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THE EFFECTS OF SPELLING GAMES ON THE ORTHOGRAPHIC ABILITIES OF 3RD GRADE YOUNG EFL LEARNERS

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A Master's Thesis

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T.C.
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YAZMA OYUNLARININ İLKOKUL 3.SINIF ÖĞRENCİLERİNİN İNGİLİZCE YAZMA BECERİLERİ ÜZERİNDEKİ ETKİLERİ

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Fatma BOSTANCIOĞLU

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The Effects of Spelling Games on the Orthographic Abilities of 3rd Grade Young EFL Learners
(A Master's Thesis)

Fatma BOSTANCIOĞLU

ABSTRACT

Learning a language requires acquiring a complex and four-language-skills-integrated process and students must practice all of them because a target language cannot be accepted as fully-learned with the absence of a skill. However, in the latest version of primary and secondary schools English lesson curriculum, the focus in mainly on the listening and speaking skills, while the activities involving reading and writing are at the word level and very limited. Moreover, as the L1 (Turkish) and L2 (English) orthographies are highly different from each other, the students spelling attempts result mostly in failures. In literature, the subject of spelling is discussed based on the differences between L1s and L2 (English) and the reasons of misspellings; however, no treatment is suggested yet. This study aims to investigate the effects of spelling games on the orthographic abilities of 3rd grade young EFL learners in a Turkish primary school context. An experimental research design was used to conduct the study with 42 3rd grade students: 21 experimental and 21 control. The 56-target vocabulary was selected according to the curriculum and used in weekly and overall dictations. Three spelling games were adopted from Graham, Freeman and Miller (1981), applied experimental group each week through the 13-week-process. After the implementation, the collected data was analyzed quantitatively. The results were examined in terms of participants' and target vocabulary correct spelling rates and the experimental group got higher results in both. Moreover, the difference between experimental and control group was statistically significant. In the light of the findings, it is inferred that the spelling games are affecting the orthographic abilities of students positively.

Key Words: Dictation, Orthography, Spelling Games, Young Learners

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Yazma Oyunlarının İlkokul 3.Sınıf Öğrencilerinin İngilizce Yazma Becerileri Üzerindeki Etkileri
(Yüksek Lisans Tezi)

Fatma BOSTANCIOĞLU

ÖZ

Öğrenciler bir dil öğrenirken karmaşık bir süreçten geçerler ve bu süreç dört dil becerisinin birleştirilmesini içerir. Bu becerilerden birinin eksik olması durumunda hedef dil öğrenilmiş olarak kabul edilemez. Bununla birlikte, ilköğretim ve ortaöğretim okullarının İngilizce dersi öğretim müfredatının en son sürümü, esas olarak dinleme ve konuşma becerilerine odaklanırken, okuma ve yazma ile ilgili etkinlikler sadece kelime düzeyindedir ve çok sınırlıdır. Bu nedenle, ilkokul öğrencilerinin İngilizce'deki okuryazarlık becerileri yeterince çalışılmamaktadır. Ayrıca, anadil (Türkçe) ve hedef dil (İngilizce) yazımları birbirinden oldukça farklı olduğu için, öğrencilerin kelime yazma girişimleri çoğunlukla başarısızlıkla sonuçlanır. İlgili literatür tarandığında, yabancı dil öğrenenler için İngilizce yazım becerisini geliştiren bir yöntemin olmadığı görülmüştür. Bu çalışma, yazma oyunlarının bir Türk ilköğretim okulu bağlamında 3. sınıf öğrencilerinin İngilizce yazma becerileri üzerindeki etkilerini araştırmayı amaçlamaktadır. 21 deneysel ve 21 kontrol grubunda olmak üzere toplam 42 öğrenciyle deneysel bir araştırma yapılmıştır. 56 hedef kelime müfredata göre seçilmiş ve haftalık ve genel diktelerde kullanılmıştır. Graham, Freeman ve Miller'dan (1981) üç yazma oyunu uyarlanarak 13 haftalık süreç boyunca her hafta deney grubuna uygulanmıştır. Uygulamadan sonra toplanan veriler nicel olarak analiz edilerek, sonuçlar katılımcıların ve hedef kelimelerin doğru yazım oranları açısından incelenmiş ve deney grubu, her ikisinde de daha yüksek sonuçlar almıştır. Dahası, deney ve kontrol grubu arasındaki fark istatistiksel olarak anlamlı bulunmuş ve bu bulguların ışığında yazma oyunlarının, öğrencilerin yazma becerilerini olumlu yönde etkilediği çıkarımı yapılmıştır.

Anahtar Kelimeler: Dikte, İlkokul öğrencileri, Yazma Becerisi, Yazma Oyunları

Sayfa Adedi: 168

Danışman: Doç. Dr. Mustafa ŞEVİK

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LIST OF ABBREVIATIONS

CEFR : Common European Framework

CFL : Compulsory Foreign Language

CoE : Council of Europe

EFL : English as a Foreign Language

ESL : English as a Second Language

FL : Foreign Language

L1 : First Language

L2 : Second Language

MoNE : Ministry of National Education

VYL : Very Young Learners

YL : Young Learners

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CHAPTER I

INTRODUCTION

In this chapter, the background of the study, the statement of the problem, the purpose of the study, the significance of the study, assumptions, limitations and definitions of key concepts will be introduced respectively.

1.1. Background to the Study

English language learning and teaching has become an extremely popular topic in the 20th century because English is the *lingua franca* which is a language used to communicate with others whose mother tongue is not the same (Harmer, 2001). As there are millions of English learners, the differences are inevitable; therefore, the people using English can be described according to Kachru's circles which are categorized as *inner circle* (Britain, USA, Australia, etc.) where the primary language is English, *outer circle* (India, Singapore, Nigeria etc.) where English is the widely-used or official language and *expanding circle* (Poland, Japan, Hungary, etc.) where English is accepted as a foreign language (FL) (Kachru, 1985). Since Turkey is one of the countries that can be categorized in the Kachru's *expanding circle*, English has been taught as FL in schools for several years.

The process of learning and teaching English as a foreign language (EFL) can differ according to the students' ages (Harmer, 2001) and the starting age to learn English has been an issue for goverments especially in the last two decades (Haznedar & Uysal, 2010). In Turkey, parallel to the world and within the light of research findings, there have also been educational reforms in primary FL teaching. With the enactment of the law (n. 4306) announced in 18.08.1997, the primary and secondary educations were accepted as 'uninterrupted 8-year-educational-reform'which was compulsory (T.C. Resmi Gazete, 23084); in other words, it can also be described as 8+4 system. Besides, English as a CFL was lowered to primary level, starting at the 4th grade in government schools (Şevik, 2009). The English lessons were 2 hours per-

week and the main purposes of the curriculum for primary FL were; recognizing a language other than Turkish, to be able to comprehend that foreign language has different voices than Turkish, to be able to comprehend the toning and pronunciation of the foreign language and to be able to use the foreign language patterns according to the rules (Haznedar, 2004).

With a later amendment that has been put into effect with another law (n. 6287) in 11.04.2012 (T.C. Resmi Gazete, 28261), primary, secondary and high school duration are systemized as compulsory 4+4+4, and also teaching English as a CFL has been lowered to 2nd class of primary schools, 2 hours per-week in each level. Besides, the primary school starting age was lowered to 66-months-old as a compulsory implementation; however, it was changed to an optimized decision for parents with legislation in 2013 because of the arguments about the individual physical and cognitive development differences (Gündüz & Çalışkan, 2013). In the light of this latest legislation, for 60-65-months-old children first grade is not compulsory and they can start primary school with their parents' petition; 66-68-months-olds have to start but it can be delayed by their parents' petition; it is also compulsory for 69-71-months-olds but can be delayed by a health report, and lastly 72-months-olds+ children have to start first grade without any exception. Therefore, from then on, the starting age to learn English differs, because 2nd grade students' age scale from 72-months-old (newly-completed-6-years-old) to 95-months-old (nearly-8-years-old).

Since there have been recent changes in politics for starting age to learn English, the program has also been revised. According to the latest version of the Primary Schools English Language Teaching Program (MoNE, 2018), "the new curricular model emphasizes language use in an authentic communicative environment" (p.3). Moreover, "the new curriculum strives to foster an enjoyable and motivating learning environment where young learners/users of English feel comfortable and supported throughout the learning process" (MoNE, 2018, p.3). Besides, the syllabus for each grade was reviewed, key competences of the program were framed as similar to European commissions and CEFR (Common European Framework) was embedded to the English language programs (MoNE, 2018).

Moreover, "the theoretical frame of testing, assessment and evaluation processes is primarily based on the CEFR, in which various types of assessment and evaluation techniques are emphasized" (MoNE, 2018, p.6). Only for 4th grades summative testing procedures can be used, while formative testing and self-assessment checklists are encouraged to be used at each level (MoNE, 2018). As the main emphasis is on listening and speaking skills, 2nd and 3rd grade students were just observed and evaluated according to their progress based on the objectives of the curriculum (MoNE, 2018). Therefore, activities involving reading and writing are at the word level (e.g., learners see a picture of a dog and write the word "dog" underneath); in other words, "reading and writing tasks at the lower grade levels are limited" (MoNE, 2018, p.10).

Within the combination of age differences and the newly revised program, the young Turkish EFL learners' literacy skills in English may not be seem studied enough because they have difficulty to use visual cues to read and write many words properly over time as the cues in English is arbitrarily related to words and different words have similar visual cues. Even the studied word-limited exercises are easily forgotten and mixed up most of the time. As the nature of testing 2nd and 3rd grade students doesn't allow pen-and-paper exams, teachers should find ways to be sure that their students are developing their literacy skills as well as the oracy skills.

1.2. The Statement of the Problem

In the first grade of the primary schools in Turkey, students start to learn reading and writing in their mother tongue, which is also the official language, Turkish. Then, in the second grade, they start to learn English; however, as they live in a country in which English is not spoken in daily lives of people, the students do not have any chance to be exposed to the second language and practice it out of the classroom. Moreover, these two languages have different kind of writing systems regarding to their orthographies. While Turkish orthography is highly "transparent" (Durgunoğlu, 2017, p.422), English orthography is at the opaque end of the transparency dimension or the *deep* end of the shallow–deep dimension among alphabetic orthographies (Perfetti & Harris, 2017) which will be explained in Chapter 2 in

detail. Thus, learning a FL, which is not similar to their mother tongue (L1), makes the process more difficult for young learners who have recently learned reading and writing in L1.

As it is mentioned in the background to the study, while listening and speaking are the emphasized skills, reading and writing are offered with limited application in the program designed for English language teaching in Turkish primary schools. However, since knowing a language is a complex and four-language-skills-integrated process, no matter how much the students are successful in listening and speaking tasks, without appropriate reading and writing, a language cannot be accepted as learned (Wright, 2010). Besides, in the lessons, although the limited version of reading and writing tasks were at the beginning level; the researcher, working as an English teacher in the Turkish primary school for 5 years, observed that the young EFL learners were making mistakes especially when it comes to read and write a word in L2. When she asked to students about the reasons of these mistakes, she found out that students' previous knowledge of L1 was affecting the attempts in L2 literacy tasks. Spelling a word in English can be challenging because of the English orthography (Hannell, 2008). It may be seen as unimportant to write at the isolated-word-level; however, as they are the young learners, this problem may lead to bigger issues in their future second language learning experiences. For example, simply, the conveyed message can be misunderstood if there are misspellings. Also, in later years, the students with poor spellings may "hold back from seeking or accepting roles that are likely to expose poor spelling; avoid further education, training or promotion if they fear that their spelling skills will let them down; and feel inadequate in comparison to others who can spell well" (Hannell, 2008, p.2).

To sum up, in this study, the participants were 3rd grade young EFL learners in a Turkish primary school, who have started to learn English as CFL at 2nd grade. The researcher observed that the students became confused most of the time and had hesitations when they were given a task which requires spelling the word correctly; therefore, there were a highly L1-affected-misspellings in their L2 word-level writing tasks which was the main point to start the present study. In other words, the low L2 orthographic skills of students were put under the examination in this study.

1.3. The Purpose of the Study

The aim of the present study is to investigate the effects of spelling games on the orthographic abilities of 3rd grade young EFL learners in a Turkish primary school context.

1.4. The Significance of the Study

The significance of the study can be described within three different angles; the main concern of the study, the instrumentation used in the study and the context the study has been conducted in.

First; to our knowledge, in regards to spelling in English, there have been researches conducted in the areas of the spelling mistakes and their categorization; the reasons of spelling mistakes and the strategies used by learners during the task of spelling. However, the possible developmental stage of spelling ability has been underestimated most of the time. Even though there have been studies which describes the strategies used by good-spellers, there is a limited number of experimental studies conducted to provide teachers an effective method to use in the lessons for the purpose of developing orthographic skills of EFL learners. In other words, the studies conducted on EFL learners have analyzed different aspects of language regarding to spelling in L2; however, 'what to use to develop the orthographic ability in L2' has not been investigated properly.

Second, language games are used to develop the four-language-skills, grammar, vocabulary and different aspects of languages and their effects have been investigated. However, as far as the researcher is concerned, there have been no previous studies which used spelling games as instrumentation.

Third, whilst the concern of the previous studies nearly the same in regards to spelling, the researchers have studied within two separate contexts; English language native speakers (L1 context) and English language learners (L2 context). In L2 context, researchers generally have compared and contrasted L1 and L2 (always English) in many aspects of the languages which will be explained in Chapter 2; however, as far as the researcher is concerned, there have been no consistent results in regards to spelling since the EFL learners' L1s are different in the conducted

studies. As the context in this study is young EFL learners in Turkey, the studies conducted in this area have been scanned, and to our knowledge, there have been no study conducted to investigate the development of the orthographic abilities in the context of young EFL learners in Turkey.

To conclude, this study becomes unique regarding to its main concern (the developmental stage of spelling ability); instrumentation (spelling games); and context (young EFL learners in Turkey).

1.5. Assumptions

The following assumptions are made regarding this study;

1. The researcher/ teacher will act unbiased.

2. Each student in the experimental and the control group will attend the lessons.

3. The games used as the treatment will provide appropriate results.

4. The participants will fully attempt to do their best in the dictation tests.

5. Spelling games will have an effect on the orthographic abilities of the experimental group.

1.6. Limitations

There have been some limitations of this study. First, this study uses an experimental design; however, there is only one control group and one experimental group in the study. Therefore, it is not a true experimental design and the relationships among variables must be interpreted with caution because of the lack of different groups.

Second, the sample for the present study comprised of 42 3rd graders in a village government school. When compared to the entire population of schools in the country, this sample size is only a very small proportion. Therefore, the research studies with much larger sample size would be required to ensure appropriate generalization of the findings of the study. Besides, the data collection was confined

to only one school in Isparta, Turkey. The replication of the study at different cities of Turkey would enable better generalizability of the findings of the study.

Third, during the data collection process, the pre-planned work schedule was disrupted due to several reasons such as school trips, official holidays and exams. It is thought that these disruptions may cause a motivation and concentration loss in participants.

Finally, the present study relies largely on quantitative methodology of data analysis and is therefore restrictive to quantitative analysis. The study could have made use of more qualitative methodology of data collection to provide wider perspective to the present study.

1.7. Definitions of Key Concepts

Dictation: Dictation is defined as "the act of saying or reading something for students to write down as a test" (Cambridge Online Dictionaries, 2016).

Language games: In a language classroom, 'game' means "an activity which is entertaining and engaging, often challenging, and an activity in which the learners play and usually interact with others" (Wright, Betteridge & Buckby, 2006, p. 1).

Literacy: Literacy means "the ability to read and write" (Cambridge Online Dictionaries, 2016) and in today's modern world, being literate is an unavoidable factor to survive in most of the societies.

Orthography: The distinctions between the writing systems are made based on how a script (a set of symbols) relates to the structure of its language and this relationship between a script and its language is what is described by the term orthography (Scheerer, 1986 as cited in Katz & Frost, 1992, p.68).

Orthographic Competence: Orthographic competence "involves a knowledge of and skill in the perception and production of the symbols of which written texts are composed" (CoE, 2001, p.117).

Spelling: Spelling refers to "the association of alphabetic symbols called *graphemes* with speech sounds called *phonemes,* the smallest identifiable sounds in speech" (Montgomery, 2007, p. 7).

Young learners: Haznedar and Uysal (2010, p.3) describe young learners as "child second language (L2) learners" and "the ones who learns a different language after accomplished their L1". Ersöz (2007) categorizes young learners in three age groups: very young learners (3-6 years old), young learners (7-9 years old) and older young learners (10-12 years old).

CHAPTER II

LITERATURE REVIEW

This chapter reviews the literature on young learners, language games, orthography, and previous studies respectively.

2.1. Young Learners

In this section, characteristics of young learners and teaching literacy to young learners will be introduced briefly.

2.1.1. Characteristics of young learners. According to Harmer (2001), through the factors affecting language learning, age is the most important one to decide especially the teaching method, and he further categorizes learners as young learners, adolescents and adults.

The *young learners* (YL) term has been described differently especially when it comes to the age factor. Philips (1993) accepts the learners ranging from the first year of schooling to 12 years old as YL. Similary, Haznedar and Uysal (2010, p.3) refer children between 6 and 12 as YL in their studies and describe YL as "child second language (L2) learners" and "the ones who learns a different language after accomplished their L1". While some researchers (Schwartz 2003; Meisel, 2008) offer the ages at least 3 and 5 when they have mastered L1. Lakshmanan (1995) claims that not all aspects of L1 are acquired around that ages and offers 7 as a starting point. In their book, Scott and Ytreberg (1990) explain the characteristics by using subtitles '5-7 years old' and '8-10 years old' without any labeling; while in another book written by Slattery and Willis (2001) they are categorized as very young learners (VYL) under age 7, and young learners (YL) 7 to 10. To conclude, as it can be understood, there is a disagreement about the bottom and the top ages for YL; however, in this study, Ersöz (2007) is taken as a main source for categorization

of ages. In her book, Ersöz (2007) categorizes YL in three age groups: very young learners (3-6 years old), young learners (7-9 years old) and older young learners (10-12 years old).

The features of YL differ in some respects from adolescents and adults; thus, the characteristics of YL have been studied for many years. As a result of research, the main findings reveal that YL;

- have short attention/motivation span (Cameron, 2001; Harmer, 2001; Philips, 2004; Ersöz, 2007),

- forget easily (Slattery & Willis, 2001; Harvey & Oakley, 2003; Ersöz, 2007),

- get distracted easily while on task (Cameron, 2001; Ersöz, 2007),

- are enthusiastic and active learners (Philips, 1993; Rumley, 1999; Cameron, 2001; Harvey & Oakley, 2003; Pound, 2005; Ersöz, 2007; Yolageldili & Arikan, 2011),

- enjoy being read to from a range of books and looking at books (Cameron, 2001),

- like learning something through movements and games, because they like playing and can understand physical world more than spoken words (Martin, 1995; Rumley, 1999; Pound, 2005),

- participate in a range of literacy events in school and link them to their daily lives (Cameron, 2001),

- "want to actually use the language, not to learn about it" (Ersöz, 2007, p.7),

- between 5 and 7 are very self-centered, reluctant to share, enthusiastic and positive about learning; know the rules; like pretending that they understand something than to ask about it and like playing; while 8-10-years-olds are relatively mature children; not too self-centered and like asking questions (Scott & Ytreberg,1990),

- "are more concerned with the use of language to convey meaning than with the correct usage" (Ersöz, 2007, p.7),

- listen to rhymes, chants and songs, and learn them by heart to sing (Cameron, 2001),

- willing to use L2 without hesitations for correct grammar (Ersöz, 2007; Yolageldili & Arikan, 2011),

- are extremely good at imitation (Rumley, 1999; Harmer, 2001; Ersöz, 2007),

- have limited language skills and experience (Cameron, 2001; Moon, 2005; Ersöz, 2007),

- love to play and learn best when they have fun (Rumley, 1999; Pound, 2005; Ersöz, 2007; Yolageldili & Arikan, 2011),

- like doing tasks and projects (Ersöz, 2007; Yolageldili & Arikan, 2011).

In this point, what children can and cannot do is also important to understand the differences better. According to Scott and Ytreberg (1990), children between 5 and 7 can tell you about their activities and something that they have done or heard; plan activities; argue something and tell you their thought; use logical reasoning; use their imaginations; use wide range of intonation in L1; understand a situation quicker than understanding the language used; however, they cannot differentiate the fact and fiction and understand abstract notions; while 8 to 10 years old children can work with others, understand abstract concepts and symbols and differentiate the fact and fiction. The authors (Scott & Ytreberg, 1990) add that while 8 to 10 years olds can decide what to learn, 5 to 7 years olds children cannot.

2.1.2. Teaching literacy to young learners. Literacy means "the ability to read and write" (Cambridge Online Dictionaries, 2016) and in today's modern world, being literate is an unavoidable factor to survive in most of the societies. In other words, literacy is not only an important part of the school life but also an integral piece of our daily lives as we are involved in a literacy event from the time that we

wake up: such as reading the news, telling the time, using our phones etc. Hence, children participate in literacy events long before they go to school and found the concepts and some limited skills of reading and writing (Cameron, 2001).

Reading requires the knowledge of written symbols, phonology and semantic; while, writing brings together the motor skills and orthographic knowledge to represent words (Cameron, 2001). When children start to learn reading and writing for the first time, they support themselves with their previous knowledge based on the context, discourse, paragraph, sentence/clause, words and letters/sounds (Cameron, 2001). However, the combinations or the order of these factors can change according to learning English literacy as a first language (L1) or second/foreign language (L2). If the learners are already literate in their L1 and learning English as a foreign language (EFL), then "the nature of the written forms of the first language, the learner's previous experience in L1 literacy, the learner's knowledge of the foreign language and their *age* can influence the learning task" (Cameron, 2001, p. 134).

First, Cameron explains in detail the Competition model, which claims as learners we tend to apply our literacy knowledge in L1 when learning L2 and look for similar clues for both languages (2001). In that case, it becomes important for setting an idea about the transferability of knowledge, skills and strategies across languages because it will be different for each pair of languages and for each direction (Koda, 1994 as cited in Cameron, 2001). For example, teachers should use different approaches to teach L2 (English) literacy to Chinese and Arabic students or vice versa.

Second, if the learners have not mastered their L1 literacy fully, in other words, they are young learners or poor readers/writers, the aspects of transfer change: they can mix the knowledge or "backward transfer" may happen (Cameron, 2001, p. 136). Besides, the way that L1 literacy is taught has an impact on the strategies that the learners use while learning L2 literacy; thus, the methodology should be similar to motivate the students for the desired results (Cameron, 2001).

Third, learner's knowledge of L2 is important to develop accurate literacy skills that should be a combination of orthoepic (reading) and orthographic (writing) competences. *Orthoepic competence* requires producing a correct pronunciation from the written form and it may involve "knowledge of spelling conventions; ability to consult a dictionary and a knowledge of the conventions used there for the

representation of pronunciation; knowledge of the implications of written forms, particularly punctuation marks, for phrasing and intonation; and ability to resolve ambiguity (homonyms, syntactic ambiguities, etc.) in the light of the context" (CoE, 2001, p. 118). *Orthographic competence* "involves a knowledge of and skill in the perception and production of the symbols of which written texts are composed" that will be explained in detail in 2.3.3 (CoE, 2001, p. 117).

Last, Cameron (2001) claims learners' age determines their learning experiences and characteristics; especially as the children are younger it is more likely for them "still learning how written text functions", thus they may not be able to "transfer even the most general concepts about text and print" (p.138). As we mentioned in 2.1.1, YL exposes different characteristics; hence, EFL literacy objectives are different for very young learners (3-6 years old), young learners (7-9 years old) and older young learners (10-12 years old). Therefore, teachers of young EFL learners should take into consideration these factors.

Cameron (2001) further suggests teachers to create a literate environment in the classroom by using labels, posters, written messages on the board, reading aloud and to use active literacy learning by providing a multi-sensory experience, pointing out important details, singing, chanting and playing simple games. Beside of the suggestions, Cameron (2001) briefly explains four formal approaches to teaching literacy skills; text level (Emergent literacy), sentence level (Language Experience approach), word level (Whole words / key words approach) and letter level (Phonics teaching) and Montgomery (2007) uses similar terms in his book written about teaching methods for spelling.

Emergent literacy process is defined as when someone reads interesting and appropriate books to children continuously, some of them can solve the link between spoken and written text by the help of regular patterns (Cameron, 2001); in other words incidental learning happens (Harmer, 2001; Montgomery, 2007). Learning starts with the whole text and moves to attend to words and letters; however, most of the time it is suggested for learning L1 literacy rather than L2 (Cameron, 2001).

Language experience approach uses a set of word cards (large ones for the whole class, small ones for individual/pair work) to make students compose sentences under the guidance of the teacher (Cameron, 2001). Students try to compose what

they want to say, read it to their teacher and copy the sentence to their notebooks. This method has been used for teaching British children their L1literacy and South African children both L1 and L2 (Cameron, 2001).

Whole words / key words approach (or *Look and say method* as cited in Montgomery, 2007) benefits from flashcards that contain written form of the most frequently used words in English (Cameron, 2001). Teachers show 5/6 flashcards, tell the words and ask students to say the words when they see the flashcards again in order to see whether they remember or not; once the students get 15 words, teachers move with a simple book that only involves the known words and students practice literacy alone (Cameron, 2001).

Phonics teaching suggests that it would be more natural if the students start to learn literacy by focusing on letter-sound relations to build literacy skills from bottom-up (Cameron, 2001, p. 149). As the attention is on the combination of letters and sounds, it can help children to make mental connections easily (Cameron, 2001). The suggested letter order to teach English literacy is first consonants at the beginning of the words, then consonants at the end of the words and finally vowels as the English vowel system is complicated to learn (Cameron, 2001). Besides, pictures should assist the teaching process; for example, to teach the sound /b/ at the beginning of the words, teacher should show the picture of a ball, basket, blue balloon etc. (Cameron, 2001).

According to Seymour (2006) the type of the orthography is an important factor to decide a literacy teaching method. In Turkey, today, students learn their L1 (Turkish) literacy at the first grade with *Phonics teaching* method. As Turkish has a *shallow orthography* (explained in detail in 2.3.), the method make the Turkish literacy learning easier for the students. However, there is not a determined approach by the government to teach the English (L2) literacy. Seymour (2006, p. 544) suggests that "in *deep alphabetic orthographies*, such as English, a combined method by which children learn basic alphabetic decoding procedures and at the same time master a 'sight vocabulary' of familiar words may be preferred".

2.2. Language Games

In this section, the definition of language games; the classification of language games; how to choose and apply language games; and the advantages and disadvantages of using language games will be introduced respectively.

2.2.1. The definition of language games. The etymology of 'game' in contemporary usage originates from *gamen* – Old English for 'joy, fun, amusement' – a term itself derived from Norse and Saxon forebears (Online Etymology Dictionary, 2018). Other than its' dictionary meaning, the term 'games' is described differently within the language learning environment. In a language classroom, 'game' means "an activity which is entertaining and engaging, often challenging, and an activity in which the learners play and usually interact with others" (Wright, Betteridge & Buckby, 2006, p. 1). Pound (2005, p. 73) refers games as 'play' in her book and defines it as "a range of activities, undertaken for their own interest, enjoyment or the satisfaction that results". In another definition, games are "student-focused activities requiring active involvement of learners" (Yolageldili & Arikan, 2011, p.220).

Rumley (1999) claims games are opportunities to create a context for repetition. Besides, Ersöz (2007, p. 7) states "games are highly motivating because they are amusing and interesting". Similarly, according to Yolageldili and Arikan (2011), games are fun and enjoyable activities, which lead cooperation and social interaction. Children naturally play games in their lives (Ersöz, 2007) and playing a game is motivating for them, because it is a challenge, and they want to win (Rumley, 1999). Students become excited while playing, because the winner is not obvious till the end of the game which can be concluded as games "help and encourage many learners to sustain their interest and work" (Wright, Betteridge & Buckby, 2006, p. 2). Besides, during playing games, learners are required to work with others to be successful and most of them enjoy cooperation and social interaction which is believed that "when cooperation and interaction are combined with fun, successful learning becomes more possible" (Yolageldili & Arikan, 2011, p.220). Another aspect of games that they help to sustain quite long exchanges in L2

and as the language used for young learners is limited, this is vital for them (Rumley, 1999).

2.2.2. The classification of language games. As the language games have been in use for several years, there have been many ways to classify games. They can be categorized according to the four language skills, language functions, topics, the learning styles of students and working group types of learners. In this part, a few recent books written as sources for English teachers of YL will be examined chronologically.

In their book, Slattery and Willis (2001) present games in categories according to the four language skills and the activity types with the combination of language focuses, topic talks and pronunciation points they include; in detail, e.g. under the 'Listen And Do' title there are games classified in subtitles such as Listening And Identifying, Listening And Doing (TPR), Listening And Performing-Miming, and finally Listening And Responding games. The main titles of the book which include sample games are Listen and Do; Listen and Make; Speaking with Support; Speaking More Freely; Reading in English; Writing in English; Reading and Telling Stories; and Story Activities (Slattery & Willis, 2001).

Harvey and Oakley (2003) introduces 150 different and re-usable activities for pairs, groups and whole class. They categorize games in six titles: starters and fillers, talking together, vocabulary, grammar, pronunciation and texts (Harvey & Oakley, 2003). The writers also present which language function that the game improves, its aims and the procedure in detail (Harvey & Oakley, 2003).

Philips (2004) demonstrates activities in the context of level, age, time and language focus. In detail, the level codes are All, 1 (beginners), 2 (elementary) and 3 (pre-intermediate); age groups are A (6-8 years olds), B (8-10 years old) and C (10-12 years old); and the time is given in minutes (Philips, 2004). In her book, Philips (2004) provides aims, descriptions, materials, the preparation process, the categorization of in-class or follow-up activities and comments, hints and advices. She also gives detailed information about the variation of activities to be used in different circumstances; for example, a revision game can be used both for cooperation and group-dynamics (Philips, 2004).

Cave (2006) classifies 137 games mostly according to the materials used through games and divides the categories into two as oracy and literacy. In her book, the main titles are Flashcards; Puppets and Soft Toys; Realia; Balls, Beanbags and Dice; Get up and Move; Interactive Whiteboard; and lastly Creativity and Imagination. The games in the book (Cave, 2006) are generally for teams or whole-class rather than individuals.

The games in the book written by Wright, Betteridge and Buckby (2006, p. 3) are grouped according to their "family type" within nine sections: Ice-Breakers and Warmers, Speaking, Listening, Writing, Reading, Vocabulary and Spelling, Grammar and lastly Solo Games. "The family name is always a verb. This verb summarizes the most important way in which the learners are engaged in the game" (Wright, Betteridge & Buckby, 2006, p. 3). The eight main titles are Care and Share; Do: Move, Mime, Draw, Obey; Identify: Discriminate, Guess, Speculate; Describe; Connect: Compare, Match, Group; Order; Remember; and Create. The authors (Wright, Betteridge & Buckby, 2006) do not present only one game under the subtitles, they give also variations of the same game in detail with the combination of the four types of grouping: class, individual, pair, and group work.

In her book, Ersöz (2007) gives examples of games according to the age groups which are very young learners (3-6), young learners (7-9) and older young learners (10-12) within the context of individual, pair and group games.

2.2.3. How to choose and apply language games. Games are accepted as a leisure time activity with the purpose of keeping the learners quiet and used generally at the end of the lesson when the other activities has been completed (Yolageldili & Arikan, 2011). Using games only for this purpose is not what good teachers do; in other words, games should not be used just for a warm-up or free-time activity (Yolageldili & Arikan, 2011). Teachers should decide the purpose of the game before using it, because games "must be regarded as *central* to a language teacher's repertoire and not merely a way of passing the time" (Wright, Betteridge & Buckby, 2006, p. 2). To sum up, the game should be the main activity in the lesson.

While deciding which game to be played, there are also several things to take into consideration. Although a game may seem enjoyable, easy to apply, appropriate and

useful, it may not be advantageous (Yolageldili & Arikan, 2011). First, the level of the game should be appropriate to the learners' language levels (Yolageldili & Arikan, 2011). According to Wright, Betteridge and Buckby (2006, p.9) "this makes all the difference between success and failure". The rule of using i+1(comprehensible input) can be applied in this process not to make the game too easy or too tedious (Krashen, 1985). The learning styles of the learners are also important. Games should be chosen to serve best for different learning styles: *visual, auditory, kinesthetic, creative, analytical, cooperative, individual, serious, amusing, dramatic* and *real* (Wright, Betteridge & Buckby, 2006, p. 6). Second, the game should not be complicated, it should be easy to describe and play; therefore, YL can enjoy (Yolageldili & Arikan, 2011). In other words, games which need a long introduction and explanation should be avoided (Wright, Betteridge & Buckby, 2006).Third, the duration of the games should be planned between 10 and 15 minutes because of the YL's short attention span, and also "it is very important not to play a game for too long. Students will begin to lose interest. It is best to stop a game at its peak" (Hong, 2002, p.1). Besides, it would be better if the chosen games for YL include TPR movements, interaction, cooperation, competition and participation (Yolageldili & Arikan, 2011). In addition, the physical conditions of the classrooms or the area where game will be played in, the size of the classes, the equipment and the materials should be considered while choosing (Yolageldili & Arikan, 2011). In short, to make the game most advantageous, it is worth to put these recommendations into act during the decision process.

The process of applying games does not end after choosing a game. Teachers should also act carefully while playing the game. Their role can change in minutes and they should be flexible to different situations during the ongoing process of a game. Teachers act mostly as the controller during the games; however, according to the requirements of the game they can also be prompter, participant, resource and tutor (Harmer, 2001). As a controller, the teacher organizes the class and if necessary decides the groups or pairs. If there is competition between groups then teachers should make sure that "each group represents mixed ability" by using "random groupings" (Wright, Betteridge & Buckby, 2006, p. 9). Team games should be played more to "maximize the ways of making every student experience success" (Wright, Betteridge, & Buckby, 2006, p. 9). Similarly, "appropriate class

organization increases the success of a game" according to Yolageldili and Arikan (2011, p. 223).

The teacher explains the game by presenting the rules step by step verbally or with demonstration which is better for YL because according to Hong (2002, p.1) "games are best set up by demonstration rather than by lengthy explanation". It is essential that all the students know exactly what to do before the game starts (Wright, Betteridge & Buckby, 2006). "Especially for young learners, it may be necessary to use the mother tongue because if these learners cannot understand how to play the game, there is no educational purpose in playing it" (Yolageldili & Arikan, 2011, p. 222). Moreover, it can be difficult to solve the misunderstandings during the game; thus, teachers should provide "helpful phrases on the board or on an A2 poster" beforehand (Wright, Betteridge & Buckby, 2006, p.8).

The playing time can be easier if the learners are familiar with the selected game in their L1 (Wright, Betteridge & Buckby, 2006). When the learners get used to playing a game in L2, new games can be introduced in the following sequence: explanation by the teacher to the class, demonstration of parts of the game by the teacher and one or two learners, trial by a group in front of the class, any key language and/or instructions written on the board, first 'try out' of the game, by groups, key language, etc., removed from the board and the game continues (Wright, Betteridge & Buckby, 2006, p. 3). When the games are learned, it is best to use them with the whole class and children should be encouraged to use them outside of the classroom (Rumley, 1999). Moreover, praise and encouragement should be embedded to playing process of the games since YL always love to be the center of attention (Yolageldili & Arikan, 2011).

According to Ersöz (2007), there are certain steps for teachers to follow while playing a game: give short but clear instructions; demonstrate if necessary; use instruction checking points; go straight to any group/student that looks confused or is usually slow to catch on and get them started; go around the class to make sure everyone is doing the activity more or less correctly and if not stop the whole class and explain again; make sure you involve all the students at all times; and lastly keep reminding your students that all activities have a teaching aim.

During the playing time, making mistakes is natural; therefore, teachers should not interrupt the flow; in other words, correction should be done afterwards rather than immediately and announced to the whole group instead of targeting an individual learner (Wright, Betteridge & Buckby, 2006). While learners are playing, the teacher should have an excellent control; however, the control cannot be set by shouting. In their book, Wright, Betteridge and Buckby (2006, p. 10) give some recommendations to teachers to help discipline problems as follows: establish a set of agreed general class rules at the beginning; write these discussed and agreed rules on a poster and keep it on the classroom wall; if you need to stop the class, use the technique of raising your hand rather than trying to shout over the hubbub of a game in progress because the raised hand spreads peace and the shout raises tensions; make the procedure for playing the game very clear to all the students; and lastly be seen to be very fair to everyone.

In conclusion, "what we need in the classroom is for everybody to experience success as much as possible" (Wright, Betteridge & Buckby, 2006, p. 10). Therefore, teachers choose games and apply them in ways which enables best motivation and learning.

2.2.4. The advantages and disadvantages of using language games. Using games in the language classrooms have been a popular topic to discuss for many years. As there are hundreds of different games used in language classes, it is inevitable to have pros and cons in the process.

McCallum (1980, p. ix) explains that there are many advantages of games such as the fact that they focus students' attention on specific structures, grammatical patterns, and vocabulary items; can function as reinforcement, review and enrichment; involve equal participation from both slow and fast learners; can be adjusted to suit the individual age and language levels of the students; contribute to an atmosphere of healthy competition, providing an outlet for the creative use of natural language in a non-stressful situation; can be used in any language teaching situations and with all skill areas (reading, writing, speaking or listening); provide immediate feedback for the teacher; ensure maximum student participation for a minimum of teacher preparation. According to Rumley (1999, p. 120), "games can

be adapted for a variety of situations" and "they reinforce speaking and listening because all the children must concentrate for the duration of the activity". Other advantages of using games in the language classrooms claimed by Wright, Betteridge and Buckby (2006, p.2) can be listed as follows: games provide one way of helping the learners to experience language rather than merely study it; many games cause as much use of particular language items as more conventional drill exercises; they involve the emotions, and the meaning of the language is thus more vividly experienced Ersöz (2007, p.7) states that games "encourage and increase cooperation". Finally, in their study, Yolageldili and Arikan (2011, p. 225) state that games decrease the students' anxiety towards language learning, and "by using games, teachers can create contexts which enable unconscious learning because learners' attention is on the message, not on the language". To sum up, games have "a great pedagogical value providing language teachers with many advantages when they are used in foreign language classes" (Yolageldili & Arikan, 2011, p.221).

The disadvantages of using games are rarely detected in the studies; however, Wright, Betteridge and Buckby (2006, p. 2) claim that "the problem with some games is that they tend to make one person the winner and the rest losers" and they further explain that "competition may be stimulating for some, but it can also be destructive, making players anxious, with losers categorizing themselves as *no good* and the winners categorizing themselves as *very good*". Another disadvantage of using games is explained by Bakhsh (2016) stating that as the games are recommended to be played in a limited time, learners may make wrong guesses about the target language meaning and use L2 false.

2.3. Orthography

In this section, the definition of orthography, the comparison of Turkish and English orthographies, the definition of orthographic competence and the definition of spelling will be introduced respectively.

2.3.1. The definition of orthography. According to Montgomery (2007, p.8), writing systems first appeared nearly 5000 years ago in several different

locations and evolved throughout history ranging from *hieroglyphs, logographs, syllabarie, rebus* to *alphabet system*. The alphabet is the latest and probably the most advanced form of writing (DeFrancis, 1989 as cited in Bentin, 1992). It is maintained however that a large number and variety of writing systems have flourished, evolved and developed, and in many cases, died, over the centuries (Katz & Frost, 1992). The distinctions between the writing systems are made based on how a script (a set of symbols) relates to the structure of its language and this relationship between a script and its language is what is described by the term *orthography* (Scheerer, 1986 as cited in Katz & Frost, 1992, p.68). According to Seymour (2006, p.543) "the languages have different orthographies that vary in the way in which speech and meaning are represented and, indeed, in the consistency and logic of the relationship". The word *orthography* is derived from two Greek roots: orthos, meaning correct, and graphein, meaning to write (Apel, 2011). Orthography, with its dictionary meaning, is "the conventional spelling system of a language" (Oxford Dictionary, 2019) and this system is not easily decided, because the attempt to make an efficient match between the written form and morphology and phonology determines the type of the chosen orthography for that language (Katz & Frost, 1992).

Every language has its own orthography and even among the alphabetic orthographies, there are differences in reflecting the spoken forms to the letters. In literature, all alphabetic orthographies can be classified according to their characteristics based on a factor that has been referred to as *orthographic depth* (Besner & Smith, 1992). The classification terms are *shallow-deep* (Katz & Frost, 1992; Seidenberg, 1992; Carello, Turvey & Lukatela, 1992, Perfetti & Harris, 2017)**,** *conventional-optimal* (Chomsky, 1972 cited in Cook & Cook, 2004), *transparent-opaque* (Durgunoğlu, 2017), *consistent-inconsistent* or *regular-irregular* (Shankweiler & Lundquist, 1992; Caravolas, 2006). In this study, the terms *shallow* and *deep* are prefered.

According to Katz and Frost (1992, p.71), an orthography in which "the letters are isomorphic to phonemes in the spoken word (completely and consistently), is orthographically *shallow*; while an orthography in which the letter-phoneme relation is substantially equivocal is said to be *deep*". Supportively, Seidenberg (1992) claims

that the correspondence between graphemes and phonemes are entirely consistent in the *shallow* orthographies because each letter only corresponds to one phoneme; whilst in *deep* orthographies, some letters have more than one sound and some phonemes can be written in more than one way or are not represented in the orthography. In parallel, Carello, Turvey, and Lukatela (1992, p. 214) explain that "a *shallow* orthography is one that has relatively few rules and whose words can be relied upon to follow them"; however, a *deep* orthography "may have numerous rules or exceptions to its rules or, perhaps, application of its rules is simply inadequate to allow a reader to settle on a single pronunciation." Moreover, at every advance, *shallow* orthographic languages have clearer link between grapheme and speech as the abstractness is lower when compared to *deep* orthographies (Hung, Tzeng & Tzeng, 1992). "As the depth of the orthography increases, they report increased effects of lexical variables on naming, of semantic priming on naming latency, and of the presence of nonwords on word naming accuracy" (Perfetti, Zhang & Berent, 1992, p.243). Therefore, during the reading or writing activities, *deep* orthographies are thought to "discourage the use of phonological recoding because the correspondences between spelling and pronunciation are inconsistent; hence the orthographic process is more efficient; while *shallow* orthographies "afford a phonological recoding strategy, because the correspondences are consistent" (Seidenberg, 1992, p.86). Furthermore, Seidenberg (1992) adds that learners adapt their reading and writing skills according to the demands of the orthography of the language; in other words, it depends on how directly the orthography reflects the phonetic surface. "Languages in which the spelling-to-sound correspondences are simple and invariant will readily support information-processing structures for literacy skills that utilize the language's surface phonological features. On the other hand, in an orthography that bears a complex relation to speech, phonologically structured mechanisms for processing words will be less developed" (Katz and Feldman, 1981, p.85 as cited in Seidenberg, 1992, p.86). Supportively, Seymour (2006) suggests learning the literacy of a shallow orthography is more efficient than learning a deep orthography and appeared to activate different brain regions, an area concerned with phonemic processing in shallow and an area concerned with lexical and semantic processing in deep.

2.3.2. The comparison of Turkish and English orthographies. In Turkey, the native and official language is Turkish while English is the foreign language. Thus, EFL learners do not have any chance to be exposed the foreign language out of the classroom in their daily lives. Although they have been given English lessons from 2nd to 12th grade; there are still many problems observed while communicating in English. One of the concerned areas is they have hesitations while attempting to read and write in the FL as the nature of Turkish (L1) and English (L2) is different from each other.

According to the Primary Schools English Language Teaching Program (MoNE, 2018), the first English lesson in the 2nd grade starts with the English Alphabet. As the students are already literate in their L1, instead of introducing the letters all over again, the cognate words (e.g. ambulance, broccoli, doctor, television) are given as examples to ease the learning process. Despite the common use of the Roman/Latin Alphabet in both languages, there are exceptions (written in italic below) and their orthographies show distinct features.

In Turkish Alphabet, there are 29 letters: 8 vowels (a,e,*ı*,i,o,*ö*,u,*ü*), 20 consonants (b,c,*ç*,d,f,g,h,j,k,l,m,n,p,r,s,*ş*,t,v,y,z) and the "silent g" written as "*ğ*" lengthens the preceding vowel, but it is not a phoneme by itself (Durgunoğlu, 2006). Turkish presents a good example of the total *shallow orthography* as each letter represents only one phoneme and each phoneme is represented by only one letter. Durgunoğlu, (2006) adds that there is no phoneme in the spoken word excluded in spelling except the written form of the borrowed words from other languages (in the case of *tren* [train], pronounced as /tiren/). The relation between letters and phonemes is *isomorphic* and *exhaustive* (Katz & Frost, 1992). Since Turkish is an *agglutinative* language,*vowel harmony*, in which all-possible combinations of the distinctive features (front-back, high-low, and rounded-unrounded) are observed, is one of the important characteristics in Turkish phonology as it decides the phonemes in the word-formation process which follows a predictable pattern (Kornfilt, 1990 as cited in Durgunoğlu, 2006). *Consonant clusters* are not allowed in the beginning of Turkish words but in the ends of the syllables such as *çift-lik* [farm] and *kent* [city]. Therefore, Turkish syllables are in four simple syllables types: V, VC, CV and CVC, and the most frequent form is CV (Durgunoğlu, 2006). When compared to English,

Turkish has fewer monosyllabic words which are phonologically consistent with the rules of the language (Durgunoğlu, 2006); most Turkish words are polysyllabic. In Turkish, as the spelling-sound correspondence is direct, once given the rules, anyone can immediately read or write the words correctly (Besner & Smith, 1992).

On the other hand, there are 26 letters in English Alphabet: 5 vowels (a,e,i,o,u) and 21 consonants (b,c,d,f,g,h,j,k,l,m,n,p,*q*,r,s,t,v,*w*,*x*,y,z) (Roach, 2009). Although most of the letters are same with Turkish, English phonology, based on the vowel system that includes short-long vowels, diphthongs, triphthongs and consonants that are categorized according to the place of articulation and manner of articulation (Roach, 2009), is highly affecting the orthography. "The letters do not stand for segments that are acoustically isolable in the speech signal"; thus, consonants and vowels are not "neatly segmented in correspondence with the way they are represented in print" (Shankweiler & Lundquist, 1992, p.180). Therefore, the orthography of English is considered relatively *deep* since many English letters can correspond to more than one sound (e.g. *c* for /k/ in *cat* and /s/ in *cinema*), many sounds can be represented by more than one letter (e.g. *c*,*k*, or *q* for /k/), and English has a number of consonant digraphs/clusters such as *th*, *sh*, *ch*, and *ck* to represent a single sound (Miller, 2019, p.3). For a better understanding, Venezky (1999, as cited in Cook & Cook, 2004, p.9) summarizes the general principles of English orthography;

- Variation is tolerated, especially the differences between American and British English letter choices in spelling.
- Letter distribution is capriciously limited; for example, there are no logical reasons why doubling is prohibited for the letters <a, i, h, v, z>, with a few exceptions like 'skivvy', 'flivver' and 'navvy', or why double <l> should not occur at the beginning of words, with odd exceptions such as 'llama'.
- Letters represent sounds and mark *graphemic*, *phonological* and *morphemic* features. English spelling sometimes depends on pairs of letters, sometimes on triples, often silent letters and even syllables. English has a large pool of monosyllabic words, which include most of the phonologic exceptions (Seidenberg, 1992).

- The history of the words, the etymology, is important factor in their spelling as the phonology of English has changed considerably since the fifteenth century (Mattingly, 1992).

- Regularity is based on more than phonology; for example, most of the time the cue of a past tense verb is the suffix –ed which takes several different forms according to the final phoneme of the verb stem. In addition, "*homophone* spellings are instances in which the two modes of representation, the phonemic and the morphemic, are partially in conflict" because a lexical distinction in homophone pairs (pronounced same, written different) is ordinarily indicated by the change of only a letter or two (DeFrancis, 1989 as cited in Shankweiler & Lundquist, 1992, p.182).

- Visual identity of meaningful word parts takes precedence over letter–sound simplicity. Carol Chomsky (1970, as cited in Cook & Cook, 2004, p.78) claims "the spelling of a word shows what is needed to access its lexical form, not its actual pronunciation" and uses the term *lexical spelling* for English spelling rules. Supportively, Cook and Cook (2004) give the silent letter <n> in 'autumn', which may well corresponds with the /n/ sound in 'autumnal', as an example. Thus, as the consistencies at the level of graphemes and phonemes decreases, effects of *lexical frequency* increase (Seidenberg, 1992).

- English orthography facilitates word recognition for the initiated speaker of the language, rather than being a phonetic alphabet for the non-speaker; in other words, spelling depends on the user knowing many aspects of English other than phonology.

"English spelling represents a compromise between the attempt to maintain a consistent letter-phoneme relation and the attempt to represent morphological communality among words even at the cost of inconsistency in the letter-phoneme relation" (Katz & Frost, 1992, p. 70). Seidenberg (1992) claims the reasons for these inconsistencies are the English orthography which also encodes morphological information, diachronic changes in pronunciation, and periodic spelling reforms. Supportively, Shankweiler and Lundquist (1992, p.187) note that "the standard system of English maps lexical items at a level that is highly abstract, both because

the conventional system is *morphophonemic*, and because it tends not to transcribe phonetic detail that is predictable from general phonological rules".

To sum up, young EFL learners have hesitations and make mistakes during spelling process, which are reasoned from the differences of the English orthography when compared to the Turkish orthography. For example, the new letters (q,w,x), the absence of letters (ç,ğ,ı,ö,ş,ü), vowel system, vowel digraphs, consonant clusters, silent letters, words pronounced similar but written different (homophones) or vice versa, the forms of the syllables and the number of syllables in a word can be possible problematic areas for young EFL learners. Thus, the orthography of English makes spelling words especially difficult for learners whose first language has a shallower orthography (Miller, 2019, p.3). Miller affirms that learning a new orthography is learning a new way of understanding visual information and how it corresponds to phonological information (2019). Shankweiler and Lundquist (1992) state that as long as the young EFL learners attempt to spell according to regular letter-to-phoneme correspondences, they experience the greater difficulty in spelling irregular words; and *nonanalytic strategy* usage can cause these failures both in reading and spelling. Therefore, readers/writers must pay attention to the arbitrary or unusual pronunciations and spellings of irregular words in English (Besner & Smith, 1992). However, what the foreigner learner lacks is just what the native child already possesses, a knowledge of the phonological rules of English that relate underlying representations to sound (Chomsky, 1972 cited in Cook & Cook, 2004). Thus, the development of L2 spelling skills is not an easy process but it is possible with appropriate practice.

2.3.3. The definition of orthographic competence.

According to CoE (2001), to be communicatively competent in a language, one must have linguistic, sociolinguistic and pragmatic competences. One of the components of the linguistic competence is orthographic competence which "involves a knowledge of and skill in the perception and production of the symbols of which written texts are composed" (CoE, 2001, p.117). For alphabetic systems, learners should know and be able to perceive and produce:

• the form of letters in printed and cursive forms in both upper and lower case

• the proper spelling of words, including recognised contracted forms

• punctuation marks and their conventions of use

• typographical conventions and varieties of font, etc.

• logographic signs in common use (e.g. @, &, $, etc.) (CoE, 2001, p.117).

In addition to these general abilities, the orthographic competence aims can be classified according to the language levels as we can see in Figure 1.

	ORTHOGRAPHIC CONTROL
C2	*Writing is orthographically free of error.*
C1	*Layout, paragraphing and punctuation are consistent and helpful.* *Spelling is accurate, apart from occasional slips of the pen.*
B2	*Can produce clearly intelligible continuous writing which follows standard layout and paragraphing conventions.* *Spelling and punctuation are reasonably accurate but may show signs of mother tongue influence.*
B1	*Can produce continuous writing which is generally intelligible throughout.* *Spelling, punctuation and layout are accurate enough to be followed most of the time.*
A2	*Can copy short sentences on everyday subjects − e.g. directions how to get somewhere.* *Can write with reasonable phonetic accuracy (but not necessarily fully standard spelling) short words that are in his/her oral vocabulary.*
A1	*Can copy familiar words and short phrases e.g. simple signs or instructions, names of everyday objects, names of shops and set phrases used regularly.* *Can spell his/her address, nationality and other personal details.*

Figure *1*. Orthographic Control (CoE, 2001, p.118).

To be able to reach this aims in English language, one should have *phonological*, *orthographic*, *semantic*, and *morphological knowledge* (Bentin, 1992; Apel, Wilson-Fowler, & Masterson, 2011). The terms will be explained in detail in 2.3.4.

2.3.4. The definition of spelling. The term *spelling* has various definitions such as:

- "forming words with the correct letters in the correct order, or the ability to do this" (Cambridge Online Dictionaries, 2016);
- "the encoding of linguistic forms into written forms" (Perfetti, 1997, p. 21);

- "the association of alphabetic symbols called *graphemes* with speech sounds called *phonemes,* the smallest identifiable sounds in speech" (Montgomery, 2007, p. 7).

According to Mattingly (1992), without a spelling system, orthography is not productive: the invention of the one requires the invention of the other. Today, it has become necessary for all members of a modern society to become able to communicate in writing by committing *spelling patterns* to paper or screen (Montgomery, 2007, p.7). As an important sub-skill of writing, spelling help writers for accurate communication and correct spelling help learners with writing fluency, good expression and confidence (Hannell, 2008). Besides, Cook and Cook (2004, p.78) claim that "spelling can show links between related words or morphemes, which are lost in the actual spoken forms" and underline the necessity and importance of spelling quoting (p. 55):

> . . . orthography, in the true sense of the word, is so absolutely necessary for a man of letters, or a gentleman, that one false spelling may fix a ridicule upon him for the rest of his life. (Lord Chesterfield: Letters to His Son, 1775)

> Take care that you never spell a word wrong. Always before you write a word, consider how it is spelled, and, if you do not remember, turn to a dictionary. It produces great praise to a lady to spell well. (Thomas Jefferson to his daughter Martha, 1783)

> Good spelling, like good grammar, is a distinct mark of culture. (The Common Sense Spelling Book, 1913)

In literature, the spelling skill is combined with the reading skill most of the time as both reading and writing depend upon the alphabetic principle and they are completing each other and use similar or common knowledge to be achieved (Shankweiler & Lundquist, 1992). "When learning to read in English, a learner must view printed letters (graphemes), decode their sounds, and combine those sounds together to form words" (Miller, 2019, p.1). However, English language readers "have probably had the experience of being unsure how to spell some words"

(Shankweiler & Lundquist, 1992, p.183), because, compared to reading, spelling requires additional knowledge and finer-grained, more explicit vocabulary knowledge at both the spoken and written levels (Moats, 2005; Treiman, 1998). In other words, Shankweiler and Lundquist (1992, p.183) claim "it is not required that the reader know exactly how to spell a word in order to read it, while the writer must generate the one spelling that corresponds to the conventional standard"; hence, spelling words requires greater orthographic knowledge and would progress more slowly compared to reading. It is a "more difficult task than *recognizing* all the letters when they are present in context in a book" because it necessitates the *recall* of spellings from the memory in exactly the correct order or the *construction* of such spellings if they are not already stored in the word memory store or lexicon (Montgomery, 2007, p.7). Apel, Wilson-Fowler and Masterson (2011, p.231) list the basic cognitive components of the spelling skill as follows:

Phonological knowledge: Phonemic knowledge is the conscious awareness of the sounds of language, and the ability to talk about and manipulate those sounds. In particular, the ability to segment words into their individual phonemes or sounds is important for spelling. "In general, in shallow orthographies, phonology is activated directly from print, whereas in deep orthographies, phonology is derived from the internal lexicon" Frost et al. (1987 as cited in Perfetti, Zhang & Berent, 1992, p. 243). Thus, across alphabetic writing systems *letter knowledge* and *phoneme awareness* should be critical for phonological and conventional spelling ability (Caravolas, 2006, p. 617).

Orthographic knowledge: In alphabetic writing systems, orthographic knowledge consists of "knowledge about the spacing of words, the orientation of writing, acceptable and unacceptable letter sequences, and the variety of ways in which certain phonemes may be represented, depending on such factors as their position in a word" (Treiman & Cassar, 1997, p. 70). It represents the information that is "stored in memory that tells us how to represent spoken language in written form; borrowing from the word's etymology, it is knowledge for the correct way to write language" (Apel, 2011, p. 592). Apel, Wilson-Fowler and Masterson (2011, p. 231) note that it "includes an understanding of letter–sound correspondence, rules for which letters can be combined to represent sounds or which can occur in certain situations".

Semantic knowledge: When readers and writers are aware of semantic links of words, they know that similarly pronounced words can be written different because a word's definition also dictates its spelling: e.g. the word *son* represents a family member, while the word *sun* represents a celestial body.

Morphological knowledge: Morphological awareness is "required to understand the importance and uniformity of spelling affixes as they are placed onto simple base words" and it also helps learners "to understand modification rules when affixes are added to base words, as well as increasing their knowledge of meaning relations, and shared spelling, among words that are derivations of a base word" (Apel, 2011, p. 592).

According to Montgomery (2007), in a method called *emergent writing* (*developmental writing* or *creative spelling*), teachers encourage their students to practice more spelling until they achieve the standard orthography. "When encouraged to invent spellings for words, young children invent a system that is more compatible with their linguistic intuitions than the standard system" and develop themselves through time (Shankweiler & Lundquist, 1992, p.183). To be a successful speller, one should have the cognitive components of the spelling skill and improve himself by time. As students do not suddenly learn and be completely successful in spelling, the theories and models about *spelling development* have been proposed in literature.

First, Simon and Simon (1973, as cited in Montgomery, 2007) claim that after good-spellers achieve being phonetically accurate, they generate alternative phonemic spellings and select the correct one via comparison with partial information in their visual memory; and call the method *information processing model of spelling*.

Then Marsh et al. (1980, as cited in Montgomery, 2007, p. 23) found that *proficient* and *mediocre* spellers uses visual information store as well as *analogy* during the spelling process of new words and non-words, which led them to propose a series of developmental stages: a *sequential encoding* (a left-to-right serial order)*, a hierarchical coding* (conditional rules) and *analogy* (selecting the most likely spelling combination by comparing their sound with already known words).

Third, Frith (1980) proposes a three-staged model: *logographic*, *alphabetic*, and *orthographic* which is revised later (1985, cited in Montgomery, 2007). In the *logographic stage*, a range of graphic features may act as cues; letters are not in order, and students do not give responds when they do not recognize the words; while in the *alphabetic stage*, letters are put in order with the knowledge of phonology; students can decode graphemes and attempt to pronounce and spell the words even though the results are incorrect (Montgomery, 2007). Then, in the *orthographic stage,* students reach the standards in reading and writing.

As a final theory, Montgomery (2007, p.26) cites Gentry's (1981) levels of spelling development which are: *precommunicative* – scribble writing in which children may tell a story as they scribble and draw; *prephonetic* – the creative or invented spelling stage where a single letter may represent a word or a group of letters e.g. H or h for 'high'; *phonetic* – letter-by-letter transcriptions of sounds e.g. 'hi'; *transitional* – the spellings look more like standard spelling influenced by origin and rules e.g. 'hye'; and *correct* – standard spelling e.g. 'high'. Therefore, "children may simultaneously produce spellings typical of *several stages* and they may rely on *various strategies* while attempting to spell words at any given time" (Caravolas, 2006, p. 616).

2.4. Previous Studies

In this section, the results of the previous studies related to L1 effects on L2 spelling were discussed chronologically. As a matter of fact, the researcher tried to include the most cited and well-known studies in the literature.

Bebout (1985) analyzed the participants' (84 native English speaking children and 61 Spanish speaking EFL learning adults) misspellings in order to investigate whether there was difference between learning the English orthography as a native or as a nonnative learner. In her study, she collected 677 misspelled words from the responses of fill-in-the-blank tasks applied during the class time, which were coded by *language*, *acceptability,* and *error type,* and analyzed according to seven categories. Results showed that while native speakers were significantly superior only in the *consonant doubling* (a rarely found feature in Spanish) category, adult Spanish participants were superior in the *silent e* and *schwa* involving categories;

which interpreted as the differences in the language backgrounds and spelling strategies could be the stems of the attempted misspellings. As no significant difference was found in all the other categories, it was concluded as both groups had more trouble with vowel graphemes than with consonant graphemes.

In another study held in the same year, Cronnell (1985) presented an error analysis of 78 3rd grade and 92 6th grade Mexican- American students' English writing samples in order to explore the aspects of language (Spanish) influences on the English (L2) writing of students. During the application, both groups wrote stories and letters in which 1595 errors were detected and classified according to these seven categories: Spanish spellings, pronunciation-consonants, pronunciation-vowels, verbs, nouns, syntax and vocabulary. Findings of the study revealed that several error types were caused particularly by the effects of Spanish (L1): spelling vowels and consonant clusters at the end; replacing sounds c-s, b-v, and s-z; verbs and nouns written with inflections etc. It was also found that 6th grade students were better at tasks. The findings were concluded as Mexican-American elementary school students' language-related English writing problems were mostly reasoned by their L1 and older students were orthographically more competent than younger ones.

Ten years later, Holm and Dodd (1996) examined the relationship between L1 and L2 literacy with regard to alphabetic-nonalphabetic languages' transfer processes. The participants were all university students (adults) from China, Hong Kong, Vietnam and Australia and each of the four groups involved 5 male and 5 female. The main difference between the China and Hong Kong group was the method used to teach L1 (Chinese) literacy: *pinyin* method (using Latin symbols as a transitional alphabet to learn Chinese logographic literacy) for China and *look and say* method for Hong Kong group. All of the students were tested individually according to phonological awareness tasks, reading tasks and spelling tasks based on real words and non-words. The results showed that while in the spelling and reading tasks there was no difference between groups on real word processing, Hong Kong group had more difficulty in the processing non-words because of their poor phonological awareness, which was linked to the students' L1 literacy learning experiences. Indeed, according to the writer, as a general result, it could be stated that all the

groups' performance showed that their L1 skills and strategies were transferred to L2.

In her dissertation, Arab-Moghaddam (1997) studied with 55 Iranian children from 2nd and 3rd grade and examined the concurrent development of reading and spelling skills in two different languages, Persian (L1) and English (L2). Firstly, she briefly described the Persian (Arabic) and English orthography and then emphasized the role of cross-language transfer effects between shallow and deep orthographies. Word-reading, spelling, pseudowords, visual recognition, and vocabulary knowledge tasks were applied in both languages. According to results, there was a positive correlation between Persian and English in terms of cross-language transfer; in other words, students who were good at performing in the tasks of Persian were also good at tasks in English. In spelling tasks, the results indicated that while orthographic skills predicted the Persian spelling, they were not enough for the English phonological and spelling skills.

As one of the most cited studies, Akamatsu (1999) investigated the possible effects of L1 on reader's sensitivity to the English spellings with 50 fluent ESL readers (Iranians, Chinese and Japanese) as an experimental group and 17 native readers of English as a control group. In the experiment, a naming task was used as a material: *visually distorted* words (letters' order and shape were changed) were given to read aloud as fast and accurate as possible. It was hypothesized that "the more sensitive one is to alphabetic orthography, the less adversely one should be affected by the visual distortion of words in the processing of the constituent letters" (p.386); and, in this case, Iranians were expected to react faster than Chinese (logographic) and Japanese (logographic and syllabic) because of their alphabetic L1 background. The analysis of the data was conducted according to participants and words in terms of reaction speed and accuracy. When the groups were ordered from the highest to lowest, the native (English) control group was significantly the most superior in completing the tasks with more quickly and accurately, while the Iranians were the second, the Japanese were the third and the Chinese were the last. Although the ESL group had similar results with each other, it was noted that, even the difference was not statistically significant, the Iranian students' reactions were faster and more accurate, which was concluded as their *inner mechanism for processing English*

words (p.398) were more efficient than the Chinese and the Japanese students'. In the comparison of the Japanese and Chinese students' results, it was found that even though there was no difference in their reaction time, the Japanese students were more accurate, which was linked to *the effects of the syllabaries in the Japanese orthography* (p.399).

In his dissertation, Wang (2000) explored the development of spelling of young 35 Chinese ESL children with a longitudinal study and compared their development with 37 native English-speaking children in terms of the L1 specific phonemes, the effects of lexicality and visual orthographic processing on ESL acquisition based on the relationship between spelling, reading and phonological processing. While the spelling measures were real-word spelling, pseudoword spelling, confrontation pseudoword spelling, and audio-visual matching spelling selection, the reading measures were recognition of the spelled words, word recognition, and pseudoword decoding and the vocabulary measure was non-verbal ability test. All testing was done individually. Wang found a significant positive correlation between participants' spelling and reading performance measures in both groups. In detail, the results showed that both groups improved themselves through time; Chinese students had difficulties in spelling pseudowords, performed better when the words presented visually rather than audial and outperformed L1 children in the confrontation-spelling task. The misspellings of Chinese students were reported as a reflection of difficulty in spelling certain phonemes that are absent in LI phonology. In addition, it was concluded from the results that the effect of L1 transfer decreases with the L2 development as the students performed better in the second year of the study.

As a longitudinal study, Wang and Geva (2003) studied with 30 Cantonese Chinese children speaking ESL and 33 native English-speaking children by following them from 1st to 3rd grade. The purpose of the study was to examine whether Chinese children transfer their L1 literacy knowledge to read and spell in English. The measures were spelling tasks such as real word spelling, pseudoword spelling, confrontation pseudoword spelling, spelling selection, vocabulary measure, and non-verbal ability test, which were applied individually. The results showed that Chinese students had difficulties in spelling pseduowords, but outranked native children in the confrontation pseudoword spelling which contained *orthographically legitimate* (pronounceable letter strings) and *illegitimate* (unpronounceable letter strings) words

(p.14). Moreover, it was noted that there were both positive and negative transfer from L1 to L2, especially with regard to pseudoword spelling.

With a different perspective to the L1-L2 transfer, San Francisco et al. (2006) worked with 66 first grade monolingual and bilingual students to explore their language of literacy instruction and their expressive vocabulary in English and Spanish. Participants were categorized as monolinguals in English language instruction, bilinguals in English language instruction, and bilinguals in Spanish language instruction. The instruments were pseudoword spelling tasks and vocabulary recognition tasks. As a result, there was not any interaction between English and Spanish vocabulary and there were no Spanish-influenced spellings were detected in the samples of children who received English language instruction during the tasks. The only group who misspelled especially pseudowords was the bilinguals in Spanish language instruction, which was interpreted as the literacy instruction was the most powerful factor in students' spellings.

With the purpose of conducting a longitudinal study, Jongejan, Verhoeven and Siegel (2007) examined the basic literacy skills and processes with 212 children from 1st to 4th grade (42% were native and 58% were ESL learners from different L1 backgrounds) through two years. In each year, in April and May, students were assessed according to the following titles: phonological awareness, lexical access, syntactic awareness, verbal working memory, word reading, and spelling. For each subtitle, different tasks were applied individually. The results showed that in all categories both groups improved their skills across grades through the study. In detail, ESL students had advantage for lexical access, while they were weaker than native students in the syntactic awareness and the working memories. In other categories, there was not a significant difference. When the results were discussed, the writers claimed that the *phonological awareness* was the strongest predictor of L1 and ESL word reading and spelling ability as both groups' results were highly related to their own previous experiences of the phonology.

In her dissertation, Sun-Alperin (2007) aimed to examine how reading and spelling acquisition in L2 (English) is influenced by L1 (Spanish) and conducted two studies. In the first study, the participants were 2nd grade students (89 Spanish-English bilingual children and 53 monolingual English children). They were tested in both

languages by using phonological, orthographic, reading and spelling tasks. The results of the first study showed that Spanish language knowledge had contributions to English learning and it was a significant predictor of especially English spelling. In the second study, the aim was to find out the error consistency. As the errors of Spanish-speaking children were systematic in the first study, this time the concern was to examine whether they were consistent with the Spanish orthographic rules. The participants were 26 native Spanish-speaking children. The researcher did not make an additional task but analyzed the errors occurred in spelling tasks in the first study. As a result, it was found out that Spanish-speaking children made errors, especially considering the English vowels' spelling, influenced by Spanish orthography directly, which supported the hypothesis on L1 effects on L2 literacy.

In the following year, Fender (2008) examined the relationship between spelling knowledge and reading skills of 37 intermediate-level ESL students within the focus of their alphabetical backgrounds. The experimental group was 16 Arab students while the control group was consisting 9 Chinese, 5 Korean and 7 Japanese students. In the procedure, students' general listening and reading comprehension skills were tested and the 58-item spelling test was administered. The results showed that although both groups had spelling difficulties with syllable-spelling patterns and derivational spelling patterns, Arab students got significantly lower scores on the spelling especially the less common words and reading comprehension test. Fender bounded these results to students' L1 experience and the orthographic influence of L1 on L2.

In the same year, Sparks et.al. (2008) presented a longitudinal study which aimed to investigate the L1 predictors of L2 reading and spelling skills. They worked with 54 high-school students and followed the participants from 1st grade to 10th grade. The most distinctive factor of this study was; while the L1 was English and tested via proficiency measures that were word decoding, spelling, reading comprehension, phonological awareness, reading readiness, vocabulary and listening comprehension; L2 was either French, German or Spanish measured by L2 word decoding, L2 spelling, and L2 reading comprehension. Some of the measures were applied individually while others were implemented in groups. The results were discussed according to L2 word decoding, L2 spelling and L2 reading comprehension. It was

reported that, L1 reading results were consistent with L2 reading, hence there is long-term cross-linguistic transfer of L1 phonological processing skills to L2 word decoding. However, as the L2 languages had more transparent orthography than L1, participants rely less on their L1 experiences through time. For the L2 spelling title, the results showed that L2 spelling skills were affected by L1 spelling skills and it was suggested that L1 spelling skills could be used to learn L2 spelling because even after students master L2 spelling, they continued to use L1 spelling strategies. Last, reading comprehension analysis also proved that L1 reading comprehension was important to predict the reading comprehension in L2.

Within a Turkish context, Kırkgöz (2010) analyzed the 400 individual written errors in the essays of 72 adult Turkish EFL learners. She collected the data in three steps: the collection of sample errors, identification of errors and description of errors. Kırkgöz categorized errors as *interlingual* (subtitled as grammatical interference, prepositional interference, verb tense, and lexical interference) and *intralingual* (subtitled as overgeneralization, use of articles, and redundancy). According to results, interlingual errors were higher in number, which revealed that the learners tended to transfer from their L1 (Turkish) in the L2 writing processes.

With the same results of their previous longitudinal research (Sparks et.al. 2008), Sparks, Patton, Ganschow and Humbach (2012) presented another study from a different point of view with two main questions: 1) whether L1 reading achievement affects L2 skills and L2 aptitude and 2) whether L1 print exposure and general knowledge influence L2 skills and L2 aptitude. In the procedure, all four skills were tested with several L2 and L1 instruments. The results were discussed according to main questions and presented in two titles: *L1 Reading Achievement and L2 Proficiency*, and *L1 Print Exposure and L2 Proficiency*. For the concern of our study, if the L2 spelling part was examined in detail with regard to L1 reading achievement or L1 print exposure, it could be concluded that neither of them was the predictors of L2 spelling because the findings were not significantly different.

In the same year, Kahn-Horwitz, Sparks and Goldstein (2012) examined the L1 (Hebrew) literacy variables' influence on EFL spelling. In this longitudinal study, 33 Hebrew speaking students received partial explicit instruction of the English orthography and were tested in 4th grade, 9th grade and 12th grade. L1 measures were

phoneme deletion, spelling, and word attack; while English (L2) measures were EFL letter name and sound knowledge, EFL word recognition, and EFL spelling. According to results, the connection between L1 measures and ELF spelling development was clearly seen in every level because students attempt to use their L1 background while attempting to spell in L2.

Ford et al. (2012) examined the literacy skills of 2351 Hispanic kindergarten students learning English as a second language (ESL) with the purpose of investigating whether they demonstrate distinctive features or not. The measures were phonological awareness, alphabet knowledge, and orthographic knowledge. Several tasks were applied individually both at the spring term of the kindergarten and at the fall term of the 1st grade. The results showed that, there was not a homogeneous group in terms of the measured skills. Their distinct literacy profiles changed even for one measure to another and for the same measure in time. As these young learners were individually that much different, it was suggested that orthographic skills needed to be assessed and taught early and practices and treatments should differ according to their individual needs.

In his dissertation, Yeon (2012) studied the contribution of metalinguistic awareness skills to spelling and reading. The participants were 287 Korean ESL children who started learning English in the 3rd grade with listening and speaking activities, while writing was not on the focus in the first year. The measures were English spelling, English vocabulary, Korean spelling, Korean phonological awareness, Korean orthographic awareness, and Korean morphological awareness. Each of the measure was examined according to metalinguistic awareness skills: phonological awareness, orthographic awareness and morphological awareness. The tasks were applied in groups, except the English vocabulary test. According to results, morphological awareness made a striking contribution to both languages' spelling, while orthographic and phonological awareness did not make statistically significant contribution to English and Korean spelling. Moreover, there was a strong positive relationship between Korean L1 spelling and English L2 spelling.

In another dissertation, Zghyer (2014) investigated the experiences and perceptions of 40 Arab students studying in USA. As a first question, the difficulties they experienced were asked and as a second question, their comments and suggestions to

ease these difficulties were explored. The researcher used a survey to get answers and the results showed that mostly their background knowledge caused problems in learning English writing. They said that practicing in L2 writing was also lacking in their country. Especially the difference between alphabets resulted in many different difficulties in the writing process. Lastly, they offered recommendations for the implementations in their own countries and also for the American teachers concerning pedagogy, the subjects of the lessons, and also how to start writing in L2.

Liu (2015) analyzed the written errors of non-English participants (L1=Chinese) in order to help both students and teachers about spelling mistakes and how to prevent them. The process started with 600 composition collection written in different topics. The spelling errors were collected automatically by using Microsoft Word and the researcher focused on the real word spelling errors which the program cannot detect. The writer decided to work on 68 compositions to describe the errors and categorized them as non-word errors, local syntactic errors, global syntactic errors and semantic errors by using a mixed-method to analyze the data. Quantitative analysis was used to show the number and the percentage of the error type while qualitative analysis was used to describe the different errors in detail. The results proved that mother tongue influenced the target vocabulary both positively and negatively.

Russak and Kahn-Horwitz (2015) examined the good and poor speller differences regarding the acquisition of novel phonemes and orthographic conventions with 233 children in total from 5th, 8th and 10th graders whose native language was Hebrew. Some tasks including phonological choice, orthographic choice and spelling dictation were implemented as baseline measures of EFL. EFL spelling measures were word spelling task and pseudoword spelling tasks. The findings demonstrated that there was a greater variance amongst the poor spellers and the good spellers in all tasks, but especially in spelling accuracy in all grades, which concluded as the gap between these two type of students was already evident even in the early stages. In other words, a student who misspelled words in L1 would also attempt spelling errors in L2.

Keilty and Harrison (2015) worked with 77 kindergarten children speaking English as a native (40 students) and a second language (37 students). They conducted error analysis on the misspellings of participants with the purpose of detecting any

differences in early spelling ability. The measures were oral vocabulary, syntactic knowledge, phonological processing, alphabet knowledge, early word reading and spelling and spelling sophistication. Tasks were applied individually in one 45 minute session. According to results, there was no difference in spelling-related scores between the groups although ESL group had a lower oral vocabulary and syntactic knowledge.

Harrison et al. (2015) conducted this study to address the components processes for writing in ESL and English as a first language. The participants were 112 3rd grade children, 62 were speaking ESL and 50 were native. As a writing measure, dictation, handwriting fluency and writing a paragraph tasks were applied. For cognitive, linguistic and word reading measurement, rapid naming task and the tasks which include verbal working memory, oral vocabulary and syntactic awareness, phonological awareness and word level reading were applied. Participants completed all of the tasks individually in a quiet room. Data were collected by Harrison during the midpoint (February) of the school year. According to results, no differences were found in phonological awareness, rapid naming, and verbal working memory tasks between ESL and EL1 children. In addition, groups did not differ in word reading and spelling measures; however, ESL group get a lower score from decoding. Moreover, subtle differences were found in spelling at the word and text level and also in the contribution of the text generation and transcription processes to writing quality.

The studies examined up to now were concerning the number of learners' L2 spelling mistakes, their types, causes, similarities with L1 and differences from L1. As it can be understood, they generally focused on the reasons but not how to treat them. The following three studies try to consider this aspect.

Young, Siegel and Chan (2012) used a language enriched phonological awareness instruction as the core of their study. They explored its effect on 76 Hong Kong young ESL learners who were speaking Cantonese as a native language. The phonological awareness program including a fixed five instructional component sequence: awareness of sound, syllable segmentation, rhyming, onset and rime and discrimination. All stages were activity based. Pretest and posttest assessments include English spelling section. In the section, to practice spelling students write

down the pronounced words and for the each correct phoneme, they get 1 point. In the procedure, teachers were trained to use the instruction appropriately in the lessons. The study took 12 weeks, 2 sessions per week. As a result of this study, there was a significant difference between the experimental and control groups in terms of the development of phonological awareness at syllable, rhyme, phoneme levels, word reading and word spelling.

In his dissertation, Alshammari (2015) also explored the effects of explicit phonological instruction. The participants were 53 ESL students. There was only the experimental group in the study. Spelling, pseudowords and a timed reading tasks were applied as pretests and posttests. Some phonological and orthographic treatments were applied during the procedure. According to results, their scores were significantly higher in the posttest; however, the lacking of the control group was an important factor as a limitation of the study.

As a relatively recent study, Yüzen and Karamete (2016) aimed to prepare a material for the use of students to learn numbers. This educational material, ADDIE (Analysis, Design, Development, Implementation and Evaluation), was constructed for the implementation of teaching pronunciation and the spelling of the numbers to 4th grade primary school students. In this study, the design of the material and the developing process was planned weekly. At the application and evaluation stage, the program was used by 3 children along with some undergraduate students and it checked their misspellings. As it was a type of a game, to motivate the students a certificate was given to them based on their success. Unfortunately, there was not much information in terms of findings because the study only included a pilot one.

As it can be understood from these studies, when researchers concern about spelling or writing, generally they focus on what are students' mistakes. They try to categorize their mistakes and think about their reasons. A few researchers have tried to implement some treatments; however, none of them was done in the classroom area with the teacher using activity-based tasks. In Turkey, English was started to be taught at the second grade of primary; therefore, from the very beginning, the spelling ability should be worked on to prevent the mentioned problems in the future writing tasks. As they are young learners, games would be beneficial to integrate with spelling tasks.

CHAPTER III

METHODOLOGY

This chapter includes six main sections; research design, research questions, participants, procedure, data collection instruments and data analysis which will be introduced in detail respectively.

3.1. Research Design

According to Rowley (2002, p.18) a research design is "the logic that links the data to be collected and the conclusions to be drawn to the initial questions of a study; it ensures coherence" and she further argues that "another way of viewing a research design is to see it as an action plan for getting from questions to conclusions". Since this study aims to investigate the effects of spelling games on the orthographic abilities of 3rd grade young EFL learners in a Turkish primary school context, an experimental research design was used. In this section, the definition of experimental method, the history of experimental method, types and procedures of experimental method, the strengths and weaknesses of experimental method and the design of the present study will be introduced briefly.

3.1.1. The definition of experimental method. First of all, it will be helpful to make it clear that many different terms have been used for experimental methods in the literature, such as *intervention research*, *scientific method*, and *deductive method* (Dörnyei, 2007; Tanner, 2018). The method is based on a *hypothesis-testing* with "a *deductive* process of logical inference, where reasoning proceeds from general principles to particular instances" (Tanner, 2018, p.339). The procedure of the classic experimental involves an experimental group and a control group, then the independent variable is administered to the experimental group but not to the control group and both groups are measured on the same dependent variable (Lee, 2012). Then the results are compared and contrasted to infer conclusions.

3.1.2. The history of experimental method. According to Dörnyei (2007, p.119) the experimental researches are "available since twentieth century" and Lazar (2017, p.39) claims "experimental research has been a highly effective research approach and has led to many groundbreaking findings in behavioral science in the 20th century". However, Hsieh et al. (2005) claims that there is a decrease in the quantity of experimental researches because of the difficulties in implementation and data collection processes such as controlling the factors and hesitations while interpreting the outcomes.

3.1.3. Types and procedures of experimental method. As it is mentioned, the classic/true experimental design includes an experimental group and a control group, then the independent variable is administered to the experimental group but not to the control group and both groups are measured on the same dependent variable (Lee, 2012). However, as the process cannot be the same for all the settings, different types of experimental design are available. The most known types are "quasi-experimental" and "pre-experimental". According to Dörnyei (2007, p.117) 'quasi-experimental design' is used for the situations that random group assignments is impossible or impractical; for example, the groups can already be divided into classes. In this type of designs, the similarity of the groups plays an important role especially for the group comparisons done via pre-tests and post-tests most of the time (Tanner, 2002, p.140). Since the obtained data can be analyzed quantitatively, ANOVA and/or ANCOVA are used in experimental and quasi-experimental studies (Dörnyei, 2007, p.118).The other type, 'pre-experimental' design, is the least recommended when compared to true experimental and quasi-experimental designs because of the fact that pre-experimental designs "utilize neither experimental and control conditions, nor randomization: hence there is no meaningful comparison" (Tanner, 2002, p.138). He further explains "they are acceptable for an exploratory study, where the researcher wishes to gain insights or gather ideas and not to generalize to the wider population" (Tanner, 2002, p.140).

3.1.4. The strengths and weaknesses of experimental method. While deciding the research design type for a study, there is a lot of things to take into

consideration because every setting needs a different type and all of the kinds have their own strengths and weaknesses. For example, if the implementation area is applied linguistics, it is hard to find perfect matched ideas for using a treatment to manipulate the variables in the complex areas like language classrooms (Dörnyei, 2007, p.119). As an opponent view, conducting an experiment is assumed as the most appropriate way to resolve a question about language teaching and learning by many people (Brown & Rodgers, 2002, p. 195) and Dörnyei (2007, p.120) also notes that "experimental studies would be feasible, for example, in the studies that look at the impact of any language-related process rather than the correlational or survey studies". Besides, although it is difficult to apply completely true experimental studies, they can "offer the greatest potential of any design for inferring causal relationships" (Tanner, 2002, p.129). Besides, true experimental studies provide a *high internal validity*, while their external validity is their major weakness because it is hard to generalize the strictly controlled research to other populations and settings (Tanner, 2002, p.135). The quasi-experimental studies share the same strengths and weaknesses with true experimental designs except their randomized groups while pre-experimental studies have more weaknesses than their strengths such as the lack of randomization, and the selected treatments to conduct and comparison of the results.

3.1.5. The design of the present study. The purpose of this study was to investigate the effects of spelling games on the orthographic abilities of 3rd grade young EFL learners in a Turkish primary school context. Within the light of the research design acknowledgments and as the process includes investigating the results of a treatment in the present study, experimental research design was used. Since the context was based on young learners, the study was conducted with 3rd grade primary school EFL students. The experimental and the control groups were selected with a convenience probability sampling method (Cohen, Manion & Morrison, 2007) and they were at the same proficiency level (A1). As they were already in two classes, the randomization was not applied; therefore, the design became a quasi-experimental type. Both groups used the book provided by Ministry of National Education (MoNE) and the only difference were the spelling games

applied to the lessons of experimental group. The target vocabulary, as it will be explained in the procedure, was selected according to the curriculum, from the 3rd grades' 2nd term units, which are Unit 6-My House, Unit 7-In My City, Unit 8-Transportation and Unit 9- Weather (see Table 1). At the end of each two-hours-lesson, a dictation test was applied to see the effects of spelling games through 12 weeks (see Tables3,4,5 and 6); and in the final week, an overall dictation test was administrated to see whether there is a difference between control and experimental groups (see Table 7). The data collection process took 13 weeks in total. After the implementation, the data was analyzed quantitatively.

3.2. Research Questions

This research seeks to address the following main question:

Are there any effects of spelling games on the orthographic abilities of 3rd grade young EFL learners in a Turkish primary school context?

With this main purpose in hand, the research will also focus on the following sub-questions:

1. Is there a significant difference between the participants' success rates in the weekly and overall dictation activities' results of the experimental and the control group?

2. Is there a significant difference between the target vocabulary correctness rates in the weekly and overall dictation activities' results of the experimental and the control group?

3.3. Participants

The participants of this study were selected with a non-probability sampling method, convenience probability. According to Cohen, Manion and Morrison (2007) "the selectivity which is built into a non-probability sample derives from the researcher targeting a particular group, in the full knowledge that it does not represent the wider population; it simply represents itself" and they further explain "convenience sampling (also known as availability sampling) is a specific type that relies on data

collection from population members who are conveniently available to participate in study" (p.113). In other words, the reason why the school and the participants were chosen to implement the study was that the researcher was working as an English teacher in that school (Büyükkabaca 75.Yıl Primary School); therefore, she had the chance to implement the study and collect the data easily.

There were 42 3rd grade Turkish primary school students as participants in the present study. They were all living in the village where the school was located, Büyükkabaca, Senirkent, Isparta. Büyükkabaca is a small village with a population of nearly 3700. The participants were on average 8.5 years old. They all can speak, read and write in their mother tongue, Turkish. They were divided into two classes as 3A and 3B, 21 students in each class. There were 10 male and 11 female students in 3A and 11 male and 10 female students in 3B. The classes were selected randomly as experimental and control groups. Both groups' English lesson was two hours (40 minutes each) per week and they did not have the chance to speak English outside of the classroom. The English lesson was on the same day for both groups, Mondays, and in detail, 3A (the experimental group) was taking the English lesson in the 3rd (10.25-11.05) and 4th (11.15-11.55) hours, and for 3B (the control group), the English lesson was in the 5th (13.10-13.50) and 6th (14.00-14.40) hours.

Since it would not be appropriate to ask questions or dictate words in the target language, which they have never seen or heard, a pre-test was not applied before the study. The participants were regarded as having the same proficiency level (A1) and identical for this study because of two reasons. First, the same teacher provided their English lesson background with the same methods and application for just one year when they were 2nd graders. Second, when all participants' English scores for the first term were taken into consideration, it could be seen that the evaluation results had the same average; out of 21 students, each group had 14 'Very Good' and 7 'Good' (Appendix 1).

3.4. Procedure

In this section, the spelling games used in the study, the target vocabulary and the implementation process will be explained in detail respectively.

3.4.1. The spelling games used in the study. Grab Bag, Alphabet Jumble and Prisoners Base, adopted from Graham, Freeman and Miller (1981), were chosen for this study. The main features of the games were that they activate students physically and mentally at the same time; provide students to practice the spelling of the new vocabulary; and help students to monitor themselves with regard to their success (Graham, Freeman & Miller, 1981). The games will be explained in detail below.

3.4.1.1. The 'Grab Bag' game. This is a class game and in the original format the teacher writes each word with three spelling options on the board. To adopt this game into today's technology and to save time PowerPoint presentations are used instead of writing the words on the board (Appendix 2). In the slides, one of the spellings is correct. Each student individually tries to select the correct spelling and writes it on a piece of paper. Once all the vocabulary has been covered, the teacher tells the correct options and the students either mark their own or their peer's papers. For every correct response a point was awarded for the student/s who wrote down the correct option. The student/s with the highest score is announced as the winner.

3.4.1.2. The 'Alphabet Jumble' game. This is a team game and the original format was conducted in 1981 using letter cards pinned on a board. Due to purposes of security, the game was modified with magnetic letters being fastened to the classroom whiteboard. Before starting the game, 6 sets of letters (26 x 6) are placed equally in two baskets. The class is divided into 2 teams and for each group a rectangle is drawn on the board to stick the magnetic letters in it. Each time, one student plays the game for his/her own team. The teacher pronounces a word and students try to fasten the magnetic letters to the whiteboard (magnetic). Each time they have one chance to choose just one letter; in other words, they cannot save more than one letter in their hands. The pupil who completes first and correct will get one point for his/her own team (Appendix 3). The game continues until all the members of the team play. At the end of the game, the team with the higher score is announced as the winner.

3.4.1.3. The 'Prisoners Base' game. This is a team game and the number of students in each team may depend on a class size. The teacher pronounces a word and all of the team members write it on the board or a piece of paper; however, the ones who misspell the word will be the prisoners. The teacher pronounces another word and the remaining students write it down. Those who have spelled the new word correctly, they can release their teams' prisoners but each correct speller can release only one prisoner from his/her team. Those who have misspelled in the second round become prisoners again and cannot be saved in the same round. If all the members become prisoners, the team loses. The game continues until the teacher has finished the target vocabulary and the team, with the more prisoners at the end of the game, loses. In this study, to apply this game more effectively, students are divided into two groups and teacher wants them write the given words into their own papers to prevent them from gazing at each other's answers. The rest of the game continues same with the original. As this game flows extremely fast and the teacher should be in control all the time, no pictures can be taken during the game.

3.4.2. The target vocabulary. The 56 target vocabulary were chosen from the English program (MoNE, 2013) and from the book titled "İngilizce 3" provided by MoNE (Dağlıoğlu, 2015). These words were chosen as the target vocabulary because they were the key words of the relevant units (15 words for units 6 and 8; 13 words for units 7 and 9). Table 1 illustrates the target vocabulary used in this study.

Table 1.

Target Vocabulary

Unit 6-My House	Unit 7-In My City	Unit 8-Transportation	Unit 9-Weather
bathroom	bank	balloon	cloudy
bed	cafe	bike	cold
bedroom	campus	boat	cool
chair	carnival	bus	foggy
cup	classroom	car	hot
garage	home	helicopter	nice
kettle	hospital	motorcycle	rainy
kitchen	museum	plane	snowman
living room	park	river	snowy
playroom	restaurant	road	sunny
shampoo	school	sea	warm
soap	shopping center	ship	weather
sofa	zoo	sky	windy
table		train	
television		truck	

3.4.3. The implementation process. Prior to the implementation process, the necessary permissions were taken from MoNE (Appendix 4) and from the parents of participants as they are young learners (Appendix 5). Then the participants were informed about the study and the process. The English language teacher of the participants, who was also the researcher of the present study, conducted this research with 42 3rd grade young EFL learners (A1 level), 21 students in the experimental group and 21 in the control group, at the spring term of 2016-2017 education year. The lesson topics were based on the 3rd grades' 2nd term units, which were Unit 6 - My House, Unit 7 - In My City, Unit 8 - Transportation and Unit 9 - Weather. Each unit was focused only for 3 weeks. The English lessons of two groups were on the same day. The teacher tried to do her best to use L2 (English) during the lessons; however, when she thought it was necessary, she used L1 (Turkish) convenient to the students' needs and levels (especially for the instructions to prevent time consuming).

The implementation process took 13 weeks in total. From the 1st to 12th weeks, during the lessons, the target vocabulary (see Table 1) was introduced by flashcards and the same listening, speaking, reading and writing activities were applied to both groups. In addition, both groups used the same materials (e.g. books, felt materials, PowerPoint presentations, worksheets, listening tracks, speaking activities and homework) and were assessed weekly by dictation activities (see Tables 3, 4, 5, and 6). The only difference was the spelling games (*Grab Bag*, *Alphabet Jumble* and *Prisoners Base*) that the experimental group played for 10-15 minutes of the English lessons' 2nd hour in each week. In the meantime, the control group continued their English lessons without the spelling games. At the last 3-5 minutes both groups were assessed by that weeks' dictation activity. For the control group lessons' time management, the researcher stretched the lessons; and if there is still time even after the dictation activity, the control group started to do their homework. In the 13th week, the final week of the implementation, the overall dictation activity was implemented to both groups in 1-hour-lesson (40 minutes). Table 2 demonstrates the work schedule of the study for the experimental group. The reason for the lack of a-week-cycle between the some dates was that there were school trips, official holidays and exams at those weeks.

Table 2.

Work Schedule of The Study for The Experimental Group

Weeks	Date	Units – Topics	The Spelling Games
1	13.02.2017	Unit 6 – My House	Grab Bag
2	20.02.2017	Unit 6 – My House	Alphabet Jumble
3	27.02.2017	Unit 6 – My House	Prisoners Base
4	06.03.2017	Unit 7 – In My City	Grab Bag
5	13.03.2017	Unit 7 – In My City	Alphabet Jumble
6	20.03.2017	Unit 7 – In My City	Prisoners Base
7	27.03.2017	Unit 8 - Transportation	Grab Bag
8	03.04.2017	Unit 8 - Transportation	Alphabet Jumble
9	10.04.2017	Unit 8 - Transportation	Prisoners Base
10	20.04.2017	Unit 9 – Weather	Grab Bag
11	24.04.2017	Unit 9 – Weather	Alphabet Jumble
12	04.05.2017	Unit 9 – Weather	Prisoners Base
13	08.05.2017	Overall Dictation	-

To maintain a clear understanding of the implementation process in this study, the first 3 weeks (Unit 6) and the last week (Week 13) will be explained in detail, because in the other 9 weeks, the same implementation with the first 3 weeks was carried out for the units 7, 8 and 9 in a cycle as it can be seen in Table 2.

3.4.3.1. Week 1. The topic of the Unit 6 was My House. The related 15 words of the unit, which were *bathroom, bed, bedroom, chair, cup, garage, kettle, kitchen, living room, playroom, shampoo, soap, sofa, table,* and *television*, were the target vocabulary of this study. In the first hour (40 minutes), they are introduced by the help of flashcards and the pronunciations of the words were practiced as a whole-class-activity. Then the teacher guided the students to do the related activities (e.g. repeating what they hear, matching by listening, reading at the word-level, writing at the word-level, doing puzzles or crosswords etc.) in the book (Dağlıoğlu, 2015). In the second hour (40 minutes), the teacher continued with the book's activities and some practices were done via similar worksheets' activities suggested by the book. Then, the experimental group played the 'Grab Bag' game for 10-15 minutes. The control groups' lessons were stretched by the teacher to cover that time, because they were not going to play any spelling game. In the last 3-5 minutes, first week's dictation activity (see Table 3) was applied to both groups and the papers were collected to be analyzed later.

3.4.3.2. Week 2. The topic and the target vocabulary for the second week were the same with first weeks'. The teacher started the first lesson by revising the words, this time with the help of the magnetic representations of the words made from felt. The teacher asked the students the English word by showing them one of the felt materials, and once the correct answer was given, she fastened it to the whiteboard. Then the teacher continued the lesson by the related activities in the book (Dağlıoğlu, 2015); however, this time the target vocabulary is given in sentences such as '*The car is in the garage.*', '*The kettle is on the table.*', and '*The soap is in the bathroom.*'; and the activities were more based on information-gap. In the second hour, the teacher continued with the book's activities and some practices were done via similar worksheets' activities suggested by the book. Then, the experimental group was divided into two teams to play the 'Alphabet Jumble' game for 10-15 minutes while the control groups' lessons were stretched. In the last 3-5 minutes, second week's dictation activity (see Table 3) was applied to both groups and the papers were collected to be analyzed later.

3.4.3.3. Week 3. As the researcher continued to teach Unit 6 according to the work schedule, the target vocabulary was accepted as the same with the previous 2 weeks; however this time, according to the plan in the book, they were given not only in positive sentences but also in the simple interrogative sentences such as '*Where is the soap?*', '*Where is the shampoo?*', and '*Where is the kettle?*'. The first hour was started with a short revision of the words with the help of PowerPoint presentations and the teacher asked each student a question about where the furniture, animal or materials are in the picture. In the second hour, the activities related to the unit and the objectives of the lesson were implemented via the useful websites of education platforms (e.g. EBA, Okulistik, Morpa Kampüs etc.). Then, whilst the control groups' lessons continued the lesson without the spelling games, the experimental group was divided into two teams to play the 'Prisoners Base' game for 10-15 minutes. In the last 3-5 minutes, third week's dictation activity (see Table 3) was applied to both groups and the papers were collected to be analyzed later.

3.4.3.4. Week 13. In the final week of the study, the overall dictation activity (see Table 7) was administrated to both groups and the papers were collected to be analyzed later. The administration was done in the first hour; and in the second hour, the results of the first 12 weeks were shown to students in individual-based. Then, the students were encouraged by the teacher not to worry too much about the misspellings, but it was also recommended to be careful more while spelling.

Besides, the results of the overall dictation activity were shared by students later because the participants mentioned their curiosity about the points; and also the students who got the most points were awarded at the end of the term.

3.5. Data Collection Instruments

In this study, dictation activities were used to collect the data for further analysis. Dictation is defined as "the act of saying or reading something for students to write down as a test" (Cambridge Online Dictionaries, 2016). Two different types of dictation activities were used in the present study; weekly dictation activities and overall dictation activity.

3.5.1. The weekly dictation activities. A weekly dictation activity was applied at the end of each two-hour English lesson based on the target vocabulary of the corresponding unit to both groups. Prior to the administration, the participants received a blank paper and were instructed to write the dictated words or sentences. They were also encouraged to make attempts even when they were not sure how to spell the target vocabulary. A full list of the target vocabulary used for the weekly dictation activities can be seen on units-based in the Tables 3, 4, 5, and 6 within the same order as they were used in the implementation. In the first week of each unit, isolated words were dictated while in the other two weeks of each unit the words were dictated in sentences to contextualize and make them easy to remember. However, for the evaluation of the results just the target words, italic in the tables, were analyzed.

The teacher pronounced the words or sentences 3 times in a row while the students individually wrote them on the paper and teacher collected the papers for further analysis (Appendix 6). This procedure was repeated from 1st to 12th week.

Table 3.

Dictated Words and Sentences for Unit 6.

Weeks	1	2	3
	chair	The car is in the *garage*.	Where is the *soap*?
	kitchen	The *kettle* is on the table.	It is under the *bed*.
	cup	The *soap* is in the *bathroom*.	Where is the *shampoo*?
	kettle	The sofa is in the *living room*.	It is in the *bathroom*.
	garage	The ball is under the *bed*.	Where is the *kettle*?
	living room	The *cup* is on the *chair*.	It is in the *kitchen*.
	sofa	The cat is under the *table*.	Where is the *cup*?
	table	The dog is on the *sofa*.	It is on the *table*.
	bed	The fish is on the table.	Where is the *chair*?
	soap	The doll is in the *bedroom*.	It is in the *playroom*.
	shampoo	The *television* is in the living room.	Where is the *television*?
	bedroom	The ball is in the *playroom*.	It is in the *bedroom*.
	playroom	The teddy bear is under the table.	Where is the *sofa?*
	television	The cup is in the *kitchen*.	It is in the *living room*.
	bathroom	The *shampoo* is in the bathroom.	Where is the car?
			It is in the *garage*.

Table 4.

Dictated Words and Sentences for Unit 7.

Weeks	4	5	6
	zoo	Where is the *hospital*?	I am at the *cafe*.
	museum	Where is the *park*?	I am in the *classroom*.
	park	Where is the *school*?	I am at the *park*.
	restaurant	Where is the *bank*?	I am in the *bank*.
	carnival	Where is the *classroom*?	I am at the *school.*
	bank	Where is the *zoo*?	I am in the *home*.
	classroom	Where is the *museum*?	I am at the *shopping center*.
	hospital	Where is the *restaurant*?	I am in the *hospital*.
	school	Where is the *campus*?	I am at the *restaurant*.
	home	Where is the *cafe*?	I am in the *zoo*.
	campus	Where is the *home*?	I am at the *museum*.
	shopping center	Where is the *carnival*?	I am in the *campus*.
	cafe	Where is the *shopping center*?	I am at the *carnival*.

Table 5.

Dictated Words and Sentences for Unit 8.

Weeks	7	8	9
	car	Where is the *car*?	You can go by *car*.
	bike	It is on the *road*.	You can take a *bike*.
	plane	Where is the *plane*?	You can go by *plane*.
	ship	It is on the *sky*.	You can take a *ship*.
	train	Where is the *ship*?	You can go by *train*.
	bus	It is on the *sea*.	You can take a *bus*.
	motorcycle	Where is the *boat*?	You can go by *motorcycle*.
	boat	It is on the *river*.	You can take a *boat*.
	helicopter	The *helicopter* is on the sky.	You can go by *helicopter*.
	truck	The *bike* is on the road.	You can take a *truck*.
	balloon	The *train* is on the rails.	You can go by *balloon*.
	sea	The *balloon* is on the sky.	It is on the *sea*.
	sky	The *truck* is on the road.	It is on the *sky*.
	road	The *motorcycle* is in the garage.	It is on the *road*.
	river	The *bus* is on the road.	It is on the *river*.

Table 6.

Dictated Words and Sentences for Unit 9

Weeks	10	11	12
	rainy	How is the *weather*?	Is it *rainy*?
	snowy	It is *rainy*.	No, it is *snowy*.
	sunny	It is *snowy*.	Is it *sunny*?
	hot	It is *cold*.	Yes, it is *hot*.
	cold	It is *sunny*.	Is it *cold*?
	warm	It is *cloudy*.	No, it is *warm*.
	nice	It is *foggy*.	How is the *weather*?
	weather	It is *windy*.	It is *nice*.
	cloudy	It is *hot*.	It is a *snowman*.
	foggy	It is *warm*.	Is it *cloudy?*
	windy	It is *cool*.	No, it is *foggy*.
	cool	It is *nice*.	Is it *windy*?
	snowman	It is a *snowman*.	Yes, it is *cool*.

3.5.2. The overall dictation activity. The overall dictation activity was applied to both groups in the 13th week which was the final week of the study. The 30 of the 56 target vocabulary were chosen by drawing straws and the number of the vocabulary to be included from each unit was decided according to the total word number of each unit. Each of the 30 isolated words were pronounced 3 times in a row while the students wrote them on the given paper, and the researcher collected students' papers for further analysis (Appendix 7). Table 7 illustrates the dictated

words for the overall dictation in the same order as they were used in the implementation.

Table 7.

Dictated Words for the Overall Dictation

Target Vocabulary	Units	Target Vocabulary	Units
1. bedroom	6	2. balloon	8
3. restaurant	7	4. windy	9
5. living room	6	6. motorcycle	8
7. carnival	7	8. hot	9
9. soap	6	10. road	8
11. school	7	12. cool	9
13. kettle	6	14. helicopter	8
15. home	7	16. foggy	9
17. sofa	6	18. car	8
19. hospital	7	20. sunny	9
21. shampoo	6	22. boat	8
23. zoo	7	24. rainy	9
25. kitchen	6	26. truck	8
27. park	7	28. snowy	9
29. television	6	30. plane	8

3.6. Data Analysis

After the implementation the collected data was entered into the Microsoft Excel 2016 program, categorized and quantitatively analyzed by using IBM SPSS Statistics 25 packet program according to the weekly dictations' and overall dictation activities results. Students who had the correct spelling got 1 point and who misspelled the word got 0 point. For example, in the first week of the implementation there were 15 words to be spelled and let's say that Student A got 9 points from that test. That means that Student A was able to spell 9 words correctly out of 15.

The analysis was done according to two different angles. First, the correct spelling rates of participants were analyzed both for the weekly dictation activities and the overall dictation activity. The results of the weekly dictation activities were calculated to find the group statistics, the percentages for 12 weeks and also for 4 units. Similarly, the results of the overall dictation activity were categorized according to group statistics and percentages. Then weekly comparison of groups was calculated according to the success they have performed in the weekly dictation activities and the overall dictation activity. The purpose of comparing the results was to see whether there is a significant difference between the experimental group and the control group. To compare the results of the two groups, Independent-samples T-Test was used.

Second, the correct spelling rates for the target vocabulary were analyzed according to weekly and overall dictation activities. The results were calculated for the 56 target vocabulary one by one and categorized according to units. Then the comparison of groups was calculated based on the 56 target vocabulary and they were also categorized according to units. For the comparison, Independent-samples T-Test was used to decide whether there is a statistically significant difference between the experimental and the control group.

CHAPTER IV

FINDINGS

This chapter presents the findings of the current study which aims to investigate the effects of spelling games on the orthographic abilities of 3rd grade young EFL learners in a Turkish context. In this respect, the first part of this chapter will be devoted to the presentation of correct spelling rates of participants; while in the second part, the correct spelling rates of the target vocabulary will be presented.

4.1. Correct Spelling Rates of Participants

In this section, quantitative data gathered from the experimental and control group in the weekly dictation activities and the overall dictation activity will be presented in tables. This will be done in two stages; first, analysis of the weekly and overall dictation activities; and, second, comparisons between groups according to participants' correct spelling rates.

4.1.1. Analysis of the weekly and overall dictation activities: participants' correct spelling rates. In this part, the weekly and overall dictation activities were analyzed in two dimensions using Microsoft Excel 2016 and IBM SPSS Statistics 25 packet programs. The calculations were done by using the analysis of the participants' group statistics in terms of the mean, standard deviation, standard error mean and means' difference between groups (see Appendix 8 for details).

First, the participants' correct spelling percentages were examined and Table 8 exhibits the participants' rates in terms of correct spelling percentages and the percentage difference between groups.

Table 8.

Correct Spelling Rates of Participants: Percentages According to Weeks

Units	Weeks	Groups	N	Correct Spelling Percentage (%)	Percentages' Difference (%)
6	1	Control	21	51.43	5.40
		Experimental	21	56.83	
	2	Control	21	55.56	14.60
		Experimental	21	70.16	
	3	Control	21	54.29	20.00
		Experimental	21	74.29	
7	4	Control	21	35.16	14.66
		Experimental	21	49.82	
	5	Control	21	49.08	11.36
		Experimental	21	60.44	
	6	Control	21	43.59	12.09
		Experimental	21	55.68	
8	7	Control	21	50.16	26.67
		Experimental	21	76.83	
	8	Control	21	38.10	27.93
		Experimental	21	66.03	
	9	Control	21	27.94	48.25
		Experimental	21	76.19	
9	10	Control	21	18.32	20.51
		Experimental	21	38.83	
	11	Control	21	37.00	3.30
		Experimental	21	33.70	
	12	Control	21	34.07	19.04
		Experimental	21	53.11	
Overall	*13*	*Control*	*21*	*44.13*	*19.36*
		Experimental	*21*	*63.49*	

According to Table 8, the experimental group outranked the control group in 12 weeks out of 13, including the overall dictation activity.

Second, the weekly and overall dictation activities' results were turned into unit basis results to see in which units the participants performed better. The studied units were Unit 6 – My House, Unit 7 – In My City, Unit 8 – Transportation, and Unit 9 – Weather. Table 9 reveals the participants' correct spelling percentages according to units, based on weekly and overall dictation activities in terms of correct spelling percentage and percentage difference between groups.

In addition, Table 9 reports percentages' difference across groups, calculated to see whether the groups improved themselves through the study. For example, the control group's correct spelling percentage is 53.76% in weekly dictation activities and 46.37% in overall dictation activity for Unit 6. The percentage difference is -7.39% which is presented in the last row for the control group.

Table 9.

Correct Spelling Rates of Participants: Percentages According to Units

			Unit 6	Unit 7	Unit 8	Unit 9
			My House	In My City	Transportation	Weather
Weekly Dictation Activities' Results	Correct Spelling Percentage (%)	Control Group	53.76	42.61	38.73	29.79
		Experimental Group	67.09	55.31	73.02	41.88
	Percentages' Difference Between Groups (%)		13.33	12.07	34.29	12.09
Overall Dictation Activity Results	Correct Spelling Percentage (%)	Control Group	46.42	44.89	39.88	45.57
		Experimental Group	61.84	57.82	66.07	68.02
	Percentages' Difference Between Groups (%)		15.42	12.93	26.19	22.45
Percentages' Difference Across Groups (%)		Control Group	-7.34	+2.28	+1.15	+15.78
		Experimental Group	-5.25	+2.51	-6.95	+26.14

Table 9 supports the results of the previous table in a different angle. It also proves the fact that the experimental group has higher scores than the control group not only when they are compared with each other but also in the comparison through the study.

4.1.2. Comparison between groups according to participants' correct spelling: T-Test results. In this part, the experimental group and the control group were compared according to their success to find whether there is a statistically significant difference or not. The weekly and overall dictation data was entered in IBM SPSS Statistics 25 packet program, and analyzed with the Independent-samples T-Test. The items in Table 10 provides groups' correct spelling rate comparisons for all weeks with the help of t-test results and the detailed account of the t-test results can be seen in Appendix 9.

Table 10.

T-Test Results

Weeks	Sig. (2-tailed)
1	.581
2	.136
3	.049*
4	.046*
5	.175
6	.186
7	.003*
8	.002*
9	.000**
10	.008*
11	.711
12	.079
Overall 13	.053

*: $p < .05$

**: $p < .001$

Table 10 shows the difference between the weekly dictation activities' results of experimental and the control group is statistically significant in weeks 3, 4, 7, 8, 9 and 10 (p<.05). Moreover, the significance of the difference is 'high' in Week 9 (p<.001). For the last week of the study, the difference between the overall dictation activity results of the experimental and the control group is not statistically significant (p>.05).

4.2. Correct Spelling Rates of the Target Vocabulary

In this section, the data obtained from the dictations was evaluated quantitatively based on the correct spelling rates of the target vocabulary. The results will be presented according to units in tables; and this will be done in two stages; first, analysis of the weekly and overall dictation activities: target vocabulary correct spelling percentages; and second, comparisons between groups according to the target vocabulary: T-Test results.

4.2.1. Analysis of the weekly and overall dictation activities: target vocabulary correct spelling percentages. In this part, the 56 target vocabulary dictated in weekly dictation activities and the 30 of them dictated in overall dictation activity were analyzed with Microsoft Excel 2016 program. The results were first calculated weekly, and then turned into unit-based percentage averages. The tables were constructed according to the weekly and overall dictation activities' results in terms of correct spelling percentages, percentages' difference between groups and finally, percentages' difference across groups. The related target vocabulary of the corresponding unit will be presented alphabetically in tables. The target vocabulary that has been used both in weekly and overall dictations were written in italics. The tables visualize the units respectively.

First, Table 11 demonstrates Unit 6 - My House target vocabulary percentages according to Week 1, Week 2 and Week 3 results' percentages mean. A detailed account of the percentage results on the Unit 6 target vocabulary can be seen in Appendix 10. Second, Table 12 shows Unit 7 - In My City target vocabulary percentages on behalf of Week 4, Week 5 and Week 6 results' percentages mean,

which can be seen in Appendix 11 in detail. Third, Table 13 presents Unit 8 - Transportation target vocabulary according to Week 7, Week 8 and Week 9 results' percentages mean. A detailed weekly analysis of Unit 8 target vocabulary percentages can be seen in Appendix 12. Last, Table 14 illustrates Unit 9 - Weather target vocabulary on behalf of Week 10, Week 11 and Week 12 results' percentages mean. Appendix 13 shows a detailed weekly analysis of the Unit 9 target vocabulary.

Table 11.

Correct Spelling Rates for the Unit 6 Target Vocabulary

Unit 6: My House Target Vocabulary			bathroom	bed	bedroom	chair	cup	garage	*kettle*	*Kitchen*	*living room*	*playroom*	*shampoo*	*soap*	*sofa*	*table*	*television*
Weekly Dictation Activities' Results	Correct Spelling Percentages (%)	Cont.	25.40	87.30	58.73	44.44	65.08	46.03	55.56	39.68	60.32	57.14	36.51	58.73	84.13	57.14	30.16
		Ex.	57.14	87.30	66.67	74.60	66.67	73.02	63.49	58.73	77.78	68.25	68.25	58.73	85.71	60.32	39.68
	Percentages' Difference Between Groups (%)		31.74	0.00	7.94	30.16	1.59	26.99	7.93	19.05	17.46	11.11	31.74	0.00	1.58	3.18	9.52
Overall Dictation Activity Results	Correct Spelling Percentages (%)	Cont.			57.14				52.38	38.10	57.14		19.05	52.38	66.67		28.57
		Ex.			85.71				57.14	61.90	66.67		47.62	47.62	71.43		57.14
	Percentages' Difference Between Groups (%)				28.57				4.76	23.80	9.53		28.57	4.76*	4.76		28.57
Percentages' Difference Across Groups (%)		Cont.			-1.59				-3.18	-1.58	-3.18		-17.46	-6.35	-17.46		-1.59
		Ex.			+19.14				-6.35	+3.17	-11.11		-20.63	-11.11	-14.28		+17.46

*: Control group has higher scores.

Table 12.

Correct Spelling Rates for the Unit 7 Target Vocabulary

Unit 7: In My City Target Vocabulary			bank	café	campus	carnival	classroom	home	Hospital	museum	park	restaurant	school	shopping center	zoo
Weekly Dictation Activities' Results	Correct Spelling Percentages (%)	Cont.	79.37	55.56	25.40	25.40	19.05	65.08	38.10	36.51	80.95	6.35	25.40	9.52	87.30
		Ex.	82.54	79.37	57.14	47.62	17.46	60.32	57.14	53.97	87.30	26.98	31.75	23.81	93.65
	Percentages' Difference Between Groups (%)		3.17	23.81	31.74	22.22	1.59*	4.76*	19.04	17.46	6.35	20.63	6.35	14.29	6.35
Overall Dictation Activity Results	Correct Spelling Percentages (%)	Cont.				28.57		57.14	33.33		66.67	19.05	33.33		76.19
		Ex.				57.14		57.14	52.38		90.48	33.33	19.05		95.24
	Percentages' Difference Between Groups (%)					28.57		0.00	19.05		23.81	14.28	14.28*		19.05
Percentages' Difference Across Groups (%)		Cont.				+3.17		-7.94	-4.77		-14.28	+12.70	+7.93		-11.11
		Ex.				+9.52		-3.18	-4.76		+3.18	+6.35	-12.70		+1.59

*: Control group has higher scores.

Table 13.

Correct Spelling Rates for the Unit 8 Target Vocabulary

Unit 8: Transportation Target Vocabulary			balloon	bike	boat	bus	car	helicopter	motorcycle	Plane	river	road	sea	ship	sky	train	truck
Weekly Dictation Activities' Results	Correct Spelling Percentages (%)	Cont.	23.81	42.86	73.02	61.90	71.43	33.33	12.70	46.03	31.75	20.63	23.81	38.10	39.68	38.10	23.81
		Ex.	61.90	79.37	88.89	82.54	90.48	63.49	65.08	85.71	66.67	50.79	55.56	90.48	76.19	87.30	50.79
	Percentages' Difference Between Groups (%)		38.09	36.51	15.87	20.64	19.05	30.16	52.38	39.68	34.92	30.16	31.75	52.38	36.51	49.20	26.98
Overall Dictation Activity Results	Correct Spelling Percentages (%)	Cont.	28.57		47.62		76.19	42.86	19.05	33.33		23.81					47.62
		Ex.	71.43		85.71		80.95	80.95	47.62	52.38		38.10					71.43
	Percentages' Difference Between Groups (%)		42.86		38.09		4.76	38.09	28.57	19.05		14.29					23.81
Percentages' Difference Across Groups (%)		Cont.	+4.76		-25.40		+4.76	+9.53	+6.35	-12.70		+3.18					+23.81
		Ex.	+9.53		-3.18		-9.53	+17.46	-17.46	-33.33		-12.69					+20.64

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Table 14.

Correct Spelling Rates for the Unit 9 Target Vocabulary

Unit 9: Weather Target Vocabulary			cloudy	cold	*cool*	*foggy*	*hot*	nice	*Rainy*	snowman	*snowy*	*sunny*	warm	weather	*windy*
Weekly Dictation Activities' Results	Correct Spelling Percentages (%)	Cont.	9.52	28.57	28.57	41.27	63.49	12.70	30.16	23.81	38.10	26.98	41.27	11.11	31.75
		Ex.	11.11	41.27	38.10	50.79	82.54	38.10	50.79	17.46	44.44	52.38	58.73	31.75	26.98
	Percentages' Difference Between Groups (%)		1.59	12.70	9.53	9.52	19.05	25.40	20.63	6.35*	6.34	25.40	17.46	20.64	4.77*
Overall Dictation Activity Results	Correct Spelling Percentages (%)	Cont.			42.86	52.38	80.95		23.81		47.62	33.33			38.10
		Ex.			57.14	76.19	85.71		61.90		61.90	61.90			71.43
	Percentages' Difference Between Groups (%)				14.28	23.81	4.76		38.09		14.28	28.57			33.33
Percentages' Difference Across Groups (%)		Cont.			+14.29	+11.11	+17.46		-6.35		+9.52	+6.35			+6.35
		Ex.			+19.04	+25.40	+3.17		+11.11		+17.46	+9.52			+44.45

*: Control group has higher scores.

Out of 56 target vocabulary, experimental group outperformed the control group in 52 words (92%) according to tables 11, 12, 13 and 14.

4.2.3. Comparisons between groups according to the target vocabulary: T-Test results. In this part, the experimental group and the control group were compared according to the target vocabulary based on the weekly and overall dictation activities' results to detect if there was a statistically significant difference. To reach this aim, the weekly and overall dictation activities' data was entered in IBM SPSS Statistics 25 packet program, and analyzed with the Independent-samples T-Test. The raw results will be presented in Appendices in detail, and the sig. (2-tailed) column will be demonstrated as unit-based results in tables below. In tables, the related target vocabulary to that unit will be presented alphabetically and the target vocabulary that has been used both in weekly and overall dictations were written in italics. The tables visualize the units respectively.

First, Table 15 illustrates the target vocabulary comparison based on Unit 6 – My House weekly and overall dictations' T-Test results. The detailed t-test results of Week 1, Week 2, Week 3 and Week 13 can be examined in Appendices 14, 15, 16 and 26.

Table 15.

Unit 6 Target Vocabulary Sig. (2-tailed) Results

	Week 1	Week 2	Week 3	Overall (Week 13)
bathroom	.199	.028*	.005*	
bed	.688	1.000	.644	
bedroom	.764	.199	1.000	.041*
chair	.113	.028*	.030*	
cup	.481	.544	.755	
garage	.066	.113	.051	
kettle	.548	.537	.113	.764
kitchen	1.000	.226	.013*	.129
living room	.537	.155	.100	.537
playroom	1.000	.199	.329	
shampoo	.129	.030*	.013*	.051
soap	.127	.544	.346	.765
sofa	1.000	.644	1.000	.746
table	.544	.755	.746	
television	.390	.544	.066	.064

*: p<.05

According to Table 15, the difference between groups is statistically significant (p<.05) in five words out of fifteen in Unit 6.

Second, Table 16 shows the target vocabulary comparison based on Unit 7 – In My City weekly and overall dictations' T-Test results. Appendices 17, 18, 19 and 26 can be seen for the detailed t-test results of Week 4, Week 5, Week 6 and Week 13.

Table 16.

Unit 7 Target Vocabulary Sig. (2-tailed) Results

	Week 4	Week 5	Week 6	Overall (Week 13)
bank	.715	.224	1.000	
cafe	.213	.041*	.100	
campus	.019*	.129	.012*	
carnival	.039*	.028*	.548	.064
classroom	.444	.481	.644	
home	1.000	1.000	.358	1.000
hospital	.122	.537	.122	.222
museum	.051	.764	.226	
park	.444	.305	1.000	.062
restaurant	.039*	.644	.008*	.304
school	.075	.764	1.000	.304
shopping center	.644	.270	.039*	
zoo	.560	.305	.644	.081

*: p<.05

The difference between groups is statistically significant (p<.05) in five words out of thirteen in Unit 7 according to Table 16.

Third, Table 17 exhibits the target vocabulary comparison based on Unit 8 – Transportation weekly and overall dictations' T-Test results. The detailed t-test results of Week 7, Week 8, Week 9 and Week 13 can be seen in Appendices 20, 21, 22 and 26.

Table 17.

Unit 8 Target Vocabulary Sig. (2-tailed) Results

	Week 7	Week 8	Week 9	Overall (Week 13)
balloon	.066	.051	.000**	.005*
bike	.018*	.031*	.001*	
boat	.688	.390	.013*	.008*
bus	.270	.733	.000**	
car	1.000	.155	.005*	.715
helicopter	.122	.064	.012*	.010*
motorcycle	.000**	.003*	.000**	.051
plane	.030*	.051	.000**	.222
river	.127	.005*	.012*	
road	.010*	.180	.028*	.329
sea	.031*	.329	.001*	
ship	.019*	.000	.000**	
sky	.122	.064	.000**	
train	.003*	.013*	.000**	
truck	.122	.024*	.113	.122

*: p<.05

**: p<.001

Table 17 proves that the difference between groups is statistically significant (p<.05) in eight words, and this significance is 'high' (p<.001) in seven words out of fifteen in Unit 8.

Last, Table 18 presents the target vocabulary comparison based on Unit 9 – Weather weekly and overall dictations' T-Test results. Appendices 23, 24, 25 and 26 can be examined for the detailed t-test results of Week 10, Week 11, Week 12 and Week 13.

Table 18.

Unit 9 Target Vocabulary Sig. (2-tailed) Results

	Week 10	Week 11	Week 12	Overall (Week 13)
cloudy	1.000	.155	.270	
cold	.000**	.764	.122	
cool	.007*	.222	.222	.367
foggy	.030*	.367	.346	.113
hot	.155	.506	.041*	.688
nice	.062	.155	.019*	
rainy	.059	.524	.129	.012*
snowman	.224	.160	.524	
snowy	.346	.358	.226	.365
sunny	.003*	.537	.127	.066
warm	.030*	.365	.028*	
weather	.036*	.688	.001*	
windy	.305	.755	1.000	.030*

*: p<.05

**: p<.001

According to Table 18, the difference between groups is statistically significant (p<.05) in nine words and this significance is 'high' (p<.001) in one word out of thirteen in Unit 9.

CHAPTER V

CONCLUSION, DISCUSSION AND RECOMMENDATIONS

Within this chapter, the findings presented in Chapter 4 will be discussed in the light of relevant literature review and conclusions will be drawn based on the present study. The chapter will end with pedagogical implications, suggestions for practice, and recommendations.

5.1. Conclusion and Discussion

The purpose of the present study was to investigate the effects of spelling games on the orthographic abilities of 3rd grade young EFL learners in a Turkish primary school context. In line with this purpose, three different spelling games were adopted from Graham, Freeman and Miller (1981), and used in the experimental groups' lessons. The variables (e.g. the teacher, books, materials, lessons' length, previous experiences on language learning etc.) for both groups were the same except the games. The study took 13 weeks in total. During the implementation process, to both groups, the weekly dictation activities were applied through 12 weeks at the end of the lessons and the overall dictation activity was applied in the 13th week. The data obtained from the dictation activities turned into quantitative representation of the participants' success and presented in tables and figures in order to find possible answers to the research questions of this study.

This study provides a methodological and empirical contribution to the field of foreign language education. The literature on spelling does not provide sufficient evidence for the impact of spelling games on the orthographic abilities of learners. However, in a Turkish primary school context, this study provided a broad investigation of how spelling games affect participants' success based on the orthographic abilities in L2 (English) and examined the correctness rates of the target

vocabulary to draw a conclusion on which words are easier to spell for young EFL learners.

The main concern in this study was the misspellings in L2, and the treatment was the games. According to the findings in this study, especially with the examples of control group dictations, we can say that as the students are using their L1 (Turkish) orthographic skills while attempting to spell in L2 (English), they fail; parallel with the results of previous researches about L1 effects on L2 spelling (Bebout, 1985; Cronnell, 1985; Holm & Dodd, 1996; Arab-Moghaddam, 1997; Akamatsu, 1999; Wang, 2000; Wang & Geva, 2003; San Francisco et al. 2006; Jongejan, Verhoeven & Siegel, 2007; Sun-Alperin, 2007; Fender, 2008; Sparks et.al. 2008; Kırkgöz, 2010; Kahn-Horwitz, Sparks & Goldstein, 2012; Ford et al. 2012; Yeon, 2012; Zghyer, 2014; Liu, 2015; Russak & Kahn-Horwitz, 2015; Keilty & Harrison, 2015; and Harrison et al. 2015).

The overall results of this study showed that spelling games were effective tools to use in the language classrooms with the purpose of improving students' orthographic abilities in a Turkish primary school context in comparison to traditional teaching. In addition, the findings of this study usually parallel with the theories about the advantages of using language games in young EFL learners' classes (McCallum, 1980; Rumley, 1999; Wright, Betteridge & Buckby, 2006; Ersöz, 2007; and Yolageldili & Arikan, 2011).

In conclusion, the quantitative results supported the evidence of the relationship between using spelling games in the lessons and increasing learners' orthographic abilities. Therefore, it is highly possible to suggest that the primary school students might get higher levels of orthographic ability in L2 (English) and the correctness of their spelling might be increased through using spelling games in language classrooms.

To provide a better understanding of the conclusions, the answers to the research questions of this study will be discussed in the light of the results of this study and the relevant previous studies'. The main research question of this study is:

Are there any effects of spelling games on the orthographic abilities of 3rd grade young EFL learners in a Turkish primary school context?

To clarify the results for the main question better, the next two parts will be presented according to the following sub-questions:

1. Is there a significant difference between the participants' correct spelling rates in the weekly and overall dictation activities' results of the experimental and the control group?

2. Is there a significant difference between the target vocabulary correct spelling rates in the weekly and overall dictation activities' results of the experimental and the control group?

5.1.1. Is there a significant difference between the participants' correct spelling rates in the weekly and overall dictation activities' results of the experimental and the control group? The answer for this research question can be found out by the analysis of weekly and overall dictation activities as well as the groups' success comparisons, presented in Chapter 4.

The most obvious finding to emerge from the analysis of the weekly dictation activities is that experimental group outranked the control group in 11 weeks out of 12 both for the group statistics (see Appendix 8) and the percentages (see Tables 8 and 9). A closer examination of the results revealed the mean and percentages' differences between groups were the highest in weeks 9, 8 and 7, all Unit 8. There may have been three different reasons for the experimental groups' highest difference in Unit 8; first, the topic (Transportation) was more interesting for them; second, they accomplished the features of that unit's target vocabulary better; and third, the experimental groups' orthographic ability began improving by the help of the spelling games through time. Besides, from the control groups' point of view, Unit 8 is the only unit that the participants of the control group have continually decreased their scores through the same three weeks. The first reason for this decrease may have been that the control group did not like the topic. Second, the orthographies of the Unit 8 target vocabulary were more difficult for the control group, which will be explained later in detail.

On the contrary, the lowest mean and percentages' differences between groups are in weeks 1, 5, and 6. As the experimental group was introduced to the spelling games and both groups to the dictation activity for the first time in their lives, they were not expected to perform their best in Week 1. For the weeks 5 and 6, before the English lesson, both groups were doing practices for 23rd April National Day performances (mentioned as a limitation of the study in Chapter 1); thus, they were tired according to the teacher's observation. On the other hand, no matter what the excuses are, it shouldn't be neglected that the experimental group has still higher results in 1st, 5th and 6th weeks.

In addition, the only week that the control group has the higher results than the experimental group is Week 11 with the means' difference and the percentages' difference. At that week, one day before the English lesson, the experimental group went to a school trip, which was mentioned as a limitation of the study in Chapter 1; and in the lesson, the teacher observed that they were tired and lost their motivation towards the lesson. The physical and psychological status of the students may have also affected their performance in the dictation activity. Since playing a game and focusing on the tasks requires a lot of energy, it may not be so easy for young learners all the time (Pound, 2005).

According to the overall dictation activity results of the experimental and the control group in terms of group statistics and percentages, the experimental group outranked the control group with the mean difference and the percentage difference. This difference may have happened because of the fact that the orthographic ability of the experimental group becomes higher than the control group at the end of the study; in other words, the participants of the experimental group become better spellers in L2 via playing spelling games.

When the percentages of the weekly dictation activities and the overall dictation activities are compared across groups in terms of participants' success, it can be seen that the experimental group's improvement is 4.17% while the control group's improvement is 2.91%. This finding proves that both groups improved themselves through the study, which can be interpreted as the nature of learning; however, the amount of the experimental group improvement is higher, which can be reasoned from the spelling games.

Considering the groups' success comparisons (see Table 10 and Appendix 9 for the details), it is clearly seen that the difference between the weekly dictation activities' results of experimental and the control group is statistically significant in weeks 3, 4, 7, 8, 9 and 10 (p<.05). Moreover, the significance of the difference is 'high' in Week 9 (p<.001). This finding means that the answer to the first sub-question of the present research is positive: there is a significant difference between the participants' success rates in the weekly dictation activities' results of the experimental and the control group, with the rates of 50%. On the contrary, for the last week of the study, the difference between the overall dictation activity results of the experimental and the control group is not statistically significant (p>.05).

To conclude, both groups improved their orthographic competence in L2 through the process but experimental group has developed more. Besides, out of 12 weekly dictations, the experimental group has the higher results than the control group in 11 weeks (91%), and the difference between the experimental and the control group is statistically significant in 6 weeks (50%). In other words, this finding can be interpreted as the spelling games are positively affecting experimental groups' orthographic abilities, which can be seen via weekly dictation activity results clearly. On the other side, according to the 13th week results, although the experimental group has higher scores than the control group in terms of mean and percentage, the difference between groups is not statistically significant. However, in this case, the matter of significance is not an obstacle to claim that the spelling games have a positive effect on the experimental groups' orthographic abilities, which proves the theories about advantages of using games to develop language skills (McCallum, 1980; Rumley, 1999; Wright, Betteridge & Buckby, 2006; Ersöz, 2007; and Yolageldili & Arikan, 2011).

5.1.2. Is there a significant difference between the target vocabulary correctness rates in the weekly and overall dictation activities' results of the experimental and the control group? The answer for this research question can be gathered by the correct spelling rates of the target vocabulary in Chapter 4. First of all, when the weekly dictation activities' results were analyzed (see Tables 11, 12, 13 and 14), a striking finding became apparent: Out of 56 target vocabulary,

experimental group outperformed the control group in 52 words (92%) with the exceptions *classroom*, *home*, *snowman* and *windy*. Supportively, in the overall dictation activity results, we can see that the control group got higher results only in 2 words (*soap* and *school*) while the experimental group outranked them in 28 words (93%). Second, when the tables were analyzed and compared with each other, it was clear that experimental group got the highest results in Unit 8. Third, when the percentages of the weekly dictation activities and the overall dictation activities were compared across groups in terms of the target vocabulary, it can be seen that while the experimental group increased the percentage in 17 words (56%), the control group heighten the percentage in 15 words (50%). As the amount of the increase/decrease was important, it was also given in detail with the symbols + (means increase) and – (means decrease). By the help of the calculations, it was proven that the experimental group increased the amount more. Finally, taking into consideration the comparisons (see Tables 15, 16, 17 and 18), the results revealed that the difference between groups was statistically significant (p<.05) in 29 words (51%) in weekly dictations' results but 6 words (20%) in overall dictation results. Furthermore, it is important to note that the significance is 'high' in 8 words (p<.001). Hence, it is obvious that these findings support the first sub-question of this study by demonstrating parallel outcomes; however, the results will be examined in detail according to words' features to launch a clear understanding. The results of the target vocabulary were ordered according to units by providing the phonetic transcriptions (see Appendices 27, 28, 29 and 30); the evaluation will be based on the percentages presented in the tables; and then a conclusion will be drawn for the 56 target vocabulary.

From three different perspectives, we can easily sum up the results of all units' target vocabulary:

1. Both groups spelled correctly the words *bed, sofa, cup, living room, zoo, park, bank, home, boat, car, bus,* and *hot* with more than 60% success, which shows that young Turkish EFL learners do their best when the English words are monosyllabic, relatively shallow to spell because of one-to-one-phoneme correspondence, and contain short vowels. These well-spelled words' features

are similar to Turkish words', constructed by Turkish orthographic rules (Durgunoğlu, 2006).

2. Both groups spelled correctly the words *television, school, restaurant, shopping center, classroom, cool, nice, weather, windy, snowman* and *cloudy* with less than 40% success. This result demonstrates that young Turkish EFL learners have difficulties in spelling English words which are polysyllabic, highly deep, written with unfamiliar letters (w) and their combinations (sch, sh, cl, th), contain diphthongs and consonant clusters. Moreover, it should be noted that the control group misspellings were observed mostly in vowel diagraphs and consonant clusters. The features of these poor-spelled words are the ones that rarely used in Turkish, except the borrowed words (Durgunoğlu, 2006).

3. In terms of more than 30% difference between the groups' results, the sequence is *motorcycle, ship, train, plane, balloon, bike, sky, river, see, bathroom, shampoo, campus, helicopter, road* and *chair* from the highest to the lowest (all of them were statistically significant words according to weekly dictation t-test results). As the most important result of this part, the sequence exhibits that even though the experimental group had problems in spelling some English words (polysyllabic, highly deep, written with unfamiliar letters and their combinations, contain diphthongs and consonant clusters), they made a statistically significant difference which can only be linked with practicing spelling games.

Supporting these results, when the 13 cognates used in the study (*balloon, bank, boat, café, campus, carnival, garage, helicopter, park, restaurant, shampoo, television,* and *train*) are examined in terms of correct spelling rates, we can see that orthographic pattern plays bigger role than the knowledge of the meaning of the word. Although the students know the meaning or immediately guess, they misspelled the cognates when unfamiliar patterns are need to be printed.

The findings also contain some interesting exceptions. For example, in the study, although there were some words *(boat-road-cold, zoo-balloon, school-cool, cloudy-classroom, shampoo-ship-shopping center)* have similar phonetic patterns, they are not well-spelled as much as each other.

To sum up, without the exceptions, the results show that Turkish students are using their previous literacy knowledge in L1 to spell in L2. However, as these two languages have different orthographic systems, the attempts fail especially when the words more than one-to-one-correspondence are required. These results support the proven fact that students' L1 literacy experiences are one of the most important factors in determining their success in L2 litearcy (Bebout, 1985; Cronnell, 1985; Holm & Dodd, 1996; Arab-Moghaddam, 1997; Akamatsu, 1999; Wang, 2000; Wang & Geva, 2003; San Francisco et al. 2006; Jongejan, Verhoeven & Siegel, 2007; Sun-Alperin, 2007; Fender, 2008; Sparks et.al. 2008; Kırkgöz, 2010; Kahn-Horwitz, Sparks & Goldstein, 2012; Ford et al. 2012; Yeon, 2012; Zghyer, 2014; Liu, 2015; Russak & Kahn-Horwitz, 2015; Keilty & Harrison, 2015; and Harrison et al. 2015). Thus, we should note that the practices of spelling games make the experimental group realize the differences in English spelling (Referans).

5.2. Implications, Suggestions for Practice and Recommendations

In the light of the findings of this research, several pedagogical implications, suggestions, and recommendations will be made.

• Orthographic practices should be provided.

When the overall results of this thesis are examined, the use of orthographic practices as a strategy in education should be encouraged in teaching EFL to YLs since it is clearly seen that practicing FLspelling significantly increases students' achievement and motivation at the primary school context.

• Spelling games should be used.

In addition, based on the findings regarding the participants' and target vocabulary correct spelling rates in the previous chapter, it is possible to suggest that spelling games should be used in language classrooms. Several factors could explain this suggestion. Firstly, in the current study, correct spelling rates of the experimental group was always higher than the control group except Week 11 and the difference is even statistically significant for six different weeks. Next, when the target vocabulary were analyzed, it was clear that the experimental group get the higher results than the

control group in nearly all of the target vocabulary both in weekly and overall activities. This success may be reasoned from playing spelling games, as they are the only difference in the implication process. Thus, teachers should be encouraged to use them in their lessons.

• Language games are motivating.

Moreover, as we mentioned before, the language games are effective tools to motivate our students (McCallum, 1980). During the implementation process, in addition to the quantitative results, the researcher observed that the experimental group were more eager to play the games and learn their scores in the dictation activies than the control group. Thus, it is possible to suggest that, when young learners' motivation seems to decrease, teachers can benefit from language games application, which brings academic success, provides a motivating learning atmosphere, and affects the learning quality.

• Spelling games provide several pedegocical benefits.

Based on the results of the present thesis, it can be suggested that teachers of young EFL learners should be encouraged to make use of spelling games especially presented in Graham, Freeman and Miller (1981), as the writers provide more than hundred different spelling games serving for different aims. The findings of the current study also support the suggestion that when the level-appopriate-spelling-games are used, it is highly possible that students' orthographic abilities and their awareness can be developed easily.

The present study aimed to explore the effects of spelling games on the orthographic abilities of 3rd grade young EFL learners. However, this study also has several limitations, as mentioned earlier, and future studies on the current topic are therefore recommended. Since one of the limitations is derived from the size of the sample, it would be beneficial to apply the procedure to a large amount of participants; in that case, the results can also be generalized. Therefore, in the study, the researcher can work with more than two groups and the comparisons can be more reliable. Moreover, during the data collection process in this study, the disruptions have happened. Hence, for a further research, the precautions should be taken beforehand. Besides, the findings of this study were only quantitatively analyzed; however, it

would be advantageous to add more qualitative methodology in order to gain a wider perspective in the future study.

What is more, the target vocabulary of this study was chosen from the English curriculum, so they are not presenting common phonological features; yet to conclude better results in a further study, the target vocabulary should be selected according to their common features such as homophones, cognates, verbs etc. In addition, at the end of the implication an overall dictation was implemented, but it only consisted 30 of 56 target vocabulary. Hence, in the next study, with a different planned work-schedule all of the target vocabulary can be revised at the end to provide better comparisons.

As a final word, it is suggested that the overall findings regarding spelling games in the current study, in which a quasi-experimental research design was used, could shed light on a better and effective use of L1 literacy skills on the improvement of L2 orthographic skills in young EFL learners' education in Turkey. Moreover, integrating the spelling games in the lesson plans may provide many pedagogical benefits in educational settings in Turkey. Therefore, educators, syllabus planners, and policymakers working in MoNE should take the preliminary findings and the suggestions in this thesis into consideration in order to assist and enhance language learning.

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TÜRKÇE GENİŞLETİLMİŞ ÖZET

Giriş

İngilizce'yi yabancı dil olarak öğrenme ve öğretme süreci, öğrencilerin yaşlarına göre değişebilir (Harmer, 2001) ve İngilizce öğrenmeye başlama yaşı özellikle son yirmi yıldaki yönetimler için bir sorun olmuştur (Haznedar & Uysal , 2010). Türkiye'de, dünyaya paralel olarak ve araştırma bulguları ışığında, ilköğretim yabancı dil öğretiminde eğitim reformları yapılmıştır. 11.04.2012'de (Resmi Gazete, 28261) yayınlanan bir kanunla (n. 6287) yürürlüğe giren değişiklikle, ilk, orta ve lise süresi zorunlu 4 + 4 + 4 olarak sistematik hale getirilmiş ve ayrıca İngilizce öğretimi zorunlu yabancı dil olarak 2. sınıf seviyesine düşürülmüştür. İlköğretim Kurumları İngilizce Dersi Öğretim Programının (MEB, 2018) en son sürümüne göre, İngilizce öğretiminde asıl odak noktası dinleme ve konuşma becerileridir (MEB, 2018). Bu nedenle, okuma ve yazmayı içeren faaliyetler kelime düzeyindedir (örneğin, öğrenciler bir köpeğin resmini görür ve altına "köpek" kelimesini yazar); başka bir deyişle, küçük sınıflarda İngilizce okuma ve yazma görevleri sınırlıdır (MEB, 2018). Sonuç olarak, ilkokul öğrencilerinin İngilizce okuryazarlık becerileri yeterince çalışılmamaktadır ve öğrenciler anadil ve hedef dil farklılıkları yüzünden kelime yazımında sıkıntılar yaşamaktadır.

Problem Durumu: Türkiye'deki ilköğretim okullarının birinci sınıfında, öğrenciler anadillerinde (Türkçe) okuma ve yazmayı öğrenmeye başlarlar. Sonra, ikinci sınıfta İngilizce öğrenmeye başlarlar; ancak, insanların günlük yaşamlarında İngilizce konuşulmadığı için, öğrencilerin ikinci dile maruz kalma ve bunları sınıf dışında uygulama şansı yoktur. Dahası, bu iki dilin kendi ortografileriyle ilgili farklı yazı sistemleri vardır. Türkçe yazım "çok şeffaf" iken (Durgunoğlu, 2017) İngilizce yazım, "saydamlık boyutunun opak ucunda veya alfabetik yazımlar arasında *sığ-derin* boyutun derin ucunda" (Perfetti & Harris, 2017) kalmaktadır. Bu nedenle, ana

dillerine benzemeyen ikinci bir dili öğrenmek, yakın zamanda okumayı ve yazmayı öğrenen ilkokul öğrencileri için süreci daha da zorlaştırır. Ayrıca derslerde, okuma ve yazma görevlerinin sınırlı bir versiyonu olmasına rağmen; 5 yıl boyunca ilköğretim okulunda İngilizce öğretmeni olarak çalışan araştırmacı, öğrencilerinin özellikle hedef dilde bir kelime okuma ve yazma söz konusu olduğunda hata yaptığını gözlemlemiştir. Öğrencilere bu hataların nedenlerini sorduğunda, öğrencilerin önceki anadil bilgisinin hedef dilde verilen okuryazarlık görevindeki girişimleri etkilediğini öğrenmiştir. İngilizce bir kelimeyi doğru yazmak, İngilizce yazım kuralları ve doğası nedeniyle zor olabilir (Hannell, 2008). Sadece bir kelime düzeyinde yazmak önemli görünmeyebilir; ancak, bu problem daha ilkokul öğrencileri olan katılımcıların gelecekteki ikinci dil öğrenme deneyimlerinde daha büyük sorunlara yol açabilir. Öğrenciler yazım hataları dolayısıyla yazmaktan kaçınabilir, bu durum onları korkutup eğitimden soğutabilir veya çok basit olarak yazım hataları yanlış anlaşılmalara sebep olabilir (Hannell, 2008).

Araştırmanın Amacı: Bu çalışma, bir Türk ilköğretim okulu bağlamında, yazma oyunlarının ilkokul 3. sınıf öğrencilerinin yazma becerileri üzerindeki etkilerini araştırmayı amaçlamaktadır.

Alt Problemler: Bahsedilen amacı gerçekleştirmek amacıyla, bu araştırma aşağıdaki ana soruyu ele almaktadır:

Türk ilköğretim okulu bağlamında, yazma oyunlarının ilkokul 3. sınıf öğrencilerinin yazma becerileri üzerinde herhangi bir etkisi var mı?

Bu ana soruyla birlikte, araştırmacı ayrıca aşağıdaki alt sorulara odaklanacaktır:

1. Haftalık ve genel olarak yapılan dikte aktivitelerinde, katılımcıların doğru yazma oranları bağlamında deneysel ve kontrol grubunun sonuçları arasında anlamlı bir fark var mı?

2. Haftalık ve genel olarak yapılan dikte aktivitelerinde, kelimelerin doğru yazım oranları bağlamında deneysel ve kontrol grubunun sonuçları arasında anlamlı bir fark var mı?

Araştırmanın Önemi: Çalışmanın önemi, üç farklı açıdan tanımlanabilir; Çalışmanın esas kaygısı, çalışmada kullanılan araçlar ve çalışmanın yapıldığı

bağlam. Bildiğimiz kadarıyla, İngilizce yazımı ile ilgili olarak yazım hataları ve kategorizasyonları, yazım hatalarının sebepleri ve yazım sırasında öğrenicilerin kullandıkları stratejiler konusunda araştırmalar yapılmıştır. Ancak, olası gelişimsel aşama çoğu zaman hafife alınmaktadır. İyi heceliler tarafından kullanılan stratejileri tanımlayan çalışmalar olsa da, öğretmenlere Başka bir deyişle, yapılan çalışmalar dilin yazımına ilişkin olarak dilin farklı yönlerini analiz etmiştir; ancak, hedef dildeki ortografik yeteneğin geliştirilmesinde ne kullanılacağı doğru bir şekilde araştırılmamıştır. İkinci olarak, dil oyunları dört dil becerisini geliştirmek, dilbilgisi, kelime bilgisi ve dillerin farklı yönlerini geliştirmek için kullanılmıştır ve etkileri araştırılmıştır. Ancak, araştırmacıya gelince, yazma oyunlarını enstrüman olarak kullanan daha önce yapılmış bir çalışma olmamıştır. Üçüncüsü, önceki çalışmaların kaygısı, İngilizce yazma konusunda neredeyse aynı olsa da, araştırmacılar İngilizceyi ana dili olarak konuşanlar ve İngilizceyi yabancı dil olarak öğrenenler şeklinde iki ayrı bağlamda çalıştılar. Ancak, araştırmacıya gelince, yapılan araştırmalarda öğrenenlerin ana dilleri farklı olduğundan, yazım konusunda tutarlı bir sonuç alınamamıştır. Bu çalışmada bağlam, Türkiye'deki ilkokul öğrencileri olduğu için, bu alanda yapılan çalışmalar tarandı ve bizim bilgimize göre, , ortografik yeteneklerin gelişimini araştırmak için yapılmış bir çalışma yapılmamıştır. Sonuç olarak, bu çalışma, asıl meselesi (yazım yeteneğinin gelişim aşaması); enstrümantasyon (yazma oyunları); ve bağlam (Türkiye'deki ilkokul öğrencileri) boyutlarında önemlilik kazanmaktadır.

Yöntem

Araştırmanın Yöntemi: Bu çalışma deneysel araştırma yöntemi kullanılarak yürütülmüştür, çünkü, Dörnyei (2007) dille ilgili herhangi bir sürecin etkisine bakan çalışmalarda korelasyon veya anket çalışmalarından ziyade deneysel çalışmaların kullanılmasının yararlı olacağını belirtmektedir.

Çalışma Grubu: Bu çalışmaya 42 3. sınıf ilköğretim okulu öğrencisi katılmıştır. Hepsi okulun bulunduğu Büyükkabaca köyünde yaşamaktadır. Büyükkabaca, Isparta'nın Senirkent ilçesinde nüfusu yaklaşık 3700 olan bir köydür. Katılımcılar ortalama yaşı 8,5 olarak hesaplanmıştır. Hepsi ana dilinde (Türkçe) konuşabilir,

okuyabilir ve yazabilir. Sınıflar rastgele deney ve kontrol grubu olarak seçilmiştir. Her bir sınıfta 21 kişi vardır: 3A'da 10 erkek, 11 kız; 3B'de 11 erkek 10 kız. Her iki grubun İngilizce dersi haftada iki saatti (her biri 40 dakika) ve aynı gündü. Katılımcılar, İngilizce dilinde aynı yeterlilik seviyesine (A1) sahipti.

Veri Toplama Araçları: Çalışma 2016-2017 eğitim-öğretim yılı bahar döneminde toplam 13 hafta sürmüştür. 1. ila 12. haftalar arasında, dersler sırasında, hedef sözcükler kartlar aracılığıyla tanıtıldı ve her iki gruba da aynı dinleme, konuşma, okuma ve yazma aktiviteleri uygulandı. Ek olarak, her iki grup da aynı materyalleri (örneğin kitaplar, keçe materyalleri, PowerPoint sunumları, çalışma sayfaları, dinleme parçaları, konuşma etkinlikleri ve ev ödevleri) kullanmıştır. Tek fark, deney grubunun her hafta 2. saat yapılan İngilizce dersleri sonunda 10-15 dakika oynadığı yazma oyunlarıydı. Bu arada, kontrol grubu yazma oyunları olmadan İngilizce derslerine devam etti. Son 3-5 dakikada, her iki grup da haftalık dikte etkinliği ile değerlendirildi. Kontrol grubu derslerinin zaman yönetimi için, araştırmacı dersleri bazen uzattı ve dikte faaliyetinden sonra bile hala zaman varsa, kontrol grubu ödevlerini yapmaya başladı. Uygulamanın son haftasında (13. Hafta), 30 kelimeyi içeren genel dikte etkinliği her iki gruba 1 saatlik derste (40 dakika) uygulandı. Dikte aktivitelerinin yapıldığı kağıtlar öğrencilerden toplanarak nicel veri analizi için saklandı.

Bulgular

Araştırmanın katılımcıların doğru yazma oranları bağlamındaki bulgularına göre, her iki grupta İngilizce yazma becerisini süreç boyunca geliştirmiştir ancak deney grubunun gelişimi oransal olarak daha fazladır. Bunun yanı sıra, haftalık yapılan 12 dikteden, deney grubu 11 haftada (% 91) kontrol grubundan daha yüksek sonuçlara sahiptir ve deney grubu ile kontrol grubu arasındaki fark 6 haftada (% 50) istatistiksel olarak anlamlıdır. Diğer taraftan, 13. Hafta sonuçlarına göre, deney grubunun kontrol grubundan ortalama ve yüzde olarak daha yüksek puan almasına rağmen, gruplar arasındaki fark istatistiksel olarak anlamlı değildir. Bununla birlikte, istatistiksel anlamlılık meselesi, yazma oyunlarının olumlu etkilerinin görüldüğünü iddia etmenin önünde bir engel değildir.

Araştırmanın kelimelerin doğru yazım oranları bağlamında, haftalık dikte faaliyetlerinin sonuçları analiz edildiğinde çarpıcı bir bulgu ortaya çıktı: 56 hedef sözcükten, deney grubu 52 kelimede daha iyi performans gösterdi (% 92). Benzer şekilde, genel dikte etkinliği sonuçlarında, deney grubunun 28 kelimeyle (% 93) üstün olduğu belirlendi. Gruplar kendi içinde değerlendirildiğinde, deney grubunun yüzdeyi 17 kelimede (% 56) arttırmasına karşın, kontrol grubunun yüzdeyi 15 kelimede (% 50) arttırdığı görülebilir. Son olarak, karşılaştırmalar göz önüne alındığında, sonuçlar gruplar arasındaki farkın haftalık olarak dikte edilen sonuçlarda 29 kelimede (% 51) istatistiksel olarak anlamlı olduğunu (p <.05) ortaya koydu.

Sonuç, Tartışma ve Öneriler

Bu araştırmadan elde edilen sonuçlar, yazma oyunlarının deney grubunun yazma becerileri üzerinde olumlu yönde etkisi olduğu şeklinde yorumlanabilir. Türk öğrencilerin anadilde kazandıkları okuryazarlık bilgilerini hedef dilde kelime yazarken kullandıklarını göstermektedir. Bununla birlikte, bu iki dilin farklı ortografik sistemleri olduğundan, girişimler özellikle birebir harf-ses eşleşmesinden daha fazlasına ihtiyaç duyulduğu için başarısız kalmaktadır. Bu sonuçlar, öğrencilerin anadil okuryazarlık deneyimlerinin hedef dilde kazanacakları okuryazarlıktaki başarısını belirlemede en önemli faktörlerden biri olduğunu kanıtlamıştır. Bu araştırmanın bulguları ister katılımcı başarısı bağlamında ister kelime başarısı bağlamında olsun, yazma oyunlarının öğrencilerin başarılarını önemli ölçüde arttırdığını ortaya koymuştur ve bu bulgu alan yazında oyunların avantajlarına dair sunulan fikirler (McCallum, 1980; Rumley, 1999; Wright, Betteridge & Buckby, 2006; Ersöz, 2007; and Yolageldili & Arikan, 2011) ve anadilin özelliklerinin hedef dile etkisini kanıtlayan araştırmalarla (Bebout, 1985; Cronnell, 1985; Holm & Dodd, 1996; Arab-Moghaddam, 1997; Akamatsu, 1999; Wang, 2000; Wang & Geva, 2003; San Francisco et al. 2006; Jongejan, Verhoeven & Siegel, 2007; Sun-Alperin, 2007; Fender, 2008; Sparks et.al. 2008; Kırkgöz, 2010; Kahn-Horwitz, Sparks & Goldstein, 2012; Ford et al. 2012; Yeon, 2012; Zghyer, 2014; Liu, 2015; Russak & Kahn-Horwitz, 2015; Keilty & Harrison, 2015; and Harrison et al. 2015) benzerlik göstermektedir.

Araştırmanın sonucunda, yazma aktivitelerinin ihmal edilmemesi ve öğretmenlerin derslerinin bir birleşeni haline getirilmesi; yazma oyunlarının ilkokul seviyesinde mutlaka kullanılmaya teşvik edilmesi ve dil sınıflarında oynanan oyunların öğrenciyi motive edici etkisinden dolayı kullanımlarının artırılması gerektiği önerilmektedir.

APPENDICES

APPENDIX-1

Participants' English Lesson Scores Prior to the Study

T.C.
ISPARTA VALİLİĞİ
Senirkent Büyükkabaca 75.Yıl İlkokulu Müdürlüğü
2016-2017 DERS YILI **YABANCI DİL** DERSİ 3. Sınıf / A Şubesi
ÖĞRETMEN PUAN ÇİZELGESİ

S.NO	OKUL NO	ÖĞRENCİNİN ADI SOYADI	1. DÖNEM DERS DEĞERLENDİRME DURUMU	2. DÖNEM DERS DEĞERLENDİRME DURUMU
1	255	AYSE NAZ DURMUŞ	ÇOK İYİ	
2	256	CENNET COSKUN	İYİ	
3	257	DİLEK CİMEN	ÇOK İYİ	
4	258	DÖNE GÖKCE	İYİ	
5	259	EGEHAN DOĞAN	ÇOK İYİ	
6	260	GÜLSÜM TEMURCİN	ÇOK İYİ	
7	261	HASAN KADİR AYTEKİN	İYİ	
8	262	HATİCE NUR ALPARSLAN	ÇOK İYİ	
9	263	İSMAİL SAMANCI	ÇOK İYİ	
10	265	KEZİBAN SENA KOCA	ÇOK İYİ	
11	266	KEZİBAN SOLAK	İYİ	
12	267	MERT CAN KOCA	ÇOK İYİ	
13	268	MERYEM MELİS ÜLPEREN	ÇOK İYİ	
14	269	FADİME TURAN	ÇOK İYİ	
15	270	MUHSİN ULUSOY	İYİ	
16	271	MUSA HALİT TASAGİREN	ÇOK İYİ	
17	272	NİSANUR YALCIN	ÇOK İYİ	
18	273	ÖMER FARUK GÜRDAL	ÇOK İYİ	
19	274	RAMAZAN KORKMAZ	İYİ	
20	275	RAMAZAN UZ	ÇOK İYİ	
21	300	MUHAMMET ENES ÖRNEK	İYİ	

T.C.
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Senirkent Büyükkabaca 75.Yıl İlkokulu Müdürlüğü
2016-2017 DERS YILI **YABANCI DİL** DERSİ 3. Sınıf / B Şubesi
ÖĞRETMEN PUAN ÇİZELGESİ

S.NO	OKUL NO	ÖĞRENCİNİN ADI SOYADI	1. DÖNEM DERS DEĞERLENDİRME DURUMU	2. DÖNEM DERS DEĞERLENDİRME DURUMU
1	276	ADEM YILDIZ	İYİ	
2	277	ALİ OSMAN BARDAK	ÇOK İYİ	
3	279	BERKAY ÖLMEZ	İYİ	
4	281	ELANUR ÖZMEN	İYİ	
5	282	ELİF NUR UZUNER	İYİ	
6	283	EMİNE RABİA ÖZCAN	ÇOK İYİ	
7	284	GİZEM TEMURCİN	ÇOK İYİ	
8	285	GÜRCÜ ÖZDEMİR	İYİ	
9	286	HALİME TOSUN	İYİ	
10	287	İBRAHİM NAZMİ TEKİN	ÇOK İYİ	
11	288	KAĞAN MEHMET ÇELİK	ÇOK İYİ	
12	289	KEZİBAN NUR CAKMAK	ÇOK İYİ	
13	290	MEHMET ALİ ÖZDEMİR	ÇOK İYİ	
14	291	MERYEM TURAN	İYİ	
15	293	RABİA KULA	ÇOK İYİ	
16	294	RAMAZAN EREN YALCIN	ÇOK İYİ	
17	295	RAMAZAN KÖSE	ÇOK İYİ	
18	296	SÜLEYMAN GÜNER	ÇOK İYİ	
19	297	SÜMEYYE ULUCAN	ÇOK İYİ	
20	298	TALHA ÖZAY	ÇOK İYİ	
21	299	VELİ BURAK TASAGİREN	ÇOK İYİ	
22	319	MELİH BERK ÇOBANKAYA	ÇOK İYİ	

APPENDIX-2

Examples from the 'Grab Bag' game presentations

a. ketıl

b. kettle

c. kettel

a. çehır

b. chayir

c. chair

a. hospital

b. hospitıl

c. haspitol

a. sıkool

b.school

c.schuul

a. motorsykıl

b.mottorcycıl

c. motorcycle

a. şiip

b. ship

c. şhipp

a. reiny

b. rainy

c. rainiy

a. sunny

b. sanniy

c. sanny

APPENDIX-3

'Alphabet Jumble' game pictures

APPENDIX-4

Required Permissions from MoNE

T.C.
SENİRKENT KAYMAKAMLIĞI
İlçe Millî Eğitim Müdürlüğü

Sayı : 98703524-/44/4618249   05.04.2017
Konu:Fatma BOSTANCIOĞLU

İLÇE MİLLİ EĞİTİM MÜDÜRLÜĞÜNE

Burdur Mehmet Akif Ersoy Üniversitesi Eğitim Bilimleri Enstitüsü Yabancı Diller Eğitimi Anabilim Dalı İngilizce Eğitimi Tezli Yüksek Lisans Programı öğrencisi Fatma BOSTANCIOĞLU'nun "Yazma Oyunları İlkokul 3.Sınıf Öğrencilerinin İngilizce Yazma Becerileri Üzerindeki Etkileri" başlıklı tez araştırmasında İlçemiz Büyükkabaca 75.Yıl İlkokulunda yapabilme isteği ile ilgili dilekçesi müdürlüğümüzce uygun görülmüş olup;

Makamınızca da uygun görülmesi halinde gereğini tensiplerinize arz ederim.

H.Süleyman GÜÇLÜ
Şube Müdürü

OLUR
05.04.2017

A.Ragıp ERTEKİN
Müdür V.

Güvenli Elektronik İmzalı
Aslı İle Aynıdır 02.04.2017

Türkân UYUMAZ
Milli Eğitim Personel Şefi

Kıbrıs Mahallesi Hükümet Konağı-Senirkent-32600-ISPARTA   Ayrıntılı bilgi için: Hatice KARAMAN Vhki
elektronik Ağ : www.senirkent.meb.gov.tr   Telefon: (0 246) 5114502
e-posta : senirkent32@meb.gov.tr   Faks   : 0(246) 5114502

Bu evrak güvenli elektronik imza ile imzalanmıştır. http://evraksorgu.meb.gov.tr adresinden e004-ebf2-349a-ad79-1a01 kodu ile teyit edilebilir.

Evrak Tarih ve Sayısı: 18/04/2017-E.4476

T.C.
MEHMET AKİF ERSOY ÜNİVERSİTESİ
Eğitim Bilimleri Enstitüsü Müdürlüğü

Sayı : 79673485-302.08.01-E.4476   18/04/2017
Konu : Bilimsel ve Eğitim Amaçlı

SAYIN FATMA BOSTANCIOĞLU
Büyükkabaca Beldesi Karşı Mah. Mehmet Niyazi Uzun Sk. No: 4 İç Kapı No:2
SENİRKENT/ISPARTA

İlgi : 13/04/2017 tarihli, 19119 sayılı ve "Fatma BOSTANCIOĞLU." konulu yazı

"Yazma Oyunlarının İlkokul 3. Sınıf Öğrencilerinin İngilizce Yazma Becerileri Üzerindeki Etkileri" başlıklı tez araştırmanızla ilgili Isparta Valiliği İl Milli Eğitim Müdürlüğü'nün ilgi yazısı ekte gönderilmiştir.

Bilgilerinizi ve gereğini rica ederim.

Yrd. Doç. Dr. Mustafa KILINÇ
Enstitü Müdürü

Ek:İlgi Yazı ve Ekleri (2 Sayfa)

BELGENİN ASLI
ELEKTRONİK İMZALIDIR
1.8./.04/20.1.2

Ferhat TEPE
Bilgisayar İşletmeni

Evrakı Doğrulamak İçin : https://ebys.mehmetakif.edu.tr/enVision/Dogrula/BP3Z7PZ

İstiklal Yerleşkesi 15030 BURDUR   Ayrıntılı bilgi için irtibat: Ferhat TEPE
Telefon:+90 248 213 32 02 Faks+90 248 213 32 09   Evrak Pin Kodu: 46332
e-Posta ebe@mehmetakif.edu.tr Elektronik Ağ:http://ebe.mehmetakif.edu.tr Kep Adresi : maku@hs01.kep.tr
Bu belge 5070 sayılı Elektronik İmza Kanununun 5. Maddesi gereğince güvenli elektronik imza ile imzalanmıştır.

APPENDIX-5

Required Permissions from Parents

VELİ İZİN BELGESİ

Okulumuzda Pazartesi günleri İngilizce öğretmeni rehberliğinde 3. sınıflarla işlenen derslerin sonunda dikte çalışmaları yapılacaktır. Dikte çalışmalarının sonucunda elde edilen veriler İngilizce öğretmeni Fatma Bostancıoğlu'nun '*Yazma Oyunlarının İlkokul 3.Sınıf Öğrencilerinin İngilizce Yazma Becerileri Üzerindeki Etkileri*' isimli tezinde öğrencilerin kimlikleri beyan edilmemek suretiyle kullanılacaktır. Çalışmalar 2. ders saati sonunda en fazla 15 dakika sürecektir. Ayrıntılı bilgi isteyen velilerimiz İngilizce öğretmenine ulaşabilirler.

Büyükkabaca 75.Yıl İlkokulu
İngilizce Öğretmeni
Fatma BOSTANCIOĞLU

Velisi bulunduğum…..... sınıfı .... isimli öğrencinin planlanan çalışmalara katılmasında herhangi bir sakınca görmediğimi bildiririm.

Baba TEL:

Anne TEL :

……../……../ 20…..

Veli Adı Soyadı

İmza

APPENDIX-6

Weekly Dictation Activities' Examples

APPENDIX-7

Overall Dictation Activity Examples

Column 1:

1. Bedroom ✓
2. Balloon ✓
3. restaurant ✓
4. windy ✓
5. living room ✓
6. motorcycle ✓
7. carnival ✓
8. hat ✓
9. soap ✓
10. road ✓
11. school ✓
12. cool ✓
13. kettle ✓
14. helicopter ✓
15. home ✓
16. foggy ✓
17. sofa ✓
18. car ✓
19. hospital ✓
20. sunny ✓
21. shampoo ✓
22. boat ✓
23. zoo ✓
24. rainy ✓
25. kitchen ✓
26. truck ✓
27. park ✓
28. snowy ✓
29. television ✓
30. plane ✓

Column 2:

1. Bedroom ✓
2. Balloon ✓
3. Restaurant ✓
4. windy ✗
5. Living room ✓
6. marycle ✗
7. Carnaval ✗
8. Hut ✗
9. Sal ✗
10. road ✗
11. rhy ✗
12. hat ✗
13. kettle ✓
14. helicopter ✓
15. Hoa ✗
16. foggy ✓
17. Sofa ✓
18. car ✓
19. Hospital ✓
20. sunny ✓
21. shampoo ✗
22. boat ✓
23. zoo ✓
24. rainy ✓
25. ficn ✗
26. Trich ✗
27. park ✓
28. snowy ✗
29. Television ✗
30. Nan ✗

Column 3:

1. Bedroom ✓
2. leales ✗
3. Restroom ✗
4. Wandy ✗
5. Silingroom ✗
6. motaseuight ✗
7. carnieal ✓
8. Hat ✓
9. coar ✓
10. ral ✗
11. schel ✗
12. Gul ✗
13. kettle ✓
14. helicarte ✗
15. hum ✗
16. faggy ✓
17. Sala ✓
18. car ✓
19. Hupital ✓
20. sunny ✓
21. samlee ✗
22. boat ✓
23. zele ✓
24. rainy ✗
25. kitchen ✓
26. truch ✓
27. park ✓
28. snowy ✗
29. television ✓
30. Plutyp ✗

APPENDIX-8

Correct Spelling Rates of Participants: Group Statistics

Weeks	Groups	N	Mean	Std. Deviation	Std. Error Mean	Means' Difference
1	Control	21	7.71	4.991	1.089	0.81
	Experimental	21	8.52	4.412	.963	
2	Control	21	8.33	4.902	1.070	2.19
	Experimental	21	10.52	4.412	.963	
3	Control	21	8.14	4.683	1.022	3.00
	Experimental	21	11.14	4.871	1.063	
4	Control	21	4.57	2.694	.588	1.91
	Experimental	21	6.48	3.281	.716	
5	Control	21	6.38	3.653	.797	1.48
	Experimental	21	7.86	3.260	.711	
6	Control	21	5.67	3.425	.747	1.57
	Experimental	21	7.24	4.110	.897	
7	Control	21	7.52	4.262	.930	4.00
	Experimental	21	11.52	3.945	.861	
8	Control	21	5.71	3.849	.840	4.19
	Experimental	21	9.90	4.277	.933	
9	Control	21	4.19	4.434	.968	7.24
	Experimental	21	11.43	3.641	.795	
10	Control	21	2.38	2.783	.607	2.67
	Experimental	21	5.05	3.398	.742	
11	Control	21	4.81	4.167	.909	0.43
	Experimental	21	4.38	3.217	.702	
12	Control	21	4.43	4.545	.992	2.47
	Experimental	21	6.90	4.369	.953	
13	Control	21	13.24	10.212	2.229	5.81
	Experimental	21	19.05	8.593	1.875	

APPENDIX-9

Correct Spelling Rates of Participants: T-Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Week1	Equal variances assumed	,473	,496	-,557	40	,581	-,810	1,454	-3,747	2,128
	Equal variances not assumed			-,557	39,405	,581	-,810	1,454	-3,749	2,130
Week2	Equal variances assumed	,922	,343	-1,522	40	,136	-2,190	1,439	-5,099	,718
	Equal variances not assumed			-1,522	39,563	,136	-2,190	1,439	-5,100	,719
Week3	Equal variances assumed	,003	,960	-2,035	40	,049	-3,000	1,474	-5,980	-,020
	Equal variances not assumed			-2,035	39,938	,049	-3,000	1,474	-5,980	-,020
Week4	Equal variances assumed	,546	,464	-2,056	40	,046	-1,905	,926	-3,777	-,033
	Equal variances not assumed			-2,056	38,542	,047	-1,905	,926	-3,779	-,030
Week5	Equal variances assumed	,486	,490	-1,382	40	,175	-1,476	1,069	-3,636	,683
	Equal variances not assumed			-1,382	39,492	,175	-1,476	1,069	-3,637	,684
Week6	Equal variances assumed	2,179	,148	-1,346	40	,186	-1,571	1,167	-3,931	,788
	Equal variances not assumed			-1,346	38,742	,186	-1,571	1,167	-3,933	,791
Week7	Equal variances assumed	,160	,691	-3,156	40	,003	-4,000	1,267	-6,561	-1,439
	Equal variances not assumed			-3,156	39,764	,003	-4,000	1,267	-6,562	-1,438
Week8	Equal variances assumed	,104	,749	-3,338	40	,002	-4,190	1,256	-6,728	-1,653
	Equal variances not assumed			-3,338	39,564	,002	-4,190	1,256	-6,729	-1,652

Week9	Equal variances assumed	1,659	,205	-5,781	40	,000	-7,238	1,252	-9,769	-4,708
	Equal variances not assumed			-5,781	38,541	,000	-7,238	1,252	-9,772	-4,705
Week10	Equal variances assumed	1,319	,258	-2,782	40	,008	-2,667	,959	-4,604	-,729
	Equal variances not assumed			-2,782	38,507	,008	-2,667	,959	-4,606	-,727
Week11	Equal variances assumed	3,215	,081	,373	40	,711	,429	1,149	-1,893	2,750
	Equal variances not assumed			,373	37,591	,711	,429	1,149	-1,898	2,755
Week12	Equal variances assumed	,060	,808	-1,800	40	,079	-2,476	1,376	-5,257	,304
	Equal variances not assumed			-1,800	39,938	,079	-2,476	1,376	-5,257	,304
Overall	Equal variances assumed	2,567	,117	-1,995	40	,053	-5,810	2,913	-11,696	,077
(Week13)	Equal variances not assumed			-1,995	38,865	,053	-5,810	2,913	-11,701	,082

APPENDIX-10

Unit 6: Weeks 1, 2 and 3 - Target Vocabulary Correct Spelling Percentages

UNIT 6	EXPERIMENTAL GROUP				CONTROL GROUP			
	Week 1	Week 2	Week 3	Mean	Week 1	Week 2	Week 3	Mean
bathroom	42,86	57,14	71,43	57,14	23,81	23,81	28,57	25,40
bed	80,95	90,48	90,48	87,30	85,71	90,48	85,71	87,30
bedroom	57,14	76,19	66,67	66,67	52,38	57,14	66,67	58,73
chair	76,19	76,19	71,43	74,60	52,38	42,86	38,10	44,44
cup	80,95	52,38	66,67	66,67	71,43	61,90	61,90	65,08
garage	61,90	76,19	80,95	73,02	33,33	52,38	52,38	46,03
kettle	47,62	66,67	76,19	63,49	57,14	57,14	52,38	55,56
kitchen	47,62	61,90	66,67	58,73	47,62	42,86	28,57	39,68
livingroom	66,67	85,71	80,95	77,78	57,14	66,67	57,14	60,32
playroom	52,38	76,19	76,19	68,25	52,38	57,14	61,90	57,14
shampoo	61,90	71,43	71,43	68,25	38,10	38,10	33,33	36,51
soap	42,86	61,90	71,43	58,73	66,67	52,38	57,14	58,73
sofa	76,19	90,48	90,48	85,71	76,19	85,71	90,48	84,13
table	47,62	61,90	71,43	60,32	38,10	66,67	66,67	57,14
television	9,52	47,62	61,90	39,68	19,05	38,10	33,33	30,16

APPENDIX-11

Unit 7: Weeks 4, 5 and 6 - Target Vocabulary Correct Spelling Percentages

UNIT 7	EXPERIMENTAL GROUP				CONTROL GROUP			
	Week 4	Week 5	Week 6	Mean	Week 4	Week 5	Week 6	Mean
bank	76,19	90,48	80,95	82,54	80,95	76,19	80,95	79,37
cafe	71,43	85,71	80,95	79,37	52,38	57,14	57,14	55,56
campus	47,62	61,90	61,90	57,14	14,29	38,10	23,81	25,40
carnival	28,57	57,14	57,14	47,62	4,76	23,81	47,62	25,40
classroom	23,81	19,05	9,52	17,46	14,29	28,57	14,29	19,05
home	61,90	66,67	52,38	60,32	61,90	66,67	66,67	65,08
hospital	52,38	66,67	52,38	57,14	28,57	57,14	28,57	38,10
museum	47,62	57,14	57,14	53,97	19,05	52,38	38,10	36,51
park	85,71	95,24	80,95	87,30	76,19	85,71	80,95	80,95
restaurant	28,57	14,29	38,10	26,98	4,76	9,52	4,76	6,35
school	14,29	47,62	33,33	31,75	0,00	42,86	33,33	25,40
shopping center	14,29	28,57	28,57	23,81	9,52	14,29	4,76	9,52
zoo	95,24	95,24	90,48	93,65	90,48	85,71	85,71	87,30

APPENDIX-12

Unit 8: Weeks 7, 8 and 9 - Target Vocabulary Correct Spelling Percentages

UNIT 8	EXPERIMENTAL GROUP				CONTROL GROUP			
	Week 7	Week 8	Week 9	Mean	Week 7	Week 8	Week 9	Mean
balloon	61,90	47,62	76,19	61,90	33,33	19,05	19,05	23,81
bike	95,24	66,67	76,19	79,37	66,67	33,33	28,57	42,86
boat	85,71	90,48	90,48	88,89	80,95	80,95	57,14	73,02
bus	85,71	71,43	90,48	82,54	71,43	76,19	38,10	61,90
car	95,24	85,71	90,48	90,48	95,24	66,67	52,38	71,43
helicopter	71,43	57,14	61,90	63,49	47,62	28,57	23,81	33,33
motorcycle	71,43	57,14	66,67	65,08	14,29	14,29	9,52	12,70
plane	90,48	80,95	85,71	85,71	61,90	52,38	23,81	46,03
river	66,67	71,43	61,90	66,67	42,86	28,57	23,81	31,75
road	57,14	38,10	57,14	50,79	19,05	19,05	23,81	20,63
sea	66,67	38,10	61,90	55,56	33,33	23,81	14,29	23,81
ship	85,71	90,48	95,24	90,48	52,38	33,33	28,57	38,10
sky	71,43	71,43	85,71	76,19	47,62	42,86	28,57	39,68
train	95,24	71,43	95,24	87,30	57,14	33,33	23,81	38,10
truck	52,38	52,38	47,62	50,79	28,57	19,05	23,81	23,81

APPENDIX-13

Unit 9: Weeks 10, 11 and 12 - Target Vocabulary Correct Spelling Percentages

UNIT 9	EXPERIMENTAL GROUP				CONTROL GROUP			
	Week 10	Week 11	Week 12	Mean	Week 10	Week 11	Week 12	Mean
cloudy	4,76	0,00	28,57	11,11	4,76	9,52	14,29	9,52
cold	66,67	47,62	9,52	41,27	14,29	42,86	28,57	28,57
cool	28,57	33,33	52,38	38,10	0,00	52,38	33,33	28,57
foggy	38,10	42,86	71,43	50,79	9,52	57,14	57,14	41,27
hot	85,71	76,19	85,71	82,54	66,67	66,67	57,14	63,49
nice	33,33	33,33	47,62	38,10	9,52	14,29	14,29	12,70
rainy	52,38	38,10	61,90	50,79	23,81	28,57	38,10	30,16
snowman	9,52	4,76	38,10	17,46	23,81	19,05	28,57	23,81
snowy	42,86	33,33	57,14	44,44	28,57	47,62	38,10	38,10
sunny	57,14	42,86	57,14	52,38	14,29	33,33	33,33	26,98
warm	61,90	38,10	76,19	58,73	28,57	52,38	42,86	41,27
weather	19,05	14,29	61,90	31,75	0,00	19,05	14,29	11,11
windy	4,76	33,33	42,86	26,98	14,29	38,10	42,86	31,75

APPENDIX-14

Week 1: Target Vocabulary T-Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means						
							Mean	Std. Error	95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper
bathroom	Equal variances assumed	5,888	,020	-1,305	40	,199	-,190	,146	-,486	,105
	Equal variances not assumed			-1,305	39,132	,200	-,190	,146	-,486	,105
bed	Equal variances assumed	,663	,420	,405	40	,688	,048	,118	-,190	,285
	Equal variances not assumed			,405	39,480	,688	,048	,118	-,190	,285
bedroom	Equal variances assumed	,296	,590	-,303	40	,764	-,048	,157	-,365	,270
	Equal variances not assumed			-,303	39,997	,764	-,048	,157	-,365	,270
chair	Equal variances assumed	7,354	,010	-1,622	40	,113	-,238	,147	-,535	,059
	Equal variances not assumed			-1,622	39,027	,113	-,238	,147	-,535	,059
cup	Equal variances assumed	2,062	,159	-,712	40	,481	-,095	,134	-,366	,175
	Equal variances not assumed			-,712	39,239	,481	-,095	,134	-,366	,175
garage	Equal variances assumed	,389	,536	-1,888	40	,066	-,286	,151	-,592	,020
	Equal variances not assumed			-1,888	39,965	,066	-,286	,151	-,592	,020
kettle	Equal variances assumed	,296	,590	,606	40	,548	,095	,157	-,223	,413
	Equal variances not assumed			,606	39,997	,548	,095	,157	-,223	,413

kitchen	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,158	-,319	,319
	Equal variances not assumed			,000	40,000	1,000	,000	,158	-,319	,319
living room	Equal variances assumed	1,386	,246	-,623	40	,537	-,095	,153	-,404	,214
	Equal variances not assumed			-,623	39,906	,537	-,095	,153	-,404	,214
playroom	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,158	-,319	,319
	Equal variances not assumed			,000	40,000	1,000	,000	,158	-,319	,319
shampoo	Equal variances assumed	,000	1,000	-1,550	40	,129	-,238	,154	-,548	,072
	Equal variances not assumed			-1,550	40,000	,129	-,238	,154	-,548	,072
soap	Equal variances assumed	1,386	,246	1,558	40	,127	,238	,153	-,071	,547
	Equal variances not assumed			1,558	39,906	,127	,238	,153	-,071	,547
sofa	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,135	-,272	,272
	Equal variances not assumed			,000	40,000	1,000	,000	,135	-,272	,272
table	Equal variances assumed	1,063	,309	-,611	40	,544	-,095	,156	-,410	,220
	Equal variances not assumed			-,611	39,969	,544	-,095	,156	-,410	,220
television	Equal variances assumed	3,204	,081	,869	40	,390	,095	,110	-,126	,317
	Equal variances not assumed			,869	37,034	,391	,095	,110	-,127	,317

APPENDIX-15

Week 2: Target Vocabulary T-Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
							Mean	Std. Error		
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper
bathroom	Equal variances assumed	5,888	,020	-2,283	40	,028	-,333	,146	-,628	-,038
	Equal variances not assumed			-2,283	39,132	,028	-,333	,146	-,629	-,038
bed	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,093	-,188	,188
	Equal variances not assumed			,000	40,000	1,000	,000	,093	-,188	,188
bedroom	Equal variances assumed	5,888	,020	-1,305	40	,199	-,190	,146	-,486	,105
	Equal variances not assumed			-1,305	39,132	,200	-,190	,146	-,486	,105
chair	Equal variances assumed	5,888	,020	-2,283	40	,028	-,333	,146	-,628	-,038
	Equal variances not assumed			-2,283	39,132	,028	-,333	,146	-,629	-,038
cup	Equal variances assumed	1,063	,309	,611	40	,544	,095	,156	-,220	,410
	Equal variances not assumed			,611	39,969	,544	,095	,156	-,220	,410
garage	Equal variances assumed	7,354	,010	-1,622	40	,113	-,238	,147	-,535	,059
	Equal variances not assumed			-1,622	39,027	,113	-,238	,147	-,535	,059
kettle	Equal variances assumed	1,386	,246	-,623	40	,537	-,095	,153	-,404	,214
	Equal variances not assumed			-,623	39,906	,537	-,095	,153	-,404	,214

kitchen	Equal variances assumed	,358	,553	-1,229	40	,226	-,190	,155	-,504	,123
	Equal variances not assumed			-1,229	39,986	,226	-,190	,155	-,504	,123
living room	Equal variances assumed	9,136	,004	-1,451	40	,155	-,190	,131	-,456	,075
	Equal variances not assumed			-1,451	36,907	,155	-,190	,131	-,456	,076
playroom	Equal variances assumed	5,888	,020	-1,305	40	,199	-,190	,146	-,486	,105
	Equal variances not assumed			-1,305	39,132	,200	-,190	,146	-,486	,105
shampoo	Equal variances assumed	1,585	,215	-2,248	40	,030	-,333	,148	-,633	-,034
	Equal variances not assumed			-2,248	39,793	,030	-,333	,148	-,633	-,034
soap	Equal variances assumed	1,063	,309	-,611	40	,544	-,095	,156	-,410	,220
	Equal variances not assumed			-,611	39,969	,544	-,095	,156	-,410	,220
sofa	Equal variances assumed	,885	,352	-,466	40	,644	-,048	,102	-,254	,159
	Equal variances not assumed			-,466	38,826	,644	-,048	,102	-,254	,159
table	Equal variances assumed	,389	,536	,315	40	,755	,048	,151	-,258	,353
	Equal variances not assumed			,315	39,965	,755	,048	,151	-,258	,353
television	Equal variances assumed	1,063	,309	-,611	40	,544	-,095	,156	-,410	,220
	Equal variances not assumed			-,611	39,969	,544	-,095	,156	-,410	,220

APPENDIX-16

Week 3: Target Vocabulary T-Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
bathroom	Equal variances assumed	,000	1,000	-3,000	40	,005	-,429	,143	-,717	-,140
	Equal variances not assumed			-3,000	40,000	,005	-,429	,143	-,717	-,140
bed	Equal variances assumed	,885	,352	-,466	40	,644	-,048	,102	-,254	,159
	Equal variances not assumed			-,466	38,826	,644	-,048	,102	-,254	,159
bedroom	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,149	-,301	,301
	Equal variances not assumed			,000	40,000	1,000	,000	,149	-,301	,301
chair	Equal variances assumed	1,585	,215	-2,248	40	,030	-,333	,148	-,633	-,034
	Equal variances not assumed			-2,248	39,793	,030	-,333	,148	-,633	-,034
cup	Equal variances assumed	,389	,536	-,315	40	,755	-,048	,151	-,353	,258
	Equal variances not assumed			-,315	39,965	,755	-,048	,151	-,353	,258
garage	Equal variances assumed	12,163	,001	-2,011	40	,051	-,286	,142	-,573	,001
	Equal variances not assumed			-2,011	37,890	,051	-,286	,142	-,573	,002
kettle	Equal variances assumed	7,354	,010	-1,622	40	,113	-,238	,147	-,535	,059
	Equal variances not assumed			-1,622	39,027	,113	-,238	,147	-,535	,059

kitchen	Equal variances assumed	,423	,519	-2,609	40	,013	-,381	,146	-,676	-,086
	Equal variances not assumed			-2,609	39,928	,013	-,381	,146	-,676	-,086
living room	Equal variances assumed	10,270	,003	-1,685	40	,100	-,238	,141	-,524	,047
	Equal variances not assumed			-1,685	38,035	,100	-,238	,141	-,524	,048
playroom	Equal variances assumed	3,752	,060	-,989	40	,329	-,143	,144	-,435	,149
	Equal variances not assumed			-,989	39,331	,329	-,143	,144	-,435	,149
shampoo	Equal variances assumed	,423	,519	-2,609	40	,013	-,381	,146	-,676	-,086
	Equal variances not assumed			-2,609	39,928	,013	-,381	,146	-,676	-,086
soap	Equal variances assumed	3,137	,084	-,953	40	,346	-,143	,150	-,446	,160
	Equal variances not assumed			-,953	39,672	,346	-,143	,150	-,446	,160
sofa	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,093	-,188	,188
	Equal variances not assumed			,000	40,000	1,000	,000	,093	-,188	,188
table	Equal variances assumed	,423	,519	-,326	40	,746	-,048	,146	-,343	,247
	Equal variances not assumed			-,326	39,928	,746	-,048	,146	-,343	,247
television	Equal variances assumed	,389	,536	-1,888	40	,066	-,286	,151	-,592	,020
	Equal variances not assumed			-1,888	39,965	,066	-,286	,151	-,592	,020

APPENDIX-17

Week 4: Target Vocabulary T-Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		Lower	Upper
bank	Equal variances assumed	,544	,465	,368	40	,715	,048	,130		-,214	,309
	Equal variances not assumed			,368	39,739	,715	,048	,130		-,214	,309
cafe	Equal variances assumed	4,324	,044	-1,265	40	,213	-,190	,151		-,495	,114
	Equal variances not assumed			-1,265	39,604	,213	-,190	,151		-,495	,114
campus	Equal variances assumed	20,463	,000	-2,445	40	,019	-,333	,136		-,609	-,058
	Equal variances not assumed			-2,445	35,823	,020	-,333	,136		-,610	-,057
carnival	Equal variances assumed	27,016	,000	-2,132	40	,039	-,238	,112		-,464	-,012
	Equal variances not assumed			-2,132	28,471	,042	-,238	,112		-,467	-,010
classroom	Equal variances assumed	2,477	,123	-,773	40	,444	-,095	,123		-,344	,154
	Equal variances not assumed			-,773	38,549	,444	-,095	,123		-,345	,154
home	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,154		-,310	,310
	Equal variances not assumed			,000	40,000	1,000	,000	,154		-,310	,310

hospital	Equal variances assumed	4,324	,044	-1,581	40	,122	-,238	,151	-,542	,066
	Equal variances not assumed			-1,581	39,604	,122	-,238	,151	-,543	,066
museum	Equal variances assumed	12,163	,001	-2,011	40	,051	-,286	,142	-,573	,001
	Equal variances not assumed			-2,011	37,890	,051	-,286	,142	-,573	,002
park	Equal variances assumed	2,477	,123	-,773	40	,444	-,095	,123	-,344	,154
	Equal variances not assumed			-,773	38,549	,444	-,095	,123	-,345	,154
restaurant	Equal variances assumed	27,016	,000	-2,132	40	,039	-,238	,112	-,464	-,012
	Equal variances not assumed			-2,132	28,471	,042	-,238	,112	-,467	-,010
school	Equal variances assumed	19,200	,000	-1,826	40	,075	-,143	,078	-,301	,015
	Equal variances not assumed			-1,826	20,000	,083	-,143	,078	-,306	,020
shopping centre	Equal variances assumed	,885	,352	-,466	40	,644	-,048	,102	-,254	,159
	Equal variances not assumed			-,466	38,826	,644	-,048	,102	-,254	,159
zoo	Equal variances assumed	1,424	,240	-,587	40	,560	-,048	,081	-,212	,116
	Equal variances not assumed			-,587	36,486	,561	-,048	,081	-,212	,117

APPENDIX-18

Week 5: Target Vocabulary T-Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
bank	Equal variances assumed	6,830	,013	-1,235	40	,224	-,143	,116	-,377	,091
	Equal variances not assumed			-1,235	35,502	,225	-,143	,116	-,378	,092
cafe	Equal variances assumed	17,778	,000	-2,108	40	,041	-,286	,136	-,560	-,012
	Equal variances not assumed			-2,108	36,000	,042	-,286	,136	-,561	-,011
campus	Equal variances assumed	,000	1,000	-1,550	40	,129	-,238	,154	-,548	,072
	Equal variances not assumed			-1,550	40,000	,129	-,238	,154	-,548	,072
carnival	Equal variances assumed	5,888	,020	-2,283	40	,028	-,333	,146	-,628	-,038
	Equal variances not assumed			-2,283	39,132	,028	-,333	,146	-,629	-,038
classroom	Equal variances assumed	2,062	,159	,712	40	,481	,095	,134	-,175	,366
	Equal variances not assumed			,712	39,239	,481	,095	,134	-,175	,366
home	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,149	-,301	,301
	Equal variances not assumed			,000	40,000	1,000	,000	,149	-,301	,301
hospital	Equal variances assumed	1,386	,246	-,623	40	,537	-,095	,153	-,404	,214
	Equal variances not assumed			-,623	39,906	,537	-,095	,153	-,404	,214

museum	Equal variances assumed	,296	,590	-,303	40	,764	-,048	,157	-,365	,270
	Equal variances not assumed			-,303	39,997	,764	-,048	,157	-,365	,270
park	Equal variances assumed	4,774	,035	-1,040	40	,305	-,095	,092	-,280	,090
	Equal variances not assumed			-1,040	33,028	,306	-,095	,092	-,282	,091
restaurant	Equal variances assumed	,885	,352	-,466	40	,644	-,048	,102	-,254	,159
	Equal variances not assumed			-,466	38,826	,644	-,048	,102	-,254	,159
school	Equal variances assumed	,296	,590	-,303	40	,764	-,048	,157	-,365	,270
	Equal variances not assumed			-,303	39,997	,764	-,048	,157	-,365	,270
shopping centre	Equal variances assumed	5,333	,026	-1,118	40	,270	-,143	,128	-,401	,115
	Equal variances not assumed			-1,118	37,647	,271	-,143	,128	-,402	,116
zoo	Equal variances assumed	4,774	,035	-1,040	40	,305	-,095	,092	-,280	,090
	Equal variances not assumed			-1,040	33,028	,306	-,095	,092	-,282	,091

APPENDIX-19

Week 6: Target Vocabulary T-Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
							Mean Difference	Std. Error Difference		
		F	Sig.	t	df	Sig. (2-tailed)			Lower	Upper
bank	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,124	-,251	,251
	Equal variances not assumed			,000	40,000	1,000	,000	,124	-,251	,251
cafe	Equal variances assumed	10,270	,003	-1,685	40	,100	-,238	,141	-,524	,047
	Equal variances not assumed			-1,685	38,035	,100	-,238	,141	-,524	,048
campus	Equal variances assumed	3,752	,060	-2,638	40	,012	-,381	,144	-,673	-,089
	Equal variances not assumed			-2,638	39,331	,012	-,381	,144	-,673	-,089
carnival	Equal variances assumed	,296	,590	-,606	40	,548	-,095	,157	-,413	,223
	Equal variances not assumed			-,606	39,997	,548	-,095	,157	-,413	,223
clasroom	Equal variances assumed	,885	,352	,466	40	,644	,048	,102	-,159	,254
	Equal variances not assumed			,466	38,826	,644	,048	,102	-,159	,254
home	Equal variances assumed	2,345	,134	,930	40	,358	,143	,154	-,168	,453
	Equal variances not assumed			,930	39,867	,358	,143	,154	-,168	,453
hospital	Equal variances assumed	4,324	,044	-1,581	40	,122	-,238	,151	-,542	,066
	Equal variances not assumed			-1,581	39,604	,122	-,238	,151	-,543	,066

museum	Equal variances assumed	,358	,553	-1,229	40	,226	-,190	,155	-,504	,123
	Equal variances not assumed			-1,229	39,986	,226	-,190	,155	-,504	,123
park	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,124	-,251	,251
	Equal variances not assumed			,000	40,000	1,000	,000	,124	-,251	,251
restaurant	Equal variances assumed	57,483	,000	-2,811	40	,008	-,333	,119	-,573	-,094
	Equal variances not assumed			-2,811	27,418	,009	-,333	,119	-,576	-,090
school	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,149	-,301	,301
	Equal variances not assumed			,000	40,000	1,000	,000	,149	-,301	,301
shopping center	Equal variances assumed	27,016	,000	-2,132	40	,039	-,238	,112	-,464	-,012
	Equal variances not assumed			-2,132	28,471	,042	-,238	,112	-,467	-,010
zoo	Equal variances assumed	,885	,352	-,466	40	,644	-,048	,102	-,254	,159
	Equal variances not assumed			-,466	38,826	,644	-,048	,102	-,254	,159

APPENDIX-20

Week 7: Target Vocabulary T-Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
balloon	Equal variances assumed	,389	,536	-1,888	40	,066	-,286	,151	-,592	,020
	Equal variances not assumed			-1,888	39,965	,066	-,286	,151	-,592	,020
bike	Equal variances assumed	40,486	,000	-2,470	40	,018	-,286	,116	-,519	-,052
	Equal variances not assumed			-2,470	27,837	,020	-,286	,116	-,523	-,049
boat	Equal variances assumed	,663	,420	-,405	40	,688	-,048	,118	-,285	,190
	Equal variances not assumed			-,405	39,480	,688	-,048	,118	-,285	,190
bus	Equal variances assumed	5,333	,026	-1,118	40	,270	-,143	,128	-,401	,115
	Equal variances not assumed			-1,118	37,647	,271	-,143	,128	-,402	,116
Car	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,067	-,136	,136
	Equal variances not assumed			,000	40,000	1,000	,000	,067	-,136	,136
helicopter	Equal variances assumed	4,324	,044	-1,581	40	,122	-,238	,151	-,542	,066
	Equal variances not assumed			-1,581	39,604	,122	-,238	,151	-,543	,066
motorcycle	Equal variances assumed	5,333	,026	-4,472	40	,000	-,571	,128	-,830	-,313
	Equal variances not assumed			-4,472	37,647	,000	-,571	,128	-,830	-,313

plane	Equal variances assumed	25,657	,000	-2,252	40	,030	-,286	,127	-,542	-,029
	Equal variances not assumed			-2,252	32,894	,031	-,286	,127	-,544	-,028
river	Equal variances assumed	1,386	,246	-1,558	40	,127	-,238	,153	-,547	,071
	Equal variances not assumed			-1,558	39,906	,127	-,238	,153	-,547	,071
road	Equal variances assumed	10,270	,003	-2,697	40	,010	-,381	,141	-,666	-,095
	Equal variances not assumed			-2,697	38,035	,010	-,381	,141	-,667	-,095
sea	Equal variances assumed	,000	1,000	-2,236	40	,031	-,333	,149	-,635	-,032
	Equal variances not assumed			-2,236	40,000	,031	-,333	,149	-,635	-,032
ship	Equal variances assumed	20,463	,000	-2,445	40	,019	-,333	,136	-,609	-,058
	Equal variances not assumed			-2,445	35,823	,020	-,333	,136	-,610	-,057
sky	Equal variances assumed	4,324	,044	-1,581	40	,122	-,238	,151	-,542	,066
	Equal variances not assumed			-1,581	39,604	,122	-,238	,151	-,543	,066
train	Equal variances assumed	75,625	,000	-3,162	40	,003	-,381	,120	-,624	-,137
	Equal variances not assumed			-3,162	27,162	,004	-,381	,120	-,628	-,134
truck	Equal variances assumed	4,324	,044	-1,581	40	,122	-,238	,151	-,542	,066
	Equal variances not assumed			-1,581	39,604	,122	-,238	,151	-,543	,066

APPENDIX-21

Week 8: Target Vocabulary T-Test Results

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
balloon	Equal variances assumed	12,163	,001	-2,011	40	,051	-,286	,142	-,573	,001
	Equal variances not assumed			-2,011	37,890	,051	-,286	,142	-,573	,002
bike	Equal variances assumed	,000	1,000	-2,236	40	,031	-,333	,149	-,635	-,032
	Equal variances not assumed			-2,236	40,000	,031	-,333	,149	-,635	-,032
boat	Equal variances assumed	3,204	,081	-,869	40	,390	-,095	,110	-,317	,126
	Equal variances not assumed			-,869	37,034	,391	-,095	,110	-,317	,127
bus	Equal variances assumed	,471	,496	,343	40	,733	,048	,139	-,233	,328
	Equal variances not assumed			,343	39,862	,733	,048	,139	-,233	,328
car	Equal variances assumed	9,136	,004	-1,451	40	,155	-,190	,131	-,456	,075
	Equal variances not assumed			-1,451	36,907	,155	-,190	,131	-,456	,076
helicopter	Equal variances assumed	3,137	,084	-1,907	40	,064	-,286	,150	-,589	,017
	Equal variances not assumed			-1,907	39,672	,064	-,286	,150	-,589	,017
motorcycle	Equal variances assumed	17,778	,000	-3,162	40	,003	-,429	,136	-,702	-,155
	Equal variances not assumed			-3,162	36,000	,003	-,429	,136	-,703	-,154

plane	Equal variances assumed	12,163	,001	-2,011	40	,051	-,286	,142	-,573	,001
	Equal variances not assumed			-2,011	37,890	,051	-,286	,142	-,573	,002
river	Equal variances assumed	,000	1,000	-3,000	40	,005	-,429	,143	-,717	-,140
	Equal variances not assumed			-3,000	40,000	,005	-,429	,143	-,717	-,140
road	Equal variances assumed	7,357	,010	-1,364	40	,180	-,190	,140	-,473	,092
	Equal variances not assumed			-1,364	38,321	,181	-,190	,140	-,473	,092
sea	Equal variances assumed	3,752	,060	-,989	40	,329	-,143	,144	-,435	,149
	Equal variances not assumed			-,989	39,331	,329	-,143	,144	-,435	,149
ship	Equal variances assumed	18,246	,000	-4,602	40	,000	-,571	,124	-,822	-,320
	Equal variances not assumed			-4,602	33,483	,000	-,571	,124	-,824	-,319
sky	Equal variances assumed	3,137	,084	-1,907	40	,064	-,286	,150	-,589	,017
	Equal variances not assumed			-1,907	39,672	,064	-,286	,150	-,589	,017
train	Equal variances assumed	,423	,519	-2,609	40	,013	-,381	,146	-,676	-,086
	Equal variances not assumed			-2,609	39,928	,013	-,381	,146	-,676	-,086
truck	Equal variances assumed	12,163	,001	-2,346	40	,024	-,333	,142	-,620	-,046
	Equal variances not assumed			-2,346	37,890	,024	-,333	,142	-,621	-,046

APPENDIX-22

Week 9: Target Vocabulary T-Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
balloon	Equal variances assumed	,544	,465	-4,411	40	,000	-,571	,130	-,833	-,310
	Equal variances not assumed			-4,411	39,739	,000	-,571	,130	-,833	-,310
bike	Equal variances assumed	,471	,496	-3,430	40	,001	-,476	,139	-,757	-,196
	Equal variances not assumed			-3,430	39,862	,001	-,476	,139	-,757	-,196
boat	Equal variances assumed	32,792	,000	-2,591	40	,013	-,333	,129	-,593	-,073
	Equal variances not assumed			-2,591	32,524	,014	-,333	,129	-,595	-,071
bus	Equal variances assumed	25,657	,000	-4,128	40	,000	-,524	,127	-,780	-,267
	Equal variances not assumed			-4,128	32,894	,000	-,524	,127	-,782	-,266
car	Equal variances assumed	37,389	,000	-2,941	40	,005	-,381	,130	-,643	-,119
	Equal variances not assumed			-2,941	32,345	,006	-,381	,130	-,645	-,117
helicopter	Equal variances assumed	3,752	,060	-2,638	40	,012	-,381	,144	-,673	-,089
	Equal variances not assumed			-2,638	39,331	,012	-,381	,144	-,673	-,089
motorcycle	Equal variances assumed	18,246	,000	-4,602	40	,000	-,571	,124	-,822	-,320
	Equal variances not assumed			-4,602	33,483	,000	-,571	,124	-,824	-,319

plane	Equal variances assumed	2,477	,123	-5,022	40	,000	-,619	,123	-,868	-,370
	Equal variances not assumed			-5,022	38,549	,000	-,619	,123	-,868	-,370
river	Equal variances assumed	3,752	,060	-2,638	40	,012	-,381	,144	-,673	-,089
	Equal variances not assumed			-2,638	39,331	,012	-,381	,144	-,673	-,089
road	Equal variances assumed	5,888	,020	-2,283	40	,028	-,333	,146	-,628	-,038
	Equal variances not assumed			-2,283	39,132	,028	-,333	,146	-,629	-,038
sea	Equal variances assumed	13,559	,001	-3,558	40	,001	-,476	,134	-,747	-,206
	Equal variances not assumed			-3,558	36,359	,001	-,476	,134	-,748	-,205
ship	Equal variances assumed	27,016	,000	-5,970	40	,000	-,667	,112	-,892	-,441
	Equal variances not assumed			-5,970	28,471	,000	-,667	,112	-,895	-,438
sky	Equal variances assumed	5,333	,026	-4,472	40	,000	-,571	,128	-,830	-,313
	Equal variances not assumed			-4,472	37,647	,000	-,571	,128	-,830	-,313
train	Equal variances assumed	17,041	,000	-6,708	40	,000	-,714	,106	-,929	-,499
	Equal variances not assumed			-6,708	29,412	,000	-,714	,106	-,932	-,497
truck	Equal variances assumed	7,354	,010	-1,622	40	,113	-,238	,147	-,535	,059
	Equal variances not assumed			-1,622	39,027	,113	-,238	,147	-,535	,059

APPENDIX-23

Week 10: Target Vocabulary T-Test Results

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
| | | | | | | | Mean | Std. Error | 95% Confidence Interval of the Difference | |
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper
cloudy	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,067	-,136	,136
	Equal variances not assumed			,000	40,000	1,000	,000	,067	-,136	,136
cold	Equal variances assumed	9,136	,004	-3,990	40	,000	-,524	,131	-,789	-,258
	Equal variances not assumed			-3,990	36,907	,000	-,524	,131	-,790	-,258
cool	Equal variances assumed	88,889	,000	-2,828	40	,007	-,286	,101	-,490	-,082
	Equal variances not assumed			-2,828	20,000	,010	-,286	,101	-,496	-,075
foggy	Equal variances assumed	25,657	,000	-2,252	40	,030	-,286	,127	-,542	-,029
	Equal variances not assumed			-2,252	32,894	,031	-,286	,127	-,544	-,028
hot	Equal variances assumed	9,136	,004	-1,451	40	,155	-,190	,131	-,456	,075
	Equal variances not assumed			-1,451	36,907	,155	-,190	,131	-,456	,076
nice	Equal variances assumed	18,246	,000	-1,917	40	,062	-,238	,124	-,489	,013
	Equal variances not assumed			-1,917	33,483	,064	-,238	,124	-,491	,014
rainy	Equal variances assumed	7,354	,010	-1,947	40	,059	-,286	,147	-,582	,011
	Equal variances not assumed			-1,947	39,027	,059	-,286	,147	-,583	,011

snowman	Equal variances assumed	6,830	,013	1,235	40	,224	,143	,116	-,091	,377
	Equal variances not assumed			1,235	35,502	,225	,143	,116	-,092	,378
snowy	Equal variances assumed	3,137	,084	-,953	40	,346	-,143	,150	-,446	,160
	Equal variances not assumed			-,953	39,672	,346	-,143	,150	-,446	,160
sunny	Equal variances assumed	17,778	,000	-3,162	40	,003	-,429	,136	-,702	-,155
	Equal variances not assumed			-3,162	36,000	,003	-,429	,136	-,703	-,154
warm	Equal variances assumed	1,585	,215	-2,248	40	,030	-,333	,148	-,633	-,034
	Equal variances not assumed			-2,248	39,793	,030	-,333	,148	-,633	-,034
weather	Equal variances assumed	32,189	,000	-2,169	40	,036	-,190	,088	-,368	-,013
	Equal variances not assumed			-2,169	20,000	,042	-,190	,088	-,374	-,007
windy	Equal variances assumed	4,774	,035	1,040	40	,305	,095	,092	-,090	,280
	Equal variances not assumed			1,040	33,028	,306	,095	,092	-,091	,282

APPENDIX-24

Week 11: Target Vocabulary T-Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
cloudy	Equal variances assumed	10,519	,002	1,451	40	,155	,095	,066	-,037	,228
	Equal variances not assumed			1,451	20,000	,162	,095	,066	-,042	,232
cold	Equal variances assumed	,296	,590	-,303	40	,764	-,048	,157	-,365	,270
	Equal variances not assumed			-,303	39,997	,764	-,048	,157	-,365	,270
cool	Equal variances assumed	2,345	,134	1,240	40	,222	,190	,154	-,120	,501
	Equal variances not assumed			1,240	39,867	,222	,190	,154	-,120	,501
foggy	Equal variances assumed	,000	1,000	,913	40	,367	,143	,156	-,173	,459
	Equal variances not assumed			,913	40,000	,367	,143	,156	-,173	,459
hot	Equal variances assumed	1,790	,189	-,670	40	,506	-,095	,142	-,382	,192
	Equal variances not assumed			-,670	39,595	,506	-,095	,142	-,382	,192
nice	Equal variances assumed	9,136	,004	-1,451	40	,155	-,190	,131	-,456	,075
	Equal variances not assumed			-1,451	36,907	,155	-,190	,131	-,456	,076
rainy	Equal variances assumed	1,585	,215	-,642	40	,524	-,095	,148	-,395	,205
	Equal variances not assumed			-,642	39,793	,524	-,095	,148	-,395	,205

snowman	Equal variances assumed	9,850	,003	1,430	40	,160	,143	,100	-,059	,345
	Equal variances not assumed			1,430	30,828	,163	,143	,100	-,061	,347
snowy	Equal variances assumed	2,345	,134	,930	40	,358	,143	,154	-,168	,453
	Equal variances not assumed			,930	39,867	,358	,143	,154	-,168	,453
sunny	Equal variances assumed	1,386	,246	-,623	40	,537	-,095	,153	-,404	,214
	Equal variances not assumed			-,623	39,906	,537	-,095	,153	-,404	,214
warm	Equal variances assumed	1,063	,309	,917	40	,365	,143	,156	-,172	,458
	Equal variances not assumed			,917	39,969	,365	,143	,156	-,172	,458
weather	Equal variances assumed	,663	,420	,405	40	,688	,048	,118	-,190	,285
	Equal variances not assumed			,405	39,480	,688	,048	,118	-,190	,285
windy	Equal variances assumed	,389	,536	,315	40	,755	,048	,151	-,258	,353
	Equal variances not assumed			,315	39,965	,755	,048	,151	-,258	,353

APPENDIX-25

Week 12: Target Vocabulary T-Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
cloudy	Equal variances assumed	5,333	,026	-1,118	40	,270	-,143	,128	-,401	,115
	Equal variances not assumed			-1,118	37,647	,271	-,143	,128	-,402	,116
cold	Equal variances assumed	11,839	,001	1,581	40	,122	,190	,120	-,053	,434
	Equal variances not assumed			1,581	34,334	,123	,190	,120	-,054	,435
cool	Equal variances assumed	2,345	,134	-1,240	40	,222	-,190	,154	-,501	,120
	Equal variances not assumed			-1,240	39,867	,222	-,190	,154	-,501	,120
foggy	Equal variances assumed	3,137	,084	-,953	40	,346	-,143	,150	-,446	,160
	Equal variances not assumed			-,953	39,672	,346	-,143	,150	-,446	,160
hot	Equal variances assumed	17,778	,000	-2,108	40	,041	-,286	,136	-,560	-,012
	Equal variances not assumed			-2,108	36,000	,042	-,286	,136	-,561	-,011
nice	Equal variances assumed	20,463	,000	-2,445	40	,019	-,333	,136	-,609	-,058
	Equal variances not assumed			-2,445	35,823	,020	-,333	,136	-,610	-,057
rainy	Equal variances assumed	,000	1,000	-1,550	40	,129	-,238	,154	-,548	,072
	Equal variances not assumed			-1,550	40,000	,129	-,238	,154	-,548	,072

snowman	Equal variances assumed	1,585	,215	-,642	40	,524	-,095	,148	-,395	,205
	Equal variances not assumed			-,642	39,793	,524	-,095	,148	-,395	,205
snowy	Equal variances assumed	,358	,553	-1,229	40	,226	-,190	,155	-,504	,123
	Equal variances not assumed			-1,229	39,986	,226	-,190	,155	-,504	,123
sunny	Equal variances assumed	1,386	,246	-1,558	40	,127	-,238	,153	-,547	,071
	Equal variances not assumed			-1,558	39,906	,127	-,238	,153	-,547	,071
warm	Equal variances assumed	5,888	,020	-2,283	40	,028	-,333	,146	-,628	-,038
	Equal variances not assumed			-2,283	39,132	,028	-,333	,146	-,629	-,038
weather	Equal variances assumed	13,559	,001	-3,558	40	,001	-,476	,134	-,747	-,206
	Equal variances not assumed			-3,558	36,359	,001	-,476	,134	-,748	-,205
windy	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,156	-,316	,316
	Equal variances not assumed			,000	40,000	1,000	,000	,156	-,316	,316

APPENDIX-26

The Overall Dictation Activity: Target Vocabulary T-Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
bedroom	Equal variances assumed	17,778	,000	-2,108	40	,041	-,286	,136	-,560	-,012
	Equal variances not assumed			-2,108	36,000	,042	-,286	,136	-,561	-,011
kettle	Equal variances assumed	,296	,590	-,303	40	,764	-,048	,157	-,365	,270
	Equal variances not assumed			-,303	39,997	,764	-,048	,157	-,365	,270
kitchen	Equal variances assumed	,000	1,000	-1,550	40	,129	-,238	,154	-,548	,072
	Equal variances not assumed			-1,550	40,000	,129	-,238	,154	-,548	,072
livingroom	Equal variances assumed	1,386	,246	-,623	40	,537	-,095	,153	-,404	,214
	Equal variances not assumed			-,623	39,906	,537	-,095	,153	-,404	,214
shampoo	Equal variances assumed	12,163	,001	-2,011	40	,051	-,286	,142	-,573	,001
	Equal variances not assumed			-2,011	37,890	,051	-,286	,142	-,573	,002
soap	Equal variances assumed	,000	1,000	,302	40	,765	,048	,158	-,272	,367
	Equal variances not assumed			,302	40,000	,765	,048	,158	-,272	,367
sofa	Equal variances assumed	,423	,519	-,326	40	,746	-,048	,146	-,343	,247
	Equal variances not assumed			-,326	39,928	,746	-,048	,146	-,343	,247

television	Equal variances assumed	3,137	,084	-1,907	40	,064	-,286	,150	-,589	,017
	Equal variances not assumed			-1,907	39,672	,064	-,286	,150	-,589	,017
carnival	Equal variances assumed	3,137	,084	-1,907	40	,064	-,286	,150	-,589	,017
	Equal variances not assumed			-1,907	39,672	,064	-,286	,150	-,589	,017
home	Equal variances assumed	,000	1,000	,000	40	1,000	,000	,156	-,316	,316
	Equal variances not assumed			,000	40,000	1,000	,000	,156	-,316	,316
hospital	Equal variances assumed	2,345	,134	-1,240	40	,222	-,190	,154	-,501	,120
	Equal variances not assumed			-1,240	39,867	,222	-,190	,154	-,501	,120
park	Equal variances assumed	18,246	,000	-1,917	40	,062	-,238	,124	-,489	,013
	Equal variances not assumed			-1,917	33,483	,064	-,238	,124	-,491	,014
restaurant	Equal variances assumed	4,419	,042	-1,041	40	,304	-,143	,137	-,420	,134
	Equal variances not assumed			-1,041	38,735	,304	-,143	,137	-,420	,135
school	Equal variances assumed	4,419	,042	1,041	40	,304	,143	,137	-,134	,420
	Equal variances not assumed			1,041	38,735	,304	,143	,137	-,135	,420
balloon	Equal variances assumed	,000	1,000	-3,000	40	,005	-,429	,143	-,717	-,140
	Equal variances not assumed			-3,000	40,000	,005	-,429	,143	-,717	-,140
boat	Equal variances assumed	20,463	,000	-2,794	40	,008	-,381	,136	-,657	-,105
	Equal variances not assumed			-2,794	35,823	,008	-,381	,136	-,658	-,104
car	Equal variances assumed	,544	,465	-,368	40	,715	-,048	,130	-,309	,214
	Equal variances not assumed			-,368	39,739	,715	-,048	,130	-,309	,214
helicopter	Equal variances assumed	10,270	,003	-2,697	40	,010	-,381	,141	-,666	-,095
	Equal variances not assumed			-2,697	38,035	,010	-,381	,141	-,667	-,095
motorcycle	Equal variances assumed	12,163	,001	-2,011	40	,051	-,286	,142	-,573	,001
	Equal variances not assumed			-2,011	37,890	,051	-,286	,142	-,573	,002

plane	Equal variances assumed	2,345	,134	-1,240	40	,222	-,190	,154	-,501	,120
	Equal variances not assumed			-1,240	39,867	,222	-,190	,154	-,501	,120
road	Equal variances assumed	3,752	,060	-,989	40	,329	-,143	,144	-,435	,149
	Equal variances not assumed			-,989	39,331	,329	-,143	,144	-,435	,149
truck	Equal variances assumed	4,324	,044	-1,581	40	,122	-,238	,151	-,542	,066
	Equal variances not assumed			-1,581	39,604	,122	-,238	,151	-,543	,066
cool	Equal variances assumed	,000	1,000	-,913	40	,367	-,143	,156	-,459	,173
	Equal variances not assumed			-,913	40,000	,367	-,143	,156	-,459	,173
foggy	Equal variances assumed	7,354	,010	-1,622	40	,113	-,238	,147	-,535	,059
	Equal variances not assumed			-1,622	39,027	,113	-,238	,147	-,535	,059
hot	Equal variances assumed	,663	,420	-,405	40	,688	-,048	,118	-,285	,190
	Equal variances not assumed			-,405	39,480	,688	-,048	,118	-,285	,190
rainy	Equal variances assumed	3,752	,060	-2,638	40	,012	-,381	,144	-,673	-,089
	Equal variances not assumed			-2,638	39,331	,012	-,381	,144	-,673	-,089
snowy	Equal variances assumed	1,063	,309	-,917	40	,365	-,143	,156	-,458	,172
	Equal variances not assumed			-,917	39,969	,365	-,143	,156	-,458	,172
sunny	Equal variances assumed	,389	,536	-1,888	40	,066	-,286	,151	-,592	,020
	Equal variances not assumed			-1,888	39,965	,066	-,286	,151	-,592	,020
windy	Equal variances assumed	1,585	,215	-2,248	40	,030	-,333	,148	-,633	-,034
	Equal variances not assumed			-2,248	39,793	,030	-,333	,148	-,633	-,034
zoo	Equal variances assumed	17,041	,000	-1,789	40	,081	-,190	,106	-,406	,025
	Equal variances not assumed			-1,789	29,412	,084	-,190	,106	-,408	,027

APPENDIX 27

Unit 6 – My House

Target vocabulary percentages from the highest to the lowest

Experimental Group		Control Group		Groups' Difference	
Words	**%**	**Words**	**%**	**Words**	**%**
/bed/	87.30	/bed/	87.30	/ˈbɑːθ.ruːm/	31.74
/ˈsoʊ.fə/	85.71	/ˈsoʊ.fə/	84.13	/ʃæmˈpuː/	31.74
/ˈlɪv.ɪŋ ˌruːm/	77.78	/kʌp/	65.08	/tʃer/	30.16
/tʃer/	74.60	/ˈlɪv.ɪŋ ˌruːm/	60.32	/ˈgær.ɑːʒ/	26.99
/ˈgær.ɑːʒ/	73.02	/ˈbed.ruːm/	58.73	/ˈkɪtʃ.ᵊn/	19.05
/ˈpleɪ.ruːm/	68.25	/soʊp/	58.73	/ˈlɪv.ɪŋ ˌruːm/	17.46
/ʃæmˈpuː/	68.25	/ˈpleɪ.ruːm/	57.14	/ˈpleɪ.ruːm/	11.11
/ˈbed.ruːm/	66.67	/ˈteɪ.bᵊl/	57.14	/ˈtel.ɪ.vɪʒ.ᵊn/	9.52
/kʌp/	66.67	/ˈket.ᵊl/	55.56	/ˈbed.ruːm/	7.94
/ˈket.ᵊl/	63.49	ˈgær.ɑːʒ	46.03	/ˈket.ᵊl/	7.93
/ˈteɪ.bᵊl/	60.32	/tʃer/	44.44	/ˈteɪ.bᵊl/	3.18
/ˈkɪtʃ.ᵊn/	58.73	/ˈkɪtʃ.ᵊn/	39.68	/kʌp/	1.59
/soʊp/	58.73	/ʃæmˈpuː/	36.51	/ˈsoʊ.fə/	1.58
/ˈbɑːθ.ruːm/	57.14	/ˈtel.ɪ.vɪʒ.ᵊn/	30.16	/bed/	0.00
/ˈtel.ɪ.vɪʒ.ᵊn/	39.68	/ˈbɑːθ.ruːm/	25.40	/soʊp/	0.00

APPENDIX-28

Unit 7 – In My City

Target vocabulary percentages from the highest to the lowest

Experimental Group		Control Group		Groups' Difference	
Words	%	Words	%	Words	%
/zuː/	93.65	/zuː/	87.30	/ˈkæm.pəs/	31.74
/pɑːrk/	87.30	/pɑːrk/	80.95	/ˈkæf.eɪ/	23.81
/bæŋk/	82.54	/bæŋk/	79.37	/ˈkɑː.nɪ.vᵊl/	22.22
/ˈkæf.eɪ/	79.37	/hoʊm/	65.08	/ˈres.tə.rɑːnt/	20.63
/hoʊm/	60.32	/ˈkæf.eɪ/	55.56	/ˈhɒs.pɪ.tᵊl/	19.04
/ˈkæm.pəs/	57.14	/ˈhɒs.pɪ.tᵊl/	38.10	/mjuːˈziː.əm/	17.46
/ˈhɒs.pɪ.tᵊl/	57.14	/mjuːˈziː.əm/	36.51	/ˈʃɑː.pɪŋ/ /ˈsen.tɚ/	14.29
/mjuːˈziː.əm/	53.97	/ˈkæm.pəs/	25.40	/pɑːrk/	6.35
/ˈkɑː.nɪ.vᵊl/	47.62	/ˈkɑː.nɪ.vᵊl/	25.40	/skuːl/	6.35
/skuːl/	31.75	/skuːl/	25.40	/zuː/	6.35
/ˈres.tə.rɑːnt/	26.98	/ˈklæs.ruːm/	19.05	/hoʊm/	4.76*
/ˈʃɑː.pɪŋ/ /ˈsen.tɚ/	23.81	/ˈʃɑː.pɪŋ/ /ˈsen.tɚ/	9.52	/bæŋk/	3.17
/ˈklæs.ruːm/	17.46	/ˈres.tə.rɑːnt/	6.35	/ˈklæs.ruːm/	1.59*

*: Control group has higher scores

APPENDIX-29

Unit 8 – Transportation

Target vocabulary percentages from the highest to the lowest

Experimental Group		Control Group		Groups' Difference	
Words	%	Words	%	Words	%
/kɑːr/	90.48	/boʊt/	73.02	/ˈmoʊ.t̬ɚˌsaɪ.kᵊl/	52.38
/ʃɪp/	90.48	/kɑːr/	71.43	/ʃɪp/	52.38
/boʊt/	88.89	/bʌs/	61.90	/treɪn/	49.20
/treɪn/	87.30	/pleɪn/	46.03	/pleɪn/	39.68
/pleɪn/	85.71	/baɪk/	42.86	/bəˈluːn/	38.09
/bʌs/	82.54	/skaɪ/	39.68	/baɪk/	36.51
/baɪk/	79.37	/ʃɪp/	38.10	/skaɪ/	36.51
/skaɪ/	76.19	/treɪn/	38.10	/ˈrɪv.ɚ/	34.92
/ˈrɪv.ɚ/	66.67	/ˈhel.əˌkɑːp.tɚ/	33.33	/siː/	31.75
/ˈmoʊ.t̬ɚˌsaɪ.kᵊl/	65.08	/ˈrɪv.ɚ/	31.75	/ˈhel.əˌkɑːp.tɚ/	30.16
/ˈhel.əˌkɑːp.tɚ/	63.49	/bəˈluːn/	23.81	/roʊd/	30.16
/bəˈluːn/	61.90	/siː/	23.81	/trʌk/	26.98
/siː/	55.56	/trʌk/	23.81	/bʌs/	20.64
/roʊd/	50.79	/roʊd/	20.63	/kɑːr/	19.05
/trʌk/	50.79	/ˈmoʊ.t̬ɚˌsaɪ.kᵊl/	12.70	/boʊt/	15.87

APPENDIX-30

Unit 9 – Weather

Target vocabulary percentages from the highest to the lowest

Experimental Group		Control Group		Groups' Difference	
Words	**%**	**Words**	**%**	**Words**	**%**
/hɒt/	82.54	/hɒt/	63.49	/naɪs/	25.40
/wɔːrm/	58.73	/ˈfɒg.i/	41.27	/ˈsʌn.i/	25.40
/ˈsʌn.i/	52.38	/wɔːrm/	41.27	/ˈweð.ɚ/	20.64
/ˈfɒg.i/	50.79	/ˈsnoʊ.i/	38.10	/ˈreɪ.ni/	20.63
/ˈreɪ.ni/	50.79	/ˈwɪn.di/	31.75	/hɒt/	19.05
/ˈsnoʊ.i/	44.44	/ˈreɪ.ni/	30.16	/wɔːrm/	17.46
/koʊld/	41.27	/koʊld/	28.57	/koʊld/	12.70
/kuːl/	38.10	/kuːl/	28.57	/kuːl/	9.53
/naɪs/	38.10	/ˈsʌn.i/	26.98	/ˈfɒg.i/	9.52
/ˈweð.ɚ/	31.75	/ˈsnoʊ.mæn/	23.81	/ˈsnoʊ.mæn/	6.35*
/ˈwɪn.di/	26.98	/naɪs/	12.70	/ˈsnoʊ.i/	6.34
/ˈsnoʊ.mæn/	17.46	/ˈweð.ɚ/	11.11	/ˈwɪn.di/	4.77*
/ˈklaʊ.di/	11.11	/ˈklaʊ.di/	9.52	/ˈklaʊ.di/	1.59

*: Control group has higher scores

CURRICULUM VITAE

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Teaching Experience

2014-2019	EFL Teacher	Büyükkabaca 75.Yıl Primary School
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Research Articles

Published in national journals:

Şevik, M., Yalçın, A., Bostancıoğlu, F. (2018). University vocational school students' beliefs about foreign language learning. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, *46*, 325-343. doi:10.21764/ maeuefd.318634

Papers presented at international conferences

Şevik, M., Yalçın, A., & Bostancıoğlu, F. (2017). *University vocational school students' beliefs about foreign language learning*. Paper presented at the IV International Eurasian Educational Research Congress, Denizli, Turkey.

Şevik, M., Bostancıoğlu, F., & Yalçın, A. (2017). *English language teachers' perceptions about EBA*. Paper presented at the IV International Eurasian Educational Research Congress, Denizli, Turkey.

Book chapters

Şevik, M., Bostancıoğlu, F., & Yalçın, A. (2018). English language teachers' perceptions about EBA. In Arapgirlioğlu, H. et al. (Eds.) The Most Recent Studies in Science and Art (pp. 1419-1429). Ankara, Turkey: Gece Publishing.