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EXPLORING THE ROLE OF DIGITAL STORYTELLING IN VOCABULARY LEARNING AND RETENTION: A CASE STUDY AT HARRAN UNIVERSITY

THESIS BY

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II

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Melek ÖZER

DEDICATION

This thesis is lovingly dedicated to my beloved parents, İbrahim and Minire ÖZER, who have always loved me unconditionally and supported me during the challenges of life. I would also like to dedicate my thesis to my lovely sister, İmran.

ÖZET

DİJİTAL HİKAYE ANLATIMININ KELİME ÖĞRENME VE AKILDA TUTMADAKİ ROLÜ: HARRAN ÜNİVERSİTESİ'NDE BİR DURUM ÇALIŞMASI

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Hikaye anlatımı en eski öğretim biçimidir, fakat yabancı dil öğretiminde hala en güçlü yöntemlerden biridir çünkü herkes hikaye dinlemeyi sever. Ancak teknolojideki gelişmeler sonucunda hikayeler dijital hikayelere dönüştürüldü. Bu nedenle öğretmenler teknolojik cihazlar konusunda uzman öğrencilere daha eğlenceli ve teknolojik tabanlı öğrenme ortamı yaratmak için dil sınıflarına çoklu ortam materyallerini dahil etme konusunda zorlanmaktadırlar. Dijital hikaye anlatımı ve ikinci dil öğrenmedeki rolü konusunda yapılan çalışmalar nispeten yeni olduğu için Türkiye'de dijital hikaye anlatımı yoluyla kelime öğretme üzerine yapılan çok az sayıda çalışma vardır. Bu çalışma dijital hikaye anlatımının kelime ve akılda tutma üzerindeki rolünü anlamayı amaçlamaktadır. Bu çalışma aynı zamanda öğrencilerin dijital hikaye anlatımı yoluyla kelime öğrenmek hakkındaki düşüncelerini de araştırmayı amaçlamaktadır. Çalışma Şanlıurfa ilinde bulunan bir devlet üniversitesinde 23 lisans öğrencisine uygulanmıştır. Sonuçlar dijital hikaye anlatımının kelime öğretiminde

değerli ve etkili bir yaklaşım olabileceğini göstermiştir. Benzer bir çalışma farklı araştırma ortamlarında uygulanabilirse bugünün öğrenme ortamlarına çok daha uygun olan eğlenceli ve teknolojik yolla kelime öğretim kalitesi geliştirilebilir.

Anahtar Kelimeler: Dijital Hikaye Anlatımı, Kelime Öğrenme, Akılda Tutma.

ABSTRACT

EXPLORING THE ROLE OF DIGITAL STORYTELLING IN VOCABULARY LEARNING AND RETENTION: A CASE STUDY AT HARRAN UNIVERSITY

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Storytelling is the oldest way of teaching, but it is still one of the powerful ways to introduce a foreign language because everyone loves listening to stories. However, stories have been converted into digital stories with the developments in technology. Therefore, teachers are forced to integrate multimedia materials into their language classrooms to create more enjoyable and technology-mediated learning environments for their learners who are expert on technological devices. Research studies investigating digital storytelling and its role in second language learning are relatively new, so there are few number of studies conducted on vocabulary learning through digital storytelling in Turkey context. This study aims to discover the role of using digital storytelling in vocabulary learning and retention. It also aims to investigate students' opinions about learning vocabulary through digital storytelling. The study was implemented in a state university in Sanlıurfa with 23 undergraduate students. The results revealed that digital storytelling could be a valuable and effective approach in vocabulary teaching. If it can be applied within different contexts, the quality of teaching vocabulary can be improved in an enjoyable and technological way which is more appropriate for today's learning environment.

Keywords: Digital Storytelling, Vocabulary Learning, Retention.

ABBREVIATIONS

EFL : English as a Foreign Language

SD : Standard Deviation

SPSS: Statistical Package for the Social Sciences

VT : Vocabulary Test

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CHAPTER 1

1. INTRODUCTION

1.1. Background to the Study

Before the invention of written language, people passed down their wisdom, knowledge and information orally through stories, so it is a known fact that storytelling is the oldest process of sharing knowledge. Although storytelling is admitted as an old way of teaching, teachers have promoted storytelling as an effective way to teach English as a second language to EFL students in recent years (Fitzgibbon & Wilhelm, 1998). Storytelling is a powerful way to introduce a foreign language because it provides learners with a familiar context (Gomez, 2010).

Every child is fond of listening to stories because stories are very appropriate for their imaginary worlds. They live there and grow up with legendary characters like monsters, dwarfs, warriors, nymphs, princes or princesses. Therefore, fairytales, fables and stories are favorable learning and teaching materials which create a magical world and enjoyable learning environment not only for children but also for adult learners. As Xu, Park and Baek (2011) states that everyone has their own stories to tell and hears others' experiences in the form of stories every day. Collins and Hronova (2011) also support the idea that people keep in touch with stories every day because every single day is a complete story which people want to share with others. As a result, it can be concluded that stories are everywhere. Stories are really useful tools to reflect our experiences because they are naturally embedded in our lives. Because of this reason, stories can give teachers the opportunity to create a meaningful context for their learners. However, a great number of changes have been made in language

learning environments in recent years, so only using written stories or telling them orally in the classroom will be most probably inefficient. Sankey, Birch and Gardiner (2010) state that traditional paper-based materials such as story books and textbooks are being converted into more multimedia materials such as videos, audios and interactive elements. As it is taken into consideration that today all children are born into the world of technology, it might be a good idea to try to figure out how teachers can connect their students' technology knowledge with the stories. Banaszewski (2005) points out that rocks and sticks were the tools used by people to narrate their stories on cave walls thousands years ago while there are a wide range of media tools to produce stories today. Bull and Kajder (2005) similarly state that "technology offers a number of opportunities for connecting classrooms with the world" (p.47). As a result, the main concern of language teachers has become to create more enjoyable and technology-mediated learning environments by integrating multimedia materials into their language classrooms.

Learning vocabulary is one of the important parts of learning a language. One of the most applied vocabulary learning strategies is to write down them on a paper and try to memorize them, which is called rote learning or memorization. However, it is really hard for learners to call back all these isolated vocabulary items. Torun (2008) states that teachers should provide learners with meaningful contextualized language presentation in their language classrooms. Furthermore, Wright (2000) points out that translating new words is a way of teaching but not a perfect one; instead, it is more meaningful and memorable to associate the words with students' experience through stories. Also, using stories to teach a language can be useful to provide similar conditions to the learning of the mother tongue, which is seen as a natural approach to second language development (Torun, 2008). Thus, using digital stories in vocabulary teaching can help create a meaningful contextualized language instruction.

1.2. Problem Statement

The use of technology continues to evolve in a rapid way and digital devices such as cameras, computers, and cell phones which help teachers to facilitate teaching (Yuksel, Robin and McNeil, 2011). Ya-Ting C and Wan-Chi I (2012) state that 21st century learning takes place in a technology-integrated environment and this environment includes access to increased classroom availability of emerging technologies. After the emergence of increasing number of personal computing and internet usage, the relationship between storytelling and technology has become strong in a short period of time (Czarnecki, 2009).

It is a known fact that technology has become an effective tool to teach to all age level of students. Today, learners are more independent than in the past. They are equipped with the latest technological devices which provide them to reach any information that they want in and out of the classroom, so the roles of teachers and students have changed correspondingly. Today, teachers are not experts or only source of information instead they are guide. Their mission is to provide help to learners to discover and construct meaning on their own and in order to keep pace with technologically-expert students, it is important for teacher to know what their learners are already doing (Kurtz, 2012).

Many researchers have carried out many different research studies related to technology usage and teaching and learning since the introduction of technological devices in learning environments in countless and various learning contexts and settings. However, research studies investigating digital storytelling and its role in second language learning are relatively new. Therefore, there are only a few number of studies which have been conducted in Turkey. One of these studies focuses on the impact of digital storytelling on learners' language learning motivation (Sever, 2014) which indicates that it is necessary to do more research to discover the role of digital storytelling in language learning especially vocabulary

learning and retention, which is the focus of this current research study. This research study also represents the students' views on writing digital stories to learn new vocabulary items.

1.3. Purpose of the Study

As the learning environments of 21st century are taken into consideration, a primary goal of teachers should be aware of learners' current practices in learning to guide their learners and to make their learning more effective. Today learning is not only limited to the classrooms and teachers, but there is also a wide learning environment outside the classroom. Learners want to use their mobile phones, computers and software programs instead of books, pencils or paper because they want to do what they know best as technology experts. Therefore, teachers should guide their learners to use their technological devices as a learning tool in and outside the classroom.

The purpose of this current research study is to discover the role of using digital storytelling in teaching vocabulary to prep school students who enrolled in Faculty of Engineering at Harran University. The study also aims to investigate prep school students' opinions about learning vocabulary through digital storytelling in terms of vocabulary usage in context and retention and how the process of teaching vocabulary through digital stories is practiced at Harran University Prep School.

1.4. Research Questions

Based on the research framework and problem statement, research questions were determined. The following questions were investigated in this case study:

Research Question 1: How does using digital storytelling affect students' vocabulary learning?

Research Question 2: How does using digital storytelling affect student's retention?

Research Question 3: What do prep-school students think about the use of digital storytelling in learning vocabulary?

CHAPTER 2

2. LITERATURE REVIEW

2.1. Importance of Stories and Storytelling in Language Teaching

"The universe is made of stories, not of atoms." (Muriel Rukeyser)

Every person is the hero of his own story. This means that there are billions of stories and their living heroes in the world. It is a known fact that stories are integral part of people's lives. Even though people barely recognize what they live in every single day as a story such as medical records and text messages, actually their lives are full of stories (Hronova, 2011). It can be said that our personal stories are a kind of emotional glue that sticks our thoughts to the people around us. Therefore, stories are in the middle of our lives every time. However, stories are not only the way of communication for us; they have been used as a source of knowledge and culture for thousands of years. From the childhood till the old ages we learn many things from the stories such as the powers of good and evil (Hronova, 2011).

When all these things mentioned above are taken into consideration, we can say that if all people have their own stories, they are also storytellers. With the help of storytelling, people become a part of others' lives, so they share their happiness, sadness, experience, adventures, knowledge, feelings and memories. As Smyth (2005) states, "storytelling is a social experience because it connects a teller and a listener" (p.5). Storytelling plays a crucial role in our daily lives because it is a natural and common way for communication and social interaction (Xu et al., 2011). Additionally, storytelling is a way of interpreting situations or experiences, which help people to construct new meaning and knowledge (Sever, 2014).
Lunce (2011) describes storytelling as a way of teaching both knowledge and cultural values in the past.

It is a known fact that everyone likes telling or listening to stories. Wright (2000) emphasizes that language teachers should not see the students coming to their classroom as only language students because they are individuals who are made of stories. Therefore, it can be a good idea to use storytelling in language classrooms. Similarly, Gómez (2010) states that storytelling is a perfect way of introducing foreign languages because stories give children a chance to learn from a familiar context. As a result, storytelling has a crucial role and will be even more important for language teachers to support students' language development and power through this way (Wright, 2000). Loukia (2006) points out stories also motivate students and help them to develop positive attitudes towards learning language.

Pedersen (1995) asserts that "storytelling is the original form of teaching" (as cited in Sadik, 2008). Furthermore, storytelling adds richness to the learning experience in language classrooms whether the stories are real or fictitious (Xu et al., 2011). It can be concluded that stories substantially have the potential to promote teaching and learning in language classrooms. According to McLellan (2006) stories fulfill many goals in education. In the research study carried out by Gómez (2010), a wide range of reasons are presented why stories are used in the classroom:

- Stories are motivating and fun creating,
- Stories exercise the imagination,
- Stories provide a rich resource for education,
- Stories are a useful tool to link fantasy and imagination with the real world,
- Stories help students to develop their language learning skills and literacy,
- Stories allow students to acquire language instead of being reinforced,
- Stories reinforce thinking strategies; develop strategies for learning and study skills.

In addition, Sever (2014) states that most of the teachers agree on the importance of storytelling for language teaching instruction because it is useful to improve learners' language skills and to create awareness about cultural values.

2.2. Today's Digital World: Technology-Integrated Classrooms

The use of technology continues to evolve in a rapid way and digital devices such as cameras, computers, and cell phones which help teachers to facilitate teaching (Yuksel, Robin and McNeil, 2011). Morgan (2014) calls today's students as "digital natives" because they begin to expose to digital world at birth. Hicks (2011) describes 21st century students: "they are expert computer gamers, whizzes on Facebook and Twitter, and most can text more words per minute than they can type." (p. 188). Therefore, it is a known fact that teachers and learners have been integrating technology in their lives beyond the walls of school (Miller, 2009). Similarly, "In the1990s, teachers began to see computers as a part of the technology resource to use beside the traditional way of teaching, and they became known as educational technology in the classroom" (Alharbi, 2013, p. 10). Ya-Ting C and Wan-Chi I (2012) state that 21st century learning takes place in a technology-integrated environment and this environment includes access to increased classroom availability of emerging technologies. However, Prensky (2013) contends that we need technology not as a mental activity but as a part of our mental activity, so technology need to be used sensibly.

To supply digital natives' needs, teachers need to be confident enough to integrate technology into their classrooms. Chung (2007) asserts that developments in technology have caused today's society to live in a world where digital tools are a must. In this rapidly changing digital world, it is necessary for teachers to know use technology appropriately to promote learning in the classroom (Heise & Grandgenett, 1996). Using technology effectively

in the classrooms has a considerable amount of benefits such as keeping students motivated, promoting academic gains in literacy, and facilitating the learning of subject matter (Morgan, 2013). In addition, Hicks (2011) argues that technology is a must-have attention keeper in the classroom because it helps teachers to connect with students digitally, which provides rich learning experiences and environment. If teachers are able to create reasonably engaging technology activities by using any software, they will promote student's learning and development (Keengwe & Onchwari, 2009). Consequently, using and integrating technology into classrooms has become essential for teachers to meet technologically expert students' needs and to create technology-rich classes, which is appropriate for 21st century learning environment. Hubbell (2007) also emphasizes that:

> Technology is and will continue to be an integral part of classrooms, workplaces, and our everyday life. Using technology helps early learners to communicate, practice life skills, and better understand concepts. If used pragmatically in the early childhood classrooms, students will be better equipped to begin using 21st century tools independently as they enter elementary schools (p. 35).

Hicks (2011) points out that learners have begun to adopt visual learning style on account of technologic devices that they use in everyday life. Therefore, they may not be happy with traditional teaching methods which are mainly focus on lecture and textbook reading. Xu et al. (2011) claims that the activities supported with technological integration gives students a chance to learn in open-ended learning environment and to be active in sharing their knowledge in virtual environment. Kajder (2004) describes technology as a simple delivery tool which acts as a hook that connects with learners' existing visual and technological literacies. Our world now is more digital than ever and we share, read and write something through our personal technological devices every second. Therefore, it is really

essential to keep pace with digital students and welcome technology into our classrooms to teach effectively.

2.3. Digital Storytelling

2.3.1. What is Digital Storytelling?

After the rapid changes and developments in technology, storytelling has been converted into a new format: digital storytelling. With the help of this new concept, teachers can easily integrate the old and precious oral storytelling custom with the new method which is essential in technologically expert students' modern and digital world. There are various definitions for digital storytelling, but researchers share some similar ideas. Robin (2006) defines digital storytelling as a combination of the art of telling stories with a variety of digital multimedia, such as images, audio, and video. Similarly, Gregori-Signes (2008) describes digital storytelling as a combination of traditional telling story with different types of digital multimedia such as images, audio, and video. In the same way, Porter (2005) assert that "digital storytelling takes the ancient art of oral storytelling and engages a palette of technical tools to weave personal tales using images, graphics, music, and sound mixed together with the author's own story voice" (as cited Ya-Ting C & Wan-Chi I, 2012, p. 340). According to Bull and Kajder (2005), a digital story includes motionless images which are put together with a narrated soundtrack for the purpose of telling stories. McLellan (2006) points out that digital storytelling mainly focuses on creating personal stories instead of interactive stories or games. The Digital Storytelling Association makes a broader definition and defines digital storytelling as:

> modern expression of the ancient art of storytelling. Throughout history, storytelling has been used to share knowledge, wisdom, and values. Stories have taken many

different forms. Stories have been adapted to each successive medium that has emerged, from the circle of the campfire to the silver screen, and now the computer screen (as quoted in Sadik, 2008, p.490).

All these definitions are taken into consideration it can be concluded that the main point of researchers' definitions is that digital storytelling is a modern and technological way of sharing information through multimedia materials.

The University of Houston (2015) recommends the following process chart how to create a digital story:

Figure 1. An example process of creating a digital story

For the first step, storytellers start the process by choosing a topic for the digital story. In the next step, learners should search for related pictures, audio or information. Then, learners should write their stories before organizing and choosing certain pictures, audios and parts of the written story. In the next stage, learners put all gathered pictures and audio into a multimedia tool such as Photostory3, Movie Maker, ProShow Producer and Apple iMovie. Learners have a chance to be able to make some changes in the order of the pictures in this stage. After learners finalize their digital stories and saved them as a video file, they can share

them with their friends and teachers to receive feedback. Kajder, Bull and Albaugh (2005) also present similar the following sequence of seven steps:

1. Write an initial script,
2. Plan an accompanying storyboard,
3. Discuss and revise the script,
4. Sequence the images in the video editor,
5. Add the narrative track,
6. Add special effects and transitions,
7. Add a musical soundtrack if time permits.

Center for Service & Learning of Indiana University (n.d.) emphasizes that producing a digital story is really simple and students don not need high level of technological competency; therefore, it suggests another procedure for creating digital story which includes the following steps: (a) reflection; (b) storyboarding; (c) gathering images; (d) recording the narrative; (e) editing and adjusting transitions; (f) adding music; (g) publishing.

According to Robin (2006) Lambert and the Center for Digital Storytelling have continued to provide people who want to create and share their own stories with training and help since the early 1990s, so the emergence of digital storytelling is not new although researchers turn their interests towards multimedia technology. Lambert (2002) presents the seven elements of digital storytelling and it is shown below (as cited in Gimeno-Sanz, 2015):

1. Point of View
2. A Dramatic Question
3. Emotional Content
4. The Gift of your Voice
5. The Power of the Soundtrack
6. Economy

7. Pacing

The procedures and elements mentioned above provide a general understanding of digital storytelling and can serve as a guideline for both teachers and learners. Digital stories can be categorized under three groups: 1) personal narratives; 2) historical documentaries and 3) stories designed to inform the viewer (Robin, 2006). Banaszewski (2005) believes in the effectiveness of personal narratives in enabling them a precious chance to construct their identity because they reflect learners' voice and give students real reasons to write their stories. Similarly, Tyner (1998) supports the idea that the main idea of media production should be representing students' own experiences and voices as cultural insiders (as cited in Banaszewski, 2005).

2.3.2. Benefits of Digital Storytelling

When storytelling is considered, the key term is sharing ideas, feelings or experiences. Like oral storytelling, digital storytelling requires participants to visualize and imagine but in more technological way by integrating multimedia tools (Thang et al., 2014). Lunce (2011) also asserts that digital storytelling is similar to traditional storytelling which is used to pass history, culture and family issues from one generation to another one before written language; however, digital storytelling is different because it is a personal event including music, video, narration and sometimes a biography by the storyteller.

As it is mentioned above, both storytelling and digital storytelling have a fundamental feature: sharing. As Ya-Ting C and Wan-Chi I (2012) point out that it is essential to combine technology-integrated learning with social construction for attaining contemporary educational objectives in 21st century learning environment. They believe that knowledge is actively constructed by each learner or group of learners through their interactions with their social environment. Yuksel, Robin and McNeil (2011) also states that digital storytelling

allows learners to create a social community around the stories. In this social community, digital stories provide learners with the opportunity to share their workload with their peers and critique other learners' work, which improves their social learning (Robin, 2006). Furthermore, learners are able to make their own interpretations and share their own ideas with real people in this real social community (Chung, 2007). In addition, Park (2014) suggests that an application of collaborative digital storytelling in a virtual environment may improve learners' learning experiences and interaction skills.

Miller (2009) argues that digital storytelling provides learners with many potential learning benefits such as increasing learners' motivation, which makes it an ideal strategy utilizing for the telling stories. The results of experimental research study carried out by Hung, Hwang and Huang (2012) show that digital storytelling is effective to increase students' science learning motivation and improve their problem solving competence and learning achievement. Skinner and Hagood (2008) also support the idea that digital storytelling which offers a chance to design virtually with a keyboard motivates learners because it is more attractive than a pencil which is more laborious process. According to Xu et al. (2011) teachers should use the concept of "edutainment" which is combination of education and entertainment while they are teaching in 21st century. Okan (2003) argues that edutainment software programs help students raise their expectations that they can learn in an enjoyable way and have fun. Therefore, digital storytelling can be a tool to create edutainment learning materials and make learning more attractive, which facilitate learning and support learners to participate actively (Baek, 2005, as cited in Xu et al., 2011). Additionally, it is possible for teachers to draw learners' attention and capture their interest by using digital storytelling which includes music, voice, and pictures; however, it offers teachers something more than entertainment (Roby, 2010).

Digital storytelling has an important potential to promote both teaching and learning, so teachers can take advantage of digital storytelling for their all level of students from young learners to adult learners. The ideas are also in line with Wright (2000) who states that storytelling is not only for children because they can also play significant part in language learning process for the adults. Furthermore, information technology-integrated teaching and learning is an important approach which affects teaching, learning, curriculum, and materials (Ya-Ting C & Wan-Chi, 2012). Sadık (2008) aims to understand the impact of digital storytelling on learning when teachers integrate technology into curriculum and the findings indicate that digital storytelling make contributions to students' learning, and teachers were also eager to integrate digital story projects into their teaching. Additionally, Sever (2014) emphasizes that teachers can create a difference by using digital storytelling in their classrooms, which shows that they are aware of different learning styles, digital necessities of 21st century, and today's digital native learners.

Sadik (2008) clearly states that "digital storytelling provided a real way to help students learn how to use technology effectively in their learning, particularly if provided with appropriate digital resources and usable editing tools to further motivate them into creating quality stories" (p. 502-503). The study conducted by Yuksel (2011) shows that digital storytelling provides equal opportunity for all learners in kindergarten classroom. Young learners also become acquainted with technology in early childhood and are supported to use technology as a learning tool. Furthermore, Gregori-Signes (2008) argue that using digital storytelling helps learners to learn how to combine basic multimedia tools with literacy skills such as doing research, writing, and giving presentation. The study also emphasizes that digital storytelling helps to enhance learning effectiveness and deep learning. Yuksel, et al. (2011) point out that digital storytelling is a powerful tool because it includes weaving images, music, narrative and voice which gives deep dimension and vivid color to characters

and situations. Therefore, it is stated that "digital storytelling supports learners' understanding of subject area knowledge, overall academic performance, writing, technical, and presentation and research skills" (Yuksel, et al., 2011). The studies show that using digital storytelling positively affects learners' higher order thinking, social, language, reflection and artistic skills.

Another important benefit of using digital storytelling is that it helps learners to gain confidence. According to Kajder (2004), it is like looking into a mirror and saw nothing when the learner narrates the events that s/he is not in or if s/he describes the world under the teacher's authority; therefore, each learner should look into mirror and see the world with different eyes ever before. Banaszewski, (2005) points out that if digital stories are applied effectively in learning environment; learners develop their interpretation of the events by using their point of view based on a specific experience.

Gils (2005) also lists a number of advantages of digital storytelling in education: (a) it offers variation compared to traditional methods; (b) it provides learners with the chance of personalization; (c) it can be a good way of making explanation or practicing certain topics more compelling; (d) it is easy and cheap way of creating real life situations; (e) it makes learners engaged through digital storytelling applications; (f) it supports active learning.

One of the most important reasons to use digital storytelling in language classrooms is that it supports constructivist learning and meaningful learning (Sever, 2014). According to Yang and Wu (2012) states that digital storytelling is technology supported approach which is effective to improve learners' language skills, critical thinking, and collaborative learning and enhance learners' higher order thinking and learning motivation.

As all benefits of using digital storytelling are taken into consideration, it can be inferred that it can be a valuable tool which is perfectly matching with todays' technologically expert learners' needs. It is highly possible to fill the gap between digital learners and the

teachers who are mostly staying one step back from their students in terms of using technology effectively.

2.3.3. Challenges in Creating Digital Stories

Although digital storytelling seems to be a valuable tool in education, both teachers and students may encounter some problems during the process of creating digital stories. Nguyen (2011) states that teachers should not let their students to be driven away by technology because the main purpose of using digital storytelling should be to teach learners how to create their story rather than developing their technology skills. Learners need variable skills such as traditional oral storytelling, written composition, visual literacy, media literacy, and an understanding of film conventions to complete their digital stories (Banaszewski, 2005). Therefore, it could be challenging for students to cope with all these skills and acquire them while creating their stories (Xu et al., 2011). Additionally, students who are mostly familiar with traditional writing tasks find digital storytelling tasks challenging because they are generally open-ended and ill-defined (Kearney, 2011).

One of the possible problems that students may face can be technical problem related with computer or the software. One of the participants in the research study conducted by (Nguyen, 2011) stated her problem with her computer:

> I found recording this piece a little difficult because my laptop's sound system was hard to tinker with. It took a lot of adjustments on my end to get the speakers and all internal volumes at just the right spot. I still ended up with muffled voices. I used Audacity to record the interview and I like what it can do except that, again, my "last-leg" laptop kept shutting the program down. I had to purchase the audio cable in order to capture sound (p.182-183).

During the research study carried out by Sadik (2008), the researcher observed that teachers generally have difficulty in integrating computer applications into their instructions due to ineffective or inappropriate practices and lack of foresight of technological tools' potential for enhancing learning. Tsou, Wang and Tzeng (2006) also point out that teachers may not be willing to use digital storytelling owing to lacking skills to integrate it into materials, not being able to find proper activities before, during and after storytelling process, and feeling incompetent to apply digital storytelling techniques. Another reason for teacher not applying digital storytelling in their classrooms could be that it is time consuming, so they do not have enough time to integrate it in the curriculum.

Digital storytelling may also Meadows (2003) states that digital storytelling is not easy but learners can learn how to do it. Similarly, Park (2014) emphasizes that the characteristics of digital storytelling allow anyone to create a story; therefore, everyone could be a writer or reader.

2.3.4. Creating Stories through *Photostory3*

Teachers and learners can prefer either a software application or a website to form and share their digital stories. Tsou et al. (2006) suggest that it is better to prefer website rather than software program because both learners and teacher can effortlessly access created stories without being concerned about software installation and updating. However, learners who do not have internet access may have difficulty in creating their stories. Therefore, using a software application could be more beneficial for students to prevent them from worrying about internet access.

There are a variety of multimedia tools such as Photostory3, Movie Maker, ProShow Producer, Animoto and Apple iMovie which learners can use to create their stories. One of

the most favored one is *PhotoStory3*. Thesen and Kara-Soteriou (2011) describe *PhotoStory3* as a free software program of Microsoft; and learners could easily download it from the website http://www.microsoft.com/tr-tr/download/details.aspx?id=11132. According to Thang et al. (2014), *Photostory3* is a software application for producing digital stories which is easy to use and provides users with offline access. Learners can create videos by using motionless images (Sheneman, 2010). Rossiter and Garcia (2010) also point out that it is comparatively much easier to combine the elements that storyteller needs such as images, music, and script to make the story effective.

Thesen and Kara-Soteriou (2011) recommends that learners should organize pictures, audios and the story before starting using *Photostory3* and explains basic steps to produce their digital stories:

Step 1: Creating a new story or editing a story

Step 2: Importing and arranging pictures

Step 3: Adding a title to the imported pictures

Step 4: Narrating pictures and customizing motion

Step 5: Adding background music

Step 6: Saving the story

Today, learners and teachers have many multimedia choices to create their own stories. *Photostory3* is one of the software application which is simple to use and chosen for this research study.

2.4. Contextualizing Language and Meaningful Learning through Digital Storytelling

British Council (n.d.) defines contextualization as "putting language items into a meaningful and real context rather than being treated as isolated items of language for language manipulation practice only." It can be concluded that meaningful and real context are the key words for contextualized language instruction. Using stories in language classrooms is valuable tool to provide meaningful context to learner because, as Torun (2008) state, stories is always a natural part of our life. Similarly, Lightbown (2003) emphasizes on learners' usage of contextual cues which means that learners get the meaning both from the language they hear and the linguistic forms they do not understand. In their study, Shrum and Glisan **(**1994) also states that "natural language always occurs in context …" (as cited in Torun, 2008, p.1). Additionally, Arıkan and Taraf (2010) argue that traditional methods de-contextualized language instruction. Therefore, digital stories can be an effective way of contextualizing language.

2.5. Digital Storytelling and Language Skills

Storytelling is a core part of a language whether it is performed orally or by writing. As for stories, they consist of all language skills in them: you can read a story, you can listen to a story, you can write a story and you can tell a story. Gomez (2010) states that children meet the literature from early ages and enjoyed it. Therefore, the stories that teachers use in their language classroom can be favorable to make contribution to learners' language skills (Hronova, 2011). Besides, Brenner (2014) emphasizes that digital story as media production contributes to learners' four skill competencies and their pronunciation, intonation and stress.

2.5.1. Productive Skills

The results of the research study conducted by Gimeno-Sanz (2015) indicated that according to participants digital storytelling was useful for especially improving their productive skills, as well as their non-linguistic skills and language acquisition. Shaaban (2015) asserts that digital storytelling has an important impact on learners' paragraph writing and learners develop their writing skills communicatively. One of the participants who took part in the study carried on by Mullen and Wedwick (2008) emphasizes the uniqueness of writing through digital storytelling. Additionally, Morgan (2014) points out that digital storytelling allows learners to cope with spelling and capitalization and to express themselves easily.

In traditional reading classes, learners read a text and answer some comprehension questions. Also, this type of course design generally includes discussion part about the topic. Therefore, digital storytelling can be used to make reluctant students excited about reading and encourage them read more to improve their reading skill (Morgan, 2014).

2.5.2. Receptive Skills

Digital storytelling gives chance to learners to be able to listen to the stories over and over again instead of just reading them. Therefore, it can be a powerful and effective way of improving listening skills. Verdugo and Belmonte (2007) conclude that learners in experimental group improved their listening skills much better than in control group although experimental group learners have lower level of English at the beginning of the research study. In addition, Hronova (2011) states that learners can acquire some vocabulary and structures that take place in a certain story while they are listening to them.

The findings of quasi-experimental research study conducted by Somdee and Suppasetsereehe (2013) showed that undergraduate students improved their speaking skills through digital storytelling. Additionally, the qualitative results of the research study carried on by Sever (2014) indicated that most of the participants agreed on the benefits of digital storytelling in terms of the improvement of their speaking skills. Furthermore, Hronova (2011) states that learners are able to adopt pronunciation of vocabulary in a natural way when they use songs and rhymes.

To sum up, digital storytelling can be a magic box for language learners in which they can find anything that they need during their learning process. As Hronova (2011) states "We can practice and improve grammar, speaking, pronunciation, listening, vocabulary, reading and literary competences, communicative skills and children´s motivation and imagination" (p. 17-18).

2.6. Vocabulary Acquisition in Second Language Learning

2.6.1. Ausubel's Subsumption Theory

In his theory, Ausubel emphasizes meaningful learning rather than rote learning. He defines meaningful learning as a process of relating new information to relevant prior knowledge in cognitive structure (Douglas, 2007). "Cognitive structure may be defined as all of an individual's existing knowledge,…"(Thelen, 1986, p.603). Douglas (2007) makes a clear explanation of cognitive structure by comparing rote learning and meaningful learning. If cognitive structure is assumed as a system of building blocks rote learning can be thought as the process of acquiring isolated blocks without any relationship to other blocks while meaningful learning refers to the process of integrating blocks with already established categories and clusters (Douglas, 2007). According to Ausebel (1968, as cited in Thelen,

1986) the most important reason of learners' choosing rote learning is that if their answers vary from teacher's certain answer, they may fail. As a result, learners have lost their ability to learn meaningfully and they decide to memorize key items instead of trying to understand what those words mean. Thelen (1986) states that the condition for meaningful learning is to organize the material and the learner's cognitive structure hierarchically, so broad or general ideas should be at the top, and then less inclusive concepts should come next continuing to the bottom, which is called "top down" process. It is also emphasized that top down model provides learners with easiness to retain new information thanks to cognitive structure which provides file folders for the new material (Thelen, 1986). Brown (2007) states that there are two conditions for meaningful learning:

- the learner has a meaningful learning set - that is, a disposition to relate the new learning task to what he already knows,
- the learning task itself is potentially meaningful to the learner – that is, relatable to the learner's structure of knowledge (p.92).

It can be concluded that cognitive structures and meaningful learning context are key concepts for retention.

2.6.2. Schema Theory

Carrell (1988) states that schema theory can be formalized as "the background knowledge in language comprehension" (p.76). According to him, any spoken and written text are not meaningful by itself, instead, it provides learners with directions about how to construct meaning from their previous knowledge. Barlett (1932), Adams & Collins (1979) and Rumelhart (1980) define schemata as learners' background knowledge and previously acquired structures (as cited in Carrell, 1988). Schema theory emphasizes on the background

knowledge in terms of comprehension. Torun (2008) this theory also imply that students need contextual clues to make connections between ideas and build schemata and materials such as visual aids, illustrations, songs, games, demonstrations, and different techniques may help students both to relate new knowledge with their previous knowledge and to strengthen the existing connections.

2.7. Vocabulary Learning, Retention and Digital Storytelling

Learning English words is one of the difficult tasks for Turkish learners. They complain most about the fact that one word has more than one meaning. Also they have difficulty in choosing the correct word which is appropriate in a context. Another problem that learners encounter mostly is that they cannot remember the meaning of a word easily even though they use different strategies. Pui Shan (1998) presents a possible reason for this situation: learners might have done for immediate comprehension, for example by looking it up in a dictionary, but it is not enough for retention in the long run or forming connections between the word and its meaning. Retention is defined by Daloglu, Baturay, and Yildirim (2009) as "keeping vocabulary in long-term memory and retrieving it for meaningful use in appropriate contexts" (p. 203, as quoted in Ahmadi, 2014).

Teaching vocabulary is generally included in reading classes. In reading classes, traditionally, teachers make their students read the text and answer the comprehension questions related to the text. As for vocabulary, most of the students look up the meanings of unknown words in their electronic dictionaries during the lesson. Oxford and Crookall (1990) points out that teachers expect their students to pick up words on their own without providing any guidance instead of teaching words explicitly. Therefore, students mostly prefer memorizing the words. However, according to Min (2008), different kinds of tasks to enhance

vocabulary seem to have impact on vocabulary retention because productive word-focused tasks are superior to receptive tasks in terms of recalling vocabulary items. Consequently, Pui Shan (1998) states that if teachers are able to draw learners' attention to certain words; provide them with meeting the words in different contexts and make them use the words to express their own ideas, learners can learn new words effectively.

Tsou et al. (2006) states that storytelling is admitted as a practical and powerful tool to learn a language. However, teachers has been recently integrated digital storytelling instead of traditional storytelling into their language classrooms due to its positive effects on EFL learners' improvement of language skills that could be exemplified by a number of research studies such as that of Xu et al. (2011) who suggest the idea that digital storytelling in a virtual environment has an effect on writing self-efficacy. The research study conducted by Thang et al. (2014) focuses on teachers' and undergraduate students' thoughts about the use of digital storytelling in English for Academic Purpose course and aims to discover its impacts on students' interactive communication skills, interpersonal skills, technology literacy skills and language skills. The suggestions are also in line with the findings of a research study that was carried out by Gimeno-Sanz (2015) who concludes that digital storytelling is useful for learners to improve their non-linguistic and productive language skills. Yoon (2012) designed a research study to explore 5th grade ELL students' attitudes towards learning English through digital storytelling. Additionally, Bumgarner (2012) conducted a case study which aims to investigate how preservice teachers taught digital storytelling to students and concluded that preservice teachers saw that project-based digital activities, which support student-centered learning, enable students to facilitate, differentiation, and created a learning environment that fostered expertise to come from anyone in the classroom. It can be concluded that teachers can welcome digital storytelling

into their language classrooms because they can develop learners' four basic skills of language easily with the help of digital storytelling. As for vocabulary learning, the study carried on by Abdul-Ameer (2014) aims to discover the effects of digital stories on vocabulary learning, and the results showed that participants in experimental group could comprehend new words better than control group and they provide more correct answers in the test.

Although many research studies focus on digital storytelling and basic language skills, vocabulary learning is also a crucial part of developing proficiency in second language, yet learners are aware of the difficulty of the task (Oxford & Crookal, 1990). To overcome present difficulties in vocabulary learning, digital storytelling can be a powerful and effective strategy for learners. Hronova (2011) states that each stories include repeated words, and if the learners cannot understand the meaning of those words, they can use pictures in the story to improve their understanding and comprehension of the context. Additionally, Abdul-Ameer (2014) emphasizes that digital storytelling is helpful both to draw learners' attention to new words and to learn them spontaneously, interactively and in an enjoyable way. According to Tsou et al. (2006), if learners involve in the reconstruction of a story, they can comprehend the story much better; therefore, it is necessary for leaners to involve actively in the process of interpreting and integrating new words into their schemata for recalling. As Joe (2010) states "We have seen that vocabulary acquisition is indeed an incremental process, requiring multiple encounters with new or partially known words in a wide range of tasks" (p. 134).

CHAPTER 3

3. METHOD

3.1. Research Design

The design of this research study is a case study. As Creswell (2007) states, a case study research is "a qualitative approach in which the investigator explores a case or cases over time through detailed, in depth data collection involving multiple sources of information and reports a case description and case-based themes" (p.73). A case study provides researchers with real life context to explore cases or phenomena (Zahidi, 2012). According to Dörnyei (2007) cases are mainly people; however, a programme, an institution, an organization can be a case for researchers. Similarly, Thadphoothon (2005) states that researchers have recently apply case studies to assess a new program or a classroom change which carry on generally over a semester or two. Although literature presents the case study under qualitative research, case studies can also include quantitative data collection tools (Verschuren, 2003).

Case studies are perfect method which allows researchers to obtain a thick description of a social problem in a cultural context, so a case study presents intense and deep understandings for researchers (Dörnyei, 2007). Therefore, readers can easily compare and think about the results in terms of their own contexts (Zahidi, 2012). In addition, case studies provide researchers with rich contextualization which helps to figure out complexities of second language learning (Mackey & Gass, 2005).

Case studies are helpful for researchers to mirror different classroom practices. However, according to Nunan (1992), a gap is still available between the theory and the practice (as cited in Thadphoothon 2005). As a solution, Thadphoothon (2005) suggests

classroom research to bridge the gap. Therefore, this current case study was designed to explore the role of using digital storytelling in vocabulary learning. The study was conducted for 12 weeks with 23 pre-intermediate level students from two classes at a state university in Turkey in order to discover how digital storytelling affects learners' vocabulary learning and retention. This case also aims to investigate leaners' thoughts about learning vocabulary through digital storytelling. This research study utilizes both qualitative and quantitative research methods through case study for collecting and analyzing the obtained data. Koivuniemi (2012) points out that adopting a mixed method design is one way of triangulation to strengthen the quality of a research study because of the complexity of SLA and the strengths and limitations of each method. Because of this reason, triangulation is accepted as a powerful way of ensuring research validity (Dörnyei, 2007).

3.2. The Context of Research

The setting of this research study was a state university in Turkey. The research study was conducted in the School of Foreign Languages at Harran University. The purpose of the School of Foreign Languages is to assist learners who have failed English Proficiency Exam in improving their proficiency in English throughout their academic studies and career. Although the medium of instruction is Turkish at Harran University, the administration has adopted policies to encourage the students to develop their proficiency in English. Because English has become a must for academic studies in every field, it is necessary to give the undergraduate and post graduate students support to have a good mastery of English language. The students enrolled in Faculty of Engineering can take a one year preparatory language program to improve their language skills.

Elementary level of reading, writing, speaking, listening and grammar courses were offered in the first semester of 2014-2015 academic year, and the study class met four days

and 28 hours in a week over a fourteen-week semester. The scope of this research study was reading course which is conducted 6 hours in a week during the spring term. This course focuses on equipping the learners with reading skill including comprehending and analyzing a text and making comments about the text, as well as learning new vocabulary. The course book of reading course is Real Reading 1 published by Pearson. It includes authentic reading texts such as folktales, stories, and true stories from the world. It focuses on meaning-focused exercises and adopts one of the semi-contextualizing techniques for vocabulary teaching: visual imagery which is defined as "making associations between a picture and a word" (Oxford & Crookall, 1990, p.16).

The university where the study was conducted caters for a variety of students who come from different cultural, educational, and social backgrounds. The class where this case study was conducted is equipped with white board, a projector, a laptop computer and speakers. It also has an access to the internet.

3.3. Participants

The participants of the present case study were 23 undergraduate prep-school students at Harran University. Their age range was between 18 and 22 and there were 11 males and 12 females. They were all Engineering Faculty students and they had main course, reading, writing, listening, speaking, and grammar courses for twenty-eight hours per week with four different English instructors. The students' English proficiency level was pre-intermediate.

In this study, the participants were selected according to critical case sampling method. Critical case sampling is defined by Dörnyei (2007) as a method that a researcher apply it deliberately to target cases offering full representation because of their uniqueness, and the researcher focus on both what is found and what is not found because it is possible to reach unlike results in different cases. Because implementation period lasted 12 weeks and it

requires workload and responsibility for students, the participation of this research study was based on participants' willingness to create digital stories and to take quizzes. Therefore, the students were asked for their approval for participating in this study and two classes out of three accepted to participate in this research study.

3.4. Classroom Procedure and Scoring

The duration of this research study was 12 weeks. The process of creating digital stories included three stages as presented below:

Stage I: Introduction to digital storytelling & *Photostory3*

- Teacher demonstrates the software program to students.
- Teacher presents the website http://www.fromtexttospeech.com/
- Students participate in a pilot work for experience with *Photostory3* and the website.

Stage II: Sharing guidelines and requirements with students

- Teacher hands in schedule and storyboard template.
- Teacher explains the steps of creating a digital story.

Stage III: Producing digital stories

A schedule and timeline (Figure 2) was prepared by the researcher for students to guide them through the process and to help them produce their digital stories.

Figure 2. Schedule and Timeline for Preparing Digital Stories

Schedule & Course Plan

Week 1: Presenting digital storytelling idea for reading course & Photostory3 demonstration.

Week 2: Covering reading texts "The Best-Dressed Penguin" and "Christian the Lion" for pilot work.

Week 3: Presentation of digital stories for pilot work & Discussing the problems encountered during the process.

Week 4: Covering reading texts "In Like a Lion, Out Like a Lamb" and "The Superstitious Gene."

Week 5: Screening digital stories related to the theme "superstitions" in the classroom.

Week 6: Quiz 1 & Covering reading texts "Trapped" and "Why Do Some Survive"

Week 7: Screening digital stories related to the theme "staying alive" in the classroom.

Week 8: Quiz 2 & Covering reading texts "Do Animals Lie" and "Who Am I Today"

Week 9: Screening digital stories related to the theme "truth or lies?"

Week 10: Quiz 3 & Covering reading texts "Two in One" and "Identical Strangers"

Week 11: Screening digital stories related to the theme "twice as good"

Week 12: Quiz 4 & Interviews

Students worked through several steps of creating a digital story throughout the research study. The process of creating digital story included 5 steps and these steps were presented below:

Step one: Writing a story During the research, firstly, two reading texts were covered for the first week. Then, students wrote their stories related to the theme of each unit such as

superstitions and staying alive by choosing 10 target words out of 20 from the reading texts and wrote their stories in corporation with their pairs.

Step two: Searching for images Students needed still images to create their digital stories, so they either downloaded them from the internet or photographed themselves, animals, and places that would be appropriate for their stories.

Step three: Completing storyboard template For the process of creating a digital story, a storyboard template was prepared by the researcher for the students to help them organize their stories and to construct their stories in a logical sequence with matching images. Students were expected to combine the story with the images. After they put the story and the images into storyboard template, they sent it to the researcher. Then, students reorganized their images if it was necessary.

Step four: Creating digital stories It was necessary for students to import their story and images, add transitions and special effects, record narration, add sound tracking to create their digital stories (Kajder, 2004). Students used *Photostory3* software program to produce digital stories.

Step five: Presenting digital stories After students finished their works, they screened their final products in the classroom. After watching the digital story, students made comments on the story and asked questions if they did not understand some parts of it.

3.5. Data Collection Tools

In this research study, data was collected through vocabulary tests and semi-structured interviews. Vocabulary tests were adopted to discover the effects of using digital stories on vocabulary usage in context and retention. Semi-structured interviews were carried out with 9

randomly-selected students at the last week of the research study to determine the participants' thoughts about learning vocabulary through digital storytelling.

3.5.1. Vocabulary tests

All vocabulary tests applied in this research study were prepared by the researcher. Throughout the research 4 vocabulary tests were applied. They consist of two different parts: unscrambling the words and completing the story (Appendix 1, 2, 3, 4). Vocabulary items were chosen from the reading book Real Reading 1. The book includes twelve units, and there are two different reading texts under each unit related to a theme. First vocabulary includes 20 target words while others contain 25 target words in order to be able to include vocabulary items both from the present and the previous units and to investigate students' vocabulary retention. After the first presentation week, students took their first vocabulary test which included target words of first unit. All vocabulary tests consist of incomplete stories similar to the stories prepared by the students. On the first page of the vocabulary tests, there were pictures related to the story, so the students could see the characters and the scenes as they were preparing or watching their digital stories. On the second page, the students found the first part of the story which included scrambled words. Firstly, the students were expected to unscramble the words to complete the story by using the pictures, and then they wrote an end for the story by including as possible target words as given in the box on the first pages of the vocabulary tests. During the process, vocabulary tests were applied every two weeks.

3.5.1.1. Scoring of Vocabulary Tests

To assess and score the second parts of the vocabulary test, the researcher modified and used Vocabulary Knowledge Scale (VKS) which was developed by Wesche and Paribakht (1994). Three modifications were made by the researcher to measure vocabulary

learning and retention in this research study. Firstly, the statements including translation and grammatical accuracy were removed because they did not contribute the aim of this current study. Secondly, a statement "The word is not used in the story" was added because it was possible for students not to include some target words in their stories. The statement "The word is familiar but meaning is not known" was changed into "The word is familiar" to meet the aim of this study." Four assessment statements were applied in a way presented below:

1 **The word is not used in the story.**

- The student who didn't use the target word to complete the end of the story received 0 point.

2 **The word is not familiar.**

- The students who used the word without semantic appropriateness in a sentence or misinterpreted the meaning of the target word received 0 point.

Examples from vocabulary tests:

- The cat is nervous *cause of lamp.
- I *complete my day very bad.
- Other cats came to Donald's box when he *connected.
- This event *connect superstition

3 **The word is familiar**

- The student who only understood of the lexical meaning of the target word correctly received 0,5 point.

Examples from vocabulary tests

- It saw alive fish in the box.
- He started to believe superstitions because of this nonsense cause.
- He said "Don't believe cats hunter fish"

4 The word is used with semantic and linguistic accuracy in the story.

- The students who used the target word semantically and linguistically correct, even if other parts of the sentence contained errors received 1 point.

3.5.2. Semi-structured interviews

Huberman and Miles (2002) states that semi-structured interviews which enable to be sensitive to each participants' unique experience give a chance to researchers to compare different cases (as cited in Zahidi, 2012). In semi-structured interviews, researchers prepare a set of guiding questions but they are free to wander off for more information (Mackey & Gass, 2005). That is the researcher as an interviewer guide and directs the student as an interviewee; however, it allows interviewee for elaborating on the issue (Dörnyei, 2007). Alharbi (2013) emphasizes that semi-structured interview is an effective tool because it provides researchers with both a revision of what participants say and their beliefs about the research subject.

In this study, semi-structured interview was used to provide flexibility while asking questions. The flexibly uttered questions are more suitable for this research study because it is important to learn the participants' stories without limiting their responses instead of using pre-prepared response categories. The interviews were carried out with a group of 9 (one third of all the participants) randomly-selected students. There were ten open ended questions related to students' digital storytelling experience and benefits/ challenges of digital storytelling. The questions were supplemented with different probes in order to clarify the participants' responses and get more explanation. The interview questions were piloted with 2 participants because Dörnyei (2007) point outs that it is necessary to prepare an interview guide and pilot it in advance. The questions were reviewed and rearranged in the light of the

participants' view about the interview and experience during the pilot interview. Examples of interview questions were "What do you think about learning vocabulary through creating digital stories?" to discover the participants' opinions about the process and experiences during the process and "Do you think that creating digital stories is helpful to remember the words easily?" to explore learners' thoughts whether digital storytelling is useful for their retention (Appendix F). The duration of the interviews was approximately 8 minutes. The interviews were carried out in person at the end of the research and audio recorded by the researcher. Participants' answers were transcribed and translated into English by the researcher. Before the interviews, appointments were made to meet with the interviewees at the agreed time.

3.6. Data Analysis

The aim of this research study is to explore the role of using digital storytelling in vocabulary learning and to investigate students' opinions about learning vocabulary through digital storytelling. This case study utilizes both qualitative and quantitative data through vocabulary tests and interviews. Quantitative data which was obtained from vocabulary tests was analyzed by SPSS 20 statistical software to interpret the descriptive statistics of the results of vocabulary tests.

Content analysis technique was used to analyze the qualitative data which was obtained from semi-structured interviews. Ok (2014) states that content analysis enables researcher to identify and classify the participants' thoughts. In order to respond the third research question, semi-structured interviews was transcribed, and each transcription was read by the researcher. Each specific or relevant thought was highlighted and given a code to categorize it under related themes. A theme name was used which is the most related to the opinions of participants while giving names to the codes (Ok, 2014), such as vocabulary

learning, retention and challenges. After the data was coded and categorized into themes, all themes were reviewed and some categories were merged or subcategorized under a major relevant theme.

CHAPTER 4

4. RESULTS

In this research study, the data was acquired from two research tools including vocabulary tests and a semi-structured interview. The participants of this case study were 23 prep school students. The gender distribution of the participants was relatively balanced (Table 1).

Table 1. Gender distribution

		Frequency	Percent
Valid	Male	11	47,8
	Female	12	52,2
	Total	23	100,0

This case study was guided by three research questions. This chapter includes both summary of key results and interpretations of the results and the findings addressed to the research questions.

4.1. How does using digital storytelling affect students' vocabulary learning?

Totally, 80 target words were covered during the process. In the first part of the quiz, students unscrambled the target words written in the parentheses to complete the story. Scores obtained from the first part of vocabulary tests were compared and analyzed to determine how effective digital storytelling is to learn vocabulary, that is, whether participants have learned the target words, which were supposed to be unknown, after using them in their digital stories or encountering with them in different digital stories. To determine how many of them were enhanced during the process, the statistics of target words which were unscrambled correctly in the first part of the vocabulary tests are presented in Table 2.

Table 2. Descriptive Statistics for the Vocabulary Tests (Part I).

	VT1	VT2	VT3	VT4
Mean	7,6957	12,6087	13,6087	12,5217
Mode	9,00	15,00	15,00	15,00
SD	1,71715	2,31083	1,85225	2,59141
Minimum	4,00	9,00	9,00	6,00
Maximum	10,00	15,00	15,00	15,00

The first vocabulary test consisted of 10 target words while the others included 15 vocabulary items. The results showed that a great number of words were written correctly in all vocabulary tests. The findings also indicated that a considerable number of students got the highest score in vocabulary tests 2, 3 and 4. In vocabulary quiz 1, the most gotten score 9 out of 10 while the most gotten score was the highest score (15) in vocabulary tests 2, 3 and 4. When the improvement in mean scores of vocabulary tests was compared, it could be clearly seen that the scores increased slightly but they decreased quite a little in vocabulary test 4. The findings also showed that the majority of the students got scores around the mean in vocabulary test1 (SD=1.71) and vocabulary test 3 (SD=1.85) while the variance of the scores is a bit high in vocabulary test 2 (SD=2.31) and vocabulary test 4 (SD=2.59).

Table 3. Descriptive Statistics for the Number of Correctly Unscrambled Target Words in Vocabulary Tests

Number of target words	VT1		VT2		VT3		VT4	
	N	%	N	%	N	%	N	%
1-5	3	13	-		-		-	
6-10	20	87	5	21,7	2	8,6	4	17,3
11-15	-		18	78,3	21	91,4	19	82,7

In the first vocabulary test, 3 participants could write maximum five target words correctly while 20 of them could write at least six words correctly. 21,7% of participants could unscramble between six to ten target words correctly whereas most of the students (78,3%) could write between eleven to fifteen target words correctly in the second vocabulary test. Almost all students (N=21) could write the many words correctly while a few of them could write ten or less than ten target words correctly in vocabulary test 3. The last vocabulary test results indicated that 19 out of 23 participants were able to write the eleven or more than eleven target words correctly. The results in Table 3 showed that most of the students got the highest scores by unscrambling them correctly.

In conclusion, the findings showed an increase in the number of the participants who could write the majority of target words correctly in vocabulary tests, which signals that using digital stories may have a positive effect on learning vocabulary.

4.2. How does using digital storytelling affect student's retention?

In the second part of vocabulary tests, students were expected to write an end to the incomplete stories by including given target words. All vocabulary tests included 10 target words in the second part of vocabulary tests. As the retention is not only just keeping the words in long-term memory but also being able to use them meaningfully and appropriately in proper contexts (Ahmadi, 2014), so the participants were asked to use as many given target words as they could do while fictionalizing their stories and writing a possible end to it in the second part. Therefore, the data obtained from the second parts of the vocabulary tests provide insight into participants' vocabulary retention.

Table 4. Descriptive Statistics for the Number of Target Words Included in the Second Part of Vocabulary Tests.

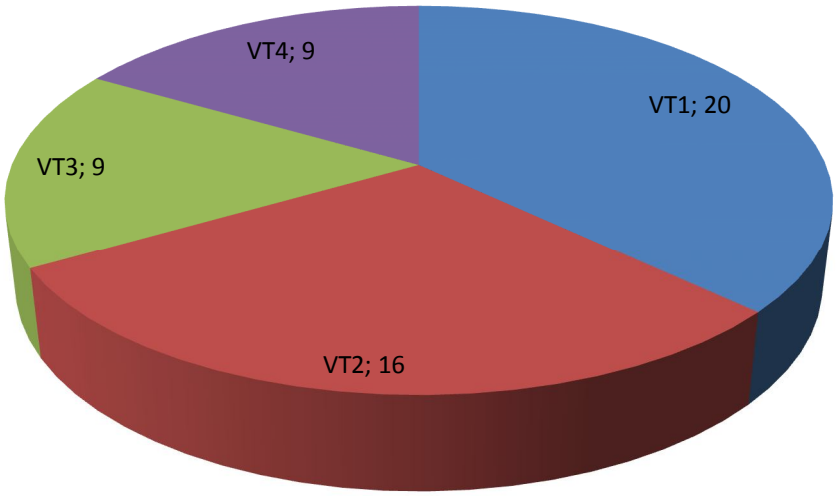
The Number of Target Words	VT1		VT2		VT3		VT4	
	N	%	N	%	N	%	N	%
1-5	6	26	1	4,3	3	13	4	17,3
6-10	17	74	22	95,7	20	87	19	82,7

Table 4 presents the results of the number of target words that were used by the participants to complete the stories in the vocabulary tests. The findings showed that most of the students (N=17) could use between six to ten target words in their stories in vocabulary test 1 while some of them (N=6) could only include between one to five target words into their stories in the second part of the test. In vocabulary test 2, almost all students (95,7%) could use between six to ten target words in their stories whereas only one student were able to use between one to five target words. In vocabulary test 3, 87% of the participants managed to include many words into their stories, but 13 % of them could include only exact number of

words. In vocabulary test 4, the percentage of participants who could use between six to ten target words was 82,7% while 17,3% of them could use between one to five target words taught previously in their stories.

To assess the second part of the vocabulary tests a scale adapted from Wesche and Paribakht (1994) was used. The Vocabulary Knowledge Scale (VKS) is a rating scale which is designed to score five different stages of vocabulary knowledge (Joe, 2010). Figure 3 presents the number of the participants who were unfamiliar with between one to five target words, which mean that some target words were used without semantic and linguistic accuracy in a sentence or the meaning of the target word was misinterpreted by the participant.

Figure 3. The number of participants who were unfamiliar with between 1 to 5 target words.

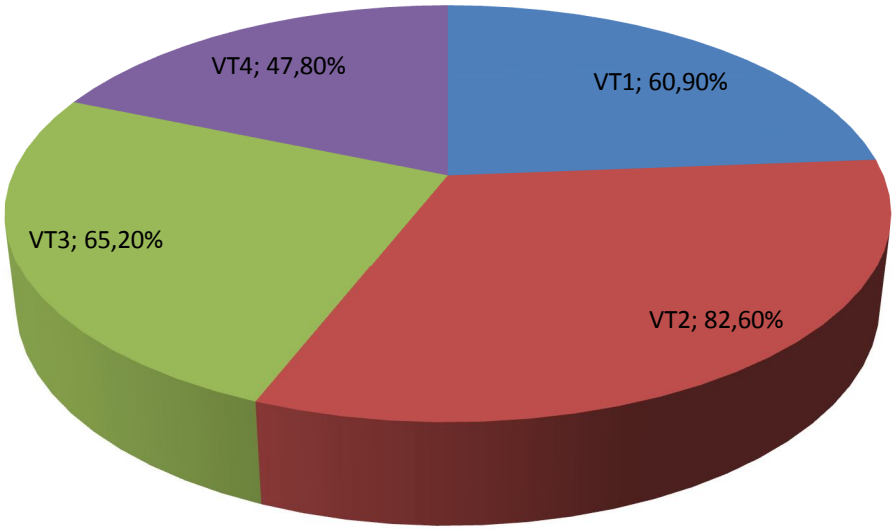


The results indicates that 20 participants were unfamiliar with between one to five target words in vocabulary test 1 while the number of the participants who were unfamiliar with

between one to five target words was 16 in vocabulary test 2. The results showed that vocabulary test vocabulary test 3 and 4 included the same results in terms of the number of participants who were unfamiliar with some target words. Both in vocabulary test 3 and 4, only 9 participants used between one to five target words without semantic and linguistic accuracy or misinterpreted the meaning of these target words. When the results were compared, it can be seen that the number of participants who were unfamiliar with some target words decreased gradually. The results also showed that there was no participant who was unfamiliar with six or more than six words.

Figure 4 shows the percentage of the participants who were familiar with between one to five target words, that is, the lexical meaning of some target words could be understood correctly by the participants, but they were not used with linguistic accuracy in vocabulary tests.

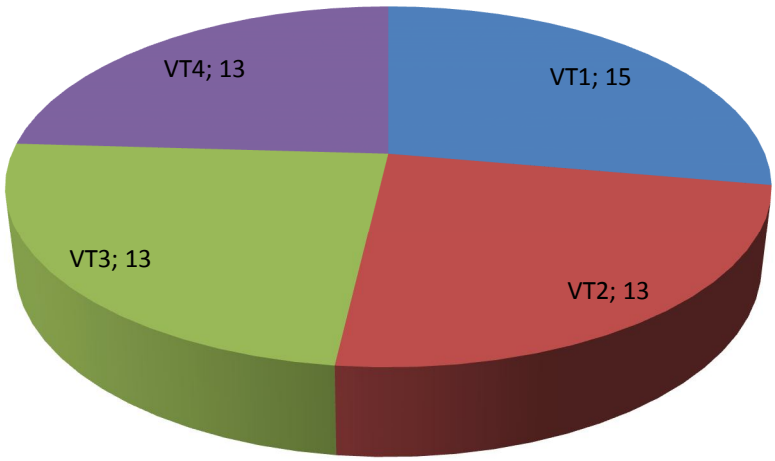
Figure 4. The number of participants who were familiar with between 1 to 5 target words.



In vocabulary test 1, the percentage of participants who could remember the lexical meaning of between one to five target words correctly, but failed to use them with linguistic accuracy was 60,9% while in vocabulary test 2, 82,6% of participants could remember the lexical meaning of between one to five target words correctly, but failed to use them with linguistic accuracy. In vocabulary test 3, the percentage of participants who could remember the lexical meaning of between one to five target words correctly, but failed to use them with linguistic accuracy was 65,2%. In vocabulary 4, 47,8% of participants could remember the lexical meaning of between one to five target words correctly, but failed to use them with linguistic accuracy. However, the results also indicated that there was no participant who could remember the lexical meaning of six or more than six target words, but failed to use them with linguistic accuracy.

Figure 5 indicates the number of participants who could use between one to five target words with both semantic and linguistic accuracy in vocabulary tests.

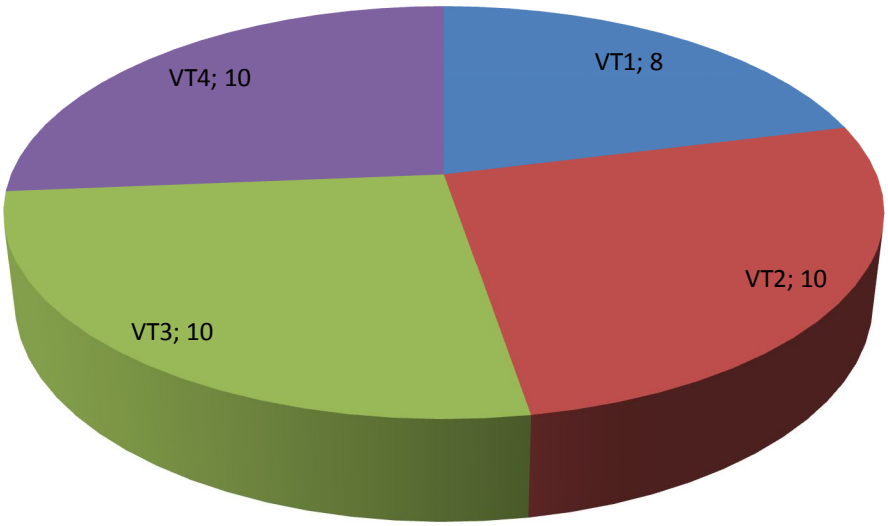
Figure 5. The number of participants who could use between 1 to 5 target words with semantic and linguistic accuracy



The results revealed that the number of participants who could use between one to five target words with semantic and linguistic accuracy in the first vocabulary test was 15. The results indicated that vocabulary test 2, 3 and 4 included the same results in terms of the number of participants who used the target words with semantic and linguistic accuracy. 13 participants could use between one to five target words taught previously with sematic and linguistic accuracy in vocabulary test 2, 3 and 4.

Figure 6 shows the number of participants who could use between six to ten target words with both semantic and linguistic accuracy in vocabulary tests.

Figure 6. The number of participants who could use between 6 to 10 target words with semantic and linguistic accuracy



The results revealed that 8 participants were able to use between six to ten target words with semantic and linguistic accuracy in vocabulary test 1. When the results are compared with the first vocabulary test, the number of participants who could use between six

to ten target words with semantic and linguistic accuracy in vocabulary test 2 has increased slightly (N=10). The results also indicated that vocabulary test 2, 3 and 4 included the same results in terms of the number of participants who used the target words with both semantic and linguistic accuracy. 10 participants were able to use between six to ten target words with semantic and linguistic accuracy in vocabulary test 2, 3 and 4. Besides, the results also indicated that there was no participant who failed to use any target words with semantic and linguistic accuracy.

To sum up, the results showed that the number of the students who could use the majority of the target words increased considerably in vocabulary test 2 while the results did not change very much in vocabulary test 3 and 4. The number of the students who could use the newly taught words in their stories in a semantically and linguistically appropriate way did not change very much all through the vocabulary tests, either. However, the results revealed that the number of students who were unfamiliar with the target words taught previously decreased gradually. It can be concluded that digital storytelling may be effective to recall and use them appropriately in a context when the students used the words in their own digital stories. However, it can be less effective if the students did not use the target words in their digital stories, but saw them in different digital stories produced by the other students.

4.3. What do prep-school students think about the use of digital storytelling in learning vocabulary?

The interviews included 10 questions and they were conducted with 9 participants at the end of the research study. The first three questions of the interview were about students' thoughts about integrating digital storytelling into reading course. The results of interview

showed that obtained data supported the results of quantitative data. The findings obtained from interviews are categorized under four sub-headings:

a. Participants' opinions regarding integration of digital storytelling into reading course

b. Participants' opinions regarding the contribution of digital storytelling

c. Participants' opinions regarding the challenges experienced during the process of digital storytelling

d. Participants' opinions regarding the use of digital storytelling as avocabulary learning and retention strategy

4.3.1. Participants' opinions regarding integration of digital storytelling into reading course

All interviewees, firstly, indicate a comparison of what they think about integrating digital storytelling into reading course at the beginning and at the end of the study, and gave opinions on what they like or dislike about the process. Most of the students said that they were worried about the process when they learned that digital storytelling was one of the requirements for reading course. However, they stated that their thoughts changed positively.

P1 "I thought that I could not manage to create digital stories. After we completed our first digital story, I understood that it was not so hard and I continued fondly and willfully. I think it is useful and enjoyable. At the beginning, I was worried, but after then I did not have difficulty."

P3 "I thought that it would be difficult because of group work. Group pairs could not be at the same place on the agreed time. However, it was good."

P4 "When you first told us about it, I thought I could not do that. It was difficult at the beginning; however, it was really good to experience this method."

P6 "At the beginning, I thought that it would be difficult because we did not have a computer. However, it was much better later on because we realized that we could learn vocabulary much better while we were writing stories."

P7 "I thought that it was irrelevant to use a software program and write stories for reading course. However, it was an effective way to learn vocabulary because we could both write the stories ourselves and listen to them. Therefore, it was much better. Fortunately, we have experienced this method."

P8 "I thought that it was irrelevant at that time. Because we would write stories, it was more relevant to writing course. Now, I can understand that it is actually related to reading, writing and vocabulary. It involves all of them."

P9 "At first, I thought that it was more relevant to writing course. However, after some practice, I realized that I learned how to use the words and this is really relevant to reading. Now, I can infer the meaning of the words."

One of the participants stated that there was no difference between his thoughts.

P5 "There is no difference between my thought at that time and my opinion at this time about the process. I did not find it useful in terms of learning vocabulary. We could use vocab cards."

4.3.2. Participants' opinions regarding the contribution of digital storytelling

Some of the participants draw our attention to the fact that the process of creating digital stories was enjoyable.

P1 "It was beneficial and enjoyable."

P6 "Everyone created different stories, so it was really enjoyable and funny."

P9 "It was really enjoyable, I did not get bored during the lesson. We learned in an enjoyable way."

The following opinion emphasized that digital storytelling made contributions to become self-confident.

P9 "... Besides, we gained self-confidence because we saw that we were able to manage to create something."

The following opinions agreed on the opinion that digital storytelling helped them to develop their creativity.

P6 "It was good in terms of creativity. Furthermore, I can prepare a video by using pictures for my friend."

P7 "We have discovered our creativity, so I liked this."

P8 "For me; ... and creativity.

P9 "It was useful for me in terms of reading and creativity."

Some of the participants stated that digital storytelling contributed to learn cooperatively.

P1 "Cooperation comes first because we worked as a group and decided together."

P3 "It developed cooperation."

P4 "I think cooperation comes first."

P8 "... It also contributed to cooperation."

The following opinions agreed on that digital storytelling was beneficial to develop their language skills.

P1 "...Apart from this, it was useful in terms of reading and pronunciation."

P3 "It developed my writing skill."

P4 "Besides, it was helpful to develop writing and listening skills.

P8 "For me; pronunciation, listening and ..."

P5 "It mostly contributed to pronunciation.

Some of the participants stated that digital storytelling made contributions to improve their technology knowledge.

P4 "We have also learned something about computer."

P5 "I have also learned how to use Photostory3 software programme."

P7 "It contributed to technology knowledge. I can prepare a video for my friend's birthday, so I have learned the things that I can apply it in my daily life."

4.3.3. Participants' opinions regarding the challenges experienced during the process of digital storytelling

Some participants gave their opinions on some challenges they experienced during the process.

P2 "I did not like finding visuals. I was really difficult for me to find appropriate images for my story."

P5 "Writing stories."

P6 "It took a lot of time. You should write a story, find images, and add audio. It made us nervous because it was a long process."

P7 "It was a bit tiring."

P8 "Firstly, I do not have a computer, so this was a difficult situation for me. Also finding relevant pictures was not easy."

P9 "My pair and I do not have a computer. We used the computer in the classroom. However, it took a lot of time because of slow internet connection."

All participants gave their opinions on difficult steps of preparing digital stories during the study. Students' opinions revealed that they mostly had difficulty in finding related images, writing story with a limited number of words and recording voice.

P1 "The difficult step for me was writing story because it was difficult for me to fictionalize and write the story."

P2 "The most difficult step for me is to find images."

P4 "I had difficulty in recording voice"

P5 "Of course, writing story, but finding images was also difficult."

P6 "The most difficult part was recording voice."

4.3.5. Participants' opinions regarding the use of digital storytelling as a vocabulary learning and retention strategy

All participants gave their opinions on digital storytelling as a vocabulary learning method. Students' reflections reveal that they agree on preparing digital stories is useful to stick newly-learned vocabulary in their mind.

The following opinions emphasize that digital storytelling helped students to learn vocabulary and use them in sentences.

P2 "We are learning vocabulary and we are using them in a sentence. Moreover, we are putting them together by using technology, so this makes learning permanent. Therefore, it was really useful for us."

P3 "Well, I did not have difficulty in writing stories; however, we did not know many words, so it helped us to learn new words."

P7 "It was helpful in terms of learning vocabulary. It was effective in terms of using words in sentences and making sentences, so I like it the most."

P9 "I have discovered that one word has more than one meaning. I read a word in different contexts."

The following opinions agree on the opinion that digital storytelling helped them learn vocabulary items permanently.

P1 "We determined the words, and then we write stories. Then, we import our story into the software. We saw those words more than one, so this method made it permanent. Also we add images to our story. Therefore, those words became more permanent in our minds."

P2 "It was exactly useful. Both we learned the words and used them in our own sentences, so it made it permanent."

P3 "It was exactly effective. Words became more permanent in my mind."

P4 "We were learning the target words in the book. Besides, we learned some other words to complete our stories. We learned permanently."

P6 "It was much better than the previous term because we didn't write stories like this term. We produced our own stories. I think it was good."

P8 "It was really good method. We used the words in our stories, so it made our learning permanent because it was much easier to remember the sentence that you made."

P9 "Exactly, it was very useful."

All participants stated that digital storytelling helped them remember the target words easily.

P1 "Especially, images were really useful to remember the words easily. Therefore, it was useful for me."

P2 "Yes, I think it is useful."

P3 "Exactly yes. We prepared our stories before. There were similar sentences into vocabulary tests; therefore, I could remember easily and answer the questions."

P4 "Of course it was useful. We wrote sentences for our stories and similar ones appeared in the quiz, so it serves the purpose."

P5 "Yes, I think it is useful. I can write the target words easily or use them in a sentence without having difficulty."

P6 "I could remember the words that I had used in my own story. I could remember them easily during the vocabulary tests."

P7 "Yes. I could remember and use the words easily that I had used before while I was writing an end to the stories in the vocabulary tests. Moreover, because I turned my sentences into audio through the website, I could remember the woman's voice who vocalized my sentences. It is in my mind, for example how the story started and finished."

P8 "Yes, it was really effective. When I couldn't remember the meaning of the word, I thought about my sentence and then I could recall its meaning easily."

P9 "We had covered all target words to create a story and we tried to use them in our story. Therefore, when I saw the word, my own story came to my mind. I could remember easily because I had used it before."

CHAPTER 5

5. CONCLUSION

In this research study, it was aimed to explore the role of digital storytelling on learners' vocabulary learning and retention in the prep school of a state university in Turkey. The data was obtained through the utilization of both qualitative and quantitative research methods: vocabulary tests and semi-structured interviews.

The results obtained from vocabulary tests showed that digital storytelling can have positive effects on participants' vocabulary learning and retention because the results supported the idea that the participants could easily recall many target words and write them correctly in a context which was similar to their stories. The results also revealed that learners could recall and use more words with semantic accuracy in writing part and the number of unfamiliar words diminished gradually during the process. However, the number of words that learners tried to include in their stories was almost the same except for vocabulary test 2 because there was no participant who could not manage to include many words. The data obtained from the interviews also supported the results of vocabulary tests because they stated that digital storytelling was very helpful to learn vocabulary and use them in sentences. They also thought that preparing digital stories was useful to stick words in their mind. All participants also agreed on that digital storytelling helped them recall the target words easily during the tests. The results also conform that digital storytelling was enjoyable and help learner develop their language skills and other skills or competences such as technological skills, creativity, cooperation and self-confidence as it is proved in the research study conducted by Tsou et al. (2006) that learners tended to be more confident after applying digital storytelling. Participants expressed that they were worried at the beginning of the study, but their ideas changed positively and almost all of them stated that they found digital

storytelling useful and effective to learn vocabulary at the end of the study. However, there were also students who found the process of digital storytelling as demanding and difficult to manage for various reasons. For example, some students expressed that they had difficulty because they did not have a computer while some others said that they had difficulty in writing story and finding related images. Besides, some participants found the process time-consuming and tiring.

Teachers may reconsider to integrate digital storytelling into their language classes which seems to develop vocabulary learning and to help learners' vocabulary retention, as the current study suggested it. Digital storytelling is an important and effective tool that can help teachers keep up pace with their digital natives and fill the gap between their learners and themselves. As Czarnecki (2009) states, storytelling can always utilize the latest available technology, so integrating digital version of stories into curriculum and using digital storytelling can be convenient for 21st century learning environment.

6. DISCUSSION

From the data analyzed quantitatively, it was found that digital storytelling could be a powerful and effective method to teach vocabulary and to improve learners' vocabulary retention. The results of experimental study conducted by Abdul-Ameer (2014) showed that learners in experimental group outperformed the control group and they were able to comprehend new words by giving more correct answers in the applied tests. The results of this current study also showed that learners tended to remember the words easily and write them correctly if they used them in their own stories.

One of the findings obtained from the quantitative data revealed that certain numbers of words could not be used by learners, so it can be inferred that they either did not know the meaning of the target word or could not manage to include that word in the story that they tried to fictionalize. Therefore, it was difficult to find out the exact reason why they did not use some target words to complete their stories. Another interesting finding was that learners mostly tended to copy or write similar sentences from either their own digital stories or other learners' stories. In their studies, Tsou et al. (2006) also reported that learners copied or recreated sentences from what they hear and read when they were recalling stories, which led them to be able to make more complex sentences and be proficient in English.

Qualitative data results revealed that almost all learners still tended to write down unknown words and memorize them. However, they agreed on the effectiveness of producing digital stories on learning and recalling words. Therefore, teachers should guide learners effectively and make them aware about different vocabulary learning strategies.

The aforementioned findings showed that digital storytelling could be a valuable and powerful tool in teaching vocabulary to EFL learners. Park (2014) states that digital storytelling gives learners an opportunity to learn by doing, to engage in trial and error, to provide similar stimulus, to present similar stimulus material and to explore, which results in

effective learning. Additionally, it is convenient for today's technologically-expert students in classrooms, so it has an undeniable potential to solve some problems that teachers mostly encounter in their language classrooms and to apply to the learners who are using technological devices every second of their lives.

6.1. Limitations

This study was limited to 23 students at Harran University, so the results can be generated for only this context. Similar studies need to be conducted with different students from different universities in Turkey.

It is also supposed that participants answered the questions honestly and seriously during the interviews.

6.2. Suggestions for Further Studies

It helps to learn words at university level in Şanlıurfa context, so it could be beneficial for English instructors to try to utilize it in their language classes. Although the number of participants was quite small and limited, it could be a ground work for other studies related to digital storytelling and vocabulary learning. The topic might be investigated through an experimental study with a larger group of participants, as an experimental study may reveal different findings that is contradicted with this study.

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8. APPENDICIES

8.1. Appendix 1: Vocabulary Test 1

Name&Surname:

Reading Quiz-1

First, read the story below and unscramble the words in the first part of the story. Then read the title and the story again. Write an ending for the story by using pictures and words in the box as much as possible.

hunter	**connect**	**cause**	**opposite**
nonsense	**alive**	**event**	**superstition**
complete	**form**		






Characters: Donald and two gangsters: Boss and Stooge

Setting: California

Donald's Lucky Day

Danold was a messenger boy. He had to work on the unluckiest day of the year, Friday the 13th. He was a superstitious boy, so he was very _____ **(nrevuso)** for being outside on that day. To remove negative thoughts from his _____ **(dimn)**, he turned his radio on his handlebars on and began to sing a song while he was riding his bicycle. The weather reporter _____ **(arwnde)** radio audiences to the approaching _____ **(osrtm)**. He thought that it was very difficult to _____ **(dpricet)** the weather in California. When he arrived at the house, he rang the doorbell. Inside the house, there were two gangsters, Boss and Stooge. Boss came close to the door, but he didn't open the door. He just opened the sliding window on the door and he gave Donald the box that he prepared _____ **(ni vadanec)**. He said: "you should

deliver the box before 12 o'clock." Donald looked at the box and read the address: "To 1313, 13th Street." He tried to make a _____ (**usges)** about the box, but he couldn't figure out what it was. He got up his bicycle and small _____ (**dposr)** of rain started to _____ (**ith)** his face. While he was riding his bicycle, he saw a ladder on his way. He stopped suddenly and rode by the ladder to protect himself from bad luck. Nevertheless, he couldn't notice the _____ **(rmriro)** on his way, so he hit and broke it.

8.2. Appendix 2: Vocabulary Test 2

Name&Surname:

Reading Quiz-2

First, read the story below and unscramble the words in the first part of the story. Then read the title and the story again. Write an ending for the story by using pictures and words in the box as much as possible.

recording	**adventure**	**independent**	**security**
risk	**limit**	**community**	**instead of**
hold on	**sense**		








quench: to drink liquid

wreckage: the parts that remain of a car, ship, or plane that has been destroyed

wound: injury

Main Characters: Jack and Kate

Setting: A tropical island

Lost

In 2004, on September 22, Oceanic Airlines Flight 815 was flying from Sydney to Los Angeles. There were 324 passangers on board. Jack was one of the passangers. The flight started out fine, however, Jack was a little bit _____ **(nruevso).** He was wearing a new black suit, so he loosened his tie and wanted a glass of water to quench his _____ **(tsihrt)**. After a few minutes late, the plane started shaking a little, so all passengers fastened their seatbelts. Jack looked at the old woman sitting in _____ (**efra)** next to him, but he thought that it was _____ **(onsnesne)** to scare. After some other mysterious_____ **(evsten),** suddenly, the plane hit severe turbulence, which _____ **(ceasud)** some of the

passengers to _____ **(alfl)** on the ground. Soon after that the plane broke apart in mid-air and _____(**chrsead)** on a tropical island.

When Jack opened his eyes, he saw sky and trees. He got up and his back was hurting a lot. He looked for someone who is_____ **(alvei)**, but soon he _____**(eralidze)** that he was alone. Then he heard a woman's scream, and he started to run towards there. When he arrived at the beach, he saw many other _____**(dsaistre)** survivors walking around the wreckage. Jack was an _____**(pexreiecend)** doctor, so he should help injured survivors. Then he saw a man who was_____ **(ptarepd)** under the plane. He tried to rescue him with two other survivors. After he rescued the man from the wreckage, he heard voice of a woman calling for help. She was pregnant and worried about her baby. He told her to_____ **(sturt)** him, and he promised that he would find someone to take care of her. He got tired after a while because his wound was still bleeding severely. He needed someone who would help him. Kate came near Jack to help him. She was a nurse, so she was _____ **(sliklde)** at doing first aid.

Now there were forty-eight survivors on the island._____

_____

_____

_____

_____

_____

_____

_____

8.3. Appendix 3: Vocabulary Test 3

Name&Surname:

Reading Quiz-3

First, read the story below and unscramble the words in the first part of the story. Then read the title and the story again. Write an ending for the story by using pictures and words in the box as much as possible.

adoptive	**nest**	**crime**	**professional**
bury	**pretend**	**lawyer**	**release**
expert	**condition**		











Main Characters: Frank, Shifty and Two mysterious men

Setting: A dark street

The Getaway

It was the last day of the week and the clock struck 12 o'clock. Frank was too late to go back to his home. He was a _____ **(fniacilna)** adviser at City Bank. He had a great _____ **(aecrer)** and he was very _____ **(scufcsusel)** at his job. When he left the bank, he saw a taxi. He thought that he was lucky because it was really hard to find a taxi at this time of the night. He raised his hand, however, the taxi driver didn't stop for him and that made Frank angry. Before starting to walk, he decided to light a cigarette. Suddenly, he heard footsteps behind him as he began to walk. Then, he saw two mysterious men who were following him. He looked at them in

_____ **(erfa)** because he thought that they would _____ **(atsel)** his money, so he began to _____ **(nru ayaw)** from them. After a while he stopped and hid behind a wall. Then he began to wait in silence. His heart was beating wildly. He felt _____ **(tpardpe)** in this dark street and he began to bite his nails. When he _____ **(sednaek)** around the corner, he bumped into a man who looked like Frank a lot. He felt as if he was looking at himself in the _____ **(roirmr).** Then, a crazy idea came to his mind. He would change both his clothes and his _____ **(idntyeti)** with this man to _____ **(oflo)** the mysterious men following him. He opened his business suitcase and gave some _____ **(scah)** money to the man. The man accepted his offer and took the money, so they changed their clothes. Both of them were very happy. Frank thought that he managed to get rid of those bad guys. However, Frank _____ **(aleriezd)** that Shifty was a wanted _____ (**tehfi)**. However, he couldn't _____ **(cperidt)** that he would be a criminal.

_____

_____

_____

_____

_____

_____

_____

_____

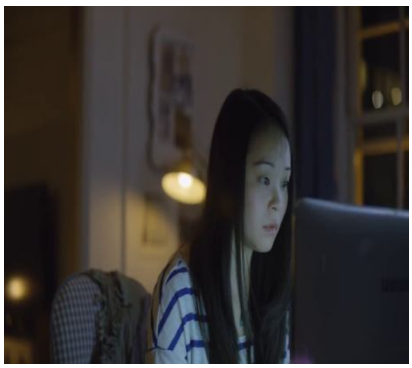
8.4. Appendix 4: Vocabulary Test 4

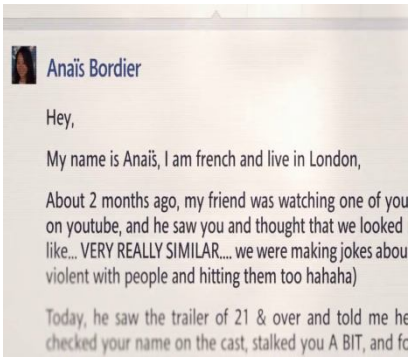
Name&Surname:

Reading Quiz-4

First, read the story below and unscramble the words in the first part of the story. Then read the title and the story again. <u>Write an ending</u> for the story by using pictures and words in the box <u>as much as possible</u>.

apart	**unless**	**inspect**	**run into**
lie down	**knee**	**legal**	**result**
shake	**publish**		





Main Characters: Samantha and Anais

Setting: Paris & Los Angeles

Another Me

Anais Bordier was a student and she was attending fashion school in Paris. One day, in December 2012, one of her friends posted a photo on her Facebook timeline that included a screenshot of someone in a YouTube video. The girl on the picture was looking at her, and she was looking back at herself. She was a _____ **(ropselfiosna)** actress who looked _____ **(ditinlcea)** to Anais. She thought that was _____ **(onesnesn)** because if she had a twin sister, it would have been mentioned on her records in adoption _____**(egnyca)**. She was so curious that she googled her name and discovered that in addition to having the same face, they had the same date of birth, the same place of birth, the same hair _____ **(ytels)** and they had both _____ **(opetdiva)** parents. All information was _____ **(athmcnig)** hers, however, they had _____ **(espertea)** lives. She was _____ **(skheodc)** and her eyes opened as wide as they physically could after she got the _____ **(snwe).** Her name and surname sounded like she would have been adopted, Samantha Futerman. Samantha was an actress and she was pursuing her acting _____ **(ecrare)** in Los Angeles. Then Anais found her YouTube video: *"How It Feels to Be Adopted."* When she

first saw the video, she _____ (**elriezad)** that her sister was amazing! She immediately thought of the film, The Parent Trap, _____ (**xeptec)** that it was reaI life. She decided to get in touch with her, so she sent a Facebook message to Samantha _____ **(ni asce)** she also wanted to meet her twin sister. Anais thought that she had to talk to Samantha because she was sure that she would enjoy her twin sister's _____ (**mcoyapn)**.

_____

_____

_____

_____

_____

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_____

_____

_____

_____

_____

https://www.facebookstories.com/stories/53771/twinsters

http://www.cosmopolitan.com/entertainment/movies/q-and-a/a37893/twins-separated-at-birth-twinsters-documentary-sxsw-interview/

8.5. Appendix 5: Storyboard Template

Group Members:

Story Title:

Characters:

-
-
-
-

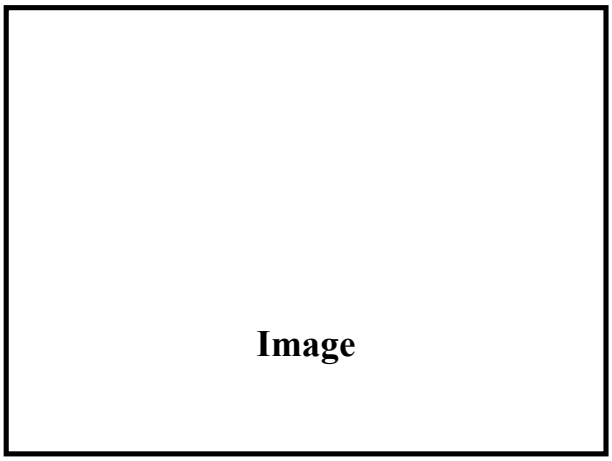
Time (When?):

Setting (Where?):

Target Vocabulary Used in the Story (At least 10 words)

-

Scene: ____



Story Line:

_____

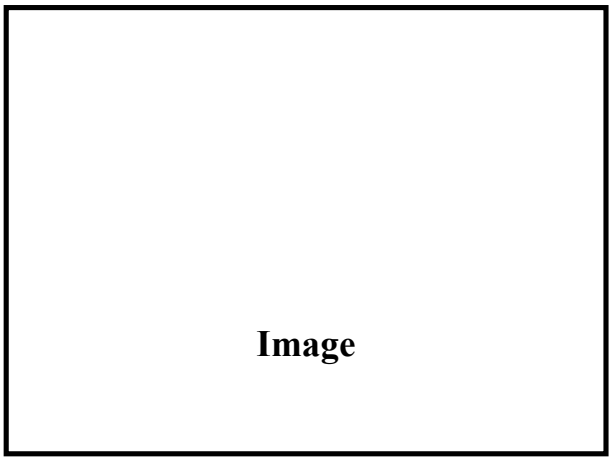
_____

_____

_____

_____

Scene: ___



Story Line:

_____

_____

_____

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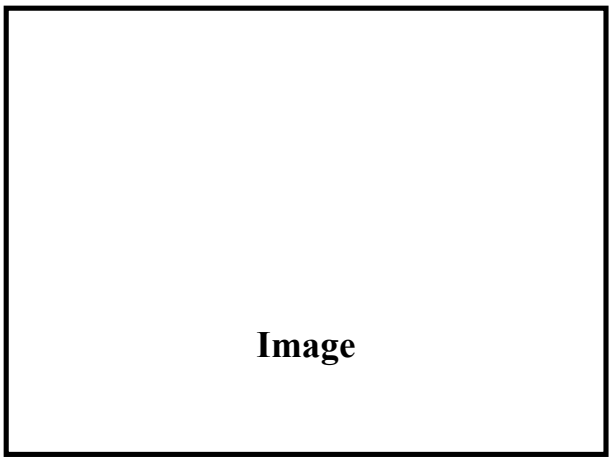
_____

Scene: ____



Story Line:

_____

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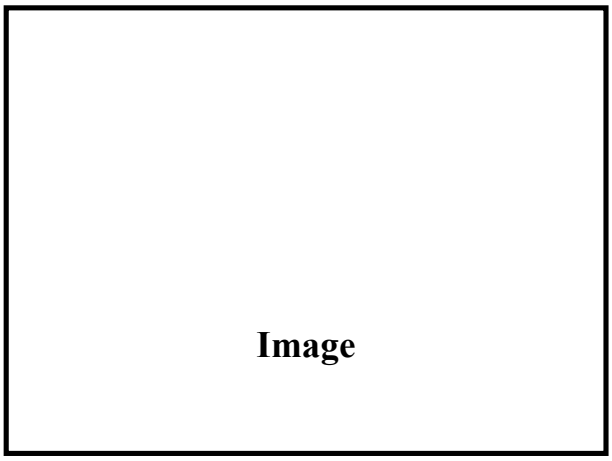


Story Line:

_____

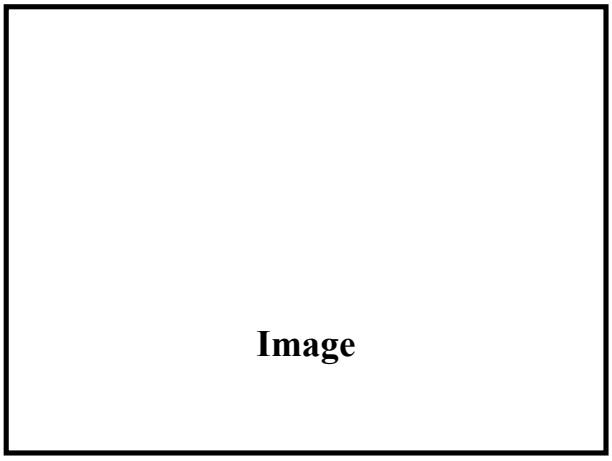
_____

_____

_____

_____

Scene: ___



Story Line:

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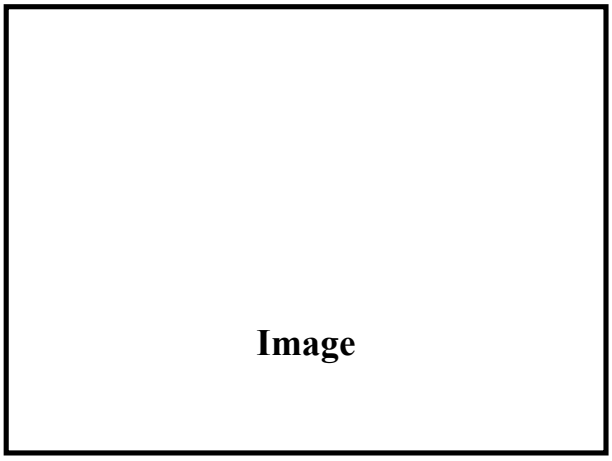
Scene: ___



Story Line:

_____

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_____

8.6. Appendix 6: Interview Questions

1) What did you think when you learned that digital storytelling was one of the requirements for our reading course? What do you think now?
2) What are the top 3 things that you like about integrating digital storytelling into reading course?
3) What are the top 3 things that you dislike about integrating digital storytelling into reading course?
4) What kind of strategy or strategies do you use to learn vocabulary?
5) What do you think about learning vocabulary through creating digital stories?
6) Do you think that creating digital stories is helpful to remember the words easily?
7) Do you think that creating digital stories supported your learning needs when you take your learning style into consideration? or Did it failed to satisfy your needs?
8) You know that creating digital story contains many steps such as writing a story, finding images and recording etc. In this process, what were the hardest parts for you? Why?
9) Do you think that creating digital stories contributed to your language learning process?
10) Which language skills or competences do you think (writing, reading, pronunciation, listening, creativity, technology knowledge, and collaboration skills) has improved in the process of creating digital stories?