

The technological devices of the 21st century enhance the individual and mobile learning. FATIH Project promises to improve the education and provide students equal learning opportunities with the latest technological devices. Integrating mobile devices into language classrooms presents a more permanent and efficient learning. However, there are some questions to be answered like how the technological products provided by Turkish Ministry of National Education (MoNE) in FATIH Project support individual learning and self-motivation, to what extent they provide success in learning and retention of English vocabulary, and if they go beyond the traditional teaching methods.

### **1.3. RESEARCH QUESTIONS AND SCOPE OF THE STUDY**

The main scope of this study is to investigate the differences in students' vocabulary learning achievements between teaching through traditional techniques and teaching through technological devices, namely tablets and IWBs provided by FATIH Project. This study also aims to reflect the students' opinions about the use of tablets and IWBs at school and in their daily lives. For these reasons this study aims to find answers to the following questions;

1. Are there any differences in students' vocabulary achievement levels between control and experiment group?
  - a. Based on pre-test results



- b. Based on post-test results
  - c. Based on follow up test results.
2. What are the experiment group students' opinions towards the use of tablets?
- a. Before the study
  - b. After the study
3. What are the students' opinions towards the use of IWBs?

#### **1.4. IMPORTANCE OF THE STUDY**

Besides the relevant literature including reports revealing Turkish students' opinions towards the use of tablets and IWBs in English vocabulary learning, this study will present more statistical results showing the students' opinions regarding tablet PC and IWB use in English lessons in Erzincan context. The study will also present an opportunity for the English Language Teaching (ELT) context in FATIH Project. The study will provide more sound information on vocabulary teaching utilizing tablets and IWBs in language classes for the EFL teachers and administrators in the field. It will also provide the stakeholders of FATIH Project new deep insights from the perspectives of Turkish EFL learners.

#### **1.5. OPERATIONAL DEFINITIONS**

Information and Communication Technologies: It is an umbrella term that utilizing any kind of communication devices, services and applications to get or share information in any field such as education, health care or school or public libraries.

Mobile Learning: It is the skill to offer educational content by integrating particular portable tools such as smartphones, tablets and netbooks.

Mobile Assisted Language Learning: According to Agnes Kukulska and Hulmes (2012), mobile assisted language learning is the ability of using mobile technologies which present certain advantages with the devices portability in language learning.

## **1.6. CONCLUSION**

In this chapter, the background of the study, statement of the problem, research questions and scope of the study and the significance of the study have been discussed followed by brief definitions of the terms used in the study. The next chapter will provide an overall review of the literature on social constructivism, mobile learning, mobile assisted language learning, FATIİH Project and other developments in education technology in Turkey, vocabulary learning.

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **2. INTRODUCTION**

In this chapter, firstly social constructivism as the theoretical framework of this study will be presented. To be able to understand how social constructivism works, the aspects of knowledge, learning and motivation in social constructivism will be explained. Secondly, the use of Information and Communication Technologies will be explained along with its benefits and drawbacks. Thirdly, the use of Interactive Whiteboards in education will be introduced. Fourthly, mobile learning, the statistics about the use of mobile tools in Turkey, mobile tools used in education and mobile assisted language learning related to mobile learning will be introduced. Then, developments in educational technology cases in Turkey carried out by Ministry of National Education will be explained in chronological order, and FATİH Project will be introduced with its different dimensions. Finally, vocabulary learning, being the main research scope of this study, will be discussed.

#### **2.1 SOCIAL CONSTRUCTIVISM AS THE THEORETICAL FRAMEWORK**

Constructivism which stresses the forming of new ideas through discussion and interaction among the learners is a learning theory. Piaget (cited in William & Burden, 1997) emphasized that to be able to construct new knowledge; the association of prior knowledge with new information is highly crucial. Piaget explains constructivism as;

“In contrast to more traditional views which see learning as the accumulation of facts or the development of skills, the main underlying assumption of constructivism is that individuals are actively involved right from birth in constructing personal meaning, which is their own personal understanding, from their experiences. In other words, everyone makes their own sense of the world and the experiences that surround them. In this way, the learner is brought into central focus in learning theory.” (Williams and Burden, 2005)

In context of constructivist learning theory, post-revolutionary soviet psychologist Lev Vygotsky created a new term called “Zone of Proximal Development (ZPD)”.

It is “the term used to refer to the layer of skill or knowledge which is beyond that which the learner is currently capable of coping” (Williams and Burden, 1997). It means that the learner must work with another learner or adult who is somewhat above the learner’s capabilities in order to improve himself for a higher level.

Vygotsky defines social constructivism as the collaborative nature of learning. In contrast to Piaget, Vygotsky claimed that learning cannot be separated from its social context or cannot be accepted as the assimilation and accommodation of new knowledge by learners. Cognitive functions are the products of social interactions and the process of integration into a knowledge community is called learning. According to Vygotsky (1978):

“Every function in the child’s cultural development appears twice: first, on the social level and, later on, on the individual level; first, between people (inter-psychological) and then inside the child (intra-psychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals.”

Social learning theory by Vygotsky was later expanded by other theorists and researchers. For example, Wood and Bruner (1976) added a new term called “instructional scaffolding” which has a slight difference from the definition of ZPD. Instructional scaffolding means that the learner is supported by another learner or adult and the others do not have to be above the learner’s capabilities. They proposed

principles of constructivism as readiness, spiral organization, going beyond the information given.

There are also streams of constructivism. They are called as cognitive constructivism, radical constructivism and social constructivism. The theoretical framework of this study is social constructivism, thus, the other constructivism types are beyond the scope of this study and they will not be explained here. Social constructivism is an appropriate framework to understand how negotiations among students occur while learning foreign language vocabulary using mobile tools.

### **2.1.1. Knowledge in Social Constructivism**

Vygotsky (1978) pointed out that language and culture have important roles in cognitive development, intellectual development and perception of the world. While people experience the world, communicate each other and understand the reality, they use language and culture which provide the frameworks around them. People's linguistic abilities give them the ability to understand and manage the world which has been shaped by cultural meanings. Vygotsky states (1978):

“A special feature of human perception ... is the perception of real objects ... I do not see the world simply in color and shape but also as a world with sense and meaning. I do not merely see something round and black with two hands; I see a clock ...”

According to Vygotsky, knowledge is not simply built, it is co-built. Cognitive frames are actually socially framed.

### **2.1.2. Learning in Social Constructivism**

According to Piaget, learners give reaction both to external stimuli and to their interpretation of those stimuli. Vygotsky agreed with his claim at some point but he believed in the social nature of language which makes learning a collaborative process. Vygotsky (1978) mentions about levels in learning:

“The level of actual development is the level of development that the learner has already reached, and is the level at which the learner is capable of solving problems independently. The level of potential development (“zone of proximal development”) is the level of development that the learner is capable of reaching under the guidance of teachers or in collaboration with peers. The learner is capable of solving problems and understanding material at this level that they are not capable of solving or understanding at their level of actual development; the level of potential development is the level at which learning takes place. It comprises cognitive structures that are still in the process of maturing, but which can only mature under the guidance of or in collaboration with others.”

### **2.1.3. Motivation in Social Constructivism**

Behavioral motivation can be accepted as extrinsic. It is based on the reactions toward the positive and negative supports. On the other hand cognitive motivation is commonly founded on the learner’s inner motivation, so it can be accepted as intrinsic. Social constructivism includes both of them. As a social phenomenon, learning occurs when learners are partly motivated by award provided by the knowledge society and they are motivated by themselves in constructing the knowledge. The learners’ internal drives are really important to comprehend and support the learning process. Sivan (1986) reports:



“Because social constructivism is primarily a paradigm for cognitive development, it is adaptable to conceptualizing motivation in learning situations. As such, the focus of this article is mainly on motivation in learning environments, primarily the classroom. From a social constructivist perspective, the individual no longer acts as the instigator of motivation. Rather, motivation is a socially negotiated process that results in an observable manifestation of interest and cognitive and affective engagement. The significance of this conceptualization of motivation in the classroom lies in the nature of social constructivist theory, for the concept of motivation takes on the characteristics of the theory from which it has evolved. As such, the possibilities are many for flexible analyses of motivation issues (e.g., the process of constructing motivation and the form in which motivation appears) and for documenting both the microgenetic and ontogenetic development of motivation.”

## **2.2. INFORMATION COMMUNICATION TECHNOLOGY (ICT) IN LANGUAGE TEACHING EDUCATION**

Technology is changing rapidly. Nearly there is not a day that goes by without technology in some way. Most of the people around the world use technology for communication purposes. The best examples of this are Facebook and Twitter. The more it develops the more we are challenge with it. It has a big impact on students, teachers, authorities, workers, organizers, and programmers. According to Blurton (2002) Information Communication Technology (ICT) provides resources and tools to communicate, create, disseminate, store and manage information. Nowadays ICT plays a big role in our daily life. Nearly everyone uses a piece of ICT devices such as mobile phones, laptops, tablets, MP3/4 players, game consoles, digital cameras, digital watches, internet, broadcasting technology via radio or television, and telephony. We need suitable skills to manage this world of technology. For social rationale, we need to teach the kids how to use ICT to make them ready for life. It provides collaboration among students. It opens gateways for the future’s jobs. Sometimes ICT reduces the cost of

teaching. One single device provides many products at the same time. As it also helps the development of distance learning, many students with special needs can get a proper and an extra-curricular education. ICT enhances the various types of learning ignoring the time and space issues. Adapting technology to content is a difficult task. We may use a blended approach. We can directly teach ICT as a single alone lesson or we can teach ICT through other lessons. Yüksel and Alemdar (2012) stated that combining ICT skills and knowledge not only in context knowledge but also in pedagogical knowledge are important matters for ICT integration to education. Bruniges (2003) explained the aim of ICT integration to education as:

“to improve and increase the quality, accessibility and cost-efficiency of the delivery of education, while taking advantage of the benefits of networking learning communities together to equip them to face the challenges of global competition.”

### **2.2.1 Advantages of ICT**

National Institute of Multimedia Education in Japan stated on a report that there is an important and positive effect of ICT on students' success in learning and understanding. It also has a significant impact on both practical and presentation skills. Students learn better with the use of the ICT gadgets. When they are used properly and smartly, they are good to use in education. However there can be some confusion in the integration of ICT tools into education field and this can be perceived as a disadvantage of ICT. Actually instead of naming disadvantages of ICT, calling the problems faced about how to use ICT smartly to improve learning is much better. The advantages of ICT can be listed as following;

- As ICT addresses to various learner types, students can express themselves better at art, music, drama, presentation, and group work.

- The most important benefit of ICT is supporting anytime anywhere learning reaching the information with high speed.
- It provides a bigger efficiency in education field.
- Communication channels get larger with the tools such as emails, forums, discussion and chat groups.
- Teaching is enhanced with the visual and audio materials which make students learn and remember better.
- Complex instructions can be explained easily and this makes students comprehend the intended topic more easily.
- Classrooms can become more interactive thanks to ICT tools.
- ICT tools make the learners concentrate better.

### **2.2.2. Problems Faced Related to the Use of ICT**

Besides its pros, it also has some negative effects on learners. Being easy to access ICT does not mean that everybody has a chance to access to ICT. We need to be sure that every learner can have access to ICT. ICT in education deals with the educational technologies. Thus, the disadvantages of the ICT linked to technology can be listed as following;

- If the teacher is not experienced with the ICT tools, it will become very hard for him/her to adapt themselves into teaching atmosphere.
- Some tools are really expensive to get.
- There can be some technical problems with the tools' settings.

As it was stated before, when ICT is used smartly, its benefits outweigh its disadvantages. ICT is the necessity of this century, so there is no escape from it, not incorporating it to the classroom. As John Dewey (1944) pointed out;

“If we teach today what we taught yesterday, we rob our children of tomorrow.”

Appealing the needs of students’ in this modern age motivates them more and leads to fewer drop outs.

### **2.3. THE PLACE OF INTERACTIVE WHITEBOARDS (IWB) IN EDUCATION**

Interactive whiteboards were developed in 1980s to be used largely in higher education law and medical faculties in the United States (Griffenhagen, 2002; Murphy, Jain, Spooner, Hassan, Schnase, Metcalfe, & Frisse, 1995; Armstrong, Barnes, Sutherland, Curran, Mills, & Thompson, 2005; Passey, 2006.) In time, the use of IWBs has spread to all areas of education around the world. In education sector, the materials such as overhead projector, video, television and radio have been used for a while, and they are now being replaced by computers, projection devices and intelligent boards.

#### **2.3.1. The use of IWBs in Education**

Interactive whiteboards which are also defined by Clyde (2004) and Hall and Higgins (2005) “smart whiteboards”, “digital whiteboards”, “electronic whiteboards” have been used for educational purposes for over ten years. Hennessy, Deaney, Ruthven & Winterbottom (2007) define IWBs as:

“IWB systems comprise a computer linked to a data projector and a large touch-sensitive board displaying the projected image; they allow direct input via finger or stylus so that objects can be easily moved around the board or transformed by the teacher or students. They offer the significant advantage of one being able to annotate directly onto a projected display and to save the annotations for re-use or printing. The software can also instantly convert handwriting to more legible typed text and it allows users to hide and later reveal objects. Like the computer and data projector alone, it can be used with remote input and peripheral devices, including a visualizer or flexible camera, slates or tablets”

Another very similar definition made in BBC Active website (Interactive Whiteboard, 2016):

“An interactive whiteboard is an instructional tool that allows computer images to be displayed onto a board using a digital projector. The instructor can then manipulate the elements on the board by using his finger as a mouse, directly on the screen. Items can be dragged, clicked and copied and the lecturer can handwrite notes, which can be transformed into text and saved.”

As new technologies develop, the MoNE spends lots of money on technological devices in order to raise students' achievements. The general perception all over the world is education must prepare students for the 21st century. Thus, education reforms must include the technologies that are the media of modern life.

Türel and Johnson (2012) claim the integration of technology into the education system in Turkey increase the constructivist education.

### **2.3.2. The Benefits and Drawbacks of IWBs in Education**

Interactive whiteboards are little scary when you first meet them. However, they are really effective tools and easy to use in the classrooms. As they are just screens that

communicate with the computers, there is no difference between in the use of whiteboards at classroom and in the use of computers at home. Compared to the normal board, the first thing that can be done better on the IWBs is that moving the written things is as easy as a single touch. Besides moving the written things, it is also possible to change the size and the style of them according to the students' needs. The most fascinating thing about the IWBs is that it saves and retrieves the previous lessons later on. On normal boards, teachers have to clean the whole previous information on the board to create space for the new one. Normal boards cannot save or recall the previous lessons. On IWBs, wiping anything off is not needed. Another good thing about IWBs is that lessons can be prepared in advance. This feature is very effective when the teacher's handwriting is not legible enough or when she/he wants to add shapes, color or highlight the important items. There are many significant materials and tools on IWBs. Ready-made materials enrich the teaching spontaneously. Students can see better by choosing the full screen mode and can focus more with the spotlight tool which makes only the crucial part visible to the students not the whole. The screen shade tool arouses the curiosity and increases the excitement of the students. It is a kind of a tool by which teacher reveals the shaded item bit by bit and starts a guessing game. To get the maximum benefits from the IWBs, educators and teachers need to practice on them as much as possible until using IWBs becomes second nature. Appealing to all the learning styles returns positive feedbacks to the teacher about his/her teaching through IWBs. Both students and teachers can edit, add, and delete any kind of data on the board. More creative and interesting lessons can be developed. The smart board allows teachers to use all the features of the computer. Through IWBs time is saved and also administrative costs are reduced by minimizing the use of paper, chalk, and ink. The quality of learning is increased with a wide range of visual and audial materials. Experiments that cannot be done in the classroom environment can be done interactively. Because lectures can be recorded on smart boards, students can later access courses or topics they have missed.

Teachers using IWBs must not allow the boards to dominate the lessons. Classroom setting must be organized carefully and students' access to the board must be enabled. Otherwise it will not be possible to go beyond the teacher-centered teaching. Instead of business-backed studies connecting advanced test scores to their products, there must be

more academic research that will show clearly that IWBs can really improve academic achievement.

## **2.4. MOBILE LEARNING (UBIQUITOUS LEARNING)**

### **2.4.1. The Definition of Mobile Learning**

The world is going mobile. Phones, computers and other media devices can easily fit in our pockets and they can let us communicate and reach the information we need anywhere and anytime. As they provide quick access to knowledge, it is inevitable not to use them in education field. With the current mobile and wireless devices, learners can lead the way and engage in designing activities and learning widely according to their personal needs. Mobile learning is becoming a rapid evolution. Mobile learning or M-learning means learning through mobile gadgets and devices anywhere, anytime. M-learning may be set as formal or informal learning. Previously mobile learning was defined only the mobility of the use of mobile technologies, but recently this idea is enriched with the concept of the mobility of the learner as well (Sharples, 2006). Mobile refers to anything that can be used anywhere. Both technology and people can be mobile. Geddes (2004) identified m-learning as both by being available anywhere, anytime and by the tools administered. Traxler (2005) defined m-learning as ‘any educational provision where the sole or dominant technologies are handheld or palmtop devices’.

There is a shift from the prevailing SMS based language learning in 2000 towards the use of more advanced multimedia and intelligent learning systems in the recent years. The frequent changes in mobile technologies enhance more sophisticated usage of communication with each other and also the surrounding environment. New

technologies especially the mobile ones with their widespread more functional use affect cultural practices and create new learning contexts (Pachler, Bachmair & Cook, 2010). Mobile technologies open another area to support learning (Ogata, Saito, Paredes, San Martin, & Yano 2008). Because of their advantages such as flexibility, low cost, small or pocket size, user-friendly, researchers are trying to find best ways to use m-technology in language learning (Wu, Wu, Chen, Kao, Lin & Huang, 2012). M-technology also has some shortcomings but again thanks to developing technology these shortcomings are getting less.

Another definition made by a UNESCO report (Shuler, Winters, Sharples, Vosloo and West, 2013) is that mobile learning is learning utilizing mobile technologies offering ‘unparalleled access to communication and information’. The report also argues that comparing to the past there are now many new opportunities assisting the learning at school with the increased affordability and functionality of mobile technology. Ubiquitous access to technology is admitted by UNESCO as facilitating more personalized learning, benefiting especially children with learning difficulties. UNESCO supports ubiquitous access to technology as it improves personalized learning and allows the students with learning difficulties to take more advantage of technology.

Today, changes in the ways in to get information have been enriched through technological developments. E-learning which provides the user with the easiest and fastest way of getting information is the best example of this. On the one hand innovations in technology and on the other hand the increase in low cost products have increased the development of various learning styles (Şencan, 2005).

#### **2.4.2. Benefits of Mobile Learning**

When the literature is analyzed, the following benefits of mobile learning have been reported;



- Efficient use of time,
- Learning anytime and anywhere,
- Adaptable and personalized content according to individual needs,
- Easy access to the contents,
- Increase in motivation,
- Enabling and disseminating the access to information outside the classroom,
- More independent and flexible teachers and learners,
- Developing student-student and teacher-student interaction, communication and cooperation,
- Supporting multimedia materials.

### **2.4.3. Drawbacks of Mobile Learning**

In addition to the benefits of mobile learning, it also has some drawbacks. The main of drawbacks of mobile learning in the field are;

- Difficulties in displaying internet pages on small screens,
- The battery life of mobile tools is limited,
- High costs,
- Problems in the security of personal data on mobile tools,
- The continuous interception of the learning experience with external factors,
- Having difficulties in controlling the learners,
- Having anxiety due to the low level of technological literacy,
- Due to the continuous changes in technology, having difficulties in updating content for new tools and platforms,
- Preparing the contents in different standards for different tools due to the absence of common operating system,
- Limited wireless data transmission technology.

#### **2.4.4. Mobile Statistics**

According to ComScore (2015) report; in 2015 mobile phones are accepted as the main tools to access the internet. Smartphones are being used for 3.3 hours a day. Mobile phones are used for many things such as shopping, banking, reading, paying, working, learning, messaging, travelling, checking weather and podcasts, watching TV and videos, listening music, and socializing.

According to the report called Digital in 2016 posted by We Are Social, active internet users' numbers has increased by 10% in 2015 (Klemp, 2015). The rate of active mobile social media users has increased by 10%. However, the greatest increase has occurred in mobile social media users with 17% growth. Turkey's internet penetration, which was 21st last year, rose to the 19th place with 58% this year. Taking into account the share of mobile internet traffic, Turkey has increased its share of web traffic by 64% this year and ranked 9th with %46. The share of social media users is 53%, ranking 12th in the global ranking. Turkey's internet penetration is stated as 58%. The penetration of active social media accounts is 53% while the penetration of active mobile social media users is 45%. Taking into account annual growth, the largest increase compared to the previous year is in mobile social media users with an increase of 13%. The social media users are mostly consists of young users aged between 13 and 29. Their rate in the total is %55.

#### **2.4.5. The Use of Mobile Learning Technologies in Education**

In today's technology, both the number of mobile tools and their places in education have been increasing. These tools can often be used in place of each other. When the relevant literature is examined in the field, it is determined that there are many different features of mobile tools. These tools are classified according to their technical

characteristics or portability (Kiriş, 2008). Only the most common tools for mobile learning purposes will be described here.

#### 2.4.5.1. The Use of Laptops in Education

In recent years, because of their performance and portability laptops have deserved the same position of desktop computers; in fact they are preferred more compared to the desktops. Their educational use has been also seen to be multidimensional. It is possible to download, view and modify text, audio and visual materials on laptops. Thanks to their large screen facilities, searching on the internet, obtaining information from the online libraries quickly and easily regardless of the location provide the maximum benefit in mobile learning (Şencan, 2005).

Laptops are admitted as the most powerful and talented tools in mobile tools in terms of their multiple features. Due to the limited life of the batteries, it is necessary to carry the chargers continuously, which is considered to be a weakness of the laptops as the user carries them all the time.

#### 2.4.5.2. The Use of Netbooks in Education

In terms of operating systems, netbooks (minibooks) do not differ from the laptops, but they are different in size, weight and some features. Netbooks which are smaller and lighter than laptops, increase the portability of these tools. Because netbooks do not have high operating systems, they can be used as an alternative to a laptop computer. The fact that netbooks are preferred is a fact that their prices are much lower than laptop computers (Işık and Yagci, 2011).

These mobile tools allow users to use them outside the class as inside the classroom, thus they extend the learning environments of users and enable them to learn at many different environments (Şencan, 2005).

#### 2.4.3.3. The Use of Smartphones in Education

Smartphones are mobile tools with both mobile phone and computer capabilities. The operating systems used on smartphones have allowed the user to install any application for any purposes. Within the context of mobile learning, it is possible to upload and develop a wide variety of applications to smart phones. As educational applications for smartphones allow offline use, mobile learning opportunities have increased. The level of interaction and sociality of users is also increasing day by day.

#### 2.4.3.4. The Use of Pen Drives in Education

Pen Drives used for data transfer can store all kinds of file formats with very different models. Thanks to their very small size, they make it possible to move the data everywhere, which always affects learning anywhere positively. Pen Drives are indispensable mobile tools in ensuring the transferability and sharing of information when the internet and computer network systems are inadequate. However, the absence of this tool's ability to operate independently from other tools can be seen as a shortcoming as it reduces the mobility features (Usta, 2013).

#### 2.4.3.5. The Use of Tablets in Education

The tablet computer, which is between 7 and 11 inches in size, is briefly referred to as tablet, computer without keyboard. Tablets that are bigger than smartphones and lighter than netbooks and notebooks are among the favorite technological tools in recent years. Tablet can be described as a tool that human beings can use to communicate after they have found the writing system. The most beautiful example of this is the tablet made of stone and clay recently discovered by archaeologists from the Massachusetts Institute of Technology (MIT) near Diyarbakir. There are about 45 female names on this tablet that have never been seen before (Tüzün, Akıncı, Yıldırım and Sarıkaya, 2013). The widespread adoption of the tablet today is supported by the Apple iPad tablet model, which was launched in 2010 by the Apple Company. The founder of Microsoft, Bill Gates (William Henry Bill Gates III) introduced the "Windows Tablet PC Edition" tablet having the same software used on personal computers, in 2001 at the Comdex, and the name "Tablet PC" was born. Some benefits of tablets could be identified as:

- Students can take them wherever they want since they are portable.
- They can be used as e-book readers such as Kindle.
- Because of their size fitting in one hand, they are easy to use.
- Their simple and easy operating systems let the users use them seamlessly.
- They present limitless choices for anyone with any budget.
- They decrease the burdens of heavy schoolbags.
- They make learning more personalized and flexible.
- Students can record the lessons and copy the images. This makes them indulge learning in their terms.
- Visualization increases students' retention.

- They provide quick feedbacks.
- They support both one-to-one learning and collaboration.

## **2.5. MOBILE ASSISTED LANGUAGE LEARNING (MALL)**

Mobile Assisted Language Learning (MALL) is considered as an approach in which mobile tools are used to support and enhance learning of languages. Increase in having mobile tools like smartphones, MP3/MP4 players, PDAs and palmtop computers, netbooks, notebooks, tablets and in accessing to wireless networks support language learning.

Winters (2006) stated the current perspectives on MALL under the following four categories;

- **Techno-centric:** It is the most dominant perspective on MALL literature. According to this perspective mobile learning is considered as learning using mobile tools which were described before.
- **Augmenting formal education:** Formal education is generally defined as a face-to-face teaching in a system where the method, the content, and the application are determined to achieve a specific goal. Correctness of this perspective is not clear at all. Since forms of distance education have been existed for over a century (Peters, 1998), mobile learning's place in all forms of “traditional” learning have been questioned.
- **Learner-centered:** In Sharples, Taylor, O'Malley and their colleagues' previous research, mobile learning was thought as learning only using a mobile tool itself (Sharples et al., 2002). However, later on, the focus on the mobility of the learner rather than the device became more meaningful. Then mobile learning was defined like; “Any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of learning opportunities

offered by mobile technologies” (O’Malley, Vavoula, Glew, Taylor, Sharples & Lefrere, 2005).

- Relationship to e-learning: It defines mobile learning as an extension version of e-learning. Broadly defined definitions like this do not help to define the unique nature of mobile learning. More clarity is needed to understand the definition of mobile learning. As Traxler (2005) stated, these kinds of definitions try to put “mobile learning somewhere on e-learning’s spectrum of portability”.

### **2.5.1. Pros of MALL**

According to educators (Ally, 2004; Holliday, 1999; Roschelle, 2003; Sharples, 2002; Sharples, Taylor, & Vavoula, 2010) the mobile technology has many important advantages for second language learning. Mobile devices can combine a great variety of learning situations, learners can concurrently engage in activities that are both social and informatic in nature. According to a recent European study, 52% of daily learning episodes contained the use of at least one piece of electronic technology (Sharples, Taylor, & Vavoula, 2010). In other words, this allows the instructors to establish that some human–human interaction continues, fulfilling all of Sharples’ three C’s of education (Construction (building an understanding), Conversation (with teachers, other learners, selves), and Control (of the process, pursuing knowledge) (Sharples, 2002). According to Huang and Sun (2010) mobile devices’ most important features are their portability and connectivity. Using the wireless network of these tools through email or messaging systems enables learners to access learning material ubiquitously. Portability lets learners to move mobile devices and bring them into the learning atmosphere. Mobile learning technology enables learners to do the activities outside the class by directly connecting to real world. Students can use mobile devices for learning purposes in their free time. Jones, Issroff, Scanlon, Clough & McAndrew (2006) have stated the following six reasons why MALL is a source of motivation for the learners;

- controlling the goals,
- the ownership feeling,
- fun factor,
- communication,
- learning-in-context,
- continuity between context.

Mobile phones are the most practical communication devices providing quick email and chat features. Teachers and learners can download various kinds of documents and videos through their mobile phones easily and quickly. These documents and videos can be presented through a TV set or a monitor available in the classrooms (Kafyulilo, 2012). Common Wealth of learning (2008) and Cui and Wang, (2008) presented that mobile phones can be used for sharing emails, teaching materials, movies, audio files and other learning materials information resources through Bluetooth, Wi-Fi, in addition to Google drive and social media sources. Most of the mobile phones have applications for recording and playing multimedia contents. According to Cui and Wang (2008), Universities in United Kingdom have used mobile phones to store and save some information such as e-books, instructional materials and students' marks to make teaching and learning practices more practical. Mobile phones are thought to have important roles in second language learning because of their sizes, weights, input and output capabilities, keypads or touchpad, screen size and audio functions. Students' skills, their prior knowledge and their experience related to mobile tools and their attitudes towards the learning through mobile tools play a significant role in the output quality of mobile-based tasks.

### **2.5.2. Cons of MALL**

Very few studies have centered on MALL, and most current research on mobile devices in English language teaching (ELT) focuses on mobile phones (Dias, 2002; Kukulska-



Hulme & Shield, 2008; Stockwell, 2007, 2008, 2010; Thornton & Houser, 2001, 2005). These studies mentioned a number of bad credits in MALL such as small screen size, added cost (e.g. for extra text messages sent or for accessing the Internet) text input difficulties. Chinnery (2006) pointed out that small screen size, limited audiovisual quality, virtual keyboarding, and one-finger data entry are some limitations of mobile phones.

## **2.6. DEVELOPMENTS IN EDUCATIONAL TECHNOLOGY CASES CARRIED OUT BY MINISTRY OF NATIONAL EDUCATION AND FATİH PROJECT**

Ideas about computer-aided teaching in Turkey have begun to attract attention in the first half of the 1980s. 1987 has been a milestone in terms of the integration of computers into education (Ünsal, 2004).

"National Education Development Project" is a project supported by the World Bank. The first applications were started in 1988-1989 academic year in the name of "Computer Assisted Education Project". "Computer Trial School (BDO) Project" and "Computer Laboratory School (BLO) Project" are the sub-projects of this project (Taşçı, 1993). Since developed countries are not yet able to solve the problems they face in computer-assisted instructional practices completely, Turkey needs to make use of limited international experience to solve its own national conditions with its own possibilities (İnal and Kiraz, 2008). The objectives of the Computer Trial School and Computer Laboratory School Projects are to disseminate computer assisted education and computer education. Other aims of these projects (Sadi, Şekerci, Kurban, Topu, Demirel, Tosun, Demirci, & Göktaş, 2008):

- To determine the role and proper use of the computer in the education system by observing the current Turkish education system,
- To develop curriculum related to computer education,
- To determine educational software criteria,

- To evaluate and assess computer education and computer assisted education activities,
- To provide and facilitate the widespread use of education and computer assisted education in Turkey,
- To provide additional materials for the students to develop learning and teaching in schools by using different information technologies.

World Bank supported another project called The Basic Education Project First Phase (BEP-Phase 1) in 1998 by MoNE to apply new basic education strategy of government. With generalizing the use of ICT in the primary schools and integrating them into system, technological revolution was intended to be realized in national education system (MEB, 2004). 2802 elementary schools (K-8) were equipped with computers, TVs, printers, scanners, videos, multimedia software and slides in ICT classrooms. In the context of this project, 2058 computer formulator teachers received in-service training on information technology coordination. On the administrative stage of the project, in-service training on computer literacy was provided to 3,000 primary education inspectors and the project was spread in every direction. Yilmaz (2011) stated that the use of ICT for education in schools cannot be fully generalized because ICT classes are mostly used for computer education rather than teaching and learning process. In the end of the agreements made with the World Bank, the Second Phase of Basic Education Project (BEP-Phase 2) was signed on July 26, 2002. With this project, the number of computer labs increased, educational materials were sent to schools in rural areas, mothers were made aware of the pre-school education, schools were equipped with materials to enrich the classes, and educational materials for the visually, audibly or mentally disabled people were provided. Moreover, the strengthening of school buildings against earthquakes was again within the objectives of this project. Yüksel and Alemdar (2012) expressed the numbers of teachers and students per computer throughout the country according to 2010 Information Society Statistics of MoNE as

- Numbers of teachers per computer: 24.6 in primary schools and 17.8 secondary schools.

- Number of students per computer: 30.9 in primary schools and 27.3 in secondary schools.

The agreements and projects made by the Ministry of National Education with various organizations for the use of technology in education can be listed as following (Öncü, 2013):

- Think-Quest: It is a training portal project implemented in cooperation with Oracle and MoNE. This project aims to offer a free web space to schools in Turkey. The aim is to provide free space and programs for all teachers and students to prepare personal internet pages, and to ensure that students and teachers interact with each other and with all foreign and national schools, included in the program. Another aim of this program is to enable the students and teachers to prepare and present projects made in the local, national and international schools. Teachers and students who prepare outstanding projects are awarded every year. These awards include free international holidays as well as computers and cameras (MEB, 2007).
- Intel Teacher Program: The aim of this project, which is carried out by the joint collaboration of MoNE and Intel CO., is to teach "Project Based Learning" and "Project Based Teaching" techniques in accordance with constructive education to the teachers working in primary education with the "face-to-face" model and to the teachers working in secondary education with "mixed" model. Another aim is to integrate the ICT in education-teaching and planning (MEB, 2007).
- Web Based Content Development: With this program, teachers who are successful in Intel Teacher Program are trained in writing software programs and they are expected to prepare educational materials for the field (MEB, 2007).
- DynEd: The DynEd (Dynamic Education System) is carried out to teach foreign languages in all schools having computer laboratories (MEB, 2007).
- Cisco Network Academy: The aim is to train teachers on computer networks (MEB, 2007).

The Ministry of National Education continues to work on integrating technology into education. The last project which is widely known and carried out throughout the whole

country is FATİH Project. FATİH Project will be explained in more detail with its all dimensions under the next headline.

### **2.6.1. Definition of FATİH Project**

The Turkish acronym of the project comes from Fatih Sultan Mehmet the conqueror of Istanbul. Its English translation is movement to increase opportunities and technology. It is considered the biggest and the widest educational movement for education technology use in the world. This project supports the education with hardware, Internet access to each classroom, e-content for lessons, platforms for teachers to integrate ICT technologies and products to their teaching atmosphere, and project implementation assistance. Interactive Whiteboards with high speed internet connection have been established to all K-12 schools (570.000 classes in 42.000 schools) in Turkey. In addition, 2.5 million tablets have been distributed to the 9th and 5th grade students in the schools (Alkan, Bilici, Akdur, Temizhan, & Çiçek, 2011).

The FATİH project started in November 2010 and it was planned to be completed until end of 2014 (YEGİTEK, 2014). The budget of the FATİH Project was thought to be nearly 3 billion Turkish Liras (US\$1.8 billion or 1.04 GBP) (Uluyol, 2013).

### **2.6.2. Aim of the Project**

This Project aims to provide a better education, a higher quality educational content and more equal opportunities for each student in Turkey. It also aims to make the technology at schools get better. For these reasons the ICT tools are widely used. This project is not just a hardware or educational project. It is a multi-dimensional service

that also supports the domestic economy. That's why FATİH Project aims to produce new products which are necessary for domestic economy. It intends to conduct new research for new technologies increasing domestic production. In short MoNE aimed “to enable equal opportunities in education and improving the efficient usage of ICT tools in the learning-teaching processes in our schools” (YEGİTEK, 2012).

Within the scope of the Project, information technologies hardware, software, network infrastructure and Internet and e-content will be provided to all schools, staff and students. Providing tablets for teachers and students opens employment gates for domestic companies. It also helps to develop young entrepreneurship spirit. The most needed skills for a 21st century citizenship such as active technology use, effective communication, analytical thinking, problem solving, cooperation and co-working will be ensured via FATİH Project. To sum up FATİH Project's aim is;

“to provide ICT equipment to classes in order to achieve the ICT supported teaching until the end of 2014 in relation to the goals that take place in the Strategy Document of the Information Society, the Development Report, the Strategy Plan of our Ministry and The Policy Report of ICT that have described all activities of our country in the process of being an information society and have been formed within the scope of the e-transformation of Turkey.” (YEGİTEK, 2014)

YEGİTEK (2014) lists the impacts of the FATİH Project on students as;

- improving learning skills using all sense organs,
- feeling more responsible with self-confidence,
- taking part in more learning activities with the trust of knowledge,
- being able to identify a life in the direction of their goals,

And on teachers within the scope of FATİH Project;

- accessing to updated information and teaching techniques easily,
- allowing students to gain a different perspective,
- following and spreading the newest information,

- having information about their power and their lacking
- preparing today's students for the future.

### **2.6.3. Components of the Project**

The project includes nine components. The hardware component provides interactive boards for each class, tablets for teachers and students, a printer for the school, and 110 distance education centers. The access component presents fiber optic (VPN), copper (ADSL) and satellite. The data center component includes servers, storage, network, security, assistance and disaster recovery center. The next component is management software which provides identity management, mobile device management, antivirus and security, logging and classroom management, geographical information system. The content software component provides personal cloud storage, market application, editor and player, simulation software, learning management system and search. The content component is very rich with EBA (education information web) coursebook, video, document, animation, simulation, interactive contents, individual learning materials, in-class teaching materials, applications, games and “EBA Let's discuss form”. In social sharing component students and teachers can share documents, audio and video files. The assistance component presents call center, service center, law, purchase and procurement, logistics, contact, and advertising. The final component is teacher training. Teachers can get in-service training about technology use, professional development, field-based content development, and distance training.

## 2.7. VOCABULARY LEARNING

Both the simplest desires and most complex sentiments are explained with the help of the words. Vocabulary acquisition is a complex phenomenon involving many different learning processes (Ellis, 1994). Vocabulary learning occurs at every stage of the learning process in a language classroom. While students are taught a foreign language, they are encouraged to learn and use new words continuously. As vocabulary plays an important role in conveying meaning, lack of it creates a major obstacle in communication (Zimmerman, 1997). That is why vocabulary teaching could be perceived as the basis of language teaching. Enabling the individual in the four basic language skills is closely related to vocabulary. It is difficult for students who cannot reach sufficient level in learning vocabulary to be successful in basic skills (Laufer, 1992; Nation, 1990). They have to know the meaning of the words in order to be successful in listening and reading skills. Effective use of basic language skills based on listening and speaking is enhanced by rich vocabulary. Therefore, words are indispensable elements of written and oral communication in language. In addition to learning a word for effective communication, it is also necessary to remember and use it whenever it is needed.

Throughout the history, language learning strategies have assisted people to attain knowledge. Thus, many researchers have attempted to identify good language learning strategies based on good language learners (O'Malley et al., 1985; Oxford, 1990; Rubin, 1975; McDonough, 1995). O'Malley and Chamot (1990) identified three main language learning strategies which are metacognitive strategies, cognitive strategies and social/affective strategies. Oxford (1990) identified a more comprehensive classification, including six strategies which are memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies and social strategies.

Learning foreign language vocabulary is a very conscious study and an endless repetition rather than an action that occurs spontaneously. These studies and repetitions continue outside the classroom as there is not always enough time in the classroom.

This means that the learner tries to learn words on his own. While learning new vocabulary, students generally tend to benefit from context, key words, dictionaries, and multimedia. They try to learn new words with a self-appropriate vocabulary learning strategy.

To be able to learn new words, Cohen (1987) distinguished four main strategies: rote repetition, structure, semantic categories, and the use of mnemonic device.

Schmitt (1997) divided vocabulary learning strategies into two main categories: discovery strategies and consolidation strategies. The discovery strategies included determination and social strategies while the consolidation strategies included cognitive, metacognitive, memory and social strategies.

Nation (2001) proposed a different taxonomy for vocabulary learning strategies. In his taxonomy, he distinguished three general categories of 'planning', 'source' and 'processes'. In the planning category, students must choose which aspects of the words they need to focus on. In the source category, they need to obtain information about the words. In the process category, they establish the vocabulary knowledge through noticing, retrieving, and generating strategies.

Cook (2001) developed two groups of vocabulary learning strategies. The first group consists of strategies to understand the meaning of new words, and the second group consists of strategies to acquire new words.

## **2.8. CONCLUSION**

This chapter presented literature review about the social constructivism as the theoretical framework with its aspects of knowledge, learning and motivation, the use of ICT with its benefits and drawbacks, the use of IWBs in education, mobile learning, the statistics about the use of mobile tools in Turkey, mobile tools used in education and mobile assisted language learning related to mobile learning, Ministry of National



Education's Advancement in Educational Technology cases carried out by, FATİH Project with its all dimensions and vocabulary learning and teaching strategies. The next chapter will introduce the methodology, the setting, the tools, the participants, data collection procedures and the data analysis of this study in detail.



## **CHAPTER III**

### **METHODOLOGY**

#### **3. INTRODUCTION**

This study aims to investigate the differences in students' vocabulary learning achievements between teaching through traditional techniques and teaching through technological devices, namely Tablets and IWBs provided by FATIİH Project. It also specifically aims to reflect how students perceive the use of Tablets and IWBs at school and in their daily lives. Therefore a mixed research method which combines both quantitative and qualitative research methods has been applied to get better results in this study. In this chapter, the method of study will be explained. It will also provide some information about the research design, participants in the study, instruments of the study, the data collection instruments and the procedure.

#### **3.1 RESEARCH DESIGN**

In recent years, a mixed research method which combines both quantitative and qualitative methods has generally been adopted in the literature (Bryman, 2006). Each method has its own techniques and supporters. Quantitative research supporters claim that the research designs must need realistic organizations. On the other hand, researchers who back up qualitative research advocate a research with an interpretive style (Johnson & Onwuegbuzie, 2004). However both research methods have their own strengths and limitations. The quantitative methods focus on numbers and they can't

give information about the research reasons of the dynamic situations. However, the qualitative method can make sense of complex situations but it cannot be generalized (Dornyei, 2007). All these advantages and limitations make the researchers use a mixed method. Johnson, Onwuegbuzie and Turner (2007) define mixed methods research as “a class of research where the researchers mix or combine quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study or set or related studies”. According to Creswell, Plano Clark, Gutmann, Hanson (2003), a mixed research method can be defined as to perceive the research problem and to get better and safer results combining both quantitative and qualitative research techniques in one study.

As mixed method research can give more details and reliable findings, this study has been carried out by using a mixed method. While the improvement of students at vocabulary learning using tablets has been examined by Vocabulary Knowledge Scale as a kind of a quantitative method, a qualitative method has become very useful in investigating the use of Tablets by means of observations and interviews with students in their natural settings. The experiment research steps took eight weeks. Table 1 below shows the events happened on these weeks.

Table 1: Time frame of the study

First Week	Experiment Group:	Student Opinion Scale for Tablet PC Use Student Opinion Scale for Whiteboard Use
	Control Group:	Student Opinion Scale for Tablet Use Student Opinion Scale for Whiteboard Use
Second Week	Experiment Group:	Pre-test, Tablet Treatment
	Control Group:	Pre-test, Traditional Classroom Teaching
Third Week	Experiment Group:	Tablet Treatment, Classroom Observations
	Control Group:	Traditional Classroom Teaching

Fourth Week	Experiment Group:	Tablet Treatment, Classroom Observations
	Control Group:	Traditional Classroom Teaching
Fifth Week	Experiment Group:	Tablet Treatment, Post-test
	Control Group:	Traditional Classroom Teaching, Post-test
Sixth Week	Experiment Group:	Traditional Classroom Teaching
	Control Group:	Traditional Classroom Teaching
Seventh Week	Experiment Group:	Traditional Classroom Teaching
	Control Group:	Traditional Classroom Teaching
Eighth Week	Experiment Group:	Follow up test, Semi-structure, Interviews Student Opinion Scale for Tablet PC Use
	Control Group:	Follow up test

### 3.2 PARTICIPANTS AND SETTING

Erzincan Anatolian High School has provided the research context of this study. Erzincan Anatolian High School was founded in 1985. Until 1997, the students of this school were admitted after a test which students took after their primary school years. During those years, this school included both a secondary school and a high school. As the main focus was on the language learning, most of the lessons were taught in target language and the curriculum included 24 hours of English language lessons a week. After the Secondary School Regulation was drafted by the Government in 2004, the secondary school section of the school was closed and the language lessons hours were

decreased. Today except the ninth grade students who are taught 6 hours, all other grades are taught only 4 hours of English lessons a week. The participants of this study were tenth grade students who were placed according to their language proficiency levels. Their English proficiency levels were determined through Cambridge Placement Test applied at the very beginning of the academic year. Besides their English level, they were also taught by the same teacher, namely the researcher herself, providing equal research setting and opportunities for each participant. The study was carried out in 2015-2016 spring semester. There are two groups, a control and an experiment group. Each group includes 56 students and the total participant number is 112. The language levels of participants in this study were determined as elementary level. The participants representing the experiment group used the Tablets during the English language lessons to learn and revise vocabulary and the control group kept learning with traditional techniques. The students were voluntary to participate in this study. They were all informed about their vocabulary development after the study. All students had hard copies of English books and the teacher displayed eBook version of the book on the IWB during the lessons. Implementation of IWBs in the classrooms is not very new concept at this school. They have at least a- three- year history. FATIH Project has provided free Wi-Fi access to all students and teachers at the school campus. When the experiment group members were not at the school, these students were able to access Internet with their mobile data wherever they were as they all stated before the study. As the study was mostly conducted during the lessons at school, the internet access outside school was not needed much.

### **3.3 RESEARCH INSTRUMENTS**

In this study, survey techniques and instruments were used in order to collect data. Mobile applications such as Quizlet, Kahoot!, WhatsApp were used to conduct the study; and two questionnaires called Students Opinion Scale for Tablets Use and Students Opinion Scale for Interactive Whiteboards Use were employed to elicit

information about the opinions of students about IWBs and Tablets use in English lessons (see Appendix 1 and 2). Vocabulary Knowledge Scale (VKS) was used to investigate the effectiveness of the applications on vocabulary learning (see Appendix 3). Semi structured interviews and classroom observations were used to get qualitative results (see Appendix 4 for semi structured interview and Appendix 7 for interview transcripts).

### **3.3.1 Quizlet**

Quizlet was first created by Andrew Sutherland to study 111 French animal names ten years ago. After he performed very well in his test and his friends wanted him to share the program with them, he wrote code program to let him memorize more words. Quizlet was introduced to public in 2005 after his efforts. This educational tool made by a high school student now changes most of the learners' vocabulary learning and memorization styles all over the world. Since then, millions of users have used this tool by creating and sharing their own activities. According to its mission stated on its website (<https://quizlet.com/>);

“We're building great learning tools for every student on the planet.”

The interactive activities on Quizlet can be embedded into other web pages. Students can share these activities even on social media platforms such as Facebook. Quizlet offers learners six learning modes. Four of them can be used to study the words; the other modes can be used for gaming (See Appendix 5 for screenshots). These are:

Flashcards: Learners study the words and their definitions through traditional flip and flow features technique. It supports the definitions of the words with the images. Moreover, learners can listen to the word's pronunciation if they wish.

**Learn:** After the learners study the cards, they can be tested. Learners can see which words they know or do not know. If they want, they can retake the test for their mistakes.

**Spell:** The word or phrase is read out loud and learners are required to type in the item with the correct spelling.

**Test:** Learners are tested randomly with a test including Written, Matching, Multiple Choice, or True/False question types. Learners could monitor their own progress in this mode.

**Match:** In this mode, learners are presented with a web with words scattered around it. The learners drag the words on top of their definitions in the fastest time possible.

**Gravity:** Learners type the correct words for the definitions as they fall off on the screen. They compete for the highest score.

Quizlet was used as an important a tool to load custom vocabulary presented through the units during this study. It allowed the students to access decks of flashcards prepared by the researcher right from their tablets and smart boards. Teaching the students how to use this tool did not take much time since the students are digital natives and the tool is very easy to use. Even if it is a website, it was easily applied to the tablets of students as FATIH Project supports the classes with Internet network. As Quizlet was a free website, the students studied the word decks prepared by the researcher anytime anywhere even after the school. This tool helped students expand their English vocabulary knowledge.

### **3.3.2 Kahoot!**

The Kahoot platform was developed by Johan Brand, Jamie Brooker, Asmund Furuseth and Morten Versvik. It is actually based on a research conducted by Morten Versvik at Norwegian University of Science and Technology (NTNU). Kahoot is a free game-based learning platform used by millions of educators and students all over the world.

The games and quizzes created by the teachers who want the students monitor their own progress, identify their strengths and weaknesses. It also supports the social learning. Even it is not a social media tool, it provides social experience. It can be played anytime, anywhere. As they stated at their web page (<https://getkahoot.com>);

“Our ethos and vision is that people all around the world should share their exceptional content for others to play globally, both in classrooms and beyond.”

Kahoot enriches learning experiences through mobile devices such as tablets, smartphones. Having IWBs in the class offered a wide screen to see the questions and check the answers. Both Google Play Store and Apple Store provide Kahoot! App (See Appendix 6 for screenshots). It offers three modes. These are;

**Discussion Mode:** In this mode, the aim is to create a discussion atmosphere. Usually a single question appears on the screen, and then the responses of the users are seen. Without the competition, the users discuss about their ideas.

**Quiz Mode:** It is the most frequently used mode, it creates a competitive atmosphere with the time limit and scoring.

**Survey Mode:** There is no scoring in this mode, so it can be used for giving feedback what the users know without the competition atmosphere.

After every Quizlet exercise, a game prepared on Kahoot! was played by the experiment group members. The quiz mode was commonly used during the study.

### **3.3.3 WhatsApp**

WhatsApp provides free and easy chatting on the mobile phones. It needs internet access. WhatsApp was another mobile application used during the study to support social learning. The targeted words discussed and exemplified by the students through



online chatting. This study also aimed to reveal the impact of the use of technological devices on social learning.

### **3.3.4 Student Opinion Scale for IWB Use**

The questions in the questionnaire were adapted by Moss et al's (2007) questionnaire on teacher and student perceptions of IWBs in specific subjects. The responses in Levy's (2002) study were also modified to write the questionnaire items for this study. The final version of the questionnaire which consists of 24 items was developed by Elaziz (2008). Lest the students' English proficiency level is not enough to understand the items in the questionnaire, the questions were translated into Turkish by the researcher. The reliability of the questionnaire was tested with Cronbach Alpha by Elaziz. The items were measured by using a five point Likert-type scale ranging from "strongly agree" to "strongly disagree". There were six sub dimensions in the scale; impacts of IWBs on learning, on motivational issues, on management and organization, on affective factors and the differences between traditional boards and IWBs, and the technical limitations of IWBs.

### **3.3.5 Student Opinion Scale for Tablet PC Use**

This questionnaire was inspired from an article by Rossing, Miller, Cecil and Stamper (2012) named "I-Learning: *The future of higher education? Student perceptions on learning with mobile tablets published in Journal of the Scholarship of Teaching and Learning.*" The items of questionnaire were measured on a five point Likert – type scale ranging from 1 to 5 (Strongly disagree=1; disagree=2; neutral=3; agree=4; strongly

agree=5). There were three sub dimensions in the scale; questions towards tablets, questions related to motivation, questions examining the differences between the traditional tools vs. tablets.

### 3.3.6 Vocabulary Knowledge Scale (VKS)

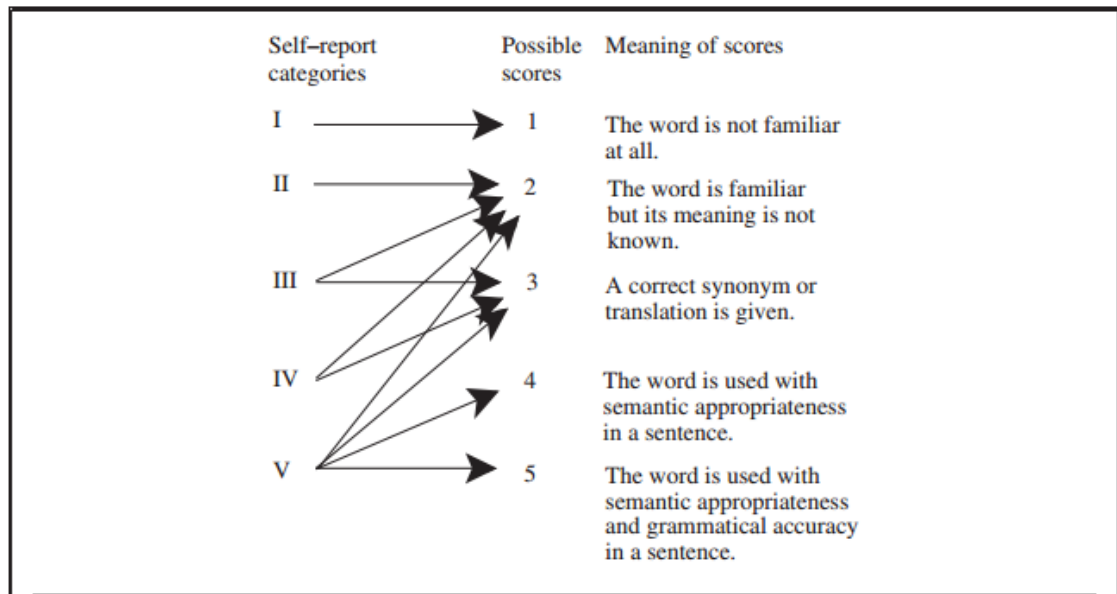
VKS is a very important assessment tool in foreign language vocabulary teaching. There are many versions of VKS but on this study the original one developed by Wesche and Paribakht was used. It was used in 1993 to assess the Persian- and French-speaking learners' vocabulary improvements at the Second Language Institute of the University of Ottawa, which was later developed in a few follow-up research (Paribakht & Wesche, 1993, 1997; Wesche & Paribakht, 1996). The most precious aim of the VKS is to build a “practical instrument for use in studies of the initial recognition and use of new words” (Wesche and Paribakht, 1996: 29). At higher levels VKS requires verifiable evidence of knowledge. That's why their scale is a kind of control scale of how well words are known and what control one has over them. This scale with self- report categories includes five items. Their scale is shown in Figure 1;

Figure 1: The Vocabulary Knowledge Scale from Wesche and Paribakht (1993)

- |  |
|--|
| <p><i>I: I don't remember having seen this word before</i></p> <p><i>II: I have seen this word before but I don't know what it means</i></p> <p><i>III: I have seen this word before and I think it means _____</i><br/><br/><i>(synonym or translation)</i></p> <p><i>IV: I know this word. It means _____</i><br/><br/><i>(synonym or translation)</i></p> <p><i>V: I can use this word in a sentence. e.g.: _____</i><br/><br/><i>(if you do this section, please also do section IV)</i></p> |
|--|

Then these five items are scored from 1 to 5 according to the participants' targeted vocabulary knowledge. The scoring scale is explained in Figure 2.

Figure 2: VKS scoring categories: Meaning of scores (Paribakht & Wesche, 1996)



VKS was used as pre, post, and follow up tests to evaluate students' vocabulary knowledge development on chosen words. The chosen words were the same words which were adopted from the modules covered during the English lessons.

### 3.3.7 Semi structured Interview

Semi-structured Interviews are used to create a flexible atmosphere for the participants to answer the open-ended questions asked by the researchers. This kind of interviews encourages the participants to give more detailed information about the study. Semi-structured Interviews commonly starts with a broad general question, and then they are expanded with detailed questions through rapport-building, thought-provoking

interjections, and critical event analysis. Thus the participants in this study stated that they didn't feel exhausted during the interview as it happened in a social chat form.

Qualitative researchers aim to get qualitative data that takes place in social and natural contexts rather than laboratories. Thus, semi-structured interviews based on the experiences of people are useful to provide qualitative data. (Rossman and Rallis, 1998; as cited in Marshall and Rossman, 1999)

Unexpected and interesting answers presented the researcher a chance to obtain different views for the study. To overwhelm the miscommunication barriers, semi-structured interviews conducted with the students were carried out in Turkish. The use of native language let the students express themselves comfortably and freely.

### **3.3.8 Classroom Observations**

Informal observations became extremely effective in helping to enhance observing students' performances during the study. According to Schön (1983), observation can be interpreted as the close examination of what the practitioners actually do. They were held by the researcher herself while the participants were studying vocabulary utilizing their tablets.

## **3.4 DATA COLLECTION PROCEDURE**

The study was conducted in the spring semester of 2015 - 2016 academic terms with 112 tenth grade students from four classes at Erzincan Anatolian High School. The study took eight weeks. The questionnaires called Student Opinion Scale for Tablet PC

Use and Student Opinion Scale for Whiteboard Use were given to the students to get their opinions about the two components of FATIH Project on the first week. On the second week, a Vocabulary Knowledge Scale was utilized as a pre-test. This test included 20 words. These words were chosen randomly from the 80 new words which would be taught at the two new modules of the students' books. After testing all participants' knowledge on these 20 new words, the experiment group was introduced with the Quizlet and Kahoot Apps. Instructions and explanations to use Quizlet and Kahoot App were given clearly from the first hand during the lesson. These apps were downloaded and installed easily from Google Play Store. To give concrete illustrations, some samples were shown on the IWB and on teacher's own tablet PC. On these apps not only the randomly chosen 20 words but also other 60 new words were taught and practiced during the lessons under the control of the researcher. The experiment group practiced the new words using their tablets inside and outside the class; on the other hand the control group got the traditional classroom teaching style utilizing only their course book. After the whole modules were covered, on the fifth week both the experiment and control group were tested with a Post-Test including the same 20-item-word list presented before. After three weeks, again all the students were tested with the same word list as a Follow up test. Students weren't informed about the Follow up test beforehand to get reliable results. All teaching and application processes were conducted by a single researcher. In addition to this, all the data were collected by the researcher herself. After closing the application phase of the study, the experiment group students were expected to fill the "Student Opinion Scale for Tablet PC Use" questionnaire one more time to identify the changes after using the tablets provided by FATIH project in an active way during the English lessons. No specific problems were encountered during the administration of the instruments. All the students were volunteers in the study.

### **3.5 DATA ANALYSIS**

The items in the student opinion towards Tablet and Interactive Whiteboard Use were analyzed through the Statistical Package for Social Sciences (SPSS) 19. Every item was statistically calculated in terms of frequencies and percentages.

The interviews with experiment group were analyzed according to the responses of the participants under the categories of interview items. The recorded and transcribed interviews by the researcher were categorized according to questions about the study.

### **3.6 CONCLUSION**

The methodology used in this study was discussed in this chapter. The research design, the participants, the setting, the instruments and the data collection procedure were clearly explained. The next chapter will give detailed information about the analysis of the data gathered by the instrument discussed in this chapter.

## **CHAPTER IV**

### **RESULTS**

#### **4. INTRODUCTION**

In this chapter the students' opinions for interactive whiteboard use and tablet PC use during the lessons are given in a detailed way. Tablet PC usage questionnaire was applied before and after the study to see the changes occurring about the active usage of tablets in English lessons. Vocabulary knowledge scale is analyzed according to the pre, post and follow up application of the study. It also shows the comparisons between the experiment and control group studies. Classroom observation data is explained. Finally the questions asked during the interviews with the students about the study itself, apps used to enhance vocabulary knowledge, and the pros and cons related to tablets use are examined one by one.

#### **4.1. STUDENT OPINION SCALE FOR INTERACTIVE WHITEBOARD USE RESULTS**

The questionnaire of student opinion scale for interactive whiteboard use was filled by all the students who participated in the study. There were four 10th grade classes consisting of 112 students. The numbers of the students in each class were fixed by the school management before the term so it was a good opportunity for the researcher teacher to work with equal numbers.

The questionnaire was analyzed in terms of six sub dimensions. These are the impacts of IWBs on learning, their technical problems, their affective factors on students, motivational issues, time management and organizational issues of IWBs and the comparisons of traditional boards and IWBs. The results are shown and interpreted under the titles below.

#### **4.1.1. Students' Opinions about the Impacts of IWBs on Learning**

There are seven items related to the impacts of interactive white boards on learning at this section of the questionnaire. By focusing on the mean scores, one can easily understand that students agreed with all of the statements in the questionnaire and supported the idea of IWBs' having an important impact on learning.

Regarding the responses for the third and the twenty third questions, which have the highest mean scores in the group, it can be seen that most of the students state that using visual materials on the IWB helps them comprehend the lessons better and thanks to the IWB it's really easy to review the previous topics. According to the results, using audio materials on IWB helps 91 students (81.2 %) understand the lessons better.

Q1: I learn well when my teacher uses the interactive white board.

Q2: It is easier to understand the lesson when my teacher uses an IWB.

Q3: Using visual materials with IWB helps me understand the lesson better.

Q4: Using audio materials with IWB helps me understand the lesson better.

Q17: If my teacher gives more lessons using IWB, I can understand more.

Q22: Learning how to use IWB took me a short time.

Q23: It is easier to revise the previous topics thanks to IWB.



For the first item, most of the students (68.8 %) agreed that they can learn better when their teacher uses smart board. For the second item a very high percentage (70.5 %) claimed that it gets easier to understand the lesson when the teacher uses the smart board. For the seventeenth question, results indicate that nearly half of the students (46.5 %) claim that they can understand the lesson well if the teachers use smart boards more. Eighty two percent of the students agreed that they learned to use the IWB in a very short time.

Table 2: Students' opinions about the Impacts of IWBs on Learning

		SA	A	N	D	SD	Mean	STD
Q1	F	21	56	12	15	8	3,60	1,150
	%	18,8 %	50,0 %	10,7 %	13,4 %	7,1 %		
Q2	F	27	52	17	11	5	3,76	1,068
	%	24,1 %	46,4 %	15,2 %	9,8 %	4,5 %		
Q3	F	51	46	11	3	1	4,28	0,819
	%	45,5 %	41,1 %	9,8 %	2,7 %	0,9 %		
Q4	F	37	54	13	3	5	4,03	0,981
	%	33,0 %	48,2 %	11,6 %	2,7 %	4,5 %		
Q17	F	18	34	26	22	12	3,21	1,241
	%	16,1 %	30,4 %	23,2 %	19,6 %	10,7 %		
Q22	F	52	40	16	1	3	4,22	0,917
	%	46,4 %	35,7 %	14,3 %	0,9 %	2,7 %		
Q23	F	35	51	16	5	5	3,95	1,021
	%	31,3 %	45,5 %	14,3 %	4,5 %	4,5 %		

Note: F: Frequency, %: Percentage, SA: Strongly agree, A: Agree, N: Neutral, D: Disagree, SD: Strongly disagree STD: Standard Deviation

#### 4.1.2. Students' Opinions about the Technical Issues

Three items in this section show the majority of the students agreed that the problems of the IWB screen make it difficult for the students to see the lesson items on the IWB and the board itself often breaks down, causing a waste of time. However by comparing the percentage of the seventh question' results, the students got a bit mixed. While a large group (39.3 %) agrees with the idea that frequent recalibration of IWBs causes a waste of time, a similar number of students (38.4 %) disagree with the same idea, and the rest of the group (22.3 %) report having no idea. This seems to indicate that a great number of the students have not faced IWB recalibration problem or if they had, that these problems were solved very quickly.

Table 3: Students' views about the technical issues

		SA	A	N	D	SD	Mean	STD
Q5	F	24	36	21	21	10	3,38	1,261
	%	21,4 %	32,1 %	18,8 %	18,8 %	8,9 %		
Q6	F	23	33	19	21	16	3,23	1,356
	%	20,5 %	29,5 %	17,0 %	18,8 %	14,3 %		
Q7	F	21	23	25	25	18	3,04	1,355
	%	18,8 %	20,5 %	22,3 %	22,3%	16,1 %		

Q5: Sometimes deficiencies of the IWB screen make me not to see the things on the IWB clearly.

Q6: IWBs often break down and causes a waste of time.

Q7: IWBs' frequent recalibration causes a waste of time.

#### 4.1.3. Students' Opinions about the Affective Factors

The responses for the four questions in this section show the students' overall feelings and opinions related to the IWBs. The first question aimed to reveal the students' opinions on the ease or difficulty of using IWBs. The majority of the students (76.8 %) didn't agree with the statement claiming the use of IWBs is difficult. For the second question which was asked in order to explore what students feel about the displaying their work on IWBs in front of the class, a very high percentage of the students (74.1 %) didn't have the hump by doing this. The next item intended to explore whether using IWBs is frustrating or not. Regarding the mean scores of this question (M: 2.03) again students didn't feel that using IWBs is frustrating. The final item in this section was asked to investigate whether the students have hesitation in attending the lessons with IWB in front of the class.

Table 4: Students' opinions about the affective factors

		SA	A	N	D	SD	Mean	STD
Q8	F	4	5	17	42	44	1,96	1,026
	%	3,6 %	4,5 %	15,2 %	37,5 %	39,3 %		
Q9	F	6	8	15	38	45	2,04	1,146
	%	5,4 %	7,1 %	13,4 %	33,9 %	40,2 %		
Q21	F	9	4	13	41	45	2,03	1,181
	%	8,0 %	3,6 %	11,6 %	36,6 %	40,2 %		
Q24	F	6	9	17	34	46	2,06	1,172
	%	5,4 %	8,0 %	15,2 %	30,4 %	41,1 %		

Q8: I think using IWBs is a hard job.

Q9: It makes me uncomfortable when my homework is shown on the IWB in front of whole class.

Q21: I think using IWBs is really frustrating.

Q24: I hesitate to go to the front of the class in the lessons requiring IWB use.

#### 4.1.4. Students' Opinions about the Motivational Issues of IWBs

The questions on the Table 5 were asked to investigate students' opinions related to the motivational issues. Question 10 showed that 63.4 % of the students can concentrate better if their teachers use IWBs. The second question on the table explored that 49.1 % of students' participation to the classes increased with the IWBs. According to the result of question twelve, a very high percentage of the students (68.7 %) thought that their classes get funnier when their teachers use the IWBs.

Table 5: Students' opinions about the motivational issues of IWBs

		SA	A	N	D	SD	Mean	STD
Q10	F	23	48	25	10	6	3,64	1,073
	%	20,5 %	42,9 %	22,3 %	8,9 %	5,4 %		
Q11	F	14	41	30	15	12	3,27	1,170
	%	12,5 %	36,6 %	26,8 %	13,4 %	10,7 %		
Q12	F	27	50	15	15	5	3,71	1,112
	%	24,1 %	44,6 %	13,4 %	13,4 %	4,5 %		
Q16	F	19	46	24	14	9	3,46	1,154
	%	17,0 %	41,1 %	21,4 %	12,5 %	8,0 %		
Q18	F	10	41	34	15	12	3,20	1,122
	%	8,9 %	36,6 %	30,4 %	13,4 %	10,7 %		
Q19	F	11	29	27	23	22	2,86	1,279
	%	9,8 %	25,9 %	24,1 %	20,5 %	19,6 %		
Q20	F	17	46	21	18	10	3,38	1,186

%	15,2 %	41,1 %	18,8 %	16,1 %	8,9 %
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Q10: I concentrate better when the IWB is used in classes.

Q11: I participate in classes more when the IWB is used.

Q12: The lesson gets funnier when the IWB is used.

Q16: I managed to concentrate on the lesson more with the IWB.

Q18: The IWB increased my interest for the lesson.

Q19: If the other teacher at the school also uses the IWB, I will love the school more.

Q20: It's important for me to learn how to use an IWB.

Question sixteenth investigated whether the IWB made the students concentrate more or not on the lessons. Question eighteenth intended to learn the students' agreement or disagreement on the statement of whether the IWB increased their interests for the lessons. The results of the nineteenth question are very interesting as the students are not so sure about whether the IWBs have a great impact on school love. While half of the students agreed on the notion that if the other teachers also use the IWBs, they will love the school more, the other half disagreed with this notion. For the final item at this section a very high percentage of the students (56.3%) thought that learning how to use IWBs is very important for them. Generally considering the mean scores on the Table 5, it can be said that the use of IWB increases their motivation and concentration.

#### **4.1.5. Students' Opinions about the Time Management and Organizational Issues of IWBs**

There was a single item aiming to reveal the students' views related to the time management and organization issues at this section. For question 13 a majority of the

students (64.2 %) proposed that lessons become more organized when an IWB was used and this helped saving time.

Table 6: Students' opinions about the Time Management and Organizational Issues of IWBs

		SA	A	N	D	SD	Mean	STD
Q13	F	22	50	25	8	7	3,64	1,073
	%	19,6 %	44,6 %	22,3 %	7,1 %	6,3 %		

Q13: The lessons become more organized and time is saved when an IWB is used.

#### 4.1.6. Students' Opinions about the Differences between the Traditional Boards and IWBs

On the last section of this IWB use opinion questionnaire, two items were asked, directly related to the differences between the traditional boards and interactive white boards. For both questions students disagreed with the statements claiming that there is no difference between traditional boards and IWBs in terms of either teaching techniques and methods or general at all. Students felt very big differences between traditional boards used lessons or an IWB used lessons.

Table 7: Students' opinions about the Differences between the Traditional Boards and IWBs

		SA	A	N	D	SD	Mean	STD
Q14	F	9	10	23	37	33	2,33	1,218
	%	8,0 %	8,9 %	20,5 %	33,0 %	29,5 %		
Q15	F	9	17	22	33	31	2,46	1,266
	%	8,0 %	15,2 %	19,6 %	29,5 %	27,7 %		

Q14: I see no difference between my teacher's use of a traditional board and an IWB in terms of teaching techniques and methods.

Q15: There is not much difference between an IWB and a normal white board.

## **4.2. STUDENT OPINION SCALE FOR TABLETS USE PRE RESULTS**

Students' opinions for the tablets use were applied twice among the experiment groups only. Fifty six students attended to the study and questionnaire. The first one was administered to students before the tablets were used in English lessons for vocabulary teaching. Actually even though all the students had had tablets for about five months, they were never expected to use them at any lessons before the study. This study was also a unique example of tablets use for any lesson. The questionnaire was analyzed in terms of three categories: learning impact, motivational issues, and differences between the use of tablet PC and traditional learning methods. The same categories were also used to evaluate the post questionnaire after the study to see what kind of changes occurred after the study. The results are shown and interpreted in the following sections.

### **4.2.1. Students' Opinions towards Tablets Use in Terms of Their Impact on Learning**

On this first section, there were six items aiming to reveal the students' opinions about the tablets' impact on learning. Regarding the percentage of neutral option for each question, most of the students had neither positive nor negative ideas about the impact of tablets use on learning. Nearly half of the students (22) had no idea that tablets help them apply course content to solve the problems which were stated in the first question. For the second question a fairly high percentage of students were neutral about whether tablets help them learn the course content. The majority of the students (30.9 %) didn't know that tablets can help them connect ideas in new ways. For question four very

interesting results were observed. The percentages of the students who think that tablets PCs help them participate in the course activity in ways that enhanced their learning and the ones who are not so sure about the same statement were the same. For the sixth question, 18.5 % of students agreed that tablets help them develop skills that apply to their career and/or professional lives. For the last item stated on this section again the majority of the students (27.2 %) stated that they were neutral about whether tablets are important supplements to the class or not.

Table 8: Students' opinions towards tablets use in terms of their impact on learning

		SA	A	N	D	SD	Mean	STD
Q1	F	5	13	22	10	6	2,98	1,104
	%	6,2 %	16,0 %	27,2 %	12,3 %	7,4 %		
Q2	F	7	15	19	9	6	2,86	1,167
	%	8,6 %	18,5 %	23,5 %	11,1 %	7,4 %		
Q3	F	4	12	25	10	5	3,00	1,027
	%	4,9 %	14,8 %	30,9 %	12,3 %	6,2 %		
Q4	F	6	19	19	6	6	2,77	1,128
	%	7,4 %	23,5 %	23,5 %	7,4 %	7,4 %		
Q6	F	8	15	14	11	7	2,89	1,257
	%	9,9 %	18,5 %	17,3 %	13,6 %	8,6 %		
Q12	F	5	15	22	11	3	2,86	1017
	%	6,2 %	18,5 %	27,2 %	13,6 %	3,7 %		

Q1: Tablets help me apply course content to solve problems.

Q2: Tablets help me learn the course content.

Q3: Tablets help me connect ideas in new ways.



Q4: Tablets help me participate in the course activity in ways that enhanced my learning.

Q6: Tablets help me develop skills that apply to my career and/or professional life.

Q12: Tablets are more important supplements to the class.

#### 4.2.2. Students' Opinions towards Tablets Use Related to Motivational Issues

As it could be seen on the Table 9, four questions were asked to investigate the students' opinions about the tablets use in the terms of motivational issues. Regarding the neutral option percentages of the first three questions on these sections, students couldn't develop sharp opinions for the tablets use in the context of motivational factors. 21.0 % of the participants felt neutral about whether the tablets help them develop confidence in the lessons. For the seventh item, a group of students (25.9 %) believed that tablets could motivate them to learn the course material more than class activities that did not use tablets. Even if a fairly high percentage of the students (28.4 %) chose neutral option for the statement at question 8, a larger group of students (30.8 %) didn't agree with the idea that they can participate more in class during the activities with tablets than during activities that do not use the tablets. The majority of the students (35.8 %) didn't agree that their attention to the tasks is greater using tablets. The reason why generally neutral or negative opinions were developed on this section could be that students didn't use tablets during the lessons before this study.

Q5: Tablets help me develop confidence in the subject area.

Q7: Tablets motivate me to learn the course material more than class activities that did not use tablets.

Q8: I participate more in class during the activities with tablets than during activities that do not use the tablets.

Q9: My attention to the task(s) is greater using the tablets.

Table 9: Students' opinions towards tablets use related to motivational issues

SA	A	N	D	SD	Mean	STD
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Q5	F	5	13	17	15	6	3,07	1,142
	%	6,2 %	16,0 %	21,0 %	18,5 %	7,4 %		
Q7	F	10	10	21	8	7	2,86	1,242
	%	12,3 %	12,3 %	25,9 %	9,9 %	8,6 %		
Q8	F	4	4	23	13	12	3,45	1,127
	%	4,9 %	4,9 %	28,4 %	16,0 %	14,8 %		
Q9	F	3	11	13	15	14	3,46	1,220
	%	3,7 %	13,6 %	16,0 %	18,5 %	17,3 %		

#### 4.2.3. Students' Opinions Related to Differences between Traditional Learning Methods and Tablets Use

Two items on this section aimed to reveal students' opinions related to differences between the use of tablets and traditional learning methods. For the tenth question, the majority of students (33.3%) agreed with the statement that tablets are more convenient than a desktop or laptop computer. A high percentage (25.9 %) weren't so sure about whether it is easier to work in a group using tablets than other group activities.

Table 10: Students' opinions related to differences between traditional learning methods and tablets use

		SA	A	N	D	SD	Mean	STD
Q10	F	7	20	11	9	9	2,88	1,294
	%	8,6 %	24,7 %	13,6 %	11,1 %	11,1 %		
Q11	F	5	15	21	13	2	2,86	0,999
	%	6,2 %	18,5 %	25,9 %	16,0 %	2,5 %		

Q10: Tablets are more convenient compare to a desktop or laptop computer

Q11: It is easier to work in a group using tablets than it other group activities.

### 4.3. VOCABULARY KNOWLEDGE SCALE (VKS) RESULTS

As it was mentioned before, Vocabulary Knowledge Scale is a very important assessment tool in foreign language vocabulary teaching. This scale was used to evaluate students' vocabulary knowledge development on chosen words. It was administered three times to all the participants in the study. There were two groups in the study; the experiment group and the control group. The results of two groups for the each test were explained in detail under three sub-titles. These are pre-test results, post-test results and follow up test results. The results were calculated based on group averages; besides, a few sample individual student answer sheets (graded by the researcher according to the VKS grading table) including all three previously mentioned tests were attached in Appendix 8.

#### 4.3.1. Pretest Results

The pre-test was applied to all groups on the second week of the study. The results were analyzed on SPSS. According to the Table 11, at the beginning of the study each two groups' mean scores are nearly equal. It means that their knowledge about the chosen words is almost equal. Moreover the scores of control group are a little bit higher than the experiment groups.

Table 11: Pretest Result

Pretest	Frequency	Mean	Standard Deviation
Experiment Group	56	32,05	7,470
Control Group	56	32,64	8,167

#### 4.3.2. Post-test Results

The post-test was applied after the experiment group utilized their tablets to study the new words via Quizlet and Kahoot applications. They also used a WhatsApp group to

communicate each other using the newly learned words. They tried to make up sentences using the new words, asked each other the synonyms and antonyms of these words to practice more. While experiment group was studying the new words through the Apps on tablets, the control group studied them with traditional learning methods. Both of the groups took the test on the fifth week, three weeks after the pre-test. Regarding the mean score results of post-test on Table 12, the effects of using tablets to learn and practice English vocabulary can be seen more clearly. There is a huge difference between the mean scores of experiment and control groups. The experiment group's score which was 32.05 at the pre-test goes up to 79.50 at the post-test. The results of control group are higher than their first test but it's much lesser than the experiment group. There is a 12.66 score rise, however they are 34.2 score behind the experiment group. This shows that utilizing tablets into English lessons have positive effects on vocabulary learning and retention.

Table 12: Post-test Result

Post-test	Frequency	Mean	Standard Deviation
Experiment Group	56	79,50	10,590
Control Group	56	45,30	9,550

### 4.3.3. Follow-up Test Results

After three weeks and completing the unit and starting the new one, the follow-up test was applied on the final week of the study. While there is a 4.82 score decrease on the mean scores of experiment group, there is a high percentage of decrease (9.35) on control group's mean score. Time and new knowledge reduced the previous vocabulary knowledge on both groups.

Table 13: Follow-up Test Result

Follow-up Test	Frequency	Mean	Standard Deviation
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Experiment Group	56	74,68	11,333
Control Group	56	35,95	4,283

#### **4.4. STUDENT OPINION SCALE FOR TABLETS USE POST RESULTS**

As it was mentioned before, the questionnaire of student opinion scale for tablets use was administered twice. The first one was applied to investigate students' neutral opinions about tablets use for the lessons. This second one aimed to reveal what sort of changes happened on the students' opinions about tablets use. The questionnaire was analyzed in terms of three categories as it was in the first evaluation: learning impact, motivational issues, and differences between the use of tablet PC and traditional learning methods. The results are shown and interpreted in the same sections.

##### **4.4.1. Students' Opinions towards Tablets Use in Terms of Their Impact on Learning**

The opinions of students towards tablets' impact on learning drastically changed after the applied study. The study made the students think positively about the tablets use. As it is seen on Table 14, the number of the students who agree with the statements rose as the numbers of the students who think negatively about the statements fell. For question one a very high percentage of students (50.6 %) agreed that tablets help them apply course content to solve problems. 47 students out of 56 believed that tablets help them learn the course content. For the third item a very large group of students (45.7 %) agreed that tablets help them connect ideas in new ways. The majority of the students (53.1 %) thought that tablets help them participate in the course activity in ways that enhanced their learning. 37 students out of 56 supported that tablets help them develop skills that apply to academic lives. For the last item on this section, a fairly high percentage of the students (45.7 %) accepted the statement that tablets are more important supplements to the class. One can easily claim that tablets use have an important impact on students' learning.

Table 14: Students' opinions towards tablets use in terms of their impact on learning

		SA	A	N	D	SD	Mean	STD
Q1	F	17	24	9	4	2	2,11	1,039
	%	21,0 %	29,6 %	11,1 %	4,9 %	2,5 %		
Q2	F	17	30	5	4	0	1,93	0,828
	%	21,0 %	37,0 %	6,2 %	4,9 %	0 %		
Q3	F	11	26	16	3	0	2,20	0,818
	%	13,6 %	32,1 %	19,8 %	3,7 %	0 %		
Q4	F	15	28	6	6	1	2,11	0,985
	%	18,5 %	34,6 %	7,4 %	7,4 %	1,2 %		
Q6	F	12	25	11	4	4	2,34	1,116
	%	14,8 %	30,9 %	13,6 %	4,9 %	4,9 %		
Q12	F	12	25	13	5	1	2,25	0,958
	%	14,8 %	30,9 %	16,0 %	6,2 %	1,2 %		

#### 4.4.2. Students' Opinions towards Tablets Use Related to Motivational Issues

There were 4 items aiming to investigate students' opinions about the tablets use in terms of motivational issues section. Compared to pre-questionnaire, students' views changed a lot. Only for question five which asks whether tablets help them develop confidence in the subject area, most of the students' (27.2 %) opinions stayed neutral. Just as negative ideas fell, the positive feelings about the statement rose. However for other items majority of the students agreed with the statements. 49.3 % of the students agreed that tablets motivate them to learn the course material more than class activities that did not use tablets. 34.5 % of the students believed that they participate more in

class during the activities with tablets than during activities that do not use the tablets. 30.9 % of the students thought that their attention to the task(s) is greater using the tablets. This percentage was only 17.3 on the pre-questionnaire.

Table 15: Students' opinions towards tablets use related to motivational issues

		SA	A	N	D	SD	Mean	STD
Q5	F	4	17	22	9	4	2,86	1,017
	%	4,9 %	21,0 %	27,2 %	11,1 %	4,9 %		
Q7	F	13	27	8	8	0	2,20	0,961
	%	16,0 %	33,3 %	9,9 %	9,9 %	0 %		
Q8	F	10	18	17	10	1	2,54	1,044
	%	12,3 %	22,2 %	21,0 %	12,3 %	1,2 %		
Q9	F	11	14	17	11	3	2,66	1,164
	%	13,6 %	17,3 %	21,0 %	13,6 %	3,7 %		

#### 4.4.3. Students' Opinions Related to Differences between Traditional Learning Methods and Tablets Use

Students were asked two questions to investigate the differences between the use of tablets and traditional learning methods. For the tenth question questioning whether tablets are more convenient than a desktop or laptop computer, the percentage which was 33.3 % rose up to 39.5 %. At the first evaluation a high percentage (25.9 %) wasn't so sure about whether it is easier to work in a group using tablets than other group activities, but after the study the students became more confident about supporting this idea with a very high percentage (44.5 %).

Table 16: Students' opinions related to differences between traditional learning methods and tablets use

		SA	A	N	D	SD	Mean	STD
Q10	F	9	23	10	9	5	2,61	1,201
	%	11,1 %	28,4 %	12,3 %	11,1 %	6,2 %		

Q11	F	8	28	8	11	1	2,45	1,025
	%	9,9 %	34,6 %	9,9 %	13,6 %	1,2 %		

#### 4.5. Classroom Observation Data Analysis

In order to get clear information about the use of tablets in vocabulary learning during English lessons, and to detect how the apps are used, what the students' reactions are while using these apps, what kind of problems are faced and how they are solved, classroom observation technique was utilized. Observations can be explained as “the process of gathering open-ended, firsthand information by observing people and places at a research site” (Creswell, 2012, p. 213). Classroom observation provides firsthand information about the real participants in the real setting. The observation form used in this research was inspired by another researcher called Ali Gök. It was revised by the researcher herself according to the aim of the subject. There are eleven parts in the form giving details about the date, group type, teacher, lesson, time, topic, technique used, its duration and aim, students' reactions for the technique used and finally the problems occurring during the study observation. Three observations were carried out. The first one was made to see the effects of using Quizlet app with the experiment group, and the second one was made to see the effects of using Kahoot app with the experiment group. The last observation was made in order to reveal how the traditional teaching and learning in English vocabulary is effective on control group students and how they feel during the lessons.

On the first classroom observation, students learned how to use Quizlet and they practiced the new words for 20 minutes. The aim of using this App was learning and practicing all the key words that would be necessary in the module study. It was observed that students learned to use Quizlet program very quickly with some examples shown by teacher on the interactive white board. After they learned how to use it, they practiced the words by themselves. Even if it was the first day of applying the app, no problem was met. It was observed that all the students had fun and wanted more time to spend on this app.



Table 17: Experiment Group Classroom Observation for Quizlet App

Date	Group	Teacher	Lesson	Time	Topic
07/04/2016	Experiment	G.D.	English	08:00-08:40	Endangered Species
Technique Used		Quizlet			
Duration		20 mins			
Aim of the Technique		To be able to learn all the key words necessary in the unit.			
The reactions of the students for the technique		They all enjoyed and wanted to spend more time on this app.			
Problems Faced		None			

The second observation was to see how functional Kahoot app was. It was a 40-word contest on online platform. Students were given a code to enter the contest. Teacher explained the features on the program shortly. As it was an easy app, there weren't needed long explanations. When all the students entered their code and connected to the contest via their tablets, the activity started.

Table 18: Experiment Group Classroom Observation for Kahoot App

Date	Group	Teacher	Lesson	Time	Topic
13/04/2016	Experiment	G.D.	English	08:55-09:35	Endangered Species
Technique Used		Kahoot			
Duration		20 mins			
Aim of the Technique		To be able to practice all the key words necessary in the unit and have fun.			
The reactions of the students for the technique		They all enjoyed and wanted to spend more time on this app.			
Problems Faced		The students' noise because of the excitement.			

Learning, practicing and having fun at the same time were aimed before the lesson and all of them were succeeded. The only problem faced was the noise of the students who felt excited while they were winning and losing.

The last observation form was prepared to see what students feel when they learn and practice the new words related to the module and to what extent they learn and

remember them. Students were taught the new words via traditional teaching methods such as writing the words on the board, giving their explanation either in native language or targeted language, asking students write them to their notebooks and memorize them. Even if the same duration of time was expected to give as in the experiment group, copying the words on the board into the students' notebooks and planning and making up sentences made the teacher exceed the planned time, finally one lesson hour was allocated to teach the new words. As it was the regular learning method of students in English vocabulary learning, students didn't show unexpected reactions during the lesson. They also didn't express that they had lovely and funny moments in learning. Writing and studying forty new words at one lesson are not something students can enjoy.

Table 19: Control Group Classroom Observation

Date	Group	Teacher	Lesson	Time	Topic
14/04/2016	Control	G.D.	English	08:55-09:35	Endangered Species
Technique Used		Traditional Teaching Methods			
Duration		40 mins			
Aim of the Technique		To be able to learn all the key words necessary in the unit.			
The reactions of the students for the technique		They studied the new words seriously.			
Problems Faced		The students got tired by writing all these new words and they were stuck in making up sentences using the new words.			

#### 4.6. INTERVIEW RESULTS

There were 56 students in the experiment group in this research. They are in two different classes. For the interview, all the students from each class volunteered. There were seven questions in this interview. The student's answers for these questions were almost the same, so some of them are mentioned here. The interview was conducted in a very friendly atmosphere to make the students feel comfortable and answer the questions truly and freely. The questions and answers were translated into English.

#### **4.6.1. Analysis of First Interview Question**

The first question of the interview aimed to get information about whether the students have their own Tablets before or not. 41 students answered this question negatively. 15 students who answered this question positively were asked to explain what purposes they generally use their Tablets for. They expressed that they use them for playing games, reading e-books, listening to music, watching television series, taking photos, saving and sharing lesson files. 8 out of 15 students told that their Tablets PCs were shared by all family members at home.

#### **4.6.2. Analysis of Second Interview Question**

Second question aimed to reveal if the students use Tablets provided by FATIİH Project during the other lessons. All the students who participated to the interview answered this question negatively. They claimed that they did not use the Tablets actively as a required component of the lessons at school, however, they sometimes use them to study school lessons through EBA at home. Twenty five of them expressed that they sometimes use Tablets to read e-books during the reading time. According to the students' statements they are not allowed to bring their Tablets to the schools for the reason that school authorities tell them Tablets violate the lessons. This problem was comprehended by the students as a result of teachers who cannot integrate the Tablets into their curriculum.

#### **4.6.3. Analysis of Third Interview Question**

Students were asked if they think studying new words through the Apps on their Tablets was useful. All of the students' responses for this question were positive. They were also asked to explain this question with clear examples. Compared to the previous vocabulary study methods, it was stated that using Tablets to study new words is much better. Student 1 claims that

"It was absolutely useful. I used to study new words with different methods. Yet, the more I tried, the less I remembered. Tablets can add visuality and sound to the learning atmosphere. It would take me a lot of time to draw illustration of each word and try to find its pronunciation from the internet or from the dictionary. That's why I would probably give up after a while to study on vocabulary. Utilizing my Tablet into English lessons for this purpose was absolutely useful."

It is generally thought that the pictures related to the target words made students remember more. Student 23 expressed that the visuals made the words memorable. Student 23 also stated that the pronunciation of each word presented through the APP let them learn and pronounce the words accurately. The practice module encouraged them to make up sentences with the new words. Thus, I'm more relaxed when I try to communicate in English."

As this generation are born with technology, they are eager to integrate the technological tools to their everyday life and to their learning styles. Technology supports individual learning. As Student 55 states that:

"Yes, studying new words through the Apps on their Tablets was really useful. Technological games and all sorts of applications mean a lot in my language learning achievement. Since I was a little kid, I have learned a lot of words thanks to the online games. When my teacher said that she would conduct a study like this, I said to myself, "Here it is." because I like to study with computers, tablets, phone games and learn something from them. "

#### 4.6.3. Analysis of Fourth Interview Question

The fourth question was to reveal whether the students want to use their Tablets in every English lesson in the future or not. All the students stated that utilizing Tablets made them love English language and English lessons more, so they would be glad to use them in the future, too. They believed that they could reach updated information through Tablets. Student 23 stated that;

"Yes, why not, I think it would be great. I love the Tablet thing very much. I did not know these kinds of applications because I did not have a smartphone or tablet before. I did not even think that these tools could be used for teaching purposes. But I was wrong. The lessons started to appeal me. We have fun while learning. Now I love English and English lessons very much."

According to Student 16 students had the opportunity to use the Tablets provided by MoNE now, and their vocabulary knowledge started to increase as well. Writing the words many times to memorize was a very traditional way. According to Student 20 she and her classmates were expected to write the translation of new words minimum five times to memory in previous years. No matter how it was a very stressful and tiring work, but it was still impossible to remember all these words. It was not just her condition, it was same for everyone in the class. She thought that learning via more modern and funnier methods is more useful. Student 17 stated his gratitude:

"I especially thank you very much for conducting a study like this."

The world is constantly changing and students need to keep up with it. Technology is thought that it could make even the most difficult lessons very easy. It makes sense to use tablets in English lessons, because there are lots of useful applications in this area..

"Student 24 expressed her feelings:

"Lessons are funnier than ever. Having Tablets are better than heavy dictionaries like stone. They are lighter than the bags but full of useful Apps."

### 4.6.3. Analysis of Fifth Interview Question

The fifth question on the interview was about what the students think about the Quizlet and Kahoot Apps used during the study. Even if 5 students have criticisms about both Apps, 51 students expressed that they enjoyed using each Apps during the study. Two students claim that the interface of Quizlet which appeals to visual intelligence needs a little bit changes and some modules in it need development. Students 55 offered that more features and games can be added to Quizlet. 50 students in the interview stated that Kahoot made them learn and have fun at the same time. According to Student 33:

“Kahoot was fantastic. It made the lessons funnier than ever.”

However, the noise during the application of Kahoot in the class because of the students' excitement cause some students have headaches. As Student 17 says;

"Both Apps are very successful and entertaining. The games in the Quizlet are beautiful. I love Kahoot but there is a lot of noise in the classroom. Sometimes I have headache after the lessons."

They are generally accepted as very useful applications as the words retain more because of visual and audio aids in both Apps. The game mode of Quizlet makes learning new words fun. According to Student 40:

“Learning is much funnier and more useful with these apps.”

Quizlet supports students with the pronunciation mode as well. Student 12 stated:

“They are absolutely wonderful apps. Obviously I admired the people behind these Apps. After studying new words with their related pictures, and their pronunciation on Quizlet, we were contesting through Kahoot App. I really enjoyed both.”

#### **4.6.4. Analysis of Sixth Interview Question**

Question six aimed to reveal whether the students' performance changed on English vocabulary learning after integrating tablets to English lessons. All of the students answered this question positively. They added that they could remember the words more and they could also use them in sentence formation. Their performances on written and oral English tests increased. Both the teachers herself and the students were happy because of these positive changes. As students expressed during the interview they started to like the lessons more and they are eager to attend every English lesson compare to the previous years.

#### **4.6.5. Analysis of Seventh Interview Question**

The seventh question was about the problems which students might face while using tablets during the study. They were also expected to give possible suggestions for these problems. Their biggest problem was related to the Internet access. Providing uninterrupted Internet access is one the most important components of FATIH Project, because of the unfinished infrastructure issues, sometimes the students had to use their own mobile data to access the Apps. 35 students suggested that the authorities of the project can control the schools often and check the internet connection problems. However, it was not a big issue during the study as teacher provides her own mobile data when the problem happened. 3 students also expressed that the size of the keyboards made them loose some contests on Kahoot App. This could be an excuse or a real problem. 5 students suggested to be enlarged the size of the Tablets. This statement was found unreasonable by the students themselves because it would affect the Tablet features of Tablet.

#### **4.7. CONCLUSION**

This chapter presented the students' opinions for interactive whiteboard use and tablet PC use during the lessons in a detailed way. Students' opinions for Tablet PC use was analyzed twice as pre and post questionnaire to see the changes occurred after the study. Vocabulary Knowledge Scale was analyzed as pre, post and follow-up for both experiment and control group. Classroom observation data which was made during the study was explained. Finally the interview questions were examined in the light of students' answers.





## **CHAPTER V**

### **DISSCUSSION AND CONCLUSION**

#### **5. INTRODUCTION**

This chapter will present the summary of the study, discussion of the research questions, limitations of the study, pedagogical implications and suggestions for further studies. Finally a conclusion will be given.

#### **5.1. SUMMARY OF THE STUDY**

This study examined the differences in the students' vocabulary learning achievements between traditional classroom teaching and utilizing tablets in EFL classrooms. Quantitative and qualitative research methods were applied in order to collect data about the opinion of students towards interactive white board and tablets use provided by FATIH Project sponsored by National Ministry of Education and the changes occurring in students' vocabulary knowledge. In other words, a mixed methods research was used to collect data to achieve this study. Using a mixed method research helped the researcher triangulate and support the results of the study. The findings were analyzed under these titles; the students' opinions towards the tablets use, and Interactive White Board use, the vocabulary knowledge scale analysis, interview questions and classroom observations.

## **5.2. DISCUSSIONS OF RESEARCH QUESTIONS**

The questions which led to this research were answered after all the stages of the study were completed. Each question was answered in detail below.

### **5.2.1. Discussion of First Research Question**

The first question was “Are there any differences in the learning of English vocabulary between traditional classroom teaching and utilizing tablets?” To get answers for this question the vocabulary knowledge scale, interview and classroom observations were made. Because of their advantages such as flexibility, low cost, small or pocket size, user-friendly, researchers report that learners benefit more from mobile devices in language learning (Wu, Wu, Chen, Kao, Lin & Huang, 2012). The data gathered from all these techniques showed that introducing tablets and the educational tools for English vocabulary teaching and learning had the students have a very successful progress. Comparing the data gathered from the Vocabulary Knowledge Scale, it can be clearly seen that there is a huge difference between the traditional classroom teaching and utilizing tablets. Although all the students' vocabulary knowledge were nearly at the same level at the beginning of the study, after the use of tablets with educational applications in experiment groups, the difference between the vocabulary knowledge end retention of the words increased drastically. While experiment group showed a great success in learning and remembering the new words, the students in control group didn't display an unexpected or great success. Tablets and the educational tools help the students study on their own pace and become more social in attending to the lessons, which is in accordance with the studies reporting on the use of tablets for their enriching properties of the lessons (Anderson, Anderson, Simon, Wolfman, VanDeGrift, & Yasuhara, 2004; Kam, Wang, Iles, Tse, Chiu, Glaser, & Canny, 2005; Casas, Ochoa, & Puente, 2009).

### **5.2.2. Discussion of Second Research Question**

The second question was “What are the experiment group students' opinions towards the use of Tablets in English lessons?” The students' neutral or negative opinions about the tablet use in both English and all lessons totally changed in a positive way, which is in agreement with previous studies (Dündar & Akçayır, 2012; Ertmer, 2005; Hew & Brush, 2007). Before this study, the students couldn't imagine how they can integrate tablets into the lessons since they did not actively use tablets in any lessons. Moreover students learned the new words better via the use of tablets.

### **5.2.3. Discussion of Third Research Question**

The third question of the research was “What are the students' opinions towards the use of IWBs in classrooms?” To answer this question, all students' opinions about the use of interactive white boards were questioned and observed. Most of the students agreed that the interactive white boards have a very big and positive impact on their learning, can motivate the students for lessons with their visual and audio tools. The students claimed that IWBs help them revise the previous lessons exactly with the help of saving the documents in the memory of IWBs. If the problems occurring outside the IWBs themselves could be fixed, the students felt that they could make use of them at a maximum degree. Interactive white boards let the students increase their social interaction and decrease the shyness and fear of speaking in front of a large audience. The lessons became more organized after the integration of IWBs to the whole classes. All these positive feelings and opinions of the students showed that there are many differences in between the traditional boards and the IWBs.

### **5.3. LIMITATIONS**

There are a few limitations in this study. The most important limitation of this study was related to the technological issues. Sometimes the intended studies could not be carried out due to electrical problems, Internet access, and temporary smart board problems.

Another limitation was that some students forgot to bring their tablets on the planned days but this problem was solved easily after WhatsApp group was actively used by all the students in the group.

Even though there are increasing numbers of studies investigating use of tablets in classrooms, more research is still needed to be able to establish important advantages or disadvantages of tablets in educational settings.

### **5.4. PEDAGOGICAL IMPLICATIONS AND SUGGESTIONS FOR FURTHER STUDIES**

This study examined the effect of tablets use on English vocabulary knowledge. Another research can be conducted to see the effects of tablets use on other skills such as speaking, reading, listening, writing, and also sub skills. Mobile technologies have been used widely in educational areas, so integrating tablets into the language education is an overwhelming need. Making use of the technological devices in the lessons has affected the students in a positive way. As these students are digital natives, they like to learn via technology. As all the participants in the study felt that the study was fun, educative and useful for them, they willingly followed the working process and they completed all the questionnaires and scales without any hesitation. Tablets and educational tools let the students overcome the barriers in their language learning efforts. In the light of this knowledge maybe another study can be carried out to reveal

the effects of tablets use in other lessons. As the most important actors in adapting the technological devices into the lessons are teachers, a study which can reveal the teachers' opinions towards the tablets and interactive white board use can be designed.

## **5.5. CONCLUSION**

Both quantitative and qualitative results of this study show that utilizing tablets in EFL classrooms has positive effects on students' vocabulary knowledge. The results gathered from the interviews indicate that students feel happiness and fun while they use their tablets in English vocabulary learning. Classroom observation results show the striking differences between the group who utilizes tablets and the one who doesn't in the satisfaction of language learning process.

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## APPENDICES

## Appendix 1: Students' Opinions towards the Use of Tablets

Fikirlerinizi derecelendirilmiş ölçekte size uygun olan kutucuğa ( X ) koyarak belirtiniz. (Indicate your ideas on the graded scale by placing an X in the appropriate box.)	Strongly (Tamamen katılıyorum) Agree	Agree (Katılıyorum)	Neutral (Kararsızım)	Disagree (Katılmıyorum)	Strongly (Hiç katılmıyorum) Disagree
1. Tabletler, ders içerikleri ile problem çözümünde bana yardımcı olurlar. (Tablets help me apply course content to solve problems.)					
2. Tabletler, ders içeriklerini öğrenmemde bana yardımcı olurlar. (Tablets help me learn the course content.)					
3. Tabletler, yeni yollarla fikirlerin bağdaştırılmasında bana yardımcı olurlar. (Tablets help me connect ideas in new ways.)					
4. Tabletler, öğrenmemi geliştirecek ders aktivitelerinde yer almam konusunda bana yardımcı olurlar. (Tablets help me participate in the course activity in ways that enhanced my learning.)					
5. Tabletler, konu alanında özgüvenimin artmasında bana yardımcı olurlar. (Tablets help me develop confidence in the subject area.)					
6. Tabletler, akademik kariyer ve/veya mesleki hayatımda uygulayabileceğim becerileri geliştirmemde bana yardımcı olurlar. (Tablets help me develop skills that apply to my career and/or professional life.)					
7. Tabletler, ders materyallerini öğrenmemde tablet kullanılmayan ders aktivitelerine göre daha motive edici olurlar. (Tablets motivate me to learn the course material more than class activities that did not use tablets.)					
8. Tablet kullanılan ders aktivitelerinde tablet kullanılmayanlara göre daha fazla yer alırım. (I participate more in class during the activities with tablets than during activities that do not use the tablets.)					

9. Tablet kullanımı ile ödevlere olan dikkatim fazla olur. (My attention to the task(s) is greater using the tablets.)					
10. Tabletler, masaüstü ya da dizüstü bilgisayarla karşılaştırıldığında daha kullanışlıdır. (Tablets are more convenient compare to a desktop or laptop computer.)					
11. Tabletleri kullanan gruplarda çalışmak, tablet kullanmayan gruplarda çalışmaktan daha kolaydır. (It is easier to work in a group using tablets than it other group activities.)					
12. Tabletler, dersler için önemli tamamlayıcılardır. (Tablets are more important supplements to the class.)					



## Appendix 2: Students' Opinions Towards The Use Of IWBs

	Fikirlerinizin derecelendirilmiş ölçekte size uygun olan kutucuğa ( X ) koyarak belirtiniz. (Indicate your ideas on the graded scale by placing an X in the appropriate box.)	(Tamamen katılıyorum) Strongly Agree	(Katılıyorum) Agree	(Kararsızım) Neutral	(Katılmıyorum) Disagree	(Hiç katılmıyorum) Strongly Disagree
1	Öğretmenim akıllı tahta kullandığında daha iyi öğreniyorum. (I learn well when my teacher uses the interactive white board.)					
2	Öğretmenim akıllı tahta kullandığında dersi anlamak daha kolay oluyor. (It is easier to understand the lesson when my teacher uses an IWB.)					
3	Öğretmenimin akıllı tahta üzerinden görsel materyaller kullanması dersi daha iyi anlamama yardımcı oluyor. (Using visual materials with IWB helps me understand the lesson better.)					
4	Öğretmenimin akıllı tahta üzerinden işitsel materyaller kullanması dersi daha iyi anlamama yardımcı oluyor. (Using audio materials with IWB helps me understand the lesson better.)					
5	Kimi durumlarda akıllı tahtanın ekranında oluşan sorunlardan dolayı tahtadaki bazı ders öğelerini net göremiyorum. (Sometimes deficiencies of the IWB screen make me not to see the things on the IWB clearly.)					
6	Akıllı tahtanın sık sık bozulması zaman kaybına neden oluyor. ( IWBs often break down and causes a waste of time.)					
7	Akıllı tahtanın sık sık ayarlanmasının gerekmesi zaman kaybına neden oluyor. (IWBs' frequent recalibration causes a waste of time.)					
8	Akıllı tahta kullanmanın zor bir iş olduğunu düşünüyorum. (I think using IWBs is a hard job.)					
9	Hazırladığım ödevlerin akıllı tahta ile sınıfa gösterilmesi beni huzursuz eder.( It makes me uncomfortable when my homework is shown on the IWB in front of whole class.)					
10	Akıllı tahta kullanıldığında derse daha iyi motive oluyorum. (I concentrate better when the IWB is used in classes.)					
11	Akıllı tahta kullanıldığında derse daha fazla katılıyorum. (I participate in classes more when the IWB is used.)					
12	Akıllı tahta kullanıldığında öğrenme daha eğlenceli hale geliyor. (The lesson gets funnier when the IWB is used.)					
13	Akıllı tahta kullanıldığında ders daha planlı ilerliyor. (The lessons become more organized and time is saved when an IWB is used.)					

14	Öğretmenimin akıllı tahta ile beyaz tahta kullanması arasında öğretim yöntem ve teknikleri açısından herhangi bir fark görmüyorum. (I see no difference between my teacher's use of a traditional board and an IWB in terms of teaching techniques and methods.)					
15	Akıllı tahta ile beyaz tahta arasında çok büyük bir fark bulunmamaktadır. (There is not much difference between an IWB and a normal white board.)					
16	Akıllı tahta ile derse daha iyi yoğunlaşabildim. (I managed to concentrate on the lesson more with the IWB.)					
17	Öğretmenim akıllı tahta kullanarak daha çok ders anlatırsa, dersi daha iyi anlarım. (If my teacher gives more lessons using IWB, I can understand more.)					
18	Akıllı tahta derse karşı ilgimi arttırdı. (The IWB increased my interest for the lesson.)					
19	Okuldaki diğer öğretmenlerim de akıllı tahtayı kullanırsa okulu daha da çok seveceğim. (If the other teacher at the school also uses the IWB, I will love the school more.)					
20	Akıllı tahtanın nasıl kullanıldığını öğrenmek benim için önemlidir. (It's important for me to learn how to use an IWB.)					
21	Akıllı tahta kullanmanın oldukça sinir bozucu olduğunu düşünüyorum. (I think using IWBs is really frustrating.)					
22	Akıllı tahta kullanmayı öğrenmem çok kısa sürdü. (Learning how to use IWB took me a short time.)					
23	Akıllı tahta sayesinde daha önce işlenen konulara geri dönmek daha kolay oluyor. (It is easier to revise the previous topics thanks to IWB.)					
24	Akıllı tahta kullanılan derslerde tahtaya kalkmaktan çekiniyorum. (I hesitate to go to the front of the class in the lessons requiring IWB use.)					

## Appendix 3: Vocabulary Knowledge Scale

İsim (Name): \_\_\_\_\_

Sınıf: \_\_\_\_\_

1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.

2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.

3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
(eş anlamlısı ya da Türkçe karşılığı).

4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eş anlamlısı ya da Türkçe karşılığı).

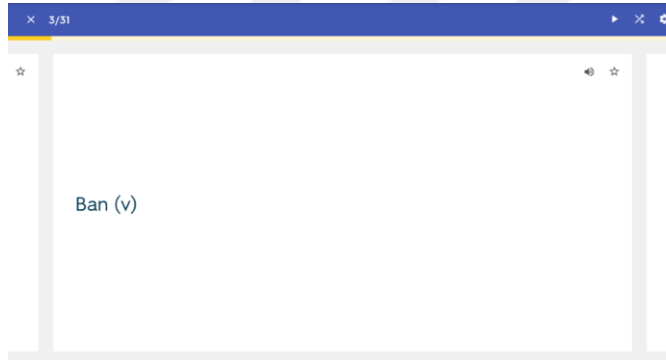
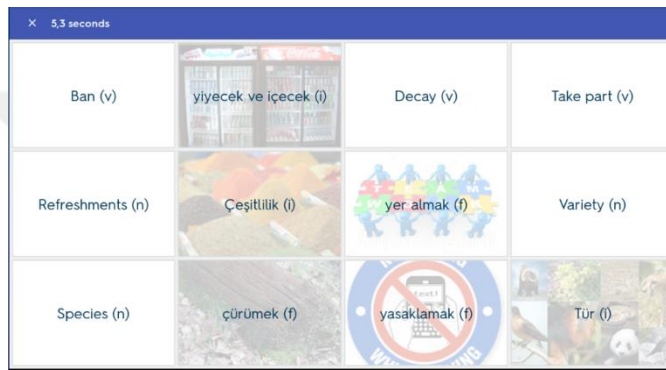
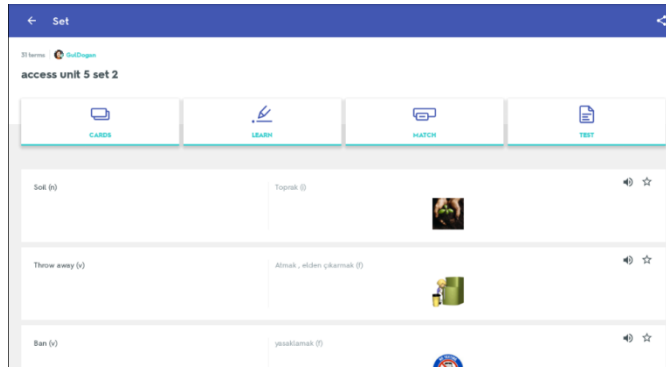
5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect						
2	Liquid						
3	Expanding						
4	Extinction						
5	Habitat						
6	Heating up						
7	Lay eggs						
8	Migrate						
9	Nesting site						
10	Remain alive						
11	Rise						
12	Wetlands						
13	Block out						
14	Dust						
15	Destruction						
16	Eruption						
17	Explosion						
18	Tap						
19	Wipe out						
20	Run out of						

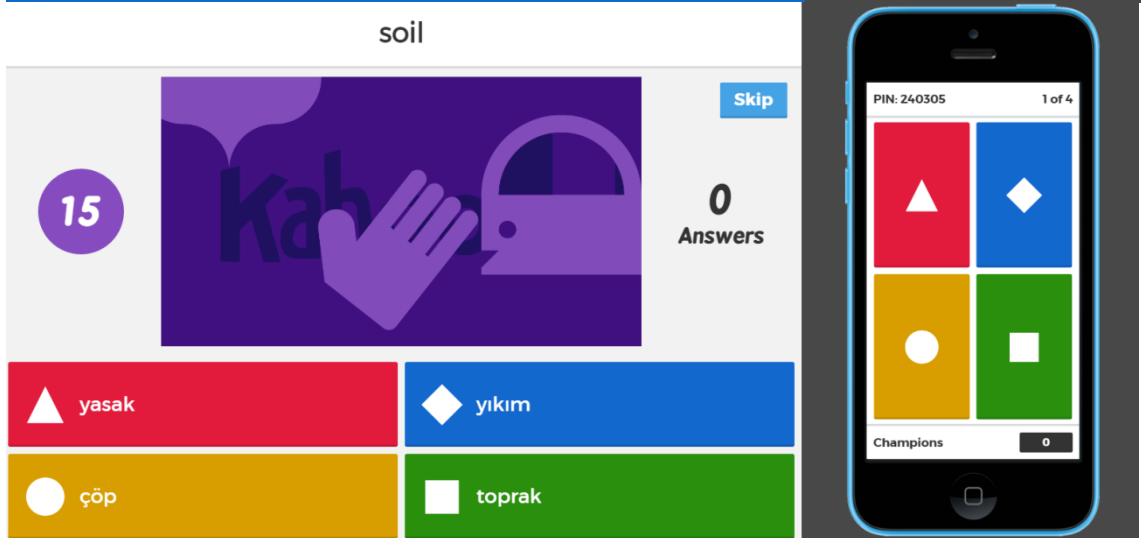
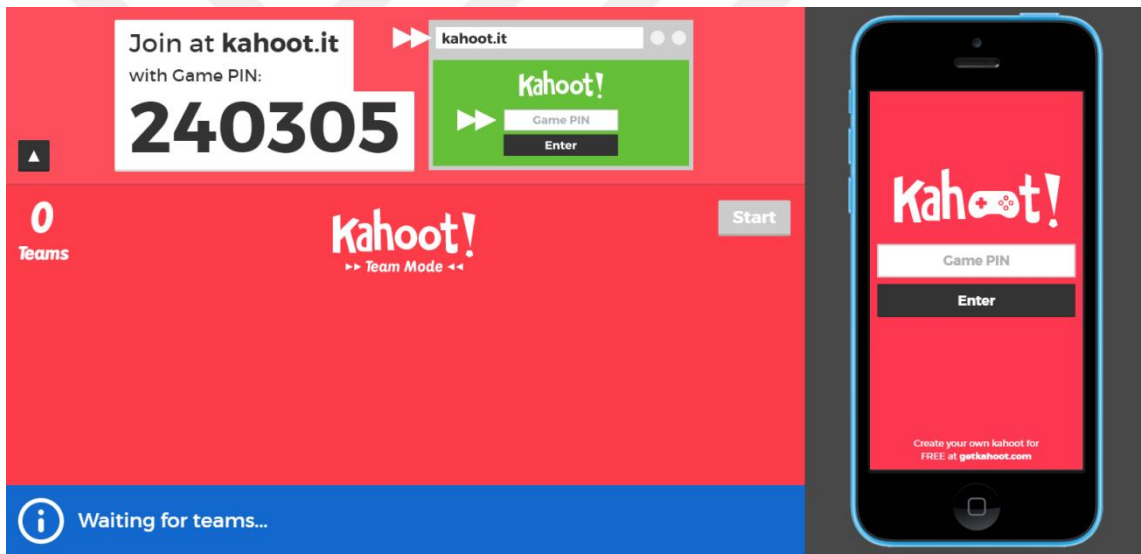
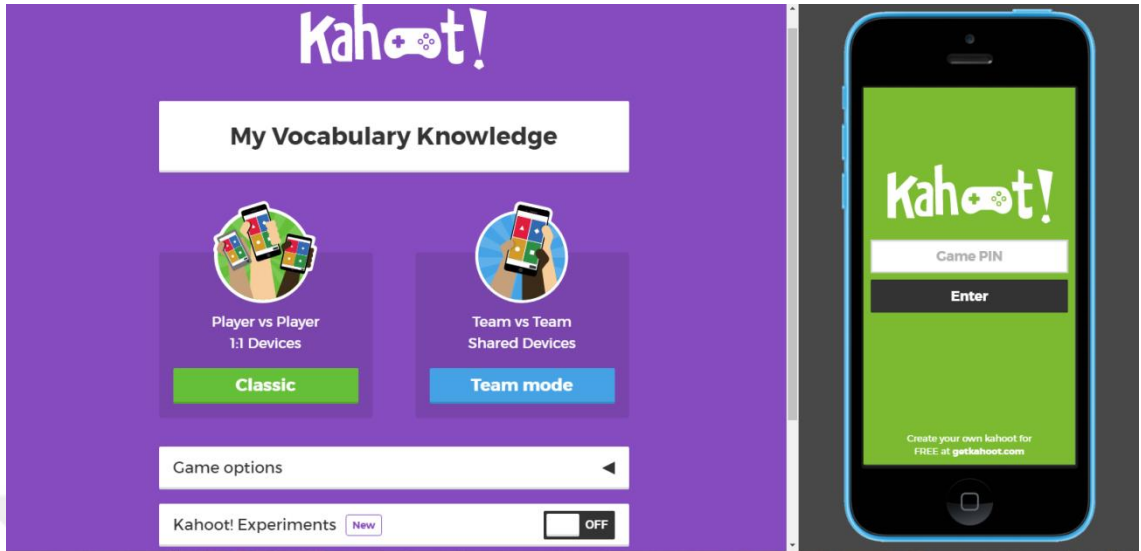
#### Appendix 4: Semi-structured Interview Questions

1. Have you got your own Tablets before? If “YES” What purposes do you generally use it for?
2. Do you use your Tablets provided by FATIH Project during the other lessons?
3. Do you think studying new words through the Apps on your Tablet PC was useful? (Can you give me an example, please?)
4. Do you want to go on using your Tablet PC in every English lesson in the future? If “YES”, why?
5. What do you think about the Quizlet and Kahoot Apps used during the study?
6. Have your performance changed on English vocabulary learning after integrating Tablets into English lessons? If “YES”, how?
7. What kind of problems have you faced with Tablets during the study? (Could you give me an example, please?) Do you have any suggestions for this problem?

## Appendix 5: Quizlet Screenshots



Appendix 6: Kahoot! Screenshots





## Appendix 7: Interview Transcripts

Student 1: Female Date: 23/05/2016 Time: 10:04

1. Daha önceden tabletin var mıydı? Eğer “Evet” ise genelde onu ne amaçla kullanıyordun?

Student 1:

“Hayır, yoktu. FATİH Projesi ile tablete sahip oldum.”

2. FATİH Projesi tarafından sunulan tabletleri diğer derslerde kullanıyor musun?

Student 1:

“Şu an aktif olarak herhangi bir dersde kullanmıyoruz ama öğretmenlerimiz evde EBA’ya bakabilirsiniz dedikleri için arada EBA’ya bakıp konularla ilgili videolar izliyorum.”

3. Tabletindeki uygulamalarla yeni kelimelere çalışma sence faydalı mıydı? (Bir örnek verebilir misin, lütfen?)

Student 1:

“Kesinlikle çok faydalıydı. Ben kendimce değişik yöntemlerle kelime çalışmaya çalışıyordum. Ama ne kadar çok uğraşsamda bu kadar çok aklımda kalmıyordu. Tabletler olaya görsellik ve ses katıyor. Her kelimenin resmini kendim çizip telafuzlarını internetten ya da sözlükten bulmaya çalışsam bir sürü zamanımı alır; bu yüzden büyük bir ihtimalle zaman içerisinde vazgeçerdim kelime çalışmaya. Tabletimin İngilizce derslerinde bu amaç için kullanılması kesinlikle çok faydalıydı.”

4. Gelecekte de her İngilizce dersinde Tabletini kullanmaya devam etmek ister misin?

Eğer “Evet” ise neden ?

Student 1:

“Tabiki isterim. Hem bize dağıtılan bu Tabletleri kullanabilmiş oluruz hem de gerçekten İngilizce kelimeleri öğrenmiş olabilirim. Geçen senelerde öğretmenlerimiz kelimeleri 5 kere defterimize yazdırttıyordu ve bu kelimelerden sözlü oluyorduk. Çok stresli ve yorucu bir çalışmaydı ama yine de yüzde yüz o

kelimeleri hatırlamam imkansızdı. Sadece ben değil sınıfdaki çoğu öğrenci böyleydi. Ama şimdi Tablette uygulamalarını yaptığımız her kelimeyi hemen hatırlıyorum ve kelimelere çalışırken zevkle çalışıyorum. İnşallah Tabletleri her sene ve her dersde kullanırız.”

5. Çalışma esnasında kullanılan Quizlet ve Kahoot uygulamalarıyla ilgili ne düşünüyorsun?

Student 1:

“İkisi de çok başarılı ve eğlenceli programlar. Hele Kahoot yaptığımız zamanlar dersler çok ama çok keyifli geçiyordu. Yarışmak çok hoşuma gidiyordu.”

6. Tabletleri İngilizce derslerine dahil ettikten sonra İngilizce kelime öğrenme performansında değişiklikler oldu mu? Eğer “Evet” ise nasıl bir değişikliklik oldu?

Student 1:

“Birinci değişiklik dersi sevmem derecesinde oldu. Ben kelime öğrenmede çok başarılı değildim. Kelimeler aklımda çok kalmadığı için İngilizce dersini de çok anlayamıyordum. Bu yüzden de derse çok katılım gösteremiyordum. Şimdi daha iyi anlıyorum ve derse daha çok katılıyorum. Hatta İngilizce derslerinin gelmesini sabırsızlıkla bekliyorum. Hem sözlü performans notum hem de yazılı notlarım yükseldi. Daha ne olsun.”

7. Çalışma esnasında Tabletler ile ilgili ne tür sorunlarla karşılaştın? (Bir örnek verebilir misin, lütfen?) Bu sorunla ilgili bir önerin var mı?

Student 1:

“Ekran boyutları biraz küçüktü. Ekranlar biraz daha büyük olabilirdi ama o zaman da Tablet Tablet olma özelliğini yitirirdi.Sanırım alışınca bu çok da ciddi bir sorun değil.”

Student 5: Male Date: 23/05/2016 Time: 10:20

1. Daha önceden tabletin var mıydı? Eğer “Evet” ise genelde onu ne amaçla kullanıyordun?

Student 5:

“Sadece bana özel değil ama evde ortak olarak kullandığımız bir tablet vardı. Genelde de oyun amacıyla kullanıyordum.”

2. FATİH Projesi tarafından sunulan tabletleri diğer derslerde kullanıyor musun?

Student 5:

“Hayır, kullanmıyoruz. Ama ben tablete indirdiğim kitapları okuma saatlerinde okuyorum. Aslında bunu yaygınlaştırsalar iyi olur. En azından okuma saatleri için çantamızda sürekli ağır kitaplar taşımak zorunda kalmayız.”

3. Tabletindeki uygulamalarla yeni kelimelere çalışma sence faydalı mıydı? (Örnek verebilir misin, lütfen?)

Student 5:

“Hem de çok. Tabletler ders çalışma işine renk kattılar. Uygulamadaki resimler, sesler o kelimeleri hatırlamamda bana süper yardımcı oluyorlar. Yaptığımız yarışmalar da oyun oynayarak öğrenmemi sağladılar. Bence tam benlik bir çalışmaydı.”

4. Gelecekte de her İngilizce dersinde Tabletini kullanmaya devam etmek ister misin? Eğer “Evet” ise neden ?

Student 5:

“Kesinlikle isterim. Sadece İngilizce değil her dersde kullanmayı çok isterim. Ben teknolojinin derslerde kullanılmasını tercih ederim. Dünya sürekli değişiyor ve bizim de buna ayak uydurmamız lazım. Teknoloji en zor dersleri bile kolay hale getiriyor. Tabletlerin İngilizce derslerinde kullanılması çok mantıklı, çünkü bu alanda bir sürü faydalı uygulama var. Hem de video olayı da çok fazla.”

5. Çalışma esnasında kullanılan Quizlet ve Kahoot uygulamalarıyla ilgili ne düşünüyorsun?

Student 5:

“Quizlet belki biraz daha geliştirilebilir. Daha fazla oyun eklenmeli. Kahoot biraz çocukca ama rekabeti arttırması hoşuma gidiyor.”

6. Tabletleri İngilizce derslerine dahil ettikten sonra İngilizce kelime öğrenme performansında değişiklikler oldu mu? Eğer “Evet” ise nasıl bir değişikliklik oldu?

Student 5:

“Kelime sınavlarında daha başarılı oldum. Görseller hatırlamamı hızlandırdığı için sınavlarda kelime bölümlerinde zaman kaybetmedim. Kelime bilgim geliştiği için İnternette oyunlara falan bakarken daha fazla şeyi anladım. İngilizce derslerinin gelmesini, yeni konuların işlenmesini dört gözle bekliyorum”

7. Çalışma esnasında Tabletler ile ilgili ne tür sorunlarla karşılaştın? (Bir örnek verebilir misin, lütfen?) Bu sorunla ilgili bir önerin var mı?

Student 5:

“Şarjlarının çok dayanmaması.Zayıf pille okula gelindiği günler tamamen işkence. Sınıfta priz sadece iki tane bu yüzden sıranın size gelmesi bazen tüm günü buluyor. Tabletlere yedek bataryalar da gönderseler harika olur.”

Student 11: Male Date: 24/05/2016 Time: 10:04

1. Daha önceden tabletin var mıydı? Eğer “Evet” ise genelde onu ne amaçla kullanıyordun?

Student 11:

“Yoktu.”

2. FATİH Projesi tarafından sunulan tabletleri diğer derslerde kullanıyor musun?

Student 11:

“Pek kullanmıyoruz.”

3. Tabletindeki uygulamalarla yeni kelimelere çalışma sence faydalı mıydı? (Örnek verebilir misin, lütfen?)

Student 11:

“Evet faydalıydı. Kelimeleri anlatan resimler çok eğlenceliydi. Eskiden yeni öğrendiğimiz kelimeleri tahtadan bakıp deftere geçirmemiz gerekiyordu. Bu hem zaman kaybıydı hem de çok sıkıcıydı. Şimdi tahtadaki halinin aynısı tabletlerimizde

de var. Ben evde yine kelime defterime yazıyorum ama ihtiyacıma göre ve canımın istediği saatte.”

4. Gelecekte de her İngilizce dersinde Tabletini kullanmaya devam etmek ister misin? Eğer “Evet” ise neden ?

Student 11:

“Evet isterim. Kelimeleri daha çok hatırlıyorum. Dersler daha eğlenceli. Ağır sözlükleri taşımaktan daha iyi..”

5. Çalışma esnasında kullanılan Quizlet ve Kahoot uygulamalarıyla ilgili ne düşünüyorsun?

Student 11:

“İkisi de çok başarılı ve eğlenceli programlar. Quizletteki oyunlar çok güzel. Kahootu da seviyorum ama sınıfta çok gürültü oluyor. Bazen dersden çıkınca başımın ağrıdığını hissediyorum.”

6. Tabletleri İngilizce derslerine dahil ettikten sonra İngilizce kelime öğrenme performansında değişiklikler oldu mu? Eğer “Evet” ise nasıl bir değişikliklik oldu?

Student 11:

“Evet kelimeleri şimdi daha iyi hatırlıyorum. Cümle kurmada sıkıntılar yaşıyordum. Bu konuda bana çok faydası oldu.”

7. Çalışma esnasında Tabletler ile ilgili ne tür sorunlarla karşılaştın? (Bir örnek verebilir misin, lütfen?) Bu sorunla ilgili bir önerin var mı?

Student 11:

“Ben ders esnasında pek bi sorunla karşılaşmadım. Ama genel olarak belki bataryalarının gücü artırılabilir.”

Student 17: Female Date: 23/05/2016 Time 11:46

1. Daha önceden tabletin var mıydı? Eğer “Evet” ise genelde onu ne amaçla kullanıyordun?

Student 17:

“Evet vardı. Yaklaşık 4 yıldır kullandığım bir tabletim vardı. Genelde oyun oynuyordum. Sosyal medyaya bakıyordum. Müzik dinliyordum. Fotoğraflar çekiyordum.”

2. FATİH Projesi tarafından sunulan Tabletleri diğer derslerde kullanıyor musun?

Student 17:

“Şu an sistem tam oturmadığı için Tabletleri okula getirmemiz gerekmiyor.. Hatta bazen derslerde oyun oynanıyormuş diye okul idaresi tablet getirmemizi yasaklıyor.”

3. Tabletindeki uygulamalarla yeni kelimelere çalışma sence faydalı mıydı? (Örnek verebilir misin, lütfen?)

Student 17:

“Kesinlikle çok faydalıydı.Resimleri çok akılda kalıcıydı.”

4. Gelecekte de her İngilizce dersinde Tabletini kullanmaya devam etmek ister misin? Eğer “Evet” ise neden ?

Student 17:

“Tabiki isterim. Hem bize dağıtılan bu Tabletleri kullanma fırsatımız olur hem de kelime bilgimiz daha çok artar. Kelimeleri bir kaç kere defterimize yazmak, onları ezberlemek, kelime sözlüsü olmak çok klasik. Daha modern, daha eğlenceli yöntemlerle öğrenmek bence daha faydalı. Özellikle bu çalışmayı yürüttüğünüz için size çok teşekkür ederim. Sadece kelime öğrenirken değilde tüm kitaptaki aktiviteler için Tabletleri kullansak iyi olur. Çantalarımız da hafifler.”

5. Çalışma esnasında kullanılan Quizlet ve Kahoot uygulamalarıyla ilgili ne düşünüyorsun?

Student 17:

“İki uygulamayı da çok beğendim. Hem eğlenceli hem de öğretici uygulamalar. Uygulamadaki oyunlar ve yarışmalar İngilizce derslerini çok eğlenceli hale getirdi.”

6. Tabletleri İngilizce derslerine dahil ettikten sonra İngilizce kelime öğrenme performansında değişiklikler oldu mu? Eğer “Evet” ise nasıl bir değişikliklik oldu?

Student 17:

“Evet oldu. Kelimeleri şimdi daha iyi hatırlıyorum. Derslere katılımım arttı. Hem öğretmenim derslere katılımımdan memnun hem de ben İngilizce derslerindeki gelişimimden memnunum.”

7. Çalışma esnasında Tabletler ile ilgili ne tür sorunlarla karşılaştın? (Bir örnek verebilir misin, lütfen?) Bu sorunla ilgili bir önerin var mı?

Student 17:

“En önemli sorun internet bağlantısı. Sürekli bağlantı hatası vermesi biraz çalışmalarını yavaşlattı. Okul bu konuda önlem almalı. FATİH Projesini yürütenlerin okullardaki internet bağlantılarını sürekli kontrol etmeleri lazım.”

Student 23: Female Date: 25/05/2016 Time: 09:55

1. Daha önceden tabletin var mıydı? Eğer “Evet” ise genelde onu ne amaçla kullanıyordun?

Student 23:

“Hayır.”

2. FATİH Projesi tarafından sunulan tabletleri diğer derslerde kullanıyor musun?

Student 23:

“Hayır.”

3. Tabletindeki uygulamalarla yeni kelimelere çalışma sence faydalı mıydı? (Bir örnek verebilir misin, lütfen?)

Student 23:

“Bence çok faydalıydı. Kelimelerin anlamını vermek için kullanılan görseller çok akılda kalıcıydı. Aynı zamanda kelimelerin nasıl telafuz edildiğinde verilmesi onları daha doğru düzgün öğrenmemizi sağladı. Uygulamalar bizi öğrendiğimiz

kelimeleri cümle içinde kullanmaya teşvik ediyordu. O yüzden şimdi İngilizce cümle kurarken daha rahatım.”

4. Gelecekte de her İngilizce dersinde Tabletini kullanmaya devam etmek ister misin? Eğer “Evet” ise neden ?

Student 23:

“Evet neden olmasın, bence çok iyi olur. Ben Tablet olayını çok sevdim. Daha önce akıllı telefonum ya da tabletim olmadığı için bu tarz uygulamaları bilmiyordum. Bu aletlerin ders amaçlı kullanılabileceğini de pek düşünmüyordum. Ama yanıltılmışım. Derslere keyif katıyorlar. Öğrenirken eğlenmemizi de sağlıyorlar. İngilizceyi de İngilizce derslerindeki şimdi daha çok seviyorum.”

5. Çalışma esnasında kullanılan Quizlet ve Kahoot uygulamalarıyla ilgili ne düşünüyorsun?

Student 23:

“Ben bu uygulamaların isimlerini daha önce hiç duymamıştım. İlk kez İngilizce dersinde öğretmenimizin yapmış olduğu uygulama sırasında öğrendim. İnsanların bizler daha iyi öğrenelim diye yapmış oldukları bu uygulamalara ve çalışmalara açıkcası hayran kaldım. Quizlet uygulamasında kelimeleri resimleri ve talafuzlarıyla öğrenip çalıştıktan sonra Kahoot uygulaması ile bu kelimelerden yarışma yapıyorduk. Gerçekten ikisinde çok keyifliydi.”

6. Tabletleri İngilizce derslerine dahil ettikten sonra İngilizce kelime öğrenme performansında değişiklikler oldu mu? Eğer “Evet” ise nasıl bir değişikliklik oldu?

Student 23:

“Aslında notlarım hemen hemen aynı ama şimdi derslerden daha keyif alıyorum. Ben eskiden de kelimelere çok çalışırdım ama aklımda kalmaları daha zordu. En güzel yanı çalıştığım kelimelerin nerdeyse yüzde doksanbeşini hemen hatırlıyorum.”



7. Çalışma esnasında Tabletler ile ilgili ne tür sorunlarla karşılaştın? (Bir örnek verebilir misin, lütfen?) Bu sorunla ilgili bir önerin var mı?

Student 23:

“Sanırım karşılaştığım en önemli sorun ailem. Çünkü tablette ders çalıştığım ailemi inandıramıyordum. Neyse ki öğretmenim ailem ile yaptığı telefon görüşmesinden sonra bu sorunum azaldı. Diğer bir sorunda okuldaki internet bağlantı sorunuydu. Bu sorun ile ilgili önerim proje yetkililerinin internet bağlantılarını güçlendirmesi olabilir.”

Student 55: Male Date: 28/05/2016 Time: 12:50

1. Daha önceden tabletin var mıydı? Eğer “Evet” ise genelde onu ne amaçla kullanıyordun?

Student 55:

“Evet vardı. Beş yıl önce karne hediyesi olarak alınmıştı. Genelde oyun amaçlı kullanıyorum. Wattpad uygulamasından kitap okuyorum.Yabancı dizileri takip ediyorum.”

2. FATİH Projesi tarafından sunulan Tabletleri diğer derslerde de kullanıyor musun?

Student 55:

“Maalasef kullanmıyoruz. Arada okuma saatlerinde o anki dersde olan öğretmenlerimizin insiyatiflerine bağlı olarak okuma amaçlı kullanıyorum.”

3. Tabletindeki uygulamalarla yeni kelimelere çalışma sence faydalı mıydı? (Bir örnek verebilir misin, lütfen?)

Student 55:

“Evet faydalıydı. Bende teknolojik oyunların ve her çeşit uygulamanın yabancı dil öğrenmedeki yeri apayrı .Çocukluğumdan beri tabletimdeki oyunlar sayesinde bir sürü kelime öğrendim. Öğretmenimiz böyle bir çalışma yürüteceğini söylediğinde kendi kendime “İşte bu ya.” dedim. Çünkü ben bilgisayar, tablet, telefon oyunlarıyla uğraşmayı da onlardan bişeyler öğrenmeği de çok seviyorum.”

4. Gelecekte de her İngilizce dersinde Tabletini kullanmaya devam etmek ister misin? Eğer “Evet” ise neden ?

Student 55:

“Sonuna kadar evet. Daha güncel bilgileri öğrenme fırsatı yarattıkları için. İngilizceyi daha çok sevdirdikleri için.”

5. Çalışma esnasında kullanılan Quizlet ve Kahoot uygulamalarıyla ilgili ne düşünüyorsun?

Student 55:

“Görsel zekaya hitap eden Quizletteki arayüzler biraz daha arttırılabilirdi. Bazı bölümlerinde geliştirme yapılabilir. Kahoot gerçekten iyidi. Dersleri daha eğlenceli hale getirdi.”

6. Tabletleri İngilizce derslerine dahil ettikten sonra İngilizce kelime öğrenme performansında değişiklikler oldu mu? Eğer “Evet” ise nasıl bir değişikliklik oldu?

Student 55:

“Ben derslere daha istekli geliyorum. Normalde öğretmenim benim ödev ve ders araç gereçlerini getirmemem konusunda hep şikayetçiydi. Ama şimdi Tablet uygulaması yapacağımız dediği zamanlar hem hazırlıklı geliyorum hem de en önde oturuyorum. Öğretmenim bu değişimimden dolayı benimle gurur duymaya başladı. Bu durum benim de çok hoşuma gidiyor. Hem yazılı hem de sözlü performanslarımda büyük bir artış var. İşin aslı bunun için çok da çaba sarf etmiyorum.”

7. Çalışma esnasında Tabletler ile ilgili ne tür sorunlarla karşılaştın? (Bir örnek verebilir misin, lütfen?) Bu sorunla ilgili bir önerin var mı?

Student 55:

“Okuldaki internet ağı güçlendirilmeli.. Sınıfın her yerinden çekim gücü olmalı.”

## Appendix 8: Sample Student VKS

21

Vks pre

Isim: Esra Mübarek Bahar Sınıf: 10-B

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamlısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamlısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect		X					2
2	Liquid	X						1
3	Expanding	X						1
4	Extinction	X						1
5	Habitat		X					2
6	Heating up	X						1
7	Lay eggs	X						1
8	Migrate	X						1
9	Nesting site	X						1
10	Remain alive.	X						1
11	Rise				X	X	Rise and Shine!	5
12	Wetlands	X						1
13	Block out	X						1
14	Dust			X			Dust = GbP	3
15	Destruction	X						1
16	Eruption	X						1
17	Explosion		X					2
18	Tap			X			Tap = tıkla	3
19	Wipe out		X					2
20	Run out of	X						1

(17)

Vka pre

İsim: Kardelen KAYMAK Sınıf: 101B

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect		X					2
2	Liquid			X			SIVI	3
3	Expanding	X						1
4	Extinction		X					2
5	Habitat			X			alışkanlık	2
6	Heating up	X						1
7	Lay eggs	X						1
8	Migrate		X					2
9	Nesting site	X						1
10	Remain alive	X						1
11	Rise		X					2
12	Wetlands	X						1
13	Block out	X						1
14	Dust			X			toz almak	3
15	Destruction			X			harışt	2
16	Eruption	X						1
17	Explosion			X			derney	2
18	Tap		X					2
19	Wipe out		X					2
20	Run out of			X			kasmak	2

16

Vks pre

İsim: Ceylan TAHKAMAN Sınıf: 10.1B

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect	X						1
2	Liquid				X		Sıvı	4
3	Expanding		X					2
4	Extinction	X						1
5	Habitat				X		Doğal Ortam	4
6	Heating up	X						1
7	Lay eggs	X						1
8	Migrate	X						1
9	Nesting site	X						1
10	Remain alive.	X						1
11	Rise				X		Işık	2
12	Wetlands	X						1
13	Block out	X						1
14	Dust				X		Toz	4
15	Destruction		X					2
16	Eruption	X						1
17	Explosion		X					2
18	Tap	X						1
19	Wipe out	X						1
20	Run out of			X			Kaşmak	2

6

Vks pre

İsim: Gülşüm Şenmez Sınıf: 10B

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamlısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamlısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect			✓			Renkle alakalı	1
2	Liquid			✓			Sıvı	3
3	Expanding	✓						1
4	Extinction	✓						1
5	Habitat			✓			Doğa ile alakalı	2
6	Heating up	✓						1
7	Lay eggs	✓						1
8	Migrate	✓						1
9	Nesting site	✓						1
10	Remain alive.		✓				Uzunlu ile alakalı	2
11	Rise	✓						1
12	Wetlands	✓						1
13	Block out	✓						1
14	Dust		✓					2
15	Destruction		✓					2
16	Eruption	✓						1
17	Explosion		✓					2
18	Tap		✓					2
19	Wipe out		✓					2
20	Run out of		✓					2

②

Vks pre

İsim: Seyma TaştanSınıf: 10.-B

1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.

2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.

3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor. (eşanlamlısı ya da Türkçe karşılığı).

4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamlısı ya da Türkçe karşılığı).

5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect		X					2
2	Liquid				X		Sıvılar	4
3	Expanding	X						1
4	Extinction	X						1
5	Habitat			X			Yaşam alanı	3
6	Heating up	X						1
7	Lay eggs		X					2
8	Migrate	X						1
9	Nesting site	X						1
10	Remain alive	X						1
11	Rise	X						1
12	Wetlands	X						1
13	Block out	X						1
14	Dust		X					2
15	Destruction	X						1
16	Eruption	X						1
17	Explosion			X			Patlama	3
18	Tap		X					2
19	Wipe out		X					2
20	Run out of			X			Kaçmak	2

1/ks pre

İsim: Onurhan ÇetinSınıf: 10-C 1232

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect		X				
2	Liquid	X	X				
3	Expanding	X	X				
4	Extinction	X	X				
5	Habitat				X		Yaşam alanı
6	Heating up	X	X				
7	Lay eggs		X				
8	Migrate		X				
9	Nesting site	X	X				
10	Remain alive	X	X				
11	Rise				X		yükselmek
12	Wetlands		X				
13	Block out		X				
14	Dust	X	X				
15	Destruction		X				
16	Eruption		X				
17	Explosion		X				
18	Tap	X	X				
19	Wipe out	X	X				
20	Run out of		X				



Vks pre

İsim: ERK ÖNGÜNSınıf: 10-C

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect	✓					
2	Liquid	✓					
3	Expanding	✓					
4	Extinction		✓				
5	Habitat		✓				
6	Heating up	✓					
7	Lay eggs	✓					
8	Migrate	✓					
9	Nesting site	✓					
10	Remain alive	✓					
11	Rise		✓				
12	Wetlands	✓					
13	Block out	✓					
14	Dust				✓		Esnasında gibi.
15	Destruction	✓					
16	Eruption	✓					
17	Explosion	✓					
18	Tap	✓					
19	Wipe out		✓				
20	Run out of		✓				

Vks pre

İsim: SedaSınıf: 10-C

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect	X					
2	Liquid	X					
3	Expanding	X					
4	Extinction	X					
5	Habitat				X		Yaşam alanı Elephants lives habitat land
6	Heating up	X					
7	Lay eggs			X			Yumurtlamak
8	Migrate		X				
9	Nesting site	X					
10	Remain alive	X					
11	Rise	X					
12	Wetlands	X					
13	Block out	X					
14	Dust			X			Toz olmak
15	Destruction	X					
16	Eruption	X					
17	Explosion	X					
18	Tap	X					
19	Wipe out	X					
20	Run out of	X					

Vks pre

İsim: Sahinim AYDOĞDUSınıf: 10-C

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect		X				
2	Liquid			X			Suy.
3	Expanding	X					
4	Extinction		X				
5	Habitat				X		Yaşam.
6	Heating up		X				
7	Lay eggs	X					
8	Migrate		X				
9	Nesting site	X					
10	Remain alive	X					
11	Rise			X			
12	Wetlands				X		Bataklık.
13	Block out		X				
14	Dust	X					
15	Destruction		X				
16	Eruption	X					
17	Explosion		X				
18	Tap	X					
19	Wipe out		X				
20	Run out of		X				

Vks pre

İsim: Melimef AliSınıf: 10.1C

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect	✓					
2	Liquid		✓				
3	Expanding		✓				
4	Extinction		✓				
5	Habitat		✓				
6	Heating up		✓				
7	Lay eggs	✓					
8	Migrate	✓					
9	Nesting site	✓					
10	Remain alive		✓				
11	Rise		✓				
12	Wetlands		✓				
13	Block out	✓					
14	Dust		✓				
15	Destruction		✓				
16	Eruption		✓				
17	Explosion		✓				
18	Tap		✓				
19	Wipe out		✓				
20	Run out of					✓	I run out of

(21)

Vks exp

İsim: Esra Hübnur Bahr Sınıf: 10-B

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect			X	X		etkilenmek	4
2	Liquid			X	X		Sıvı	4
3	Expanding			X	X		Genişlemek	4
4	Extinction			X	X		Yok olmak	4
5	Habitat			X	X		Tasarruflama	4
6	Heating up			X	X		Isınmak	4
7	Lay eggs			X	X		Yumurtlamak	4
8	Migrate			X	X		Göç etmek	4
9	Nesting site			X	X		Yuvama alanı	4
10	Remain alive			X	X		Hayatta kalmak	4
11	Rise				X	X	Rise and shine!	5
12	Wetlands			X	X		Sulak alan	4
13	Block out			X	X		Block etmek	4
14	Dust			X	X		Toz.	4
15	Destruction			X	X		Yıkım	4
16	Eruption			X	X		Patlamak	4
17	Explosion			X	X		Patlama	4
18	Tap			X	X		Musluk	4
19	Wipe out			X	X		Yok etmek	4
20	Run out of			X	X		Tükennmek	4

(17)

Vcs exp

İsim: Kendin KAYNAK Sınıf: 101R

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve hence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect					X	I will affect her → etkilemek	5
2	Liquid					X	I drank very liquid → sıvı	4
3	Expanding					X	The ball is expanding → genişlemek	5
4	Extinction				X		yok olma	4
5	Habitat					X	I went to habitat → doğal ortam	4
6	Heating up					X	Our planet will heating up → ısınma	5
7	Lay eggs					X	The bird lay eggs → yumurtlamak	5
8	Migrate					X	The bird migrate to south east → göç etmek	5
9	Nesting site					X	We saw egg in nesting site → yuva alanı	5
10	Remain alive				X		Hayatta kalma	4
11	Rise					X	I am rising → yükselmek	5
12	Wetlands					X	I saw very wetlands → sulak alan	4
13	Block out					X	I block out my phone → bloke etmek	5
14	Dust					X	I saw dust her bone → toz	5
15	Destruction				X		Yıkım	4
16	Eruption				X		püskürme	4
17	Explosion				X		patlama	4
18	Tap					X	I turn off tap → musluk	5
19	Wipe out					X	I wipe out the word → silmek	5
20	Run out of					X	My energy runs out off	5

(16)

Vks exp

İsim: CeylanSınıf: 10-B

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect				X	X	Sadness is affect me
2	Liquid				X	X	Water is a liquid
3	Expanding				X		Genişleme
4	Extinction			X			Yok olmak
5	Habitat				X		Yaşam alanı
6	Heating up				X		Isınma
7	Lay eggs				X	X	Chickens are lay eggs
8	Migrate				X	X	Birds are migrate to hot
9	Nesting site				X		Yuvanın alanı
10	Remain alive				X		Sarı kalmak
11	Rise				X	X	When ice melt, sea level will rise
12	Wetlands				X		Sulak alan
13	Block out				X		gölgelemek
14	Dust				X		Toz
15	Destruction			X			Yok olmak
16	Eruption				X		Püskürme
17	Explosion				X		Patlama
18	Tap				X		Musluk
19	Wipe out				X		Yok etmek
20	Run out of				X		Tükenecek

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Ves exp

İsim: Gülşüm Şimşek Sınıf: 10B

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamlısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamlısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect				✓	✓	etkilemek   I Affect you	5
2	Liquid				✓	✓	Sui   I bought Liquid soap	5
3	Expanding				✓	✓	genişleme   world is expanding	5
4	Extinction				✓	✓	Jok olmak   Dinosaurs was extinction	5
5	Habitat				✓	✓	Jasem alan   fish's habitat is water	5
6	Heating up				✓	✓	Isınma   world is Heating up	5
7	Lay eggs				✓		Jumartlama	4
8	Migrate				✓		G.Ş.G	4
9	Nesting site				✓		Juvalama alanı	4
10	Remain alive				✓		Hayatta kalma	4
11	Rise				✓	✓	Jükselme   My net is Rise	4
12	Wetlands				✓		Sulak alan	4
13	Block out				✓	✓	bloke etmek   I did My phone was blackout	5
14	Dust				✓		Toz	4
15	Destruction				✓		Yıkım	4
16	Eruption				✓		Puş çıkma	4
17	Explosion				✓		Patlama	4
18	Tap				✓		Musluk	4
19	Wipe out				✓		Yok etmek	4
20	Run out of				✓		tük etmek	4



②

UKS exp

İsim: Şeyma BaranSınıf: 10-B

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect				X		Etkilemek	4
2	Liquid				X	X	Water is liquid	5
3	Expanding				X		Genişlemek	4
4	Extinction				X		Yok olmak	4
5	Habitat				X		Yaşam alanı	4
6	Heating up				X	X	World will heat up.	5
7	Lay eggs				X		Yumurtlamak	4
8	Migrate				X		Göç etmek	4
9	Nesting site				X		Yuva alma alanı	4
10	Remain alive				X		Sop kalmak	4
11	Rise				X		Water is rising	5
12	Wetlands				X	X	Some birds live in wetlands	5
13	Block out				X		Blot etmek	4
14	Dust				X	X	There is dust on the table	5
15	Destruction				X		Yıkılmak	4
16	Eruption				X		Fışkırtmak	4
17	Explosion				X		Patlama	4
18	Tap				X		Musluk	4
19	Wipe out				X		He is <u>back</u> wiping out	4
20	Run out of				X	X	Water will run out of every 5 years	5

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Vks post

İsim: Önder ÇelenSınıf: 10-C 1232

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect		X				
2	Liquid			X			Sıvı
3	Expanding						
4	Extinction			X			Nesli Tükemek
5	Habitat				X		Yaşam alanı
6	Heating up						
7	Lay eggs	X					
8	Migrate		X				
9	Nesting site		X				
10	Remain alive	X					
11	Rise				X		yükselmek
12	Wetlands		X				
13	Block out		X				
14	Dust				X		Toz
15	Destruction		X				
16	Eruption		X				
17	Explosion	X					
18	Tap	X					
19	Wipe out		X				
20	Run out of		X				

VKS post

İsim: Elif ÖNGÜNSınıf: 10-C

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect			✓			Afet demek
2	Liquid			✓			Sıvı
3	Expanding		✓				
4	Extinction		✓				
5	Habitat			✓			Habitat
6	Heating up		✓				
7	Lay eggs		✓				
8	Migrate		✓				
9	Nesting site		✓				
10	Remain alive		✓				
11	Rise			✓			Yükselmek
12	Wetlands			✓			Islak ota
13	Block out			✓			Bloke
14	Dust		✓				
15	Destruction		✓				
16	Eruption		✓				
17	Explosion				✓		Karza
18	Tap		✓				
19	Wipe out		✓				
20	Run out of				✓		Dışarıya taşmak

Uks post

İsim: SedatSınıf: 10-C

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect	X					
2	Liquid				X		Sıvı
3	Expanding		X				
4	Extinction		/				
5	Habitat				X		Yaşam alanı
6	Heating up		X				
7	Lay eggs		X				
8	Migrate				X		Erin Göç etmek
9	Nesting site						
10	Remain alive	X	X				
11	Rise					X	Yükselmek Temperature rise
12	Wetlands		X				
13	Block out		X				
14	Dust				X		Toz
15	Destruction		X				
16	Eruption				X		Patlamak / Volkanos eruption
17	Explosion				X		Yıkım - Hasar
18	Tap	X					
19	Wipe out	X					
20	Run out of		X				

VKS post

İsim: Saharın 740201Sınıf: 10-C 265

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect		X				
2	Liquid			X			Sıvı
3	Expanding		X				
4	Extinction		X				
5	Habitat				X		Yaşam alanı
6	Heating up	X					
7	Lay eggs		X				
8	Migrate			X			göçmek
9	Nesting site		X				
10	Remain alive		X				
11	Rise			X			40 derece. temperature (6 rise.
12	Wetlands			X			Bataklık
13	Block out						
14	Dust				X		Toz
15	Destruction		X				
16	Eruption		X				
17	Explosion <sup>yıkım</sup>				X		Yıkım
18	Tap						
19	Wipe out				X		silme
20	Run out of		X				

Vks post

İsim: Mehmet Ali

Sınıf: 10/C

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect		✓				
2	Liquid		✓				
3	Expanding		✓				
4	Extinction				✓		Yok olmak
5	Habitat				✓		Doğa yaşam çevre
6	Heating up		✓				
7	Lay eggs		✓				
8	Migrate		✓				
9	Nesting site		✓				
10	Remain alive		✓				
11	Rise				✓		gükselmek
12	Wetlands				✓		Islak
13	Block out		✓				
14	Dust				✓		toz
15	Destruction		✓				
16	Eruption		✓				
17	Explosion		✓				
18	Tap		✓				
19	Wipe out		✓				
20	Run out of				✓		Dişari koşmak

follow up test  
EXP

21

İsim: Esra Behar Sınıf: 10-B

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamlısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamlısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect				X		Etkilemek
2	Liquid				X		Sıvı
3	Expanding				X		Genişlemek
4	Extinction			X	X		Yok olmak
5	Habitat				X		Yaşam alanı
6	Heating up				X		Isınma
7	Lay eggs				X		Mumutlana
8	Migrate				X		Özdeşmek
9	Nesting site				X		Yuvolana alanı
10	Remain alive				X		Sağ kalmak
11	Rise				X		Yükselmek
12	Wetlands				X		Suluk alan
13	Block out				X		Block etmek
14	Dust				X		Toz
15	Destruction				X		Yıkım
16	Eruption			X	X		Püskürme
17	Explosion				X		Patlama
18	Tap				X		Musluk
19	Wipe out				X		Yok etmek
20	Run out of				X		İkermek

follow up test  
Exp

17

İsim: Kardelen AYNA Sınıf: 10/B

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.
- 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.
- 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor. (eşanlamlısı ya da Türkçe karşılığı).
- 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamlısı ya da Türkçe karşılığı).
- 5- Bu kelimeyi bir cümle çerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect					X	etkilenek I affect from your dream	4
2	Liquid					X	Sıvı I drink liquid	5
3	Expanding				X		genişleme	4
4	Extinction				X	X	yok olma My planet extinction	4
5	Habitat				X	X	daşal ortam It live in its habitat	5
6	Heating up				X	X	ısıtma Our worth heating up	4
7	Lay eggs				X	X	yumurtlamak The hen lay eggs	5
8	Migrate				X	X	göç etmek It migrates	5
9	Nesting site				X	X	yuvalama alanı I went to nesting	4.5
10	Remain alive				X	X	hayatta kalmak	4
11	Rise				X	X	yükselmek I am still rising	5
12	Wetlands				X	X	su bataklığı It live in wetlands	4
13	Block out				X	X	bloke etmek I block out light	4
14	Dust				X	X	toz I clean the dust	5
15	Destruction				X	X	yıkım I saw a destruct	5
16	Eruption				X	X	patlama The supervolcanoes eruption	5
17	Explosion				X	X	patlama	4
18	Tap				X	X	musluk I open tap	5
19	Wipe out				X	X	yok etmek I wipe out light	4
20	Run out of				X	X	bitirmek My energy run out	5



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follow up test -  
expİsim: Beylan KAHRAMAN Sınıf: 10-B

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamlısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamlısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle çerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect				X		Etkilemek
2	Liquid				X		Sıvı
3	Expanding				X		Genişleme
4	Extinction	X					
5	Habitat				X		Yaşam alanı
6	Heating up				X		Isınmak
7	Lay eggs				X		Yumurtlamak
8	Migrate				X		Göç etmek
9	Nesting site				X		Yuvalama alanı
10	Remain alive				X		Hayatta kalmak
11	Rise				X		Yükselmek
12	Wetlands				X		Sulak alan
13	Block out				X		Blocke etmek
14	Dust				X		Toz
15	Destruction				X		Yıkım
16	Eruption				X		Püskürme
17	Explosion				X		Patlama
18	Tap				X		Musluk
19	Wipe out				X		Yıkma
20	Run out of				X		Tükenmek

follow up test  
exp

İsim: Gülşüm Sönmez Sınıf: 10.B

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamlısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamlısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle
1	Affect				✓		etkilenmek
2	Liquid				✓		Sıvı
3	Expanding				✓		genişleme
4	Extinction				✓		Jok olma
5	Habitat				✓		Yaşam alanı
6	Heating up				✓		Isınma
7	Lay eggs				✓		Yumurtlama
8	Migrate				✓		GGG
9	Nesting site				✓		Yuvalama alanı
10	Remain alive				✓		Sağ kalmak
11	Rise				✓		Yükselme
12	Wetlands				✓		Sulak alan
13	Block out				✓		Blocke olmak
14	Dust				✓		Toz
15	Destruction				✓		Yıkım
16	Eruption				✓		Püskürme
17	Explosion				✓		Patlama
18	Tap				✓		Musluk
19	Wipe out				✓		Jok etmek
20	Run out of				✓		Eklemek

follow up Test  
exp

(3)

İsim: Seyma Tostan

Sınıf: 10-B

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.
- 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.
- 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).
- 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).
- 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect				X		Etkilenmek	4
2	Liquid				X	X	Water is liquid	5
3	Expanding				X		Genişlemek	4
4	Extinction				X	X	Yok etmek	4
5	Habitat				X		Yaşam alanı	4
6	Heating up				X		Isınmak	4
7	Lay eggs				X	X	Chicken laying eggs	4
8	Migrate				X		Gitmek	4
9	Nesting site				X		Yuva alma alanı	4
10	Remain alive.				X		Sag kalmak	4
11	Rise				X		Yükselmek	4
12	Wetlands				X		Suluk alan	4
13	Block out				X		Block etmek	4
14	Dust				X		Toz	4
15	Destruction				X		Yıkım	4
16	Eruption				X		Püskürtmek	4
17	Explosion				X		Patlama	4
18	Tap				X	X	Turn on the tap	5
19	Wipe out				X		Yok etmek	4
20	Run out of				X		Tükenecek	4

122

follow up Test

İsim: Onurhan ÇelikkSınıf: 10-C 1232

- 1- Bu kelimeyi daha önce den gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önce den gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önce den gördüm ve hence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamlısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamlısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect	✓						1
2	Liquid				X		Sıvı	4
3	Expanding	✓						1
4	Extinction	✓						1
5	Habitat				X		yaşam alanı	4
6	Heating up	✓						1
7	Lay eggs	✓						1
8	Migrate	✓						1
9	Nesting site	✓						1
10	Remain alive	✓						1
11	Rise			X			yükselmek	3
12	Wetlands	✓						1
13	Block out	✓						1
14	Dust				X		Toz	4
15	Destruction	✓						1
16	Eruption	✓						1
17	Explosion			X			patlama	3
18	Tap	✓						1
19	Wipe out	✓						1
20	Run out of	✓						1

follow up test

114

İsim: ERG ÖNGÜN

Sınıf: 10-C

- 1- Bu kelimeyi daha önce den gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önce den gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önce den gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect			✓			Olay	2
2	Liquid				✓		Sıvı	4
3	Expanding		✓					2
4	Extinction		✓					2
5	Habitat			✓			Olay	2
6	Heating up			✓			Yaşam	2
7	Lay eggs		✓					2
8	Migrate		✓					2
9	Nesting site		✓					2
10	Remain alive		✓					2
11	Rise		✓					2
12	Wetlands		✓					2
13	Block out		✓					2
14	Dust			✓			Esasında	2
15	Destruction		✓					2
16	Eruption		✓					2
17	Explosion		✓					2
18	Tap		✓					2
19	Wipe out		✓					2
20	Run out of		✓					2

follow up test

120

İsim: SedetSınıf: 10-C

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eşanlamısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect	X						1
2	Liquid			X			Sıvı	3
3	Expanding		X					2
4	Extinction			X			Patlama	2
5	Habitat			X			Yaşam alanı	3
6	Heating up	X						1
7	Lay eggs	X						1
8	Migrate			X			Göç etmek	3
9	Nesting site	X						1
10	Remain alive	X						1
11	Rise		X					2
12	Wetlands			X			Botanlık	3
13	Block out			X			engel	3
14	Dust			X			Toz	3
15	Destruction			X			Tarip <del>am</del> yıkım	3
16	Eruption			X			Püskürtmek	3
17	Explosion			X			Patlama	3
18	Tap		X					2
19	Wipe out	X						1
20	Run out of		X					2

123

follow up test

İsim: SaharSınıf: 1006(11)

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor. (eşanlamlısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eşanlamlısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle içerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect		X					2
2	Liquid			X			Sıvı.	3
3	Expanding			X				2
4	Extinction			X			Patlıca.	2
5	Habitat				X		Yaşam alanı.	4
6	Heating up			X				2
7	Lay eggs			X				2
8	Migrate				X		göt.	4
9	Nesting site			X				2
10	Remain alive			X				2
11	Rise			X				2
12	Wetlands				X		Bataklık	4
13	Block out				X		engel	3
14	Dust				X	X	toz (class & very dusty)	4
15	Destruction				X		Tahrip	4
16	Eruption			X				2
17	Explosion				X		Yanış	2
18	Tap	X						1
19	Wipe out			X				2
20	Run out of			X				2

follow up test

121

İsim: Mehmet Ali

Sınıf: GELİK

- 1- Bu kelimeyi daha önceden gördüğümü hatırlamıyorum.  
 2- Bu kelimeyi daha önceden gördüm, fakat ne anlama geldiğini bilmiyorum.  
 3- Bu kelimeyi daha önceden gördüm ve bence \_\_\_\_\_ anlamına geliyor.  
 (eş anlamlısı ya da Türkçe karşılığı).  
 4- Bu kelimeyi biliyorum. \_\_\_\_\_ anlamına geliyor. (eş anlamlısı ya da Türkçe karşılığı).  
 5- Bu kelimeyi bir cümle çerisinde kullanabilirim: \_\_\_\_\_. (Bir cümle yazınız.) (Eğer bu bölümü yaparsanız, lütfen 4. Bölümü de yapınız.)

		1	2	3	4	5	Kelime ya da Cümle	
1	Affect	X					D	1
2	Liquid				X		Sıvı	4
3	Expanding	X						1
4	Extinction	X						1
5	Habitat				X		Doğa yaşam alanı	4
6	Heating up	X						1
7	Lay eggs	X						1
8	Migrate	X						1
9	Nesting site	X						1
10	Remain alive	X						1
11	Rise	X			X		Nehir	2
12	Wetlands							1
13	Block out	X						1
14	Dust				X		kül toz	4
15	Destruction				X		Yıkım	4
16	Eruption	X						1
17	Explosion	X						1
18	Tap	X						1
19	Wipe out	X						1
20	Run out of				X		Dışarı karmak	2



## CURRICULUM VITAE

Name & Surname: Gül DOĞAN

Address: Mimar Sinan Mah. 1200 Sk. No: 33/3 24100 Erzincan/TR

Birth Place and Date: Erzincan/ Turkey – 02.10.1983

Foreign Languages: English, Italian and German

Primary School: 13 Şubat Primary School

Secondary School: Atatürk High School

High School: Erzincan Anatolian Teacher Training High School

Undergraduate: Istanbul University Hasan Ali Yücel Education Faculty

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Work Experience: 2005 - .....: English Teacher at MoNE