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The Impact of Cyberhunt on Reading Comprehension Level in Foreign Language Teaching*

İngilizce Öğretiminde Cyberhunt Kullanımının Okuduğunu Anlama Düzeyine Etkisi*

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ABSTRACT

The aim of this study is to determine the effect of the Cyberhunt activities and the methods in the current curriculum on students' reading and comprehension level in English. This study was conducted using the quasi-experimental design. Participants of this study consisted of 32 fifth grade students who are studying in a secondary school from Çilimli district of Düzce province in the 2017-2018 academic year. The simple present tense test was applied to the students as pre-test and post-test to determine whether the initial conditions were equal before the test process and whether the method used in the foreign language lessons in the experimental and control groups was active after the application process. Dependent samples t-test, independent samples t-test, and regression analysis were applied to the scores of the students in experimental and control groups. As a result of the analyses made, there was a significant difference between the post-test scores of the experimental group students who are studying English language courses with Cyberhunt activities and the control group students who are studying the foreign language courses with the methods in the current curriculum in favor of the experimental group. It was also found that the Cyberhunt is a significant predictor of reading comprehension level. In addition, as a result of the independent samples t-test made on the final test scores of the students in the experimental group, the achievement levels of the students show no difference according to gender.

Keywords: Cyberhunt, English language learning, English language teaching, English language instruction

ÖZ

Bu çalışmanın amacı, İngilizce öğretiminde, mevcut öğretim programındaki yöntemler ile Cyberhunt etkinliklerinin, öğrencilerin İngilizce okuduğunu anlama düzeyine etkisini belirlemektir. Bu çalışma, yarı deneysel desen kullanılarak gerçekleştirilmiştir. Bu araştırmanın katılımcıları 2017-2018 eğitim öğretim yılı, Düzce ili, Çilimli ilçesine bağlı bir ortaokulda öğrenim görmekte olan toplam 32 adet beşinci sınıf öğrencisinden oluşmaktadır. Deney süreci öncesinde başlangıç koşullarının eşit olup olmadığını ve uygulama süreci sonrasında deney ve kontrol gruplarında işlenen İngilizce derslerinde kullanılan yöntemin etkililiğini belirlemek için öğrencilere the simple present tense (geniş zaman) testi ön test ve son test olarak uygulanmıştır. Deney ve kontrol grubunda bulunan öğrencilerin aldıkları puanlar

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üzerinde bağımlı örneklem t-testi, bağımsız örneklem t-testi ve regresyon analizi uygulanmıştır. Yapılan analizler sonucunda, Cyberhunt etkinlikleri ile İngilizce dersi işleyen deney grubu öğrencileri ve mevcut öğretim programındaki yöntemler ile İngilizce dersi işleyen kontrol grubu öğrencilerinin son test puan ortalamaları arasında deney grubu lehine anlamlı bir fark bulunmuştur. Ayrıca, Cyberhunt etkinliklerinin okuduğunu anlama düzeyinin anlamlı bir yordayıcısı olduğu belirlenmiştir. Buna ek olarak, deney grubu öğrencilerinin son test puan ortalamaları üzerinde yapılan bağımsız örneklem t-testi sonucunda, öğrencilerin başarı düzeylerinin cinsiyete göre bir farklılık göstermediği sonucuna ulaşılmıştır.

Anahtar Sözcükler: Cyberhunt, İngilizce eğitimi, İngilizce öğrenme, İngilizce öğretimi

INTRODUCTION

Kant expresses that nature equips people with the nuclei of the capabilities and possibilities, and that it leaves them to develop them and that human beings can only be human through education (Anğ, 2006; Kıroğlu, 2009). In their works, Jeffs and Smith (2005) reported that education is not an attack on his mind by enslaving man in his work. Kıroğlu (2009) mentions that when education is mentioned we should not realize only the education in schools and he also states that it is a phenomenon that can be realized almost everywhere. Communication has become very important among different societies that are in our world which is becoming smaller in terms of globalization (Ökmen, 2015). With the technological developments taking place in many areas, people need to communicate with different cultures and people, and for this reason only the mother tongue is no longer enough for people (Özkanal & Hakan, 2010), in this global world, the language of communication which has become irresistible (Mede & Uygun, 2014) and it is evident that English is of great importance (Orhan & Çeviker-Ay, 2017).

Language is the most effective means of communication that people use to express themselves (Bayyurt, 2013). The language, which is the symbolic expression of people's historical and cultural background as well as their views of life, thoughts and lifestyles, is also the whole of the values created in the process of culture, history and social development in which it was developed (Kartal, 2010). In this respect, the language reflects culture and is influenced and shaped by it, simultaneously (Nida, 2003; Özil, 1991; Abdallah-Pretceille, 1983). Language is the only means of creating, producing, understanding and transmitting meaning (Cortazzi & Jin, 1999). At the same time, language is defined as the form and the framework of thought (Akatli, 1998).

A language is considered foreign if it is learned largely in the classroom and is not spoken in the society where the teaching occurs (Kramer-Moeller & Catalano, 2015). Foreign-language instruction is becoming increasingly important in our global society (Johnson, 2011). In addition, students can have different purposes and reasons in their foreign language learning journey. Some of these purposes can be to be able to communicate with people they would otherwise not have the chance to know, to open doors to other cultures, and to understand and appreciate the people from other countries (Cummins, 1994). Therefore, it is vital that the foreign language education system meets the expectations of the learners and in order for the learners to be able to communicate with the people from other cultures when needed in real life at the end of their language learning journey (Gül, 2016).

Language teachers understand that acquiring a language means learning a skill, not a body of information (Branch, 2012). Thus, many foreign language classrooms are social with a lot of group work, fun classroom activities, and homework exercises which help students strengthen their speaking, listening, writing, and reading skills (Lee, 2005). Foreign language learning brings along a challenging process. Until today, numerous scientific studies have been conducted to evaluate students' performance as a problem in foreign language teaching and to investigate the underlying causes of this problem (Ünal et al., 2011). Today, students are recognized as those who are responsible for their own learning and who need to be actively involved in the language learning process by using their knowledge, skills and strategies (Mandl & Freidrich, 2006; Ünal et al., 2011). Chamot (2001a) stated that a good learner is the one who uses the strategies effectively, productively, practically, questionably.

Knowledge of another language provides people with the opportunity to look at the world and various cultures with a broader prospective (Branch, 2012). Countries around the world are becoming increasingly dependent on each other and new technologies are removing the boundaries once drawn. As these boundaries between countries are demolished, foreign language (FL) instruction has become more necessary (Morris, 2005). Foreign language teaching has multiple elements and it is a process that must be kept open to changes (Güler, 2005).

It is clear that the method used has an important function in teaching (Ökmen, 2015). Afrin (2014) stated that there has been a significant change in foreign language teaching over the last two decades and that language teaching has undergone significant changes in terms of methods. Gömleksiz (1999) stated that the method of teaching foreign language is the most important factor affecting the learning process and that educators and linguists have worked for years to find the most effective way in foreign language teaching. In another study, Memiş and Erdem (2013) mentioned that the method of teaching a language is a factor that will bring the student to the aims of education as quickly and most reliably and that the existing methods cannot be effective alone. A method that may be useful on one person may not be equally successful on another person or may fail completely (Tarcan, 2004). Good knowledge of foreign language teaching approaches and methods is very important in terms of development of

new approaches and methods and follow-up of this process (Demircan, 2013).

Prensky (2009) argued that today's learners need to develop several "21st Century Skills" to prepare themselves for life by using technology. Students (and learners) not only seem to have high expectations of how they should learn, but they also demand that technology should play an integral part in their learning (Conole & Creanor, 2007). Stubbé and Theunissen (2008) stated that learning activities should have knowledge creation, comprehension and higher order learning at its core through the use of selfmonitoring, reflection, testing, questioning and student self-evaluation. From this information, it can be said that technology is an integral part of foreign language teaching. Accordingly, internet supported activities can be used in foreign language teaching.

A Cyberhunt (Internet Scavenger Hunt) is an Internet activity that focuses on gathering information from web sites to answer questions or to support a concept on a particular theme or content area (Baedke, 2003). The first Internet Scavenger Hunt was developed in 1992 by Rick Gates (Lih, 2009). He created the hunt to encourage adults to explore the resources on the Internet (Kozma, 1997). Therefore, a cyberhunt refers to an online activity where learners are using the Internet as a tool to find answers to questions based upon a certain theme or topic that has been composed by someone else (Rechtfertig, 2002). In their study, Spool et al. (1999) described Cyberhunt activities as a means of discovering how quickly and/or correctly the participants were able to find information in an electronic text. Benson (2003) refers to Cyberhunt activities as an internet activity that focuses on collecting information from various websites to support a lesson on a specific theme or content area or to find answers to questions. A Scavenger hunt is essentially a worksheet or a web page containing a series of questions and a list of web pages where the students may find the answers (Renau-Renau & Pérez-Garralón, 2016). These questions, which are asked to be answered by the students, are generally at different cognitive levels and teachers may use cyberhunts as an introduction to a theme in a pre-activity or as a review for an upcoming test or other form of authentic assessment (Slayden, 2000). Du Plessis (2010) mentions that Cyberhunt activities are done in two ways as horizontal and vertical. A Cyberhunt activity is called horizontal when the answers of the questions are found in a specific web page (Du Plessis & Webb, 2011). Horizontal Cyberhunt activities can be used by teachers and students who are newly acquainted with the internet or have low skills in information technologies. These simple and low level cyberhunts assist teachers and learners to feel secure in the initial stages and build ICT confidence in both parties (Du Plessis, 2010). A cyberhunt becomes vertical the moment a learner has to explore a website deeper on his/her own to find the answer to the composed question (Du Plessis, 2003). In practice it entails that a learner is provided with a question and a hyperlink that opens a web page when the hyperlink is selected. (Du Plessis & Webb, 2011). Du Plessis (2003) calls this practice step by step discovery. Traditional cyberhunts are online input activities that students use the Internet as a tool to answer questions prepared by the teacher on a predetermined theme or subject (Slayden, 2000). For these activities to be implemented, the teacher provides the links relevant to the questions the students discover and try to answer (Du Plessis & Webb, 2012). In addition, Slayden (2000) stated that teachers could use the Cyberhunt activities to teach or enrich a new and very different subject. It is possible to turn traditional Cyberhunt activities into extended Cyberhunt. However, we are of the opinion that the traditional Cyberhunt concept can be extended effectively when learners become the designers of Cyberhunts (Du Plessis, 2010). Cyberhunt activities can also be used to generate information when students become Cyberhunt designers. In the initial phase when cyberhunts are introduced to learners, the teacher is the designer, but the next phase is to assist learners to become designers of knowledge through the creation of their own cyberhunts (Du Plessis, 2003). This relates to the idea of knowledge as design (Harel and Papert, 1991) where learners become designers or users of knowledge instead of passive consumers of knowledge (Du Plessis, 2010).

A typical Cyberhunt is in the graphics editor form of a question and answer. It involves participants in hunting through the material selected for evaluation in search of specific facts without using the browser's "Find" command (Wilson & Landoni, 2001). This method is suggested by Spool et al. (1999) as a means of learning how easy it is for participants to find information in a website, and is of particular relevance to electronic textbooks, which are often used for the retrieval of facts and pieces of information. In his study, Wilson (1999) stated that in Cyberhunt activities, participants can browser and search for the word or phrase in the search engine without having to click on the "find" command, they do it directly by clicking on the link to the internet address is ready to get the information needed to talk about and he also emphasized that the answers in Cyberhunt activities should be learned by the participants by going to the given addresses. In addition, Cyberhunt activities can be used to promote group work and collaborative learning, as well as for individual activities (Starr, 1999; Slayden, 2000). This study was designed basing on the above explanations that Cyberhunt activities will have a positive effect on English teaching and will facilitate learning.

Aim of the Study

The general aim of this study is to determine the effect of the implementation of Cyberhunt activities in fifth grade English course on students' reading comprehension levels.

The research questions sought answers in this study are as follows:

1. Is there a significant difference between the pre-test and post-test scores of the students taking English courses with Cyberhunt activities?
2. Is there a significant difference between the pre-test and post-test scores of the students taking English courses with the methods in current curriculum?

3. Is there a significant difference between the post-test scores of the students who have completed the English courses with Cyberhunt activities according to gender?
4. Is there a significant difference between the post-test scores of the students who have completed the English courses with the Cyberhunt activities and the methods available in the current curriculum?
5. Does the use of Cyberhunt activities in English teaching predict students' reading comprehension?

METHOD

This study was performed according to the quasi-experimental design with pre-test post-test comparison group design. The pre-test post-test comparison group design is to measure the participants with the dependent variable before and after the experimental research (Karasar, 1999).

Study Group

The study group of this study consisted of the 5th grade students studying in a public school in Duzce province in 2017 academic year. The selection of the classes in the research was carried out by considering the classes that the same teacher entered. Table 1 shows the numerical data of the students.

As seen in Table 1, a total of 15 people (eight females and seven males) constitute the experimental group. In the experimental group, the pre-test result of a student was removed from the group because it was zero In this case, the number of students in the experimental group of 16 fell to 15. Female students in the experimental group accounted for 53.3% of the group and 46.7% of the male students. In the control group, there are 17 female and nine male students. Female students accounted for 51.5% of the control group, while male students accounted for 48.5%. The total number of students in both groups was 32, including 17 female and 15 male. Of the study, 53.1% were female students and 46.9% were male students.

Data Collection Tools

After the literature review was conducted about the research, an achievement test was developed to measure the students' reading comprehension levels. In this study, a total of 100 questions were applied to the students in the experimental and control groups. The course implementation process consisted of three hours per week in both groups and was applied for eight weeks. At the end of the research process, the same "the simple present tense test" was applied to the experimental and control groups as posttest.

Difficulty, discrimination and variance were calculated before and after the experiment. According to the pretest item index applied before the experiment, it was determined that one item was easy, 39 items were medium, 58 items were difficult and two items were very difficult. After the experimental process, the posttest item difficulty index was found to be easy, five items were easy, 94 items were medium and one was difficult. In addition, the normality test was applied to determine whether the distribution of the findings obtained from the pre-test and post-test results of the experimental and control groups were normal before the analysis of the collected data. According to the results obtained from these analyzes, it was determined that the items of the simple present tense test used as pre-test and post-test showed normal distribution.

Data Analysis

Pre-test was applied to the students in the experimental and control groups before the experiment. After eight weeks, the same simple present tense simple test was applied to both groups as a posttest to determine the effectiveness of the method used.

The effectiveness of the method on student achievement and the difference between pre-test and post-test in both groups were determined by dependent samples t test, independent samples t-test and regression analysis. The independent samples t-test was used to determine whether the success had changed according to gender. The data were analyzed with SPSS 22 (Statistical Package for Social Sciences).

FINDINGS

In order to determine whether there is a difference between the learning level and conditions of the experimental and control group students, dependent samples t-test, independent samples t-test and regression analysis were applied on the pre-test and post-test scores. The data obtained as a result of the analyzes are given in tables 2, 3, 4, 5, and 7.

In Table 2, the mean score of 15 students in the experimental group was found to be $\bar{x}$=26.00 and the mean score of 17 students in the control group was found to be $\bar{x}$=28.29. No significant difference was found between the pre-test mean scores of the two groups (t=-0.815; p>0.05 (0.422). According to these findings, it is seen that the initial conditions of the

Table 1: Numerical Data Related to Students Participating in the Study

Students	Gender	*f*	%
Experimental Group	Female	8	53.3
	Male	7	46.7
	Total	15	100.0
Control Group	Female	9	47.1
	Male	8	52.9
	Total	17	100.0
All Groups	Female	17	53.1
	Male	15	46.9
	Total	32	100.0

Table 2: Independent Samples t-Test Results for Pre-Test Means

Groups	*n*	$\bar{x}$	sd	*Df*	*t*	*p*
Experimental	15	2.,00	5.81			
				30	-.815	.422
Control	17	28.29	9.42			

experimental and control groups are equal. Thus, it was accepted that the experimental and control groups were equal in terms of initial conditions.

As seen in Table 3, the mean of the pre-test scores of 15 students in the experimental group is $\bar{x}$=26.00. The mean of post-test score of the experimental group was found to be $\bar{x}$=58.47. According to the results of Dependent Samples t-Test using pre-test and post-test scores, there was a significant difference between the average scores of the experimental group students in favor of post-test (t=-5.76; p<0.05 (.,00). According to these results, it can be said that Cyberhunt activities significantly increased students' reading comprehension level in teaching the simple present tense subject in the experimental group.

According to the data presented in Table 4, the arithmetic average of the 17 students in the control group obtained from the pre-test was found as $\bar{x}$=28.29 and the arithmetic average of the points they got from the post-test was found as $\bar{x}$=31.29. According to the dependent samples t-test results on pre-test and post-test scores, there was no significant difference between the mean scores of the control group students (t=1.30; p>0.05 (0.20). In this context, it can be said that the method which is used in the reading conprehension of the simple present tense in the control group is not effective on the success of the students due to the natural structure of the traditional teaching method, and the applied method is partly effective on the success of the students.

As shown in Table 5, the arithmetic means of the scores of the students in the experimental and control groups were calculated as $\bar{x}$=58.47 and $\bar{x}$=31.29, respectively. As a result of the independent sample t-test using the post test point averages of both groups, there was a significant difference between the posttest mean scores of the two groups in favor of the experimental group (t=4.27; p<0.05 (0.000). Based on these findings, it was determined that the experimental group who had been studying with Cyberhunt activities was much more successful than the control group. Thus, it can be said that Cyberhunt activities are significantly effective in language teaching on the development of reading comprehension skills compared to the methods in the current curriculum.

Table 6 presents the results obtained from the linear regression analysis conducted to determine the predictive level of Cyberhunt activities used in English lessons of the experimental group students on the reading comprehension skills of the control group students who took the English course with the traditional language teaching methods. When Table 6 is examined, Cyberhunt activities used in English lessons of experimental group students were found to be a significant predictor of students' reading comprehension level (F=18.31; p<0.05 (0.000). In addition, considering the determinant number (R^2= 0.379), it can be said that Cyberhunt activities accounted for 38% of the students' reading comprehension level.

In Table 7, the arithmetic averages of the scores of the male and female students in the experimental group were $\bar{x}$=56.13 and $\bar{x}$=61.14, respectively. There was no significant difference between the posttest mean scores of the two groups in terms of gender (t=0.411; p>0.05 (0.155). Cyberhunt activity of the study showed a positive effect on the students' reading comprehension level, but this success did not show a significant difference according to the gender of the students.

DISCUSSION, RESULTS and RECOMMENDATIONS

In this study, it was aimed to determine the effects of Cyberhunt activities and methods in the fifth grade English course on students' reading comprehension level. According to the purposes of the study, after the analysis of the data obtained from the success tests which was applied to the experimental and control group students, it was concluded that the initial conditions of the students in both groups were equal in terms of both pre-learning and the factors.

Table 3: Dependent Samples t-Test Results of Pre-Test and Post-Test Scores of Experimental Group Students

Experimental Group	*n*	$\bar{x}$	sd	*Df*	*t*	*p*
Pretest	15	26.00	5.81			
				14	-5.76	.000
Posttest	17	58.47	22.86			

Table 4: Dependent Samples t-Test Results of Pre-Test and Post-Test Scores of Control Group Students

Control Group	*n*	$\bar{x}$	sd	*Df*	*t*	*p*
Pretest	17	28.29	9.42			
				16	-1.30	.209
Posttest	17	31.29	12.04			

Table 5: Independent Samples t-Test Results for Post Test Means

Groups	*n*	$\bar{x}$	sd	*Df*	*t*	*p*
Experimental	15	58.47	22.86			
				30	4.27	.000
Control	17	31.49	12.04			

Table 6: Results of Linear Regression Analysis of Experiment Group Students' Average Scores of Post Test

Variances	*B*	*β*	R	R^2	*F*	*p*
Constant	85.63		.616	.379	18.31	.000
Post test	27.17	-.616				.000

Table 7: t-Test Results on the Post test Scores of Experiment Group Students According to Gender

Gender	*n*	$\bar{x}$	sd	*Df*	*t*	*p*
Female	8	56.13	17.37			
				13	-.411	.155
Male	7	61.14	29.18			

Cyberhunt activities used in the experimental group had a significant effect on students' reading comprehension levels. Although there is no study in the literature about the use of Cyberhunt activities in teaching English, there are many studies supporting the impact of technology use on language skills in English lessons. Adıgüzel and Kumkale (2018) found that the use of digital story in English lessons had a positive effect on students' reading comprehension levels in their experimental study. Similarly, in a study conducted by Sancar- Tokmak, Sürmeli and Özgelen (2014), it was seen that preparing a digital story helped the undergraduate students in the foreign language education department develop their creativity and integrate technology into their courses. Godwin-Jones (2016) argues that the use of an augmented reality (AR) game Pokemon GO in foreign language lessons contributes to the linguistic skills of the students and that by adding different equipment to this practice, it will improve the possibility of living a foreign language learning process. In another study, Vassilikopolou et al. (2011) investigated the effect of the use of digital cartoons in foreign language teaching. As a result of the study, it was determined that digital cartoons had a positive effect on foreign language learning. In their study, Yang and Mei (2018) investigated the effect of augmented reality application in foreign language lessons and found that students gave positive responses to the use of augmented reality practice in foreign language courses. In his study, Yıldırım (2012) aims to determine the effect of educational computer games on vocabulary learning in foreign language lessons and has determined that mobile games and vocabulary instruction provide persistence in learning. In addition, in his study for the purpose of evaluating the use of computers in foreign language lessons in terms of reading and comprehension success, Girón-García (2015), stated that the materials used on computer in foreign language courses increased the reading and understanding success of students. The researcher also found in his study that the students responded positively to the use of computer technologies in foreign language courses.

It was observed that the English teaching methods in the current curriculum used in the control group courses had a partial impact on students' level of reading comprehension. In parallel with this result, Marzban (2011), in her study to determine the effect of computer-assisted language teaching on English reading and comprehension success, states that the reading pieces given on paper by using traditional teaching methods in English lessons, which has a lesser effect on the success of students than the reading pieces given on computer. Yakut and Aydın (2017) stated that the use of blogs alone has little effect on reading and comprehension success, but it will increase the success when used with appropriate teaching method. In a study conducted by Liu (2010) in order to determine the effect of multimedia on foreign language teaching, it was found that foreign language lessons with traditional teaching had a partial effect on students' reading and understanding success. In another study, Soroudi and Heidar (2016), in their study to determine the effect of computer-based reading pieces and traditional reading pieces on student achievement, found that traditional reading pieces on students' reading comprehension successes had less impact on computer-based reading. In addition, Taj et al. (2017) found that foreign language courses using traditional teaching methods and printed books have little effect on student achievement in their study on the effect of technology-enriched teaching on students' reading and understanding achievements. Bhatti (2013), in his study, examined the effect of a computer-assisted environment on students' reading and comprehension skills ,and determined that students who have foreign language lessons with a teacher-centered approach have less success than the students who have foreign language lessons with a computer assisted environment.

When the post test scores of the experimental and control group students were compared, it was determined that the Cyberhunt activities used in the experimental group had a greater effect on the level of reading comprehension than the methods in the current curriculum used in the control group. In addition, it was concluded that the Cyberhunt activities used in English classes of students in the experimental group had a significant predictive level on the level of reading comprehension in English. In parallel with these results, Zhu et al. (2017) tried to determine students' foreign language vocabulary learning success by using a visual dictionary called ViVo in foreign language courses. At the end of their study, they stated that they learned 30% more words than the English words they know. In addition, Azabdaftari and Mozaheb (2012) used mobile vocabulary cards and paper vocabulary cards for teaching vocabulary in a foreign language. As a result of this research, the use of vocabulary cards on smart phones in foreign language courses was found to be more effective in terms of students' vocabulary learning and researchers found that mobile vocabulary cards provided persistence in learning. In addition, Sancar-Tokmak and Yanpar-Yelken (2015) conducted a study on how digital story preparation in foreign language teaching has an effect on teachers' technological pedagogical content knowledge. At the end of the research, it was seen that students who prepared a story in a foreign language on the digital story preparation program had an increase in their self-confidence in terms of using the Technological Pedagogical Content Knowledge in foreign language courses and they stated positive opinions about students' digital story creation process. In their study to determine the effect of computer use on students 'reading and comprehension success in foreign language courses, Tzortzidou and Hassapis (2001), found that the content of computerized content in foreign language courses in the students' reading and comprehension success has been determined to be significantly effective. In another study, Asgari and Salehi (2018) tried to determine the effect of WebQuest application on vocabulary learning in foreign language and determined that using WebQuest as a result of the research had a positive effect on the success of vocabulary learning in foreign language. Rahimi and Miri (2014) determined that mobile dictionaries have a positive effect on foreign language learning in their research to determine the effect of mobile dictionary usage on foreign language learning. Hattem (2012), in his research on determining the effect of microblogs on learning in foreign

language teaching, found that using Twitter as a microblogging platform has a positive effect on foreign language learning. In addition, Kayaoğlu et al. (2011) investigated the effects of animations on foreign language vocabulary learning. As a result of the study, it was seen that teaching with animations in foreign language lessons had a positive effect on vocabulary learning and retention. In addition, Zarei et al. (2017), in their research that they tried to determine the effects of Telegram on vocabulary learning in foreign language lessons found that the use of Telegram has a positive effect on learning a foreign language and that students have a positive attitude towards this practice.

When the success of the male and female students in the experimental group were examined, there was no significant difference between the two genders in terms of the level of comprehension in English. Similarly, Asgari and Salehi (2018) reported the number of female and male students as 23 and 49 in their experimental studies, but did not comment on whether the foreign language learning achievement differs according to gender. In another study, Zarei et al. (2017) reported the number of male and female students as 50, but they did not comment on the fact that Telegram application had a significant difference according to gender. Ullrich et al. (2010) observed that the use of microblogging applications in foreign language teaching had an impact on student communication and observed that students from the same gender were more in touch with microblogging tools. Unlike the above-mentioned studies, Soroudi and Heidar (2016), in their study investigating the effect of computer-based foreign language teaching on learning success, stated that 60 people, 30 in the experimental and 30 in the control group, were all composed of female students. Yakut and Aydın (2017) studied with a total of 42 students, 27 women and 15 male students, found that the effect of blogs on reading and comprehension in foreign language didn't show any difference in terms of gender factor. In another study, Taj et al. (2017) tried to determine the effect of technology-enriched foreign language teaching on reading and understanding success. In this study, the researchers stated that the gender of everyone in the group of 122 students was women.

Cyberhunt activities were used only for fifth grade students. The effect on student achievement can also be investigated by using it for students in other education levels and classes. The use of Cyberhunt activities in English is only used to determine the effect on reading comprehension level. This study can be done in order to measure how students affect their listening and speaking skills in English classes and by reaching more sampling. Only web addresses prepared by the teacher were used in the study. In a similar study, researchers can also perform Cyberhunt activities with augmented reality applications.

REFERENCES

Abdallah-Pretceille, M. (1983). The perception of the other: Pivotal point of the intercultural approach. *Francais dans le Monde, 181,* 40-44.

Adıgüzel, A., & Kumkale, Z. (2018). The effect of digital story preparation program on reading comprehension in English. *Electronic Journal of Education Sciences, 7*(14), 176-186.

Afrin, S. (2014). *Teaching methods and approaches in ESL classrooms in Dhaka. A comparative study between English and Bangla Medium Schools* (Unpublished bachelor's thesis). BRAC University, Department of English and Humanities. Bangladesh.

Akatlı, F. (1998). *Acıyla, sevgiyle, kahramanca.* İstanbul: Boyut Kitapları.

Anğ, T. (2006). *Felsefe, eğitim, tarih ve insan üzerine düşünceler.* İstanbul: Toroslu.

Asgari, M., & Salehi, H. (2018). Impact of using web-quests on learning vocabulary by Iranian pre-university students. *International Journal of Foreign Language Teaching & Research, 6*(22), 33-46.

Azabdaftari, B., & Mozaheb, M. A. (2012). Comparing vocabulary learning of EFL learners by using two different strategies: Mobile learning vs. flashcards. *The EUROCALL Review, 20*(2), 47-59.

Baedke, J. (2003). Using web-based research activities-cyberhunts, webQuests, PBL++MM: How do you choose? *Virginia Society for Technology in Education, 17*(2), 5-11.

Bayyurt, Y. (2013). Foreign language learning for young learners in 4+4+4 education system (Paper). *Hacettepe University 1st National Workshop on Foreign Language Education,* Ankara.

Benson, B. (2003). Handhelds and TSSA: Using handheld computers to improve productivity and professional practice in school administration. *Virginia Society for Technology in Education, 17*(2), 2-4.

Bhatti, T. M. (2013). Teaching reading through computer-assisted language learning. *The Electronic Journal for English as a Second Language, 17*(2), 1-11.

Branch, R. (2012). *The Effects of Web Based Instruction on Foreign Language Learning* (Unpublished dissertation). Walden University, Minneapolis.

Chamot, A. U. (2001a). Issues in language learning strategy research and teaching. *Electronic Journal of Foreign Language Teaching, 1*(1), 14-26.

Conole, G., & Creanor, L. (2007). *In their own words: Exploring the learner's perspective on e-learning,* Bristol: Joint Information Systems Commitee.

Cortazzi, M., & Jin, L. (1999). Cultural Mirrors. In Hinkel, E. (Ed.), *Culture in second language and learning teaching* (pp. 148-160). Cambridge, UK: Cambridge University Press.

Cummins, J. (1994). Knowledge, power and identity in teaching English as a second language. In Genesee, F. (Ed.), *Educating second language children: The whole child, the whole curriculum, the whole community* (pp. 35-58). Cambridge, UK: Cambridge University Press.

Demircan, Ö. (2013). *Yabancı Dil Öğretim Yöntemleri.* İstanbul: Der yayıncılık.

Du Plessis, A. (2003). *Learners Perceptions of Creating a Collaborative Hypermedia Product: AN Exploratory Study at Mount Pleasant Primary School* (Unpublished master's thesis). Rhodes University, South Africa.

Du Plessis, A. (2010). *The Introduction of Cyberhunts as a Teaching and Learning Strategy to Guide Teachers Towards the Integration of Computer Technology in Schools* (Unpublished dissertation). Nelson Mandela Metropolitan University, South Africa.

Du Plessis, A., & Webb, P. (2011). An extended cyberhunts strategy: Learner centred learning by-design. *Australasian Journal of Educational Technology, 27*(7), 1190-1207.

Du Plessis, A., & Webb, P. (2012). Digital immigrant teacher perceptions of an extended Cyberhunt strategy. *Australasian Journal of Educational Technology, 28*(2), 341-363.

Girón-García, C. (2015). Literacy and technologies in EFL settings: Fostering reading comprehension on the Internet. *Bellaterra Journal of Teaching & Learning Language & Literature 8*(2), 69-100.

Godwin-Jones, R. (2016). Augmented reality and language learning: From annotated vocabulary to place-based mobile games. *Language Learning & Technology 20*(3), 9–19.

Gömleksiz, M. N. (1999). Yabancı dil öğretiminde kullanılan yöntemler ve yöntem sorunu. *Fırat University Journal of Social Science,* 253-264.

Gül, A. (2016). *Constructivism as a new notion in English language education in Turkey* (Unpublished dissertation). Kent State University, Ohio.

Güler, G. (2005). The common European framework of reference: Learning, teaching, assessment and the foreign language education process in Turkey. *Trakya University Journal of Social Science, 6*(1), 90-106.

Harel, I., & Papert, S. (1991). Software design as a learning environment. In I. Harel and S. Papert (Eds.), *Constructionism: Research reports and essays 1985-1990 by the Epistemology and Learning Research Group* (pp. 41-84). New Jersey: Ablex.

Hattem, D. (2012). The practice of microblogging. *Journal of Second Language Teaching and Research, 1*(2), 38-70.

Jeffs, T., & Smith, M. K. (2005). *Informal Education-conversation, democracy and learning* (Revised edition). Shrewsbury: Educational Heretics Press.

Johnson, V. H. (2011). *An examination of teacher perceptions of foreign language learning* (Unpublished dissertation). Lamar University, Beaumont.

Karasar, N. (1999). *Bilimsel Araştırma Yöntemi* (9. Baskı). Ankara: Nobel Yayın Dağıtım.

Kartal, E. (2010). The relationship between language, culture, and education. *e-Journal of New World Sciences Academy, 5*(3), 447-454.

Kayaoğlu, M. N., Dağ-Akbaş, R., & Öztürk, Z. (2011). A small scale experimental study: Using animations to learn vocabulary. *TOJET: The Turkish Online Journal of Educational Technology, 10*(2), 24-30.

Kıroğlu, K. (2009). Eğitimle ilgili temel kavramlar. In K. Kıroğlu, & C. Elma (Eds). *Eğitim bilimine giriş* (pp. 2-15). Ankara: Pegem A Akademi.

Kozma, T. (1997). *The internet hunt.* Info Tech News Issues, Wayne State University.

Kramer-Moeller, A., & Catalano, T. (2015). *Foreign Language Teaching and Learning.* Department of Teaching, Learning and Teacher Education, Lincoln: Faculty Publications.

Lee, L. (2005). Using web-based instruction to promote active perspectives. *CALICO Journal, 23*(1), 139-152.

Lih, A. (2009). *The Wikipedia revolution: How a bunch of nobodies created the World's greatest encyclopedia.* Newyork: Hyperion.

Liu, J. (2010). An experimental study on the effectiveness of multimedia in college English teaching. *English Language Teaching, 3*(1), 191-194.

Mandl, H., & Freidrich, H. F. (2006). *Handbuch lernstrategien.* Göttingen: Horefe.

Marzban, A. (2011). Improvement of reading comprehension through computer-assisted language learning in Iranian intermediate EFL students. *Procedia Computer Science, 3*, 3-10.

Mede, E., & Uygun, S. (2014). Evaluation of a language preparatory program: A case study. *International Association of Research in Foreign Language Education and Applied Linguistics ELT Research Journal, 3*(4), 201-221.

Memiş. M. R., & Erdem, M. D. (2013). Methods/usage features that are used ın foreign language teaching and critics. *International Periodical For The Languages, Literature and History of Turkish or Turkic, 8*(9), 297-318.

Morris, B. (2005). Why study a foreign language? Retrieved from http://www.learnnc.org/lp.

Nida, E. A. (2003). Language and culture: Two similar symbolic systems. In S. Petrilli (Ed.), *Translation.* Newyork: Rodopi.

Orhan, A., & Çeviker-Ay, Ş. (2017). Evaluation scale of english language course curriculum conducted by distance education: A validity and reliability study. *Journal of Higher Education and Science, 7*(3), 534-545.

Ökmen, B. (2015). *The relationship between English language teaching methods, that English teachers use, and students' academic success* (Unpublished master's thesis). Düzce Üniversitesi Sosyal Bilimler Enstitüsü, Düzce.

Özil, Ş. (1991). *Dil ve kültür.* İstanbul: Cem Yayınevi.

Özkanal, Ü., & Hakan, A. G. (2010). Effectiveness of university English preparatory programs: Eskisehir Osmangazi University Foreign Languages Department English Preparatory Program. *Journal of Language Teaching and Research, 1*(3), 295-305.

Prensky, M. (2009). H. Sapiens digital: From digital immigrants and digital natives to digital wisdom. *Innovate: Journal of Online Education, 5*(3), 1-11.

Rahimi, M., & Miri, S. S. (2014). The impact of mobile dictionary use on language learning. *Procedia-Social and Behavioral Sciences, 98,* 1469-1474.

Rechtfertig, M. A. (2002). *Online learning module: Internet cyberhunts.* Working Paper. Dixie School District Staff Development Day.

Renau-Renau, M. R., & Pérez-Garralón, B. (2016). Integrating ICT in a didactic unit: Lights, camera, action! *International Journal for 21st Century Education, 3,* 7-26.

Sancar-Tokmak, H., Sürmeli, H., & Ozgelen, S. (2014). Pre-service Science Teachers' Perceptions of their TPACK Development after Creating Digital Stories. *International Journal of Environmental and Science Education, 9*(3), 247–264.

Sancar-Tokmak, H., & Yanpar-Yelken, T. (2015). Effects of creating digital stories on foreign language education pre-service teachers' TPACK self-confidence, *Educational Studies, 41*(4), 444-461.

Slayden, B. (2000). Scavenger hunt for knowledge. Retrieved from http://www.suite101.com/article.cfm/english_education_k12/33709

Soroudi, P., & Heidar, D. M. (2016). IT system-based instruction vs. traditional instruction of teaching reading comprehension: A case of low-intermediate EFL learners. *International Journal of Foreign Language Teaching & Research, 4*(15), 87-98.

Spool, J. M., Schroeder, W., Scanlon, T., & Snyder, C. (1997). *Web site usability: A designer's guide.* North Andover, MA: User Interface Engineering.

Spool, J. M., Schroeder, W., Scanlon, T., Snyder, C., & DeAngelo, T. (1999). *Web site usability: A designer's guide.* Massachusetts: Morgan Kaufmann.

Starr, L. (2010). Scavenger hunts: Searching for treasure on the internet! Educational world. Retrieved from http://www.education-world.com/a_curr/curr113.shtml

Stubbé, H. E., & Theunissen, N. C. M. (2008). Self-directed adult learning in a ubiquitous learning environment: A meta-review. In M. Kalz, R. Koper, V. Hornung and M. Luckmann (Eds.) (pp. 5-28). Aachen, Germany: RWTH Aachen University.

Taj, I. H., Ali, F., Sipra, M. A., & Ahmad, W. (2017). Effect of technology enhanced language learning on EFL reading comprehension at tertiary level. *Arab World English Journal (AWEJ), 8*(1), 108-129.

Tarcan, A. (2004). *Yabancı dil öğretim teknikleri.* Ankara: Nobel Yayıncılık.

Tzortzidou, S., & Hassapis, G. (2001). Assessment of the reading skill improvement in the computer-assisted teaching of a foreign language. *Education and Information Technologies, 6*(3), 177–191.

Ullrich, C., Borau, K., & Stepanyan, K. (2010, June). A social network analysis perspective on student interaction within the twitter microblogging environment. 10th IEEE International Conference on Advanced Learning Technologies (pp. 70-72). Sousse: IEEE Computer Society.

Ünal. D. Ç., Onursal-Ayırır, İ., & Arıoğul, S. (2011). The use of foreign language learning strategies by university students learning English, German and French. *Hacettepe University Journal of Education, 41,* 473-484.

Vassilikopoulou, M., Retalis, S., Nezi, M., & Boloudakis, M. (2011). Pilot use of digital educational comics in language teaching. *Educational Media International, 48*(2), 115-126.

Wilson, R. (1999). *The importance of appearance in the design of web books* (Unpublished master's thesis). University of Strathclyde, Glasgow.

Wilson, R., & Landoni, M. (2001, September). Evaluating electronic textbooks: A methodology. Proceedings of the Research and Advanced Technology for Digital Libraries, ECDL (pp. 1-12). Darmstadt.

Yakut, A. D., & Aydın, S. (2017). An experimental study on the effects of the use of blogs on EFL reading comprehension. *Innovation in Language Learning and Teaching, 11*(1), 1-16.

Yang, S., & Mei, B. (2018). Understanding learners' use of augmented reality in language learning: Insights from a case study. *Journal of Education for Teaching, 44*(4),1-3.

Yıldırım, N. (2012). *Mobile learning in foreign language education with educational games* (Unpublished master's thesis). Fırat Üniversitesi, Elazığ.

Zarei, R., Heidari-Darani, L., & Golestan, A. A. (2017). Effect of telegram application on Iranian advanced EFL learners' vocabulary knowledge and attitude. *International Journal of Foreign Language Teaching & Research, 5*(20), 95-109.

Zhu, Y., Wang, Y., Yu, C., Shi, S., Zhang, Y., He, S., Zhao, P., Ma, X., & Shi, Y. (2017, May). ViVo: Video-augmented dictionary for vocabulary learning. CHI '17 Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems. Denver: ACM.