

**THE EFFECT OF BLOG WRITING ON
TURKISH EFL HIGH SCHOOL
STUDENTS' WRITING AND
VOCABULARY DEVELOPMENT
PhD DISSERTATION
Senem CELLAT
Eskişehir 2019**

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PhD DISSERTATION

English Language Teaching Program

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ABSTRACT

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Department of Foreign Language Education

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Anadolu University, Graduate School of Educational Sciences, May 2019

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The primary objective of this dissertation study is to investigate the effect of blog writing on Turkish EFL high school students' writing and vocabulary development. Besides that, the study also scrutinizes the perceptions of the participants about the blog writing process from different aspects. The participants of the study comprise 35 students selected by non-random purposeful-convenience sampling. The study adopts Mixed-Method Explanatory Sequential Design in tune with the aims of the study. During the 18-week implementation session, the participants are asked to write a blog post each week and comment on the peers' posts each weekend. In order to investigate any improvement regarding their writing and vocabulary development, both pre and posttests are conducted in the study. The statistical calculations of quantitative data reveal that blog writing helps the participants to improve both their writing and vocabulary development after the implementation. Furthermore, the analyses of the qualitative data regarding students' perceptions about the blog writing process highlight favorable effects of the process on different aspects such as technology use, vocabulary knowledge, reading and writing skill, general world knowledge and culture, time management and interaction. Based on the findings of the study, several pedagogical implications and suggestions for further research are presented in the study.

Keywords: Blog, Writing and vocabulary development, Perceptions of Turkish EFL high school students.

ÖZET

BLOG YAZMANIN YABANCI DİL OLARAK İNGİLİZCE ÖĞRENEN TÜRK LİSE ÖĞRENCİLERİNİN YAZMA BECERİSİ VE SÖZCÜK GELİŞİMİNDEKİ ETKİSİ

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Bu tez çalışması, blog yazmanın yabancı dil olarak İngilizce öğrenen Türk Lise öğrencilerinin yazma becerileri ve sözcük gelişimi üzerindeki etkisini araştırmaktır. Bunun yanı sıra bu çalışmada katılımcıların blog yazma süreci hakkındaki algıları farklı açılardan derinlemesine incelenmektedir. Çalışmanın katılımcıları rastgele olmayan bir amaç-kolaylık örneklemeyle seçilen 35 öğrenciden oluşmaktadır. Çalışmanın amaçlarına uyumlu olarak Açıklamalı Sıralı Karma Yöntem benimsenmiştir. 18 haftalık uygulama süreci boyunca, katılımcılardan her hafta bir blog gönderisi yazmaları ve her hafta sonu da akranlarının iki gönderisi üzerinde yorum yapmaları istenmiştir. Katılımcıların yazma becerileri ve sözcük bilgisinde herhangi bir artış olup olmadığını incelemek için ön ve son testler uygulanmıştır. Nicel verilerin istatistiksel hesaplamaları blog yazmanın öğrencilerin hem yazma becerilerini hem de sözcük gelişimini artırmaya yardımcı olduğunu ortaya çıkarmıştır. Buna ek olarak, öğrencilerin blog yazma süreci hakkındaki algılarıyla ilgili nitel verilerin analiz sonuçları, bu sürecin katılımcıların sözcük bilgileri, okuma ve yazma becerileri, genel dünya bilgileri ve kültürleri, zaman yönetimi ve etkileşimleri gibi değişik açılardan olumlu bir etkiye sahip olduğunu vurgulamaktadır. Çalışmanın sonuçlarına bağlı olarak çeşitli pedagojik önerilerde ve gelecek çalışmalar için tavsiyelerde bulunmaktadır.

Anahtar Sözcükler: Blog, Yazma becerisi, Sözcük gelişimi, Yabancı dil olarak İngilizce öğrenen Türk lise öğrencilerinin algıları.

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Senem CELLAT

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27/05/2019

STATEMENT OF COMPLIANCE WITH ETHICAL PRINCIPLES AND RULES

I hereby truthfully declare that this thesis is an original work prepared by me; that I have behaved in accordance with the scientific ethical principles and rules throughout the stages of preparation, data collection, analysis and presentation of my work; that I have cited the sources of all the data and information that could be obtained within the scope of this study, and included these sources in the references section; and that this study has been scanned for plagiarism with “scientific plagiarism detection program” used by Anadolu University, and that “it does not have any plagiarism” whatsoever. I also declare that, if a case contrary to my declaration is detected in my work at any time, I hereby express my consent to all the ethical and legal consequences that are involved.

Senem CELLAT

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LIST OF ABBREVIATIONS

EFL	: English as a Foreign Language
ESL	: English as a Second Language
ELT	: English Language Teaching
FCE	: First Certificate in English
L1	: First Language
L2	: Second Language
NL	: Native Language
NVLT	: New Vocabulary Levels Test
VLT	: Vocabulary Levels Test
VLsT	: Vocabulary Levels Test

1. INTRODUCTION

1.1. Background to the Study

In the 21st century, digital technology has become ubiquitous in human life. As for its history, it dates back to mid 1980s in which digital era came out with lots of technological facilities such as CD players, video games, internet, e-mail, etc. With the emanation of digital technology, a new generation called *Digital Natives* sprang out (Prensky, 2001). Prensky (2001), who is an expert in gamification in education area, alleged that digital technology has disseminated swiftly for the last century; hence, it is not radical to say that this century is also called as *Digital Age* (p.1). As a consequence of the digital age, today's students seem totally different than the ones in the past. In other saying, the students in the current age have spent most of their times with various digital technologies such as computers, mobile phones, digital games, etc. As a natural result of this process, students of today are highly competent in using computers, digital games and the internet. Through their engaging in technology so frequently, they started to take advantage of it in many areas such as drawing information from different digital sources, using it on different online platforms and so on. In this way, they shape their way of thinking and build new thinking patterns in accordance with technological tools (Prensky, p. 2). In their new thinking patterns, they can behave in versatile manners by carrying out multi tasks at the same time. For instance, they are able to exert visual material within audial materials or vice-versa. Unlike digital natives, teachers born in the pre-digital age might not be considered as much competent as the students applying technologies in their daily lives. That is why they are called as *Digital Immigrants* (Prensky, 2001, p.2). Broadly, digital immigrants are discriminated from digital natives from their deficiency in technology use. As a metaphoric expression, Prensky names this deficiency an *accent* of digital immigrants. This means that no matter how hard digital immigrant teachers try to speak the language of technology, there will be still an accent which is dissimilatory from a native speaker of that language. Therefore, it seems inevitable for teachers to integrate technological devices into their teaching experience in order to communicate with students in the language of technology, and this might be achieved only by designing or adopting technological materials according to the language of digital natives.

The primitive form of using technology in language education was Computer Assisted Language Learning (CALL) which was coined by Levy (1997) and described as an application of computer in language teaching and learning (p. 1). Use of technology for

learning and teaching language proceeded with a pedagogical model of Flipped classrooms. Flipped classrooms appeared for the aim of enriching teaching experience by giving interactive exercises, offline lectures or activities which are executed outside the classroom environment (Hawks, 2014, p. 264). In the following years, with the advent of the internet, it was possible to do tasks in multiple ways both inside and outside the classroom. The use of internet in education introduced the term *E-Learning* which is generally defined as any kind of learning via the internet (Cheng, 2006). The recent application of e-learning has been executed by Web 2.0 tools (Downes, 2005). Weblogs, twitter, wikis and other social networks are known as some of the most common applications of Web 2.0 tools. These tools can be used in either synchronous or asynchronous ways in education. Synchronous environment is procured by using Web 2.0 tools at the same time of teaching with face-to face communication such as online discussion and video conferencing. However, when Web 2.0 tools are used irrespective of time and place, it indicates a case of asynchronous application. It means that via asynchronous application, it is possible to communicate with someone in any place and any time. Weblogs, wikis, twitter and edmodo could be indicated as some notable asynchronous applications of Web 2.0 tools. The basic underlying rationale of using asynchronous applications is to trigger social interaction among the practitioners within a virtual community (Huang, Chao and Lin, 2008). Now that in these applications there is no exigence to have contact at the same time, it is possible for the practitioners to express their ideas or comments without any time limitation. Put differently, this means that on the education platform since students are not required to give instant response, they can complete the tasks later at their own pace; thereby having a chance to produce greater language output. Because of these facilities, asynchronous applications seem to be more practical for teaching and learning items as compared to synchronous applications.

Web 2.0 tools have been embraced by many instructors and teachers since they have quite many potential facilities for educational uses. Ajan and Hartshorne (2008) suggest that Web 2.0 tools could make the teaching and learning process more attractive than ever before because of their great beneficial potentials such as having low cost, saving time, accessibility and providing a platform for interaction. The other promising advantage of using Web 2.0 tools in education is that they facilitate communication and collaboration among practitioners (O'Reilly, 2005). Hence, via Web 2.0 tools, it is convenient to

conduct collaborative tasks and share ideas in meaningful contexts (Stevenson and Hedberg, 2013). Last but not least, by using web 2.0 tools in education, the role the teacher radically changes. Instead of being an authority in the class, teacher's role transforms to a facilitator who supports learners in finding and creating their own material (Yang, 2011). Owing to all these facilities, Seitzinger (2006) describes Web 2.0 tools as constructivist practices on the education platform. As one of the most popular asynchronous and constructivist applications, weblogs have been used in education for two decades. The first instance of weblog application appeared on a news site in 1998 (Long, 2002). Later, in 2004 Peter Merholz, a web developer, coined the term *blog* as a shortened form of weblog in his site *Peterme.com*. Instead of weblog, the term *blog* has been favourably used thereafter. In this aspect, the term *blog* is adopted throughout the current study. In 2004, Blood (2004) named the action of posing texts and commenting on them via a blog website as *blogging* and this term took place in dictionaries in the following years. Therefore, the term *blogging* is used in the present study to mean writing and commenting on the texts via blog platform.

Tyagi (2012) states that even though using blog as a Web 2.0 tool is not novel, it is still in its infancy in the education field (p. 31). Blogs differ from other Web 2.0 tools in that posts primarily focus on an individual's identity as a writer and his/her viewpoint rather than the topic itself (Sun and Chang, 2012, p.43). The underlying rationale for using blogs in education has been explained by different researchers. For instance, Richardson (2009) states that blogs should be used in education in order to "collaborate with subject-specific experts, to archive learning, to share results of experiments, and to publish student work" (p. 32). Besides these facilities, blogs also give a potential to create an e-class or e-portfolios in education (p. 20-25). Guo (2013) also pinpoints that blogs are appropriate tools to state and exchange ideas as well as communicate among the practitioners of it (p. 3). With this expressivist application, blog use has a theoretical base of constructivism (Murray and Hourigan, 2008). To be more specific, blogs provide a platform on which learners interact, discuss and collaborate with other people, and teachers follow students' progress without restriction of classrooms environment.

With the proliferation of blog technology in education, much research has been devoted to inquire any impact of blog use on language teaching (e.g. Akdağ and Özkan, 2017; Arslan and Şahin- Kızıl, 2010; Campbell, 2003; Fellner and Apple, 2006; Lin, 2015; Lin and Hsu, 2011; Nguyen, 2012; Pinkman, 2005; Zhaou, 2015). The studies

sought to explore the impact of blogging on either first language or second language teaching. However, the results of the studies revealed different findings in terms of its effect on language development. Based on blog's inherent idiosyncrasy, a vast majority of the research studies examined the impact of the blogs on writing development. Now that blogging requires writing an idea and commenting on it, it may seem that blogging inherently supports writing development. However, it was not always the case in some research studies (e.g. Kavandı, 2012; Lin, Groom and Lin, 2013). To be more specific, it can be said that while it has generally been agreed upon that blog writing has a facilitating effect on the writing skill, there are still some studies indicating no superior effect of blogging on practitioners' writing quality. Therefore, more research studies should be conducted in order to have a deep insight about blogs' effect on writing development of language learners. In addition to this, when the literature is reviewed, it is seen that the majority of the studies examined the impact of blogging on a single specific language skill such as writing or reading (e.g. Cequena, 2013; Cheng, 2012; Çiftçi, 2009; Ekinci, 2017; Glymph, 2012; Jones, 2016; Kayacan, 2017; Sun, 2010; Özdemir and Aydın, 2015). A relatively few research studies focused on examining the impact of blogging on the vocabulary knowledge of learners as well as their language skills (e.g. Dickinson, 2013; Lerma, 2013; Noytim, 2010). Therefore, the present thesis aims to contribute to the area of language teaching by examining the impact of blog use on two dependent variables; writing and vocabulary development of learners.

1.2. Statement of Problem

In language learning, vocabulary is considered as a touchstone of all skills; therefore, vocabulary knowledge plays a crucial role especially in the language proficiency and communicative competence in the EFL/ESL environment (Nation,1990; Staehr, 2008, 2009). Researchers in the field of vocabulary learning have mentioned two distinctive aspects of vocabulary knowledge: *receptive* and *productive* vocabulary (Haastrup and Henriksen, 2000; Qian, 1999; Wesche and Paribakht, 1996). While receptive vocabulary refers to the *comprehension* part of a word, productive vocabulary indicates the *usage* dimension of a word (Nation, 2001). Receptive vocabulary knowledge of learners has been commonly assessed in receptive skills such as reading and listening; likewise, productive vocabulary of learners has been measured in productive skills such as writing and speaking (Henriksen, 1999; Webb, 2005). It is asserted that as compared

to receptive vocabulary, productive vocabulary is much more challenging to develop (Webb, 2005; Yüksel, 2012); hence, learners' receptive vocabulary is inherently quite larger than their productive vocabulary (Nizonkiza, 2016; Karakoç and Köse, 2017; Yüksel, 2012). Based on this claim, it seems urgent that students' productive vocabulary knowledge be developed with different activities (Zhai, 2016, p.758). As an authentic way to activate productive vocabulary within context, a writing activity might be an efficient way (Webb, 2005, p. 34) since some previous studies revealed that using vocabulary in context contributes to activate productive vocabulary of learners (Hu and Nation, 2000). Based on this comment, it may be considered that writing activities are precipitating for vocabulary development. In order to investigate this possible relation, a good many research studies have been conducted in the literature (Engber, 1995; Ganji and Beikian, 2013; Hu and Nation, 2000; Koda, 1993; Pudra, 2009; Sadeghi and Dilmaghani, 2013). A clear majority of these studies have revealed a strong positive relationship between vocabulary size and writing skills; however, there are still a few studies which do not indicate a tight correlation between vocabulary size and writing development (e.g. Pudra, 2009). Therefore, whether any kind of writing applications trigger vocabulary development still remains ambiguous in the literature.

As compared to other skills, it is not radical to say that writing is the most challenging skill for language learners (Klimova, 2011; Ji and Qiao, 2018; Salma, 2015). This might be explained that above the sentence level, writing requires some more knowledge such as sentence structure, punctuation, layout, vocabulary, register, spelling, cohesion and coherence (Klimova, 2011). Moreover, writing involves employing various thinking skills such as knowing how to support an idea and organize a text (Schoonen, et. al., 2003) and affective factors (e.g. motivation to write) besides linguistic knowledge (Smetanova, 2013). Despite these difficulties, writing is of utmost significance in language teaching and should be excelled by every language learner in a sort of way (Worley, 2008). For this reason, teachers in language classes need to find different ways and provide a variety of materials in order to mitigate all the challenges. However, it is not so easy for language teachers to develop different materials due to time constraints of lessons. Besides these difficulties, a rising number of students in classrooms have limited L2 communication substantially. Furthermore, EFL learners do not have enough opportunities to receive foreign language input and to use it out of classroom (Vaughan, et.al, 2011). In general, L2 learners have limited time to engage in writing activities and

the classrooms tend to be the only place to use language for L2 learners. Writing activities have also been performed in a paper-pencil format, which is not considered as practical application. Furthermore, writing practices in a classroom atmosphere have been found tedious by most of the students nowadays (Smetanova, 2013). A solution for all these mentioned problems might be creating an atmosphere where students have an opportunity to produce foreign language actively with the aim of communication both inside and outside of the classroom. In this regard, Web 2.0 tools might be a judicious solution for L2 writing problems. It is because with the advent of Web 2.0 technology, learners may feel the need of practicing target language via internet at anytime and anywhere convenient (O'Reilly, 2005). Since this technology has offered multiple ways for learners to use the target language both inside and outside the classroom without time limitation, it is possible for learners to both read and write a text asynchronously in these days. Furthermore, with the internet technology, it is possible for learners to reach their teachers or peers instantly for the aim of communication. Lastly, with the use of Web 2.0 tools in education, the novelty factor which suppresses the drawbacks of traditional learning environment comes into play in the learning process. Based on these reasons, the present study makes an attempt to interrogate if blog writing as a kind of a Web 2.0 tool application has any effect on both writing and vocabulary development of EFL learners. By conducting such a study, it is aimed to contribute to the growing body of research on the value of blog use on learners' both writing ability and vocabulary development which are considered as essential parts of language development.

1.3. The Purpose of the Study

Vocabulary is considered as a vital element among four language skills. Therefore, it is a need to accelerate learners' vocabulary knowledge by various activities. When the literature is reviewed, it is seen that many language learners, especially less proficient learners, have less productive vocabulary than receptive vocabulary (Llach and Gallego, 2009; Nizonkiza, 2016). This means that it might be quite easy for L2 learners to recognize vocabulary in reading and listening activities; however, they may not be able to produce vocabulary in writing and speaking activities as much as they do in listening and reading activities. In this regard, it seems to be significant for language teachers to focus on enhancing students' productive vocabulary more. One of the ways to increase students' productive vocabulary is to encourage them to use target words in a context

such as writing about a topic. By writing about a topic, students can have a chance both to use vocabulary in a context and to improve their writing skills (Maskor and Baharudin, 2016, p. 268)

Writing in a proficient way has a fundamental role in foreign language proficiency since writing is one of the most difficult skills to be developed. In a traditional classroom environment, writing sessions are conducted under the guidance of a teacher. The teacher poses a question and asks students to write a text on a paper. Following that, papers are collected and evaluated mostly by the class teacher. However, this process takes too much time and it is difficult to complete the whole text within a limited class hour. In his thesis, Kaya (2013) stated that most of the ELT teachers in Turkey abstain from asking students to write an essay in a classrooms atmosphere because of time constraints. Moreover, even if these teachers assign the writing tasks as homework, they may not have a chance to give feedback to the assignments due to restricted class hours and spending extra time on them. What is worse, when learners are 12th grades, they tend to ignore writing tasks because they concentrate on university entrance exams and see the writing tasks as time consuming (Kaya, 2013, p.72). Dealing with students' illegible hand writing constitutes another problem for teachers in writing lessons. Students' prejudice about the difficulty of writing skill also leads to their unwillingness to write (Sa'diyah, 2010, p.164). Therefore, it seems crucial for language teachers to take a step to eliminate all these challenges.

Inasmuch as many students have already been using Web 2.0 technology in their everyday life, it is reasonable to integrate this technology into their learning practices as well. As one of the Web 2.0 tools, blog has come into use by many language teachers in order to develop students' writing skill. The majority of the research studies in literature indicate that language learners react to using blog writing in a positive way since it is a practical, asynchronous and motivating application for them (Guo, 2013; Jones, 2016; Kavandı, 2012, Kajder and Bull, 2004). It was also seen that L2 learners would rather write their ideas online than write in paper-pen format. It is because they can write their texts and make comments on the them online at anytime and anywhere (Sun, 2010). Furthermore, it has been generally agreed that using blogs triggers learner autonomoy since learners would be responsible for their own learning by revising and changing some parts in their texts (Blankenship, 2011; Pinkman, 2005).

Besides all its popularity, blog technology is still needed to be explored in language classrooms in order to have more generalizable results about its impact on language learning. In this aspect, both based on the problems mentioned and due to the paucity in the literature, the current research study has an attempt to investigate the effect of blog writing on learners' writing and vocabulary development in detail. After the investigation, perceptions of learners about blog implementation are important to probe the process from their perspectives. Thus, in order to see their reflection and make some decisions on blog use for further practices, the study also investigates perceptions of learners about blogging writing process.

1.4. Significance of the Study

The significance of this study results from delimitations of previous research studies and therefore, a need to conduct a new study. First of all, compared to a large body of research examining the effect of blogging on language areas abroad, there is a quite limited number of research studies in Turkish context (Aydın, 2014). In this respect, more research studies should be held in order to provide more insight with the use of blogs in the Turkish context. In addition to this, the participants in the studies held in Turkey were mostly university students. However, there are relatively few research studies which examine high school students' use of blogs and effect on writing ability and vocabulary knowledge (e.g. Akdağ and Özkan, 2017). High school students are considered as adolescents, and thus their reaction to blog writing might be different from university students who can be considered as young adults. Therefore, a study conducted with high school students might reveal different results as compared to the studies conducted with university students.

Second, although the literature mostly highlights the facilitating effect of blog writing on writing and its superiority to paper-pen format (Jones, 2016; Guo, 2013; Kajder and Bull, 2004; Zhaou, 2015), there are still several studies which did not indicate any enhancing effect of blog writing on foreign language learning (e.g. Cheng, 2012; Gonzalez-Bueno and Perez, 2000). Like the writing skill, the effect of blogging on vocabulary development is still controversial, and there is a paucity in terms of studies examining the impact of blogging on vocabulary knowledge of learners. Therefore, there is a need to conduct more studies to have more generalizable results regarding any impact of blog writing on learners' both writing and vocabulary development.

Third, the previous studies focused on the effect of blogging on only one aspect of language such as writing (Jones, 2016; Guo, 2013; Kajder and Bull, 2004; Zhaou, 2015). Thus, it is considered as limited in terms of scope. However, the effect of blogging should be examined in diverse linguistic dimensions such as vocabulary knowledge besides writing quality to have a general picture of blog writing in language learning.

Fourth, it has been seen that there is a poverty of experimental studies which examine the impact of blog writing on language skills. The majority of studies have made use of only qualitative data in order to investigate the impact of blog writing on language skills (Guo, 2013; Jones, 2016; Lin, Groom and Lin, 2013; Tekinarslan, 2008; Şahin and Arslan, 2012). However, utilizing only qualitative data may not suffice to have objective results of a study (Creswell, 2005). Instead, quantitative data as well as qualitative data are advisable to obtain more detailed information about the blogging phenomenon. Therefore, there is a need to conduct a mixed methods study with both quantitative and qualitative data in this particular area.

In most of the research studies, the participants received feedbacks from either the teacher or their peers based on a writing rubric. It means that there is a teacher or peer intervention on learners' writing process. Moreover, the focus shifts from content to correctness of the text when it is evaluated on rigid criteria of a rubric by either the teacher or peers. Therefore, in order not to offend learners and demotivate them by mechanical feedbacks, it is advisable to give feedbacks on the content of the text rather than the accuracy of it (Ferris, 1995). In this way, giving feedbacks turns to an encouraging and motivating task which leads learners to think critically and behave creatively in constructing the text again based on different perspectives (Strake and Kumar, 2010). Accordingly, in the current study participants are asked to read each other's written texts on a blog platform and make comments on the content instead of the mechanics of the texts.

Last but not least, there is a dearth of empirical data for the impact of blog writing on both writing and vocabulary development of English language learners in the long term. Long-term studies provide an insight with regard to an overall picture of a particular application process, thereby having generalizable results related to implementation in the end (Creswell, 2005). For this reason, the current study is conducted in one semester (18 consecutive weeks) to monitor implementation in the long term.

1.5. Research Questions

Based on the scarcity of the research studies regarding blog use on language development in the Turkish context, there is a need to further examine whether blog writing helps Turkish high school students to develop their writing ability and vocabulary knowledge. Furthermore, the perceptions of adolescents about blog writing process may reveal a valuable idea about whether or not to pursue the application in the future. In line with these reasons, the study posed the following research questions:

- 1) Does blog writing help Turkish EFL high school students to develop their writing ability?
- 2) Does blog writing help Turkish EFL high school students to develop their vocabulary knowledge?
- 3) What are the perceptions of Turkish EFL high school students about blog writing process?

1.6. Rationale for the Study

By conducting such a study, it is aimed to shed light into the literature from different perspectives.

First and foremost, conducting such a study will give a practical experience to EFL teachers and facilitate their pedagogical practices. Seeing the consequences of implementation of blog writing in language classes, EFL teachers could revise and improve their teaching practices and may make exemplary contributions to instructional improvement in the ELT area. For example, a teacher might include an online class into her future course and ask students to practice writing skill via blogs. If any facilitating effect of blogs are revealed in the study, it might promote language teachers to incorporate other Web 2.0 tools into their lessons. Hereby it becomes possible to appeal to students with different learning styles (Rakap, 2010).

Second, this study is implemented in a state high school; thus, the findings of this research study might shed light to further studies conducted in similar settings. Accordingly, language educators and authorities in educational institutions might benefit from the findings by drawing a conclusion regarding the impact of blog writing on both the writing skill and vocabulary development.

Third, by implementing blogs in foreign language teaching, it would be possible to foster use of technology in the classroom environment as well. To be more specific, practicing the internet technology in the lessons is one of the goals that the Turkish Ministry of National Education (MNE) has desired to attain in recent years. In 2012, Turkish Ministry of National Education conducted a project called Fatih Project (Movement of Enhancing Opportunities and Improving Technology) in education. This project has aimed to make use of any technologies in education in order to enrich lessons' content and create an information community. In tune with the aim of the project, instead of blackboards the majority of the schools have been equipped with smart boards in the classes and tablet PCs were delivered to the students in order to follow the lessons. Through this renovation in education, schools in Turkey started to engage in using different technologies in the lessons. In line with the Fatih project, in the current study the participants have been encouraged to use blogs as an information technology in their language learning process. Moreover, by conducting such a study, the participants will have a chance to use their tablet PCs at school, mobile phones and computers at home in order to reach their blog accounts. Therefore, it can be said that the current study might support active use of technology in education in keeping up with the Fatih project.

Lastly, by examining the perceptions of adolescents about blog use, the current study seeks to make contribution to the literature in terms of identifying any impact of blog writing process in different aspects such as time management, vocabulary development, reading skill, general world knowledge and culture, interaction and other aspects. By scrutinizing the feedbacks of the learners, it is aimed to identify any advantages and disadvantages of the application and to what extent if they want to pursue this application in their following lessons. In this way, some precautions may be taken for further applications by both some other teachers and researchers as well. Lastly, it can be said that the results of the study can reveal valuable ideas for the researcher of the study in order to pursue or not to pursue this application in her following lessons.

1.7. Limitations

Based on the scope of the study, this study is restricted to examining the impact of blog writing only on writing and vocabulary development of EFL learners. Therefore, the results will be interpreted with regard to only writing ability and vocabulary knowledge of EFL learners.

The participants of the study is limited to Turkish EFL high school students in a state school of Eskişehir. Therefore, it may be difficult to generalize results to all high school students in Turkey. Although the participants consist of the students studying in different grades in the same high school, they were included in the study on the condition that they had vocabulary knowledge at minimum 2000 receptive word level, which is thought a crucial threshold to be efficient in language skills (Llach and Terrazas, 2009), and had an ability to write a comprehensible paragraph regarding their thoughts.

The implementation session lasts one semester (18 consecutive weeks) of the 2016-2017 academic year. Thus, the effect of blogging is observed within this period of time, and the results of the study cannot be generalized to a more extended time frame. That is to say, the implementation session with more than one semester might reveal different results regarding the blog effect on language development.

As the last limitation, it is not possible to control all factors that might intervene in the blogging process. To be more clear, the implementation of the study lasts one academic semester and the participants are required to attend their regular English lessons within this time period. Therefore, they might be exposed to extra language input both in and out of the class throughout the blogging process. That is, it might cause an intervening factor in terms of writing and vocabulary development of the participants. However, it is not possible to control this possible effect in the study.

1.8. Definitions of the Terms

Weblog (Blog): It is an online journal in which an individual can continuously update his/her own words, ideas, and thoughts through software that enables one to easily do so (Campbell, 2003, p.1). Richardson (2009) claims that weblogs create a platform where learners express their ideas, interrogate the topic by searching detailed information, comment on the entries and have conversation based on the comments (p. 1).

Web 2.0 tools: It is defined as "a Web technology that aims to enhance creativity, information sharing and collaboration among users" (Tu, Blocher and Ntoruru, 2008). It is accepted as the second generation of World Wide Web (Başal and Aytan, 2014, p.372) in which students gain a great engagement, control and responsibility in the learning process (Blankenship, 2011).

Synchronous learning environment: It is a kind of e-learning application which helps practitioners communicate and collaborate *at the same time* irrespective of location. It necessitates online connection among the users. Hence, in this environment, it is required to be always online at the same time of communication. Voice-based chats, video conferencing, online lectures and discussion are some of the examples for synchronous tools.

Asynchronous learning environment: It is a kind of e-learning application through which practitioners can communicate and collaborate *at different times and locations* according to their own pace. Hence, it gives practitioners the opportunity to write something freely whenever and wherever they want. In this environment, one does not need to be always online in order to communicate with others or to get any information; thus, it can be applied either online or offline. E-mails, wikis, and blogs are known as some of the applications of asynchronous learning environment.

Constructivism: Constructivism is composed of Piaget's cognitivism (1955) and Vygotsky's (1978) social culturalism, and it implies learners' active construction of knowledge as a result of interaction with others. In this process, the learner is an active developer of knowledge through communicating with others. It means not only is each person unique in terms of interpretation of the world, but meaning is also socially constructed by communicating with each other.

Based on the scope of the study, Literature Review Section presents an overview of relevant literature about vocabulary, writing, technology, blog and research studies regarding blog application. Methodology section focuses on the research design, participants, instruments, data collection and data analysis of the study. Results section presents the results of the data analyses within the frame of each research question. Lastly, Conclusion, Discussion and Implications section provides a comprehensive conclusion including the summary of the study, discussion of the findings, pedagogical implications and suggestions for further studies.

2. LITERATURE REVIEW

2.1. Vocabulary and its Dimensions

Vocabulary knowledge is considered as a benchmark for proficiency in all language skills (Nation, 2011). That is to say, it is accepted as a touchstone of all language skills in both L1 and L2 (Nation, 1990; Staehr, 2008). Schmitt furthermore asserts that vocabulary knowledge is of paramount importance to L2 learners' communicative competence (p. 55). However, as compared to L1 situations, there is a challenge in L2 situations since L2 learners do not have as many learning opportunities to get target vocabulary as they have in their native languages. Moreover, L2 learners have limited social interaction to use the target vocabulary. Therefore, the extent of vocabulary knowledge is accepted as one of the most distinctive factors between L2 learners and native speakers of English (Laufer, 1998, p. 255). Based on this claim, it is suggested that L2 learners should devote much time to get a sufficient amount of vocabulary in order to both read and write in the target language. However, it is not that much easy, and thus vocabulary development still constitutes one of the largest obstacles in the foreign language learning process (Mokhtar, 2010).

The term *vocabulary* was defined in different ways by different researchers (Nation, 1990, 2001; Milton, 2009; Lewis, 1993; Schmitt, 2001); nevertheless, there is a consensus on the fact that vocabulary comprises of a single item or chunk of lexical items conveying a meaning. As for vocabulary knowledge, Nation (1990) further suggests that knowing a word does not mean only to know the meaning of the word but also to know its written and spoken form, grammatical features, collocations, register, associations, and frequency. In other words, vocabulary knowledge requires knowing the form, meaning and usage of a word (Nation, 2011). Therefore, it seems to be a need to examine vocabulary knowledge from different aspects depending on peculiar cognitive processes. As mentioned by previous studies, vocabulary knowledge includes two different cognitive aspects; receptive and productive vocabulary (e.g. Laufer, 1998; Nation, 2001; Qian, 1999; Web, 2005; Wesche and Paribakht, 1996; Schmitt, 2001; Stuart Webb, 2009). While receptive vocabulary can be generally defined as the number of lexical items that can be recognized by learners, productive vocabulary includes the usage dimension of lexical items (Haastrup and Henriksen, 2000; Qian, 1999; Web, 2005; Wesche and Paribakht, 1996). Maskor and Baharudin (2016) describe the receptive dimension of vocabulary as only recognition and comprehension of words in reading and listening

activities without actively using the words (p. 263). However, the productive vocabulary knowledge includes the use of words in productive skills such as speaking and writing besides recognition of the words (Web, 2005). This means that receptive vocabulary knowledge precedes productive vocabulary knowledge, and furthermore; productive vocabulary overarches with receptive vocabulary knowledge. In parallel with this assumption, Schmitt (2000) and Nation (2011) suggest that vocabulary acquisition first starts with understanding the meaning defined as receptive knowledge and thereafter ends with producing vocabulary in the context of speaking and writing, which is known as productive vocabulary.

As an overall argument, it may be concluded that productive vocabulary is deemed as more challenging than receptive vocabulary knowledge (Webb, 2005). However, the opposite may be true as well. To be more clear, a learner may write a word correctly or in appropriate context without understanding of the meaning of the word (Maskor and Baharudin, 2016, p. 264). Moreover, a learner can pronounce and use a word correctly in a context but cannot recognize the word in the written text. Therefore, both dimensions of vocabulary knowledge should be examined to give a comprehensive picture of vocabulary knowledge (Nation, 2001; Meara, 2002; Schmitt, Ching, and Garras, 2010, Qian, 1999). Wesche and Paribakht (1996) further stated that these two dimensions of vocabulary knowledge are complementary for one another. Thus, it is required to measure vocabulary knowledge based on two different dimensions (Qian, 1999; Wesche and Paribakht, 1996).

In tune with these two dimensions, assessing vocabulary from two perspectives has been important in language teaching. As for assessing receptive vocabulary, Nation (2001) states that the vocabulary size of a learner is a good indicator of how many words is known by a learner at recognition level. Nation (2001) also suggests that vocabulary size indicates the *lexical competence* of a learner. Since lexical competence indicates the size of words comprehended by a learner, it shows the receptive knowledge of a learner. There are various tests to measure the receptive vocabulary of a learner depending on foci of the studies. However, the best known test is a revised version of Vocabulary Levels Test (VLT) by Schmitt, Schmitt and Clapham (2001). This test was originally composed by Nation in 1990 based on a frequency list of vocabulary. Later, Schmitt and his colleagues (2001) revised and reconstructed the test. The test was employed and validated as an appropriate measure of vocabulary size by the previous studies in literature (Cobb,

1997; Laufer and Nation, 1995; Laufer and Paribakht, 1998; Qian 2002). It is described as a selective test which assesses a learner's vocabulary size in the recognition dimension in five different frequency subsets and in Academic Word List (AWL). In the test each subset corresponds to a particular word-frequency level; ranging from the most frequent 1000 word level (1k) to least 10,000 (10k) frequent word level. In this frequency subset, knowledge of the least frequent level (10k) encompasses knowledge of the most frequent words used in every day language (Schmitt 2000). However, it may not always be the case. For instance, in the study by Cameron (2002), it was found that the students who mastered 7000 word level could not do well in 5000 word level even if latter one is more frequent than the former. Therefore, measuring vocabulary size of learners in each frequency level was suggested for further studies.

As for assessing productive vocabulary knowledge, Laufer (1998) states that lexical diversity and use of general vocabulary are needed to be examined in order to give detailed information about the usage dimension of a word which refers to *lexical performance* of a learner. In order to assess lexical performance, Laufer (1998) probes two different kinds of productive vocabulary tests; *controlled* and *free vocabulary* tests. In controlled productive vocabulary tests, learners are given a prompt and asked to produce the words based on the prompts. One of the best known examples for this kind of test is Vocabulary Levels (VLsT) Test developed by Laufer and Nation (1999). It profiles learners' productive vocabulary size on the basis of 5 different frequency levels by getting learners to complete the words with letter prompts; thus, it restricts possible answers in a certain amount. However, since the test is not embedded in a particular written text, it is also called context independent test.

When it is aimed to test the productive vocabulary which is embedded in a linguistic context such as a free writing and speaking activity, it profiles learners' free use of productive knowledge. ESL Composition Profile (Jacobs et. al., 1981) can be given as an example for this type of test. The aim of this writing rubric is to assess learners' writing proficiency from different rating scales such as mechanics, vocabulary, organization, etc. In this case, vocabulary usage of a learner is assessed as embedded in a written text (Read and Chapelle, 2001) in terms of the amount and correct usage of words in a context. Even if an independent score is given for the vocabulary section, it is evaluated in the context of overall writing text; therefore, it is called context dependent test as well.

In order to assess productive lexical improvement, Johansson (2008) suggests examining a written text in terms of both *lexical diversity* and *lexical density* (p. 61). Lexical diversity indicates how many different words are used in a text. It refers to *lexical richness* of a written text (Daller, Roeland and Jeanine, 2003). Lexical diversity is calculated through type/token ratio. In order to run this computer program, a text is typed or copied into the analysis screen, and then the calculate button is clicked on. As a result, it reveals how many words (token) the text includes and how many different types of words (type) is used in the text at each different frequency levels. Put it differently, it shows the quality of the text in terms of vocabulary regardless of the length of the texts. Therefore, Laufer (1998) suggests that lexical diversity is a kind of indice of in-depth productive vocabulary use. As a second indication of productive lexical improvement, lexical density infers to the proportion of content words to the total number of lexical items. That is, when a text contains more content words (i.e. nouns, adjectives, verbs) than function words (i.e. pronoun, articles), it indicates a high lexical density or when it is the opposite, it refers to low lexical density. Both lexical density and lexical diversity can be analyzed by Lexical Frequency Profile (VocabProfile) developed by Laufer and Nation (1995). Thus, it is now practical to analyze the lexical density and diversity of a text with this program.

2.2. Methodology of Teaching Vocabulary

The methodology of teaching a foreign/second language first come to the fore with Grammar-Translation Method (GTM) in the 1840s. This methodology adopted a deductive teaching approach, and it was based on translation of sentences from the target language to the first language and vice versa. According to this methodology, grammar structures were more prominent than vocabulary knowledge. As for technique, word by word translation was used to emphasize morphological and syntactic rules explicitly (Zimmerman, 1997). As for vocabulary teaching, it was executed independent of all language skills based on pure memorization of cognates, antonyms/synonyms and drill activities. With the reform movement in Western education at the end of the 19th century, an inductive approach in which learners infer the meaning of the words in context and use the words in context came to the fore. One of the new reformist methods was Direct Method (DM) which was also known as Anti-grammatical, Natural and Phonetical Method. In this methodology, rather than translation and memorization techniques, mime,

demonstration and picture techniques were used to teach vocabulary. The order of target words was from the easiest to the most difficult ones. With this method, it was the first time that vocabulary was more important than grammar in language teaching. Berlitz schools in United States were the best-known users of this methodology. In these schools, speaking was the most important skill and learners were expected to speak fluently and accurately as much as a native speaker. Therefore, L1 use was forbidden in the lessons. Instead of books, teacher's ability was more important in teaching a foreign language. Therefore, this method required teachers to be native or sound native-like of that target language. However, this method was found to be impractical depending on both time-restrictions of developing speaking skills and finding native /native like teachers for teaching speaking. Due to the restrictions of Direct Method, a new approach called Reading Approach emerged in 1920s. In this approach, reading comprehension was heavily emphasized and vocabulary was a prerequisite for comprehension of reading texts. Thus, it can be said that vocabulary regained an important place in foreign language teaching with this method. In the 1950s, Audiolingual Method appeared with an emphasis on speaking and listening skills more than any other language skills. However, instead of real communication, repetition of drills and memorizing of chunks came into prominence to develop speaking and listening skills. Thus, it can be said that with this method the habit formation based on the theory of Behaviorism was underscored rather than creative manipulating of structures. As for vocabulary, it was taught implicitly and as embedded in syntactic structures; that is, learners were asked to get the meaning of words from the sentences. In general, vocabulary dropped behind language structures since the main focus was teaching syntactic structures rather than vocabulary itself in this method (Zimmerman, 1997). As a reaction to Audiolingual method, Cognitive approach came out at the end of 1960s, and it grounded its roots on Chomsky's generative grammar. With this approach learners started to gain control over both grammar and vocabulary in the sentences; thus, cognitive depth and conscious learning became prominent in language learning. That is, instead of repetition of drills, working on words became popular at that time. In line with this method, Natural Approach, Lexical Approach, Suggestopedia, Communicative Approach adopted the same principles in vocabulary teaching. All these approaches had a consensus on priority of communication instead of knowledge of syntactical knowledge and suggested teaching vocabulary in communicative contexts. For instance, Lexical Approach, taking Lewis's argument (1993) as a base, proposed

teaching words in lexical phrases connected to each other to give the meaning. Based on this approach, words were taught in chunks rather than discrete items. Afterwards, Vygotsky's constructivist theory (1978) enthralled in language education with an assertion that language learning is an active and constructive process in which each learner brings his/her own past experiences and cultural features into current learning practice. Thus, language concepts are constructed by learners via discovery technique and social interaction with others. According to this theory, a language learner should feel responsible for his/her learning process, and at the final stage of this process it is expected from the learner to become experimental, motivated, independent and autonomous in the language learning process. Throughout the process, the teacher's role is to encourage learners to discover the principles by themselves and adapt materials based on the learners' cognitive level. Since the environment is an important factor for social interaction, a rich and broad language experience provided by teachers is also essential in the learning process. Two approaches; Silent Way and Whole Language Approach adopted this learning theory in their teaching practices for all language skills. As for vocabulary teaching practices, Whole Language Approach suggests learners' guessing meaning of vocabulary from various types of reading texts with an aim of pleasure. Similarly, in the Silent Way, learners are asked to discover the meaning of words by using their problem solving abilities, and meanwhile the teacher keeps silent in order to foster their autonomy. As for the techniques of Silent Way approach, cuisenaire rods are used by the teacher in order to link words with their meanings in the target language and the teacher points to words in word charts to teach core vocabulary in a sentence. In turn, learners take all responsibility in learning vocabulary via discovering or creating the meaning instead of repetition of the words.

As mentioned above, all methodologies include vocabulary in their practices to some extent. However, the way of teaching vocabulary varies due to the philosophy behind them. As for the last practical application, the constructivist methodology requires learners to construct the meaning of a word by using it in a social interaction. In that sense, Web 2.0 tools in which any kind of information is used for communication become in line with this theory. Via these tools, learners face numerous exposures to target words in context, set the meaning of the word and acquire it gradually. Therefore, this technology is used as one of the contemporary applications to teach vocabulary (Lin, Hsiao, Tseng and Chan, 2014).

2.3. Writing

2.3.1. Definition of writing

Writing is generally described as a way of transmitting ideas and information into a written form (Agesta and Cahyono, 2017; Flower and Hayes, 1981). In this transition procedure, cognitive process is activated by searching for appropriate structures, vocabulary and phrases according to the writing task (Flower and Hayes, 1981, p. 367). Therefore, a writing task demands for further skills rather than simply stating any kind of idea. It is also the reason for why writing is perceived as a more complex skill than other language skills by many language learners (Klimova, 2011, p. 390). Another challenging feature of writing stems from the fact that it may not be learned in a natural environment like speaking or listening skills; instead, as Harmer (2007) in his book postulates that it has to be taught by an instructor (p. 265). Smetanova (2013) maintains that writing sessions are generally perceived as tedious by many EFL learners (p. 3376). Smetanova (2013) further explains that lack of exposure to writing tasks outside the classrooms can be considered as another limiting factor in writing improvement. Kim and Kim (2005) mention that “time constraint in learning writing” is one of the problems that most EFL learners face frequently (p. 68). However, besides all these challenges, writing has still been of great importance in language proficiency and being able to write in a specific context is commonly considered as a prerequisite to be called literate (Harmer, 2004). Since it is one of the fundamental skills of foreign language proficiency like other language skills (Smetanova, 2013) and has always taken place in Foreign Language Teaching curriculum (Harmer, 2007), it should be facilitated in some ways in foreign language classes. Concerning this topic, Badger and White (2000) point out that adopting an approach for teaching writing may be one of the motivating factors in conducting a writing task. Kong (2005) also confirms that adopting a variety of approaches in writing instruction helps foreign language practitioners to improve their writing skills. Therefore, it has been very common for language teachers to have a writing lesson with at least one particular approach (Agesta and Cahyono, 2017, p. 39). In order to have better writing practices, writing approaches should be in tune with students’ needs and devoted time for writing instruction (Pujianto, Emilia and Sudarsono, 2014, p.100). Until recently, several writing approaches have been circulated in L2 classes. Based on different purposes, each approach has stressed different text elements in teaching and learning writing skills. From

these approaches, Product, Process, Genre, Process-Genre Approaches have basically dominated much of the teaching of writing that take place in foreign language classrooms (Hasan and Akhand, 2010; Lam, 2015). Therefore, all these approaches as well as some other basic approaches will be described in the following section.

2.3.2. Writing approaches

2.3.2.1. Product approach

Badger and White (2000) emphasize that there are two basic approaches in conducting writing tasks; product and process approach. They also point out that these two approaches differ from each other based on how they conceptualize learning and teaching writing. From these two approaches, the product approach was the first dominating approach in writing classes. It was until the end of 1960s that product approach came to the fore in writing in L2. It used to be applied during the audiolingual era in which accuracy and repetition of a model were emphasized in language teaching. This approach is generally accepted as *traditional writing approach* (Badger and White, 2000; Gabrielatos, 2002) and was also named *Model Approach* due to its basic steps in teaching writing (Akinwamide, 2012). Accordingly, Gabrielatos (2002) defined product approach as “a traditional approach in which students are encouraged to mimic a model text, which is usually presented and analysed at an early stage” (p. 5). Based on this definition, it may be concluded that writing practices commence with imitating a model text in this approach. As a next step, learners generate identical sentences to the model text. In the imitation session, a linguistically accurate model text is analysed by learners under the supervision of teacher. After the analysing stage, learners are first asked to imitate the model text and then generate a new individual text complying with some basic linguistic features of the model text. The aim of these steps is to compose grammatically correct structures and sentences (Hashemnezhad, 2012). As a broad description of the steps in the approach, Steele (2004) explains that composing a text starts with controlled writing by practicing the language features and ends with individual free writing in the end. However, in the final stage, learners are still required to obey the basic organization, vocabulary and structures taught beforehand by a teacher. Furthermore, the focus is still on the correctness of the finished written text. Therefore, it might be concluded that in this approach, organization of ideas come to priority rather than the content of the ideas in a written text. Likewise, submitted essays of learners tend to be evaluated based on this

priority. To be more specific, when a feedback is given on the final product, grammatical and lexical errors are the most probable foci in feedbacks; thus, the content of the text becomes of secondary importance. In such cases, learners' critical thinking is restricted firmly. Herewith, it might not be possible to create an original text in the end, which impedes learners' creative writing skills (Nazim and Ahmad, 2012). Another criticism is that adopting the product approach leads to a teacher-centered learning environment in which the teacher always gives models, follows the steps and controls the submitted texts (Rusinovci, 2015, p. 699). However, it is not accepted as a desirable learning atmosphere in the recent pedagogy which emphasizes learner's discovery throughout the learning process (Kain, 2003). Because of the mentioned restricting features, this approach faced much opposition by a good few language specialists (e.g. Akinwamide, 2012; Badger and White, 2000; Rusinovci, 2015). However, despite its limitations, the product approach has still some popularity among some language teachers since it is easy to apply and time saving in the classrooms atmosphere (Sarala, Rahim and Ismail, 2014). Furthermore, by applying the product approach it is easy to produce various text types in a term. Since not so much time is devoted to the writing process for each text type, it saves time to fulfill the syllabus on time. This is also considered as a motivating factor by many language teachers (Sarala, et. al., 2014). Despite such advantages, the product approach still holds some eminent shortcomings. In this way, the process approach has emerged as an alternative approach to the product approach.

2.3.2.2. *Process approach*

In the 1970s, a new approach called *process approach* came into the field of L2 writing. It has come into prominence with the aim of focusing on content rather than form in writing (Hasan and Akhand, 2010; Raimes, 1991). With debut of this new approach, it is the first time that students' creativity has come to fore rather than structural accuracy of a text (Silva, 1993). As opposed to imitating a model and just copying it without any authentic addition, this approach promotes students' own ideas with a focus on content. Besides content, with this approach, the purpose and audience of the texts have been the foci of writing tasks. Rusinovci (2015), therefore describes this process as the Learner-centered approach (p.700). In this new paradigm, writing a text is composed of recursive stages. Basically, Hu (2003) mentioned some basic stages of this approach such as thinking and debating about the topic as a preparation stage, writing a draft paper and

lastly revising and sharing the written text with either the teacher or peers in order to get feedback. Similarly, Harmer (2007) designated four basic stages such as pre-writing, drafting, writing and editing phases. In 2015, Zhou broadly suggested five stages of process approach as prewriting, rough draft, feedback, revising and rewriting (p.190). With this approach, it is convenient to move back and forth amongst each stage in order to accomplish a writing task; therefore, it is also called as a “cyclical approach” (Palpanadan, 2014). Zamel (1985) also suggests that process writing can be described as a nonlinear and recursive process. In this recursive process, learners are allowed to write several drafts based on teacher or peer feedback before reaching a final text. In other words, in this process peer or teacher feedbacks help learners to review the text, make any changes accordingly and improve their writing in the end (Zamel, 1985). The recursive process is basically as follows:

In terms of type of feedbacks on the written tasks, the current literature mentions several different ways such as teacher correction, error identification, commentary, teacher-student conference, peer correction, and self correction (Saito, 1994). All feedback types except for commentary focus on forms of written texts, and they elicit problematic parts in the piece of students’ writing. In commentary type of feedback, students receive only written comments, and no error correction is made on the students’ written papers. Therefore, it is considered as more content-oriented than the other types of feedback.

As for the effects of feedbacks on students’ written paper, findings of the studies in the literature are controversial. While most of the studies in the literature indicate facilitating effects of giving feedback on students’ writing (Hedgcock and Lefkowitz, 1996; Othman and Mohamad, 2009; Saito,1994), there are still several studies which identify some negative aspects of giving feedback on students’ achievement in writing (Cohen and Robbins,1976; Hattie and Timperley, 2007). Therefore, there is still a need to conduct more studies to have more generalizable result regarding the feedback effect on students’ written paper.

In sum, the process approach dominated the area of teaching writing for a long time by virtue of focusing on learners in teaching process by promoting their creativity and collaboration with peers or teachers. Yet, besides its favorable hallmark, the process approach has been expostulated on the ground of spending a long time to reach a final composition by many practitioners. Furthermore, from the point of language teachers’

view, giving feedbacks on several drafts and marking them generally lead to heavy workload (Pour-Mohammadi, Abidin and Fong, 2012) since several weeks should be allocated to assess the drafts and give a mark in the end. In that sense, this approach may be considered as impractical in a limited time of language instruction. Another shortcoming of the approach may be explained as the fact that all text types are taught in the same process cycle (Badger and White, 2000, p. 157). To be more clear, the process approach is criticised in that there are no particular stages typical to each different essay type (Steele, 2004). Silva (1993) also discusses that this approach does not include tasks in tune with academic needs of learners and this stems from the fact that learners are usually exposed to a limited number of genres in a restricted class hour. Ignoring grammatical and structural aspects of the texts (Flower and Hayes, 1981) and focusing on drafts instead of preparing learners for academic exams (Horowitz, 1986) are the other critiques mentioned by some specialists. Consequently, all these critiques paved the way for a new writing approach called *genre approach*.

2.3.2.3. Genre approach

A more recent approach called *Genre Approach* was first mentioned in 1980s when English for Specific Purposes (ESP) and communicative approaches came into prominence in L2 writing. Despite having its some peculiar features, this approach still contained some features of previous approaches in it, insomuch that it is perceived as an “extension of product approach” (Badger and White, 2000, p.155). To put it more explicitly, in both product and genre approaches, linguistic features of a composition are of significance; and thus, a model text is served for the aim of analysing and imitating for a further step. Furthermore, both approaches manipulate several exercises to focus on linguistic features. However, the genre approach focuses on different contexts for each typical genre on the contrary to product approach. Hence, in this approach writing is carried out within a specific context in tune with different social purposes (Badger and White, 2000, p. 156). Consequently, it contributes to socialisation of individuals and can also be considered as a kind of cultural practice (Hasan and Akhan, 2010). This approach was favoured by most language practitioners since it helps learners to discover how a particular text type is constructed and what kind of rhetorical structures are used in a specific genre (Hyland, 2007). Hyland (2007) broadly termed genre as *rhetorical patterns* such as essays, notices, biographies, anecdotes, jokes, articles or film reviews. He further

explains that each genre has a distinctive purpose and differs in terms of formality of language and linguistic patterns. For instance, while there is an informative purpose in an essay and article genre, a joke genre includes entertainment in purpose. Depending on the purpose of the genres, vocabulary, grammar and organization also change since each genre is socially and culturally shaped (Badger and White, 2000). Thus in this approach, being exposed to different genres is crucial in order to be able to write in different styles.

As for the pedagogy of this approach, it is more demanding than previous writing approaches since teachers have more responsibilities in scaffolding students for their writing tasks. Hyland (2007) suggests that a teacher's role in this approach is to serve all the relevant functions of a particular text type. To be more specific, by engaging in writing different genres, it is aimed to give distinctive patterns of language structure in a particular academic writing. Thus, in their L2 writing experience, learners need to be encouraged to examine, explore, investigate and construct various text types by considering the purpose and target readers. Furthermore, during this process a teacher undertakes a role of facilitator rather than authority (Rusinovci, 2015, p. 701). In that sense, it can be said that this approach may indicate a realization of sociocultural theory of learning (Vygotsky, 1978). As it is in Vygotsky's sociocultural theory, a teacher guides students to explore functional and rhetorical features in a specific genre and encourages them to produce their own samples in that specific genre (Hyland, 2007). During the process, while teachers assist learners at the initial stages of a writing task by providing many samples, learners are encouraged to explore their own potential writing performances in the end.

Despite its several advantages, this approach was criticised because of the fact that learners may not be active in writing tasks as much as the process approach. That is why a new approach called Process-Genre Approach emerged in language classrooms.

2.3.2.4. Process-genre approach

This current approach emerged in the last decades with a framework of genre and process approach combination (Badger and White, 2000; Kim and Kim, 2005; Yan, 2005). More specifically, this approach incorporates a mixture of teaching steps of both genre and process-based approaches. In a case study by Pujianto, Emilia and Sudarsono (2014), general teaching steps in writing instruction are basically explained as follows; 1) learners are introduced to various reading texts for a specific genre in order to set detailed knowledge of the field, 2) model text types are examined accompanied by learners in

order to give in-depth information about grammatical and rhetorical features of that particular genre, 3) learners are asked to create their first model texts in group under the guidance of the teacher. Therefore, this level is also called *joint-construction* session of a text. In this level, learners might receive either peer or teacher feedbacks if required, 4) the first individual text is written in a specific genre as a draft. Learners compose their texts under a topic chosen by both the teacher and learners. In this stage, learners have a chance to indicate what they have learned before, 5) In the revising stage, learners are encouraged to proof-read their own written texts. Moreover, through either teacher or peer feedback, learners get a chance to shape their texts several times by moving backwards or forwards in stages; thus, this stage is also called as *cyclical process* stage (Pujianto, et.al., p.102). The basic cyclical process of this model is depicted in Figure 1.

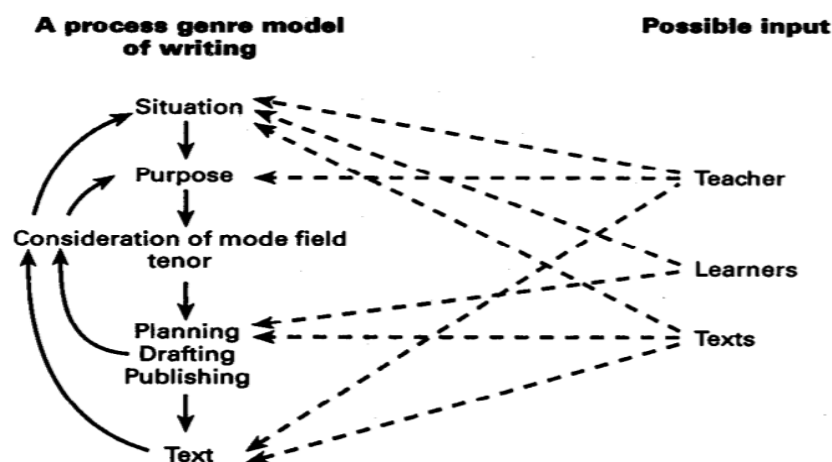


Figure 1. A genre process model of teaching writing (Badger, R., 2000, p. 159)

Yan (2005) confirmed all these stages by proposing very similar teaching steps. These steps are preparing, planning, joint construction of the text, independent constructing and revising. For the concepts of process-genre approach, Kim and Kim (2005) point out that as it is in genre-approach, this approach is conducted based on rhetorical knowledge and on the aim of that particular genre. Similarly, as it is in process-approach, this approach takes advantage of giving and receiving feedbacks throughout the writing process. Therefore, this approach is accepted as a mixture of both genre and process approach. In brief, all the aforementioned descriptions have a consensus on some procedures of process-genre approach. These are starting a writing task with examining a model text, eliciting linguistic and rhetorical features of a particular genre, then first draft writing through the guidance of the teacher and then independent construction of the

text and ending with revising and editing the text based on teacher or peer feedbacks. Even if this approach is quite new, it has widely been applied in the EFL classrooms because of its favourable effects on writing achievement. The positive effect of process-genre approach on writing achievement was confirmed by several research studies as well (e.g. Agesta and Cahyono, 2017; Arteaga-Lara, 2017; Babalola, 2012; Elson, 2011; Pujianto, et.al., 2014; Shariatmadari and Mazandarani, 2016). More specifically, some of these research studies also revealed that the process-genre approach facilitated not only learners' overall writing performance but also their vocabulary, organization, grammar and mechanics ability in writing (Agesta and Cahyono, 2017; Babalola, 2012). It was also revealed that this approach helps learners write well developed paragraphs under a certain topic (Arteaga-Lara, 2017; Elson, 2011), employ linguistic features in a specific genre (Pujianto, et.al., 2014) and compose their thoughts effectively in their own texts (Shariatmadari and Mazandarani, 2016). Despite these advantages, the superiority of this approach over conventional approaches was not confirmed by some research studies (e.g. Herawati, 2015). For this reason, an eclectic approach which synthesizes the strengths of all approaches in writing instruction has been suggested by many practitioners as an alternative to all previous approaches (Alharbi, 2017; Badger and White; 2000; Hyland, 2003).

2.3.2.5. Eclectic approach in writing instruction

As a recent application of writing instruction, eclectic or multi approaches have been employed more frequently than one particular approach in L2 classrooms (Hyland, 2003, p. 23). Badger and White (2000) further inform that the basic approaches (process, product, genre) complement one another and they are generally intricately intertwined in application. Thus, it can be said that there might not be any clear distinction among the approaches in terms of application. It means that even if only a specific writing approach seems to be adopted, some procedures of other approaches might inherently be implemented during writing instruction. Therefore, it seems reasonable for blending merits of all approaches by taking into account the underlying rationale of them (Badger and White, 2000, p. 157). The proponents of eclectic approach underpin that applying only one writing methodology may not be sufficiently helpful in terms of teaching writing (Badger and White, 2000; Kumaravadivelu, 2006). For instance, in case only process approach is resorted in writing instruction, linguistic correctness may be ignored; and therefore, the finished version of a

written text may contain several mistakes in it, which may result in fossilization in the future. Kumar (2013) adds that it is nearly impossible to employ only one method in a classroom including students with various backgrounds and aims. Alharbi (2017) maintains that various writing approaches should be implemented in writing instruction by considering learners' needs and the aim of the writing task. In this way, an *eclectic language teaching approach* which involves a rich combination of multiple approaches and techniques can be suggested to make writing practices more interesting and motivating (Khan and Bontha, 2015; Lazarus and Beutler, 1993). The study of Khan and Bontha (2015) confirmed that eclectic method in teaching writing was preferred not only by teachers but also by learners. In their study, the perceptions of both teachers and learners on the preference of either process and product approach were examined. At the end of the study, it was revealed that both learners and teachers preferred blended approach for writing practices, and this eclectic application helped learners to write more effectively; thereby leading to academic success eventually.

Simply put, since all writing approaches had both benefits and drawbacks, an eclectic writing methodology emphasizing blending merits of different approaches has come to the fore recently (Hasan and Akhan, 2010; Kim and Kim, 2005). Since its practical application was confirmed by several research studies (e.g. Alharbi, 2017; Hasan and Akhan, 2010; Khan and Bontha, 2015; Kumaravadivelu, 2006; Lazarus and Beutler, 1993), the current study aims to employ an eclectic methodology for writing practices. More specifically, the present study adopts the essay genre, and from the essay types, opinion essay is purposely elicited in tune with blog application of the study. As for the practice on eclectic approach, the merits of product, process and genre approach will be used in the study. For instance, it will indicate some practices of both product and genre approach while making the learners familiarize with the model text for the opinion essay. In addition, learners' revising and rewriting of the same genre with different practices throughout the implementation will indicate an instance of the process approach. Lastly, as it is in the process and genre-process approach, it is encouraged to focus on the content rather than the form of the texts in all writing practices. Since students are required to have several drafts before the final version, it adopts the framework of process approach. Therefore, the current study can be considered a prime example of the eclectic approach application.

2.3.3. Writing quality and writing assesment

Writing quality as one of the indicators of writing development (Crossley and McNamara, 2012) has been described as an ability to write in tune with the context, audience and purpose of a particular text by using some linguistic and discoursal features accordingly (Witte and Faigley, 1981, p. 199). Writing quality in a written text has generally been correlated with different variables such as linguistic production (Crossley and McNamara, 2012), elaborated vocabulary (Kyle and Crossley, 2016), cohesion between sentences (Crossley, Kyle and McNamara, 2016) and sophisticated use of grammar (Ortega, 2015).

In order to evaluate the writing quality of a text objectively, the rating scale called *rubric* has been one of the instruments used widely in writing classes. A writing rubric is generally described as a tool used for evaluating hallmark of a particular written text based on a rating scale (Kim and Crossley, 2018). Making use of a rubric is considered as one of the professional and practical applications in writing assesment (Kim and Crossley, 2018, p. 40). Kim and Crossley (2018) maintain that owing to containing specific criteria in it, a rubric helps evaluators to have an objective judgement on a written text (p. 41). A rubric also helps teachers to focus on specific aspects on the written texts of learners. Even if there are several types of rubrics used for scoring a written text, basically there are two foremost categories; holistic and analytical rubrics. Holistic rubrics are used to assess the performance of a learner on a written task as a whole, thereby assigning a single general score to the whole written sample. It means a text is not rated according to each separate criterion in holistic scoring. Since this scoring is one-dimensional, it is not difficult to rate a written text entirely. Hence, it saves time to evaluate learners' writings in a restricted time period (Hijikata-Someya, Ono and Yamanishi, 2015). As one of the samples of holistic scoring, Cambridge FCE holistic scoring rubric is used to make an overall judgement about the quality of a written paper. In this rubric, an entire written text is scored according to a scale ranging from Band 1 to Band 5. While number 1 indicates poor performance, number 5 indicates excellent level of writing performance. Only one descriptive band score is assigned for the whole written text; that is why it is not likely to distinguish learners' strengths or weaknesses in each writing trait. For this hiatus, analytic scoring has been suggested to obtain more detailed assesment. Evaluating a written text multi-dimensionally and being able to diagnose both weaknesses and strengths of a written sample are the major merits of using analytic

scoring (Gamaroff, 2000). On an analytic rubric, in contrast to a holistic rubric, written samples are rated on different discrete criteria and a different individual score is given for each discrete criterion. Therefore, it is possible to evaluate a written sample from the different aspects and elements such as content, vocabulary, mechanics, organization, etc. Since the analytic rubrics are used for diagnostic purposes (Jacobs, Zinkgraf, Wormuth, Hartfiel, and Hughey, 1981), it is feasible to profile writing performance of an examinee profoundly. As one of the most known analytic writing rubrics, *ESL Composition Profile* of (Jacobs, et. al.,1981) has been widely used in L2 writing research. ESL Composition Profile has a descriptive scale in it and based on the description of each criterion, different scores are assigned by raters. In this representative rubric, the compositions are rated according to five criteria: content, organization, vocabulary, language use and mechanics. It is in a grid format in which the criteria are listed on the left and their descriptions place on the right column of the paper. According to each description, it is rated within a specific range. Therefore, it is possible to score each criteria individually, independently from overall score of the written text. In sum, this kind of rubric has been commonly used and favored because of its outstanding hallmarks by several studies (e.g. Hijikata-Someya, et. al.,2015; Reyhan, 2012).

Notwithstanding, Brookhart, (1999) propounds that there should be an interplay between analytic and holistic scoring. For instance, a holistic judgment can be developed based on sum of each discrete score in an analytic rubric. De Hijikata-Someya, et. al., (2015) also suggest that more objective and detailed analysis regarding learners' writing quality can be achieved by adopting more than one scoring rubric. Thus, it seems reasonable to adopt at least two scoring rubrics to probe L2 written samples. For this reason, in the current thesis, both holistic and analytic scoring will be used to analyze all the written text in different dimensions.

2.4. Pedagogy of Technology

Technology in education is defined by Okojie (2006) as “a technical device or tool used to enhance instruction” (p. 66). Technical devices are commonly used in order to cater for learners' needs compliance with their different learning styles. Lacina and Griffith point out that technology is an essential part of our life in the 21st century; therefore, technological devices should be part of instructional settings (2013, p. 317). Okojie also adds that while choosing appropriate technology in an instructional setting,

teachers should know the pedagogical principles that are specific to the use of technology (p. 70). That is, knowing how to use technology is not adequate to enhance learning. Instead, it is essential to decide what instructional technology would be used, and where and what time it would be used in the education process. Therefore, technology and pedagogy should be always in intricate relationship.

Instructional technology has changed its form in the process of time. Especially with the advent of the internet, there have been remarkable changes in pedagogical technologies. While it started with basic applications of internet such as creating a personal website, finding information from online encyclopaedia (Web 1.0 tools), it shifted to more complicated internet applications for the aim of communication and information exchanges (Web 2.0 tools). Some basic applications of Web 1.0 and Web 2.0 tools are indicated in Figure 2. By employing Web 2.0 tools, it has been possible to use information both inside and outside the classroom. By integrating Web 2.0 tools into education, the role of teacher has also changed. Instead of being an authority who gives all instruction in the class, teachers have a facilitating role which involves learners in finding and creating their own material via technological tools.

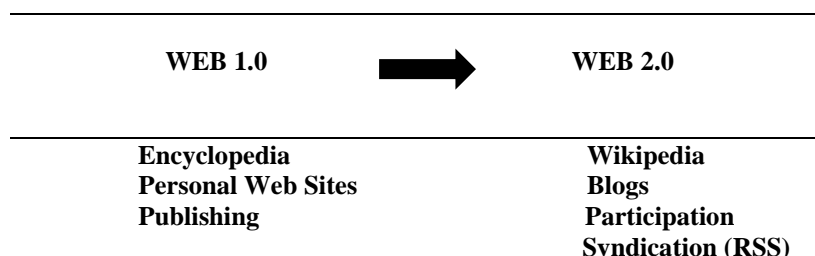


Figure 2. *Web 1.0 and Web 2.0 difference model (O'Reilly, 2005)*

As hereinbefore, today's students are engulfed with Web 2.0 technology. They use these tools as a part of everyday life. For instance, instead of written books, they prefer getting information from different technological tools such as mobile phones, computers and searching from the internet. Therefore, using these technologies is not approved as a novel and isolated application for them. Based on this case, it can be alleged that it is fundamental to incorporate interactive tools into lessons in order to fulfill the needs of today's students and make them more motivated in learning processes.

2.5. Blog Use

From the Web 2.0 tools, blogs are the most applied ones in educational settings owing to their practicality and noteworthy advantages (Campbell, 2003; Johnson and Kaye, 2004). Campbell (2003) describes a blog as an “online journal that an individual can continuously update his or her own words, ideas, and thoughts through software that enables one to easily do so” (p. 2). It is organized as chronologically backwards and updated regularly. Hence, the posts and comments of posts are seen in reverse chronological order with the newest one at the top of the page. In the blogging session, the first step to use a blog commences with creating an entry based on a prompt. An author writes his/her ideas on a specific topic with date and time information. As the second step, a visitor of the blog website sees the entry and leaves a comment about the author’s entry. As the third step, the author may give a response for the visitor’s comment; thus, ideas are continually exchanged between the author and visitor. This process creates an interactive atmosphere in the platform eventually.

Campbell (2003) claims three types of blog use based on its purpose in education context. These are categorized as *teacher*, *student* or *class blogs*. In a teacher blog, the teacher has an active role to communicate with the students or deliver supplementary materials. In that sense, the blog is used to provide any information (either audio or visual files) out of the class like a tutor. The student blog, on the other hand, is executed by individual students in a platform where the students send their assignments or write their ideas under a specific topic. By both reading and commenting on the ideas, it serves to enhance writing and reading skills of learners. As a third type of blog use, class blog is used to promote collaborative work between the teacher and students. To be more specific, in this type of application, each learner writes a different part, works collaboratively and composes a shared blog entry in the end. In this way, learners discuss and write on a shared blog page as members of the whole class. Campbell (2003) suggests that from these three applications, the most suitable one should be adopted for the education purpose considering the aim and context of language learning. Thus, it would be possible to benefit from the advantages of blog use.

Even though blog as a Web 2.0 tool is ubiquitous nowadays, it is still in its infancy in language teaching. However, blog technology has been favoured by many educators because of its promising effects on language learning. The favourable features of blog technology are as follows:

First, via blogs, it is possible for users to reflect, share and discuss about various topics in the blog platform (Oatman, 2005). In addition, Richardson (2009) counters the idea that blogs create a platform in which students express their ideas, interrogate the topic by searching detailed information, comment on the entries and have conversation based on the comments (p. 17). Thus, it can be deduced that students might organize and revise their writing both from their own perspective and the readers' perspectives. By this way, it also suggests an interactive and engaging environment in which communication is of top priority. Trajtemberg and Yiakoumetti (2011) confirm that the use of blogs increases social interaction among users and promotes peer learning throughout the language learning process by reading and commenting on each other's blog posts. In this way, it promotes social constructivism as well (p. 5).

Second, by incorporating blogs into lessons, it is possible to have more student-centered atmosphere where students interact with each other under a topic. Moffett (1982) supports this idea by postulating that learners write better when they care about their own writing and connect the texts with their own lives. Thus, they become critical and creative in the learning process (p. 233). In addition, by sharing blog posts with partners and commenting on the partners' posts, a virtual community is obtained in the blog platform (Bishop, 2010; Efimova and Fiedler, 2003). In this virtual community, the teacher carries on a facilitator role instead of an authority in a classroom. This means that blog use paves the way for an environment in which students are at the core of the learning process.

Third, it is practical to use blog technology both in class and out of the class. To be more specific, since it is an asynchronous application (Arslan and Şahin-Kızıllı, 2010), bloggers can work at their own pace due to the blog time-delayed feature and reflect on their content whenever they want. Since it is not required to give instant response, the practitioners can complete their tasks according to their own pace; thus, it would be possible to generate more language outputs in such an extended time period. Another convenient aspect of blog use is that it is possible to post a blog entry with different technological tools such as computers, PCs, smart boards or mobile phones. Moreover, without downloading an application, one can access all blog entries immediately just by typing the name of the blog website. In this aspect, blog technology is approved to be a quite practical application.

Fourth, it enhances learners' responsibility and authorship of a text in case they create their own exclusive texts in a blog platform. In this way, learner autonomy and

intrinsic motivation also increase in the course of time (Jee, 2008). It was proved by several studies that blog technology has been viewed positively by both EFL and ESL students due to the fact that it is a motivational, novel and alternative application in language learning (Arslan and Şahin-Kızıl, 2010; Chen, et.al, 2011; Ducate and Lomicka, 2008; Nguyen, 2012; Noytim, 2010; Pinkman, 2005; Trajtemberg and Yiakoumetti, 2011). Furthermore, in the study by Hashemi and Najafi (2011), it was revealed that as is the case with learners, teachers find this application motivational for blog practices help teachers to have a creative and innovative way of teaching sessions. In sum, it can be concluded that blog practice might be motivational for both learners and teachers.

Pinkman (2005) also highlights that the use of blog technology promotes learner autonomy because it is possible for learners to study on their own pace and employ various media in their blog posts (p. 14). In this way, they might have a control and responsibility over their own learning (Blankenship, 2011). Lan, Hung, and Hsu (2011) emphasize that compared to pen-and-paper writing, a learning environment with high richness media (e.g. photos, audio, hyperlinks) makes learners more motivated and helps them have positive attitudes towards writing. Moreover, an authentic learning environment where audiences are not only teachers but also classmates or global respondents might motivate learners to write more elaborately. Since it is known that there will be a reader of the blog entries, they might pay more attention to the content and grammatical correctness of the entries to be understood.

Fifth, blog writing facilitates learners' reflective thinking as they are required to think about the topic and write coherently according to text type (Xie et al., 2008). They become more careful before they post their comments because their postings and comments will be read by different audiences. Thus, students need to become analytical and critical throughout the writing process (Bishop, 2010; Oravec, 2002). Zhang (2009) also confirms that learners' critical thinking is encouraged when they monitor and evaluate their writing and give comments on someone's post (p. 68).

Sixth, blog technology is highly recommended especially for shy and slow learners. Since there is no face to face communication and it is a virtual platform, shy learners can express their ideas more easily and freely without having much stress. Avellaneda (2016) suggests that using technological tools helps introverted students to lower anxiety and feel more relaxed without fear of ridicule. The study by Guo (2013) affirms that writing in a blog platform triggers students' various thinking strategies and

blogging is a good way especially for the silent students to express their ideas, thereby being heard by the other members of the class. Besides introverted students, blog technology also might help slow learners to catch up with faster learners. To be more precise, since there is not a time restriction to complete a blog entry, it may be possible for slow learners to write and complete their tasks according to their own paces. Thus, they do not fall behind the other learners in the same learning environment.

Seventh, blog application enhances technology-related literacy of both students and teachers (Jee, 2008; Okan and Taraf, 2013). As more and more students have been addicted to using internet technology nowadays, there is a real need to integrate this technology into learning environment as well. Via blog technology, learners can insert any weblinks, photographs, visual and audioal materials into their texts. Thus, they might employ different materials in the texts, and this increases their technology-related literacy in the end. When teachers apply this technology, they have to take into account some salient points. For instance, they should know how to manage and integrate blogs into a particular language task. Hence, they are required to be equipped with pedagogical knowledge as well as technological knowledge. In sum, it might be concluded that using this technology encourages both learners' and teachers' technology-related literacy.

Last but not least, blogs can also be used as a kind of e-portfolio. Portfolio is generally described as a systematic collection of students' work in order to track their progress (Jee, 2008). As an authentic form of assessment, it demonstrates students' ability, achievement, and improvement (Richardson, 2009, p. 32). Since all the entries are automatically saved and compiled in a blog platform, it is possible to profile a broader picture of a writer's ability in time. As all writings are recorded, both teachers and students can go back and check all the previous posts. In the education environment, blogs can be also used as a formative assessment tool which helps teachers to gauge students' language development in short intervals (Akdağ and Özkan, 2017). This means that it might be possible for teachers to monitor student learning frequently and assist them if it is necessary until a final judgement is obtained about their success at the end of a course.

Because of all its remarkable features, blogs have been widely used by foreign language teachers in order to both cure some problems related to language learning and to facilitate the language development process. However, there is still a need to explore its impact on a specific language skills and areas. Therefore, the present study aims to

examine if blog writing helps Turkish EFL high school students to develop their writing and vocabulary knowledge.

2.5.1. Theoretical framework of blog use

The main theoretical base of blogging depends on Constructivism. With the first appearance in 1980s, constructivism has taken place in the basis of educational practices (Wilson,1996). There are two dimensions of Constructivism; a) Cognitive and b) Social constructivism (Cobb, 1994). Cognitive Constructivism refers to an individual's own construction of knowledge through interaction with the environment. However, social constructivism focuses on new knowledge through social interaction and collaboration. Hence, according to this theory, knowledge is mediated by either cognitive construction or social interaction where learners engage in the activities by collaborating in a social group. Vygotsky with his social constructivist framework arrays learning in two phases (1978). In the first phase, the learner has an interaction in a society and in the second level, the learner internalizes information in his/her own mind (p. 57). Therefore, it can be said that learning is actualized by an active recreation of knowledge based on individual experience in society. In this process, each person is a part of an environment and by engaging in social interactions, first intelligence, and then language is shaped. In other words, the learner is an active developer of knowledge through communicating with others. However, it means not only is each person unique in terms of the interpretation of the world, but meaning is also socially constructed by communicating with each other. As for language education, it suggests that one could learn best by doing, sharing ideas and collaborating in a social environment. Hence, when one learns a language by communicating with people in a society, the meaning for a language item is automatically constructed.

Vygotsky (1978) also highlights the importance of scaffolding in the learning process. Scaffolding can generally be described as developing one's own learning level by receiving assistance from more capable people. In this respect, giving and receiving feedback from either the teacher or other students is important in the constructivist application. To exemplify it, when a student gets feedback from a teacher or more capable peers, it would be possible for that student to test a hypothesis and refine his/her developing knowledge of the language system. By this way, he/she can produce more complicated tasks that he/she can do on his/her own. As a pedagogical application, peer

collaboration and comments in communicative activities may help learners to construct a new item in language development. In a blog platform, it is convenient for learners to reflect on their experience, negotiate ideas with their readers and make any changes on the texts based on comments. Therefore, feedbacks via blogs support the idea of scaffolding as a constructivist practice.

Kajder and Bull (2003) further affirm that blogging has a scaffolding effect on learning since it assists learners to construct a text based employing both reading and writing skills. To be more specific, in order to post an entry on a blog platform, it is required for a learner to search for the topic, gather information by reading related texts, thereby constructing his/ her own text. Ferris (1995) also adds that learners should consult with other friends, books and dictionaries to collect information. In this way, they become more encouraged and instinctively motivated to complete their writing. Therefore, collecting and synthesizing all information from different sources encourage learners to construct their own knowledge.

Seitzinger (2006) also adds that blogs are of great importance for constructivism because blogs trigger learner-centeredness, interactivity and problem-based learning. When learners write comments, make critics and give feedback to each other's pages, they interact with each other and they construct meaning. Hence, learners become active developers of knowledge in blog platforms.

As an application of constructivism in blog platforms, Murray and Hourigan (2008) submitted two different approaches: expressivist and socio-cognitivist applications. Whilst the expressivist approach views learning as a kind of personal expression of ideas, socio-cognitivism promotes learning as a result of process-oriented negotiating applications. While the former best suits to individual learner blogs, the latter is suitable for collaborative class blog. Therefore, depending on learners' needs and the reasons for employing blogs, different ways of constructivism may be adopted in a study.

Besides constructivist theory, there are some other theories which constitute the theoretical framework of the present study. One of them is *Krashen's (1982) Affective Filter Hypothesis*. According to this hypothesis, learners' language acquisition is facilitated when they are motivated and self-confident with low anxiety level. Gregersen (2006) emphasized that anxiety has a major role in a student's failure in four language skills. Therefore, it should be taken into consideration in an educational context. In a blog platform, since users do not have face to face communication, it is considered that they

may express their ideas freely in a more relaxed way. Furthermore, they may tend to behave more courageous without fear of ridicule (Avellaneda, 2016). In that sense, blog use supports the idea of lowering the affective filter.

Blog application also helps to lower the situational anxiety of learners (MacIntyre and Gardner, 1991). The situational anxiety consists of the anxiety that is aroused by a specific type of situation or event such as public speaking, examinations or class participation. It means that when a learner does not have apprehension because of unfamiliar situations, learning is actualized at a maximum level. It suggests that the learning environment should be quite friendly, encouraging and motivating. Furthermore, learners should know that making a mistake is not a matter of life. Even though it is not practical to avoid all anxiety-provoking situations completely, the learning environment should help to reduce anxiety level. In that sense, a blog platform creates an atmosphere where students could express their ideas freely since there is no face to face communication; and thus, there is not a situation for being ridiculous in front of other students as it is in a class environment. Moreover, by discussion under a topic with peers, students naturally tend to focus on content rather than grammatical correctness. In this way, they may not feel anxious about grammatical mistakes. Having a flexible time to complete a blog entry may also reduce situational anxiety of learners. In contrast to classroom environment, it is possible to construct a text irrespective of time and place in a blog platform. Thus, learners abstain from stressful situations to complete writing tasks. Writing in a blog platform without knowing the identity of audiences and realising that someone will read and comment on the entries may also increase the motivation of learners. Instead of only a written text, adding some supplementary tools such as videos, links or pictures to the texts might also make students motivated to write and read more. In that sense, blog use might have a motivation framework as well.

Swain's Comprehensible Output hypothesis (1985) also supports the integration of blogs into education. According to this theory, comprehensible input is not enough to acquire a target language. Instead, the use of input via different practices is necessary to complete learning process. Output hypothesis concerns with the fluency of language instead of competence since it is a process from comprehension to production of the language (Swain, 1995, p. 125). There are three functions of this hypothesis; noticing, hypothesis testing and metalinguistic awareness. As for the first function, learners notice the gap in their productive use of language. Through practicing the target language, it

becomes possible to realize any deficiency as for language knowledge. To be more specific, learners become aware of the gap between what they want to produce and what they can produce; thus, they become conscious about their deficiencies. As for the second function of the hypothesis, in the hypothesis testing phase learners check the comprehensibility and accuracy of their utterance. In that case, an erroneous utterance can be considered as the indication of hypothesis testing about how language works. This is also called a try and test phase. Metalinguistic awareness is considered as the third and the last function of the hypothesis. In this phase, learners reflect on the language which they hypothesized beforehand and have control on a language item; by this way, they internalize linguistic knowledge. In sum, this theory suggests that language is acquired in the process of transmitting a message, trial and error, and then arrive at the correct form. For this reason, Swain proposes that constant practice of language items is essential for learners' awareness about their production. In tune with this theory, blogs provide a platform where learners generate a variety of output by making several entries. In this process, what students know as input turns into output. Therefore, blog practice characterizes the features of output hypothesis.

2.6. Research Studies

In this section, the related research studies conducted with regard to the relation between blog use and writing skills as well as vocabulary development are presented. Besides, the research studies in terms of blog employment in the Turkish context are overviewed.

2.6.1. Blogs and writing

In recent years, the educational value and potential of blogs have been investigated by many research studies (e.g. Arslan and Şahin- Kızıl, 2010; Campbell, 2003; Fellner and Apple, 2006; Lin, 2015; Lin and Hsu, 2011; Nguyen, 2012; Pinkman, 2005; Sun, 2010; Wang, 2009). They probed the role of blog use in language development from different perspectives; thus, they revealed different findings regarding its impact on language development.

From the language skills, writing has been the most prevalent skill which was investigated in terms of the impact of blog on writing. The majority of the studies have highlighted positive effects of blog writing on the development of L2 learners' writing

performance (Avellaneda, 2016; Arslan and Şahin-Kızıl, 2010; Blau, et.al., 2013; Bloch, 2007; Chen et al., 2011; Halic et al., 2010; Lee, 2010; Nguyen, 2012; Noytim, 2010; Sun, 2009; Taki and Fardafshari, 2012; Trajtemberg and Yiakoumetti, 2011; Vurdien, 2013). Even if all these studies had a consensus on the facilitating impact of blog writing, they adopted different methodologies and revealed specific results peculiar to the research context.

For instance, in the comparative study of Avellaneda (2016), the effect of Weblogs, Google Docs, and YouTube were compared in terms of the language development of college students studying Spanish as a foreign language. In the study, the researcher investigated whether or not using these Web 2.0 tools facilitate the students' four language skills and which one of these Web 2.0 tools is more effective than others in terms of language development. 75 intermediate level students participated in the study and they were assigned into four groups. As an experimental study, there were three experimental groups, each of them using a different Web 2.0 technology and a control group using traditional methods to develop the four language skills. A one-way analysis of variance (ANOVA) was conducted to analyse the data. The data analysis of the study yielded a significant difference between the control group and the treatment groups in terms of their writing scores. However, no significant differences were detected in reading, listening, and speaking skills of students in both groups. This result underscored the facilitating effect of using technological tools on only the writing skills. Reflections of the students in experimental groups revealed that they recognized an improvement especially on their grammar and vocabulary components of their writing. They also said that they they had lower anxiety while using these three Web 2.0 technologies. As a suggestion of the study, it was stated that using quantitative data to detect which components of writing are affected by using web 2.0 tools should be employed in further studies. It was also cautioned by the researcher that it is necessary to provide any technical support when learners are not proficient in technology. Therefore, further research studies should give technical supports as well as instructional supports.

With a study by Anderson (2010), the effect of blog and journal writing were compared in terms of writing development of 70 high schools in USA. In this quasi-experimental study, data were gathered using a pretest-posttest design with a convenience sampling. The participants were divided into groups. While one group wrote the texts on a blog website, the other group used a computerized journal for 6 weeks. During the

implementation the students piled a total of 30 entries and there was no teacher intervention for any kind of feedback. At the end of the 6 week-implementation, the students were asked to write on another prompt given by the researcher as a post-test. Both writing pre and posttests were scored according to a rubric containing content/ideas, organization, vocabulary/word choice, voice, sentence fluency, and conventions (mechanics) components in it. Statistical analysis of the study indicated that there was not a statistical significant difference between two groups in terms of specific writing skills. Furthermore, writing test scores of both groups did not reveal any significant improvement in terms of organization, fluency and mechanics. However, examination of individual item scores revealed that there were statistically significant improvements in both content and voice aspects of writing in two groups. Therefore, it was concluded that both blogging and journaling have comparable effect in terms of students' writing development. While no significant improvement could be seen in the organization, fluency and mechanics aspects of writing in both groups, both methods (blogs and journal) helped the students to develop content and voice parts in their written texts. As for the limitation of the study, only two writing prompts were given by the teacher during the 6 weeks of blogging or journaling sessions. In order to draw a general conclusion about the effect of both methods in students' writing skills, it was suggested for further studies implementing more sessions.

In contrast to the findings of Anderson (2010), Kavandı (2012) did not reveal any facilitating effect of blog writing on students' writing element of voice. In the quasi experimental Ph.D study by Kavandı (2012), the effect of weblogs on Persian adult learners' writing proficiency were investigated in detail. More specifically, the effect of blog writing was scrutinized in terms of 6 elements of writing; ideas, organization, voice, word choice, sentence fluency, and convention. 30 students who were preparing for TOEFL and IELTS exams at the Institute of Language Learning Centre were the participants of the study and they were divided into two groups, experimental or control group. The implementation session for the experimental group took 14 weeks and during this session the participants wrote paragraphs, worked in groups, read the comments, made corrections and uploaded the corrected version to their weblogs. The control group followed the same writing sessions without using weblogs. Data were analyzed by both qualitatively (observations, questionnaires, interviews and subjective reports) and quantitatively (writing test scores based of 6 elements). In order to examine if there was

any statistically significant difference between and within the groups, quantitative data were analyzed by using both paired sample t-test and ANOVA test. Data analysis of the study indicated that the blog-based group outperformed the students who followed the same process conventionally in a classroom atmosphere. Moreover, a statistically significant difference was revealed between the groups in terms of idea, organization, word choice, sentence fluency, and convention. However, the use of weblogs did not cause any significant improvement on the voice (personal tone) trait of the students' written texts. The study concluded with a suggestion that EFL classrooms should benefit from weblogs more frequently. As for a critique of the study, there was not a consistency in the essay type that the students were asked to write. To be more clear, the students were required to write argumentative, opinion essays as well as giving examples throughout the study; thus, there was not a specific type of essay in order to conclude about the effect of weblogs in a certain type of essay.

In another comparative study, Zhaou (2015) examined the impact of blogging on Chinese EFL learners' writing development. The participants of the study were eighty-one sophomores in a state university in China and they were randomly assigned to either a blog or a class group. While the blog group implemented all phases of process writing via blogs, the class group completed all phases face to face in their class hours. All implementation sessions lasted 18 weeks. Writing pre-post test scores indicated that blog-assisted process writing significantly improved students' writing ability. In addition, the questionnaire and interview results indicated that most of the participants in the blog group adopted positive attitudes towards blog-assisted writing model. Furthermore, they asserted that while their writing anxiety decreased, their self-confidence increased considerably throughout the implementation. In sum, the study suggested positive effects of blog-assisted process writing on EFL students' overall writing development. However, the study did not reveal in which traits of writing the students made improvement the most. Therefore, examining the effect of blogging on different writing traits was suggested for further studies.

The effect of blogging on different writing traits were examined in another comparative study by Kashani, Mahmud and Kalajahi (2013). It was sought to find out if there was any superiority of blog writing over classical paper-pen essay writing of Iranian graduate students in terms of different writing traits besides overall writing development.

Implementation session of the study lasted 8 weeks and during this period, while the blogging group wrote their essays on the blog website, the control group wrote their essays via paper-pen format. In the implementation session, while the blog group could receive several feedbacks from their peers, the control group could not have that chance. Instead, they directly submitted their assigned essays to the researcher. The study adopted a quantitative true experimental design. In this design, pre and post test mean scores of both groups were compared, and it was revealed that there was a considerable improvement in the overall writing performance of EFL learners in both groups. Moreover, when post-test mean scores were compared between two groups, no significant difference was found between two mediums of writing. However, when the writing scores of each group were compared under each category of ESL Composition Profile (Jacob's et al., 1981), a significant difference was seen only in the content category with a superiority of the blog group. However, it may be speculated whether blog use or receiving peer feedback caused any superiority of the blog group over the control group in terms of content. The researchers of the study also conclude that even though writing mediums, either blogs or paper-pen, do not guarantee writing improvement of learners, integrating technology into lessons encourages learners to write more owing to its novelty factor.

Different from other studies, Glymph (2012) investigated the effect of blogging on Spanish writing skills. More precisely, it was examined if there was any relationship between blog use and adolescents' Spanish writing skills. The participants of the study were 34 high school students at different grades in a Georgia public high school. As for methodology, a quasi experimental design was adopted, and in this design private classroom blog (experimental group) and traditional classroom (control) applications were compared in terms of writing development. The implementation session lasted six weeks and during this period, while the experimental group completed formal writing tasks via class blog, the control group conducted writing the same tasks in a paper-pencil format. Pre-post tests design was employed to determine any differences between two applications in terms of text comprehensibility, discourse and vocabulary usage. The writing tests were analyzed by an analytic rubric and it was found that there was no statistically significant difference between two groups' written tasks in terms of text comprehensibility, discourse, vocabulary usage and language control. However, the results of the study is restricted to only 6 week application; therefore, it is only possible

to speculate on short-term effects of the private classroom blog practice on writing. Thus, as a suggestion, extending the implementation session to a term may increase the strength and generalizability of the results.

Dickinson's study (2013) revealed that blog writing does not only improve learners' writing skill but also their vocabulary and grammar knowledge. The study was conducted with 10 Japanese university students, and they were asked to write weekly blog posts of 150 word limit and make comment with at least 100 word count on their peers' posts. At the end of the implementation, it was revealed that the participants learned new words and did better in grammar via reading and commenting on blog sessions. Furthermore, owing to collaborative work sessions, it was seen that the participants both improved their writing skills and interpersonal communication with the peers. Thus, it was observed that the participants became less teacher dependent throughout the implementation. As a problem occurring in the implementation, some students could not write their posts with at least 150 word counts and therefore, the researcher had to remind them to write more time after time. That is why it was suggested for further studies tracking and recording word counts of learners' blog posts in short intervals.

As an alternative application of blogs, Cheng (2012) explored the potential use of Twitter as a microblogging tool on writing and reading skills of Taiwanese EFL learners. 56 college students majoring in applied English participated in the study. The participants were randomly assigned to Twitter and non-Twitter group. The study lasted 2 months and during this period, whilst the experimental group utilized Twitter as a microblogging platform to discuss about the tasks, the control group did the same procedure without employing Twitter as a supplementary tool for the lesson. Pre and posttests were conducted in order see any changes in terms of the participants' reading and writing performances after the implementation. Both dependent and independent samples t-tests were utilized to assess pretest and posttest scores of the participants. The analysis of the data indicated that different learning approaches (Twitter-non Twitter) did not lead to any significant difference on the learners' reading and writing performances. More specifically, it was seen that the students in the Twitter group were more motivated to read and write after the implementation. Furthermore, they produced more writing entries and asked more questions related to the course tasks. However, it did not yield any statistically significant differences between two groups. Interestingly, the dependent sample t-test result revealed that writing pre and post-test scores of each group were significantly different. Hence, it

can be concluded that there is an improvement in terms of reading and writing performances of both groups irrespective of different mediums. The researcher explained this insignificant difference with time constraints of the study. He explained that if the implementation of Twitter-assisted learning had taken place over one whole semester, the potential benefits of using Twitter for language learning might have been magnified. Furthermore, Twitter activities in the study were implemented only in class meeting sessions. Therefore, they were restricted to complete all the tasks in a certain time period. In addition to this, although a limited number of characters confined in Twitter posts seems to be an advantage to complete tasks in classroom meeting sessions, it might be a disadvantage for the students to express their intended thoughts in longer paragraphs. Based on these delimitations of the study, it was recommended for further studies to apply blogging sessions out of the classrooms setting without word limitation.

As a long term comprehensive study, Cequena (2013) questioned the effects of blogging on 41 freshman college students' writing development. The implementation session lasted 13 weeks, and during this process, the students were asked to write extended definition essays. After posting their first drafts, both their peers and the teacher gave constructive feedbacks on the essays. In order to find out if there was any improvement in their writing ability, their entry and exit writing test scores were analyzed according to a specific rubric. The rubric included content, organization, style, grammar, mechanics, spelling and punctuations criteria in it. The results of the study revealed that among six criteria in the rubric, the students improved in content and organization aspects of writing most. The perception of the students regarding blog use and giving feedback revealed that blogging was beneficial in terms of improving their writing skills, boosting confidence, increasing critical thinking skills, self esteem and self-expression. It was also acknowledged by most of the students that blog application was quite enjoyable. As for a critique, in the study, there was an intense teacher intervention on students' blog entries; therefore, it may not be claimed that this positive result belongs solely to blogging itself, instead the teacher's constant feedbacks might have attributed to the students' writing improvement. Thus, teacher intervention during an implementation session was not suggested for further studies.

The study by Sun (2010) attested the findings of Cequena (2013) as for the facilitating effect of blog writing on especially organization aspect of writing. Sun (2010) scrutinized extensive writing of undergraduate Taiwanese EFL students in blog platform.

It was investigated if any significant improvement was revealed in terms of students' writing performances throughout the blog implementation. For this aim, the first three blog entries of students were compared with their last three blog entries in terms of syntactic complexity. Furthermore, they were asked to fill in a survey regarding their attitudes towards blog implementation. The results of the study indicated that blog application enhanced EFL students' overall writing performance at the end of the implementation. Moreover, even though they used simpler structures in the last three entries, they still indicated a significant improvement especially in terms of mechanics and organization of the texts. The survey results also revealed that the undergraduate students enjoyed blog writing a lot and found blog practices valuable for their language development. At the end of the study, Sun concluded that blog writing helps learners to establish good writing habits, build language awareness, develop learner autonomy, promote confidence and motivation. Sun also recommended for further studies conducting blog practices with younger learners in order to have a comprehensive result in terms of the impact of blog writing on EFL learners' writing development.

Based on the recommendation of Sun (2010), in the master thesis of Bakan (2016), the impact of blog writing was investigated on the fourth grade elementary students' motivation, engagement and writing skills. In the study, the students were asked to write a blog, read and comment on their classmates' entries regularly. Both qualitative and quantitative data were collected from the students. The data analysis of the study indicated that even though there was an improvement in the students' writing skills over time, no improvement was detected on the students' blog posts in terms of grammar and mechanics aspects of writing. However, it was observed that blogs provided a platform where students could communicate and learn from each other. Moreover, by the help of blog use, most of the students had a sense of community in a new platform. As a whole, all the students stated their enjoyment as for reading their friends' posts and commenting on them. In sum, the study suggests that when students concentrate on a specific topic to write, they get a sense of group under a topic and they become more motivated to write. Furthermore, based on the researcher's observation and survey results, it was concluded that the students learned from each other and felt more motivated to write since they knew that their friends would read and comment on their texts; herewith, they paid more attention to their posts. As a limitation of the study, the implementation session lasted only a few weeks; therefore, the researcher of the study suggested that blogs should be

implemented over a longer period of time to have more detailed information about the impact of blogs on writing development.

Besides the studies adopting experimental and mixed-methods design, several studies investigated the effect of blog writing based on qualitative data. As one of the examples, the case study by Guo (2013) investigated 31 Chinese EFL university students' experience with blogging activities. The study lasted 14 weeks and during this period, the students were asked to write about their thoughts based on either assigned prompts by the teacher or unassigned prompts on a class blog each week. The assigned prompts were given during the first seven weeks and then they were asked to write about any topics that they wanted in the following seven weeks. After writing their blog entries, the students were asked to comment on at least two other classmates' posts. Thus, it was aimed to provide a communicative platform for the students to express their thoughts. After completing the implementation session, they wrote their reflections on their experience with blogging. Data of this qualitative study were collected by students' blog entries, surveys, interviews, observations and reflections of the researcher. The results of the study revealed that the students felt self-confident during blogging and made use of different thinking skills while writing their posts. Moreover, they adopted unassigned topics more than the assigned ones; therefore, they tended to write much more on the topics they wanted to write about. As for a limitation, it can be said that only seven students' blogging experiences and their online interactions with others were scrutinized throughout the study. In that sense, the number of the participants is not enough to obtain generalizable results. As for a suggestion, the researcher of the study recommended including more participants by using quantitative data in order to examine students' writing quality statistically for future research studies.

In another qualitative case study, Jones (2016) echoed the findings of Guo (2013). In his doctoral dissertation, Jones examined the effect of Edmodo as a microblogging tool on eight grade students' writing development in their native language as well as investigating their perceptions on microblogging experience. During the implementation, the participants were asked to write their comments on the short stories which they read in the class atmosphere each week. The students' writing development in their posts was gauged according to the steps in the revised version of Bloom's Taxonomy. The result of the study indicated a considerable improvement in the students' writing ability especially in analysis and evaluation steps of the taxonomy each week. The students' positive view

on the microblogging experience confirmed this finding since they asserted that microblogging enhanced their writing ability in various ways. However, the number of the participants was not found sufficient in order to have a generalised conclusion. In other words, data were collected from only six student assignments, and therefore, it was very difficult to gauge of the students' overall writing improvement.

As a different research design, Carlino (2009) employed an action-research project in a study conducted with the students who learned Spanish as a foreign language. The results of the study revealed that blog writing facilitated students' participation, collaboration and interpersonal communication owing to sophisticated arguments via blogs. The study also suggested that errors made through writing blog posts might be used to construct new language items. Feedbacks from the students revealed that writing in a blog platform creates a less anxious atmosphere than face-to-face communication. Therefore, Carlino concluded that electronic discussion in a blog platform is highly recommended for foreign language classes.

Besides the aforementioned studies indicating positive effects of blogging on language learning processes, there are relatively few research studies indicating students' negative feedbacks on blogging experiences (e.g. Lin, 2015; Lin, Groom and Lin, 2013). As a qualitative study, Lin and his colleagues (2013) probed the experience of 25 freshman students in Taiwan with blog-assisted language learning. The implementation of the study lasted two semesters (36 weeks) and during this time, the participants were asked to construct their writings in different genres by using weblogs. They constructed their texts in a school laboratory each week. After completing their tasks, they were asked to comment on the blog posts of their friends. During this process, the researcher also intervened in the process and gave some corrective feedbacks on the blog posts of the students. The interview conducted at the end of the study revealed that the students felt anxious and demotivated to write on the blog platform during the study. Some possible reasons for this case were the participants' inefficacy in terms of writing ability and giving comments, pressure of making mistakes and fear of peer criticism. Based on these results, the researchers of the study suggested focusing on content rather than grammatical correctness of the written texts on a blog platform. Besides written texts, the feedbacks should also be focused on content instead of grammatical correctness of the blog posts.

The study of Lin (2015) examined the effect of learner blogging on Taiwanese EFL students' writing development as well as on their motivation and self-efficacy in

writing. 18 university students from English Department in Taiwan participated in the study and their language proficiency ranged from A2 to C2 level under the Common European Framework of Reference (CEFR) for languages. The experiment lasted 18 weeks and during this period, the participants wrote at least 7 blog entries on any topic that they wanted to write on a free online blog platform. Both quantitative (writing pretests and questionnaire) and qualitative (interviews) data were collected for the aim of the study. In addition, the writing pretest samples were compared to the ones of writing posttests in terms of type/token numbers. It was revealed that there was a slight increase in both type and token numbers in the writing post-tests of the learners. The result of questionnaire regarding learner motivation and self-efficacy revealed that even though most of the students were more motivated and had more self-efficacy on content and organization aspects of writing at the end of the implementation, they still had apprehension about losing face during blogging experience. They thought that they had limited English knowledge; and therefore, they might not have been understood by the readers. This finding is in line with the findings of Lin et al. (2013) which indicates students' high anxiety because of limited L2 knowledge and peer pressure.

In regard to grammatical and vocabulary errors, the experimental study of Gonzalez-Bueno and Perez (2000) revealed no significant difference between electronic dialogue journal and the traditional paper-pencil journal writing. The study also concluded that blogging based on given prompts did not yield any writing improvement of Spanish high school students. In sum, this study contradicts with the findings of the previous studies which indicate superiority of blog writing to paper-pencil format writing. Based on the controversial studies, it can be said that there is still a need to conduct research studies in order to explore the impact of blogging on language skills, especially on vocabulary and writing skills.

In sum, the majority of both qualitative and quantitative research studies have a consensus on the fact that blog writing increases learners' linguistic awareness, facilitates the development of L2 writing community and fosters critical thinking skills. Some of the research studies also highlight that the use of blogs increases both student-student and student-teacher interaction, enhances learning motivation towards writing, and ultimately improve writing performance in the end (e.g. Arslan and Şahin-Kızıl, 2010; Blau, Mor and Neuthal, 2013; Halic et al., 2010; Kajder and Bull, 2004; Nguyen, 2012; Sun, 2010; Taki and Fardafshari, 2012; Trajtemberg and Yiakoumetti, 2011; Vurdien, 2013).

However, besides many research studies that indicate an enhancing effect of blog use on language skills, there are still some studies which do not reveal any superiority of blog use to traditional paper-pen format especially in terms of grammatical and lexical accuracy (e.g. Gonzalez-Bueno and Perez, 2000). In this respect, there is still a need to conduct research studies examining the impact of blog writing on language skills.

2.6.2. Blogs and vocabulary

Besides the writing skill, blogs have also been noted as effective in promoting other language skills and units in EFL classes (Aydın, 2014). However, as compared to many studies in the literature, studies investigating the impact of blog use on vocabulary knowledge is relatively scarce in the literature (e.g. Dickinson, 2013; Lerma, 2013; Noytim, 2010; Rahmany, Sadeghi and Faramarzi, 2013). Moreover, they employed different applications in terms of blogging and vocabulary development of learners.

For instance, in the study of Noytim (2010), the impact of blog use was examined on EFL students' reading ability and vocabulary knowledge besides on their writing skills. The results of the study indicated that EFL students in Taiwan perceived blogs as a useful tool in terms of improving writing, reading, vocabulary, self expression, thinking skills and social interaction. The study also revealed that the students had a tendency to focus on the fluency rather than the accuracy of their blog project. This means that meaning seems to be prior to form in blog environment.

In order to improve accuracy of the sentences in the blog platform, Rahmany, Sadeghi and Faramarzi (2013) integrated grammar checking and vocabulary enhancement tools into a blog website. In their study, it was investigated if these tools help Iranian learners' vocabulary development and grammatical accuracy. It was researched to what extent the blog tool alleviated errors or mistakes in the written texts of EFL learners. 25 adult learners participated in the study and they were asked to write five articles about pre-determined topics in the 5-week implementation session. After posting their entries, they were asked to comment on the blog posts of their friends as well as check any grammatical mistakes when necessary. With online enhancement vocabulary tools, they had a chance to suggest new words to their peers in order to make the sentences more authentic. The number of comments regarding grammatical errors and vocabulary choice was compared through each blog entry of learners by running Chi-square test. A great improvement was seen in the writing quality of the learners in terms

of vocabulary and syntactic structure in time. Furthermore, it was found that both the grammar checking and vocabulary enhancement applications within the blog website helped learners to become aware and critical about their writing abilities. That means that the improvement in the learners' written texts cannot be explained with only the blog application. In other saying, making use of the vocabulary and grammar checking tools may be the intervening factors to conclude about the results. Therefore, it can be suggested that in order to conclude about the impact of blog use on the vocabulary development, any intervening factors except for blog use should be eliminated in a study.

The positive effect of blog use on both vocabulary and grammar development of learners was also verified by the study of Dickinson (2013). This study was conducted with 10 Japanese university students, and the participants were asked to write weekly blog posts of 150 word limit and give comments with 100 word count on their partners' posts. During the collaborative work sessions, it was seen that the participants improved both their writing skills and interpersonal communication with the peers. It was also revealed that EFL students could learn new words and grammar items through reading and commenting sessions on the blog platform. Observations during the implementation also indicated that the participants became less teacher dependent after the blog implementation. As a limitation of the study, it was observed that some students could not write their posts within a 150 word limit and the researcher had to remind them to write more. For this reason, it is recommended that further studies should track and record word counts in the blog posts regularly.

As seen in the study by Dickinson (2013), the facilitating effect of blogging on both writing and vocabulary development was confirmed by the study of Ghaderi, Behjat and Rostampour (2014) as well. In the study, it was examined if employing Weblogs had any enhancing effect on Persian EFL learners' both writing and vocabulary development. The participants of the study were 60 intermediate Persian women students. The participants were assigned into two groups; experimental and control group. While the experimental group studied target words in a blog web page with various exercises and wrote a paragraph including the words, the control group studied the same words in conventional ways such as memorization and translation and wrote a paragraph including the target words by using paper and pen. As the last step of the implementation, the participants were asked to give corrective feedbacks on each others' written texts. After three months of the implementation session, a posttest was given to the participants. Both

pre and post tests were totally the same and in both tests learners were asked to write a paragraph on a given topic and answer some vocabulary questions built by the researchers. Besides these tests, the experimental group also carried out a survey investigating their attitudes towards the blog writing process. Data analysis of the study revealed that the use of weblogs has a facilitating effect on the Persian students' vocabulary knowledge and writing performance since the students in the weblog group outperformed the students in the control group in both vocabulary and writing tests. However, because the students in the experimental group had much opportunity to practice the target words in different context such as synonyms, antonyms etc. via the weblog, it can be speculated that extra materials regarding target words in the blog page might have caused the superiority of the experimental group on the vocabulary tests.

As different from the aforementioned studies, Lerma (2013) conducted a study to investigate the effect of blog use on vocabulary knowledge in Maths and Science disciplines instead of English. More specifically, in the master thesis of Lerma (2013), it was interrogated whether writing on the blog platform could facilitate young learners' academic vocabulary knowledge in both Maths and Science lessons. The participants of the study were sixteen 4th grade students enrolled in two bilingual classes in Texas. During the implementation, 12 blog prompts were collected from each participant. Seven of the twelve prompts were related to Mathematics and the remaining five blogs were related to science discipline. The prompts were analyzed based a rubric modified by the researcher. The analysis of the study indicated that the students' academic language and knowledge have improved considerably owing to blog writing. As for the assignments given by the researcher, the students found blogging more motivating than a paper-pen writing application. Therefore, it was concluded that blogging created a positive effect on the motivation of young learners. As for a restriction of the study, interaction occurred only between the teacher and the students. Moreover, corrective feedbacks were given by only the class teacher. This means that the teacher's interference on the process might have caused any improvement in the students' vocabulary knowledge. Therefore, there is a need to interrogate the impact of blog use on students' vocabulary knowledge without any teacher intervention.

2.7. Research Studies in the Turkish Context

With a debut of integrating information technology into education, blogs have been used as pedagogical tools in language teaching in Turkey. In accordance with this inclination, a growing number of research studies have been conducted so far to interrogate the blogs' value in education context. However, as compared to a large number of research studies concerning blogging and language learning abroad, the use of blogs for educational purposes in the Turkish context is relatively limited; thus, the literature regarding the blog application in the Turkish context has been extremely rare and remained an issue that needs to be probed (Aydan, 2014; Aydın, 2014). When the research studies regarding blog use in Turkish context are scrutinized, it is seen that they examine blog applications from different perspectives and reveal different findings based on their effects on language learning.

For instance, as one of the qualitative studies, Tekinarslan (2008) probed blog application of 42 undergraduate students through interviews, documents analysis, and observations. The implementation session lasted an academic term in Abant İzzet Baysal University, and during this process the researcher asked students to use a blog website for their writing applications. The analysis of qualitative data revealed that blogging was proven to be easy to apply, convenient and effective in language development since it helped the students with the organization of sentences. The study also indicated that even though the blog was easy to set up, it was difficult to decide on the topics to discuss about. Therefore, further studies were suggested preparing writing topics meticulously.

As for investigating Turkish EFL university students' perceptions on blog use, Şahin and Arslan (2012) conducted a study with 27 intermediate level undergraduate students. The study sought to explore the students' perceptions about integrating blog application into their writing course. 27 intermediate university students carried on process writing during 16 weeks by using a free blog website. At the end of the study, the participants were given a questionnaire regarding their perceptions about the blog experience. The result of the questionnaire indicated that the participants had positive attitudes with regard to integrating the blog application into their writing lessons. Furthermore, they perceived that they made improvement the most in the content and organization traits of writing. However, conclusions were drawn based on only the students' perceptions. That is, there was no statistical value to indicate the impact of blog use on the traits of writing. Therefore, it seems to be a need to conduct an experimental

study to reveal more objective results regarding its impact on language learning. As a pedagogical implication, the researchers of the study suggest integrating blog application into the courses which have limited time.

The positive attitudes of learners towards blog application was endorsed by the case study of Aydan (2014). In this study, it was investigated whether or not a blog application was favoured by the Turkish EFL students and instructors. The study was conducted with 104 university students and five English language instructors in a private university, and their perceptions about both the benefits and challenges of using blogs in reading lessons were scrutinized through questionnaires and interviews. In a two-semester implementation session, the students were asked to use their class blog so as to write their comments on the chapters they read in the reading lesson. After undergoing the implementation, a questionnaire was conducted with the students while the instructors had a semi-structured interview regarding their experiences with the blogging process. The results of the questionnaire and the interview revealed that both the students and the instructors perceived blog application enhancing in terms of reading, writing, vocabulary development and syntactic accuracy in English. Moreover, the students found blogging motivating for searching for new topics. However, some challenges of the blog application such as choice of topics, internet connection, unclear instructions, time-wasting and extra workload were also mentioned by both the students and the instructors in the study. In line with these challenges, the researcher proposed some solutions such as taking into account students' own topic choices, giving clear instruction about the topics, and integrating different modalities such as pictures, videos or links into blog websites. For further studies, she also suggested taking into account all the challenges mentioned in the study while conducting a new study.

As it is in blog application, Ekinçi (2017) indicated the positive effects of Twitter, as a Web 2.0 tool, on the students' writing abilities and motivation. As a mixed-methods design study, Ekinçi (2017) inquired any impact of Twitter, as a microblogging application, on the undergraduate students' writing improvement and the motivation to write. The study was conducted with 63 EFL Turkish students attending an English preparatory class in a private university. The participants were assigned either to an experimental or a control group. The students in the experimental group were asked to write English sentences according to hashtags given by the teacher. However, the students in the control group had writing lessons without any intervention of the Twitter

application. In this mixed-methods study, the quantitative data were gathered from the students' pre and post writing test scores in each group and a motivation questionnaire which was conducted in the experimental group. The qualitative data were collected from retrospective evaluations by a few students in the experimental group. The results of the study revealed that the Twitter application had an enhancing effect on the students' both the writing ability and the motivation level. The researcher explained the facilitating effects of Twitter use with on having an opportunity to get immediate feedback, authenticity of the interaction, providing a platform for social interaction and writing practice. Based on the positive effects of Twitter use on the students' writing abilities and motivation, the researcher recommended integrating Twitter applications into the curriculum. The researcher had some recommendations for further studies as well. First, a similar study with a different age group such as college or primary school students and with different proficiency levels could be conducted in order to make generalizations about its impact on learners' writing skill. Second, in the study, the students were restricted with 140 character limit in their written texts. However, another Web 2.0 tool allowing to use more than 140 character limit in a text might give more detailed information about the impact of Web 2.0 tools on the students' writing abilities. Furthermore, a longitudinal research design might be precious to see if the results will be consistent with this study. Therefore, a longitudinal study with a different Web 2.0 tool, with different age groups and proficiency levels was recommended at the end of the study.

In another study conducted with university students, Çiftçi (2009) investigated the effect of peer feedbacks via blogs on the Turkish EFL students' writing development. 30 university students majoring in English Language Teaching in a private university participated in the study. The participants were assigned to either the experimental or the control group equally. The implementation session lasted one semester and during this period while the experimental group attended the writing lessons in a computer laboratory and used blogs for peer feedback, the control group had their writing lessons in a classroom environment and gave face-to-face oral peer feedbacks on the written texts. Then, all of the participants were asked to write their revised drafts once more based on the received feedbacks. Data were gathered from the written texts of the students via a background survey and a questionnaire regarding the blog application. The analysis of the data revealed that both the control and the experimental group improved on the major aspects of writing in their second drafts, and the students' writing performances in both

groups were comparable after the implementation. Furthermore, no significant difference was found between the groups in terms of word counts of the written texts. Even though both groups benefitted from their peers' comments on their texts, the only difference was recognized regarding the content of the feedbacks. While peer commentary feedbacks on the blog platform were mostly about global issues, face-to-face peer comments dominated on local issues. Finally, the analysis of the interviews and the questionnaire revealed positive attitudes of the Turkish EFL students on the use of blogs in the writing classes. Some of the students in the blog group also mentioned that in contrast to a classrooms atmosphere, they had more time to complete their writing tasks and there was not any noise while writing in the blog platform; therefore, they benefitted from the blog application considerably. In this aspect, blogs could be supplementary applications for especially crowded and noisy language classrooms.

As it was in the study by Çifçi (2009), Kayacan (2017) investigated the effects of digital feedbacks on EFL learners' writing improvement. However, in this quasi-experimental study, more specifically, self and anonymous peer feedbacks were compared in terms of their effects on the writing improvement of the Turkish EFL high school learners. 46 students in two intact classes participated in the study, and they were categorized as *good*, *moderate* and *weak* according to their language proficiency. During the implementation, each student provided both self-evaluation and an anonymous peer feedback on four writing assignments via the digital program, Edmodo in a reverse order. Both quantitative and qualitative data were used for the aim of the study. While the quantitative data were gathered from writing task scores through an analytic scoring rubric, the qualitative data were collected from open-ended questions. The data analysis of the study revealed that both self-evaluation and anonymous peer feedback helped the participants to revise and restructure their texts in a better way. Moreover, when the written texts were examined in detail, it was seen that there was an improvement at five major components of writing; namely, organization, content, grammar, vocabulary, and format. The analysis of open-ended questions confirmed the statistical findings in that the participants mentioned improvement in their texts in terms of content, grammar and format components. Moreover, they highlighted their positive attitudes towards both digital self evaluation and peer feedbacks.

Like the aforementioned studies, Özdemir and Aydın (2015) employed process writing throughout a blog implementation. More specifically, they examined if there was

any superiority of blog-based writing to traditional pen-paper writing in terms of writing development. Forty-eight EFL learners majoring English Language Teaching in Balıkesir University participated in the study, and they were randomly assigned either to the blog or the control group. During the implementation, both groups engaged in process-based writing, but in different formats. To be more specific, while the participants in the control group completed their writing tasks in a traditional pen-paper format, the experimental group benefitted from a blog application to complete their writing tasks. Pre-post design was adopted to see any difference between two groups after the implementation. The independent sample t-test results indicated that there was a statistically significant difference between the groups in terms of the content, organization, discourse markers, vocabulary, mechanics aspects of writing; however, no significant difference was found in terms of sentence structure. Moreover, when two groups were compared in terms of overall writing scores, it was seen that blog writing does not have any superiority to traditional pen-paper application. The researchers explained this result with the experimental group's lack of technical skills and experience with the blog application. In other saying, the participants' familiarity with the conventional pen-paper activities throughout their educational backgrounds might have caused this insignificant difference. The study concludes that the use of blogs does not guarantee a better writing experience for Turkish EFL learners.

Similar to the study by Özdemir and Aydın (2015), Arslan and Şahin-Kızıl (2010) examined the impact of integrating blog application to process-based writing approach on the writing development of Turkish EFL students. The study was conducted with 50 university students in a state university throughout an academic year. In this quasi-experimental study, the students were randomly assigned into an experimental (blog writing) and a control group (paper-pen writing). During the implementation, all of the students were asked to write a sample text in different essay types such as descriptive, compare and contrast, cause and effect essays. While practicing the stages of process writing approach, the experimental group made use of a free blog website while the control group adopted a paper-pen format to complete the writing tasks in a class environment. However, the feedbacks for each group were given in a class environment by the teacher. In the free blog website, extra course materials regarding each essay type were also provided by the teacher. A pre-posttest design was adopted in order to find out whether blogging helped the students to improve their writing skills or not. As for the

writing pre and post-tests, the students were allowed to write paragraphs on any topic they wanted. All the tests were scored based on an analytical rubric. Data analysis of the study revealed a significant difference between two groups in terms the writing posttest scores. When the writing performances of both groups were compared, it was found that the students in the blog group outperformed the students in the class group. In order to find out in which element of writing a difference occurred, an ANCOVA test was employed in the study. The result of the test revealed a significant difference between two groups in terms of the content and organization components of the written texts. However, no significant difference was found in other components such as vocabulary, language use and mechanics in the written texts.

When the literature is broadly reviewed, it is seen that the only study conducted with Turkish EFL high school students was the one of Akdağ and Özkan (2017). As a small scale exploratory case study, it was sought to find out whether or not blog writing has an effect on the high school students' writing abilities. The participants of the study were 14 ninth grade students of a state school in Adana. For the purpose of the study, the participants were asked to write two blog posts each week during a term, and this process was examined in detail via the teacher's observation and individual interviews with the students. At the end of the study, it was observed that the students created more complex sentences at the end of the implementation, and there is a lexical variety in their latter blog posts. The researcher also noted that the blog experience contributed to the students' productive vocabulary development in the written texts. As for the students' perceptions about blog experience, both positive and negative aspects of blog writing were mentioned by the students. The most frequently mentioned positive aspects were as follows; blog application triggered vocabulary development, it was a fun activity, it improved reading and writing skills and fostered learner responsibility. As for the negative aspects, it was mentioned by the participants that they had to focus on grammatical correctness of the texts; and thus, they sometimes felt anxious in the process of time. In addition, some of the participants also stated that the blog application was a bit time consuming. However, as compared to the negative ones, the positive aspects of blog writing were apparently a lot more. Therefore, integrating blog application into the teaching practices was suggested for language teachers. As a limitation of the study, the conclusion of the study was drawn on only the observation of the researchers. That is, no statistical calculation was conducted in the study. Therefore, it may be better if statistical calculations are included

in a study in order to have more objective results in terms of the effect of blog use on the high school students' writing skills.

To sum up, the abovementioned studies generally pointed out the facilitating effects of blog use on the writing skills of Turkish EFL students. However, it can be speculated whether the feedbacks within the process writing might have caused this effect as seen in the study by Arslan and Şahin-Kızıl (2010), Çifçi (2009), Kayacan (2017), Özdemir and Aydın (2015), Şahin and Aslan (2012). For this reason, it seems to be a need to examine the impact of blog writing on the learners' writing abilities irrespective of corrective feedbacks. In this way, it would be possible to eliminate any peer or teacher intervention on the blogging process. Previous research studies also focused on the effect of blogging on only one aspect of language, mostly writing (e.g. Arslan and Şahin-Kızıl, Çifçi, 2009, 2010; Ekinçi, 2017; Kayacan, 2017; Özdemir and Aydın, 2015, Şimşek, 2009, Tekinarslan, 2008). Even though Akdağ and Özkan (2017) sought to investigate the effect of blog use on the learners' vocabulary development as well as their writing ability, only qualitative data such observations and individual interviews were gathered in order to gauge the impact of blog writing on these two language areas. However, in order to obtain a comprehensive conclusion, both quantitative and qualitative data should be included in a study. Moreover, quantitative data should be assessed by the objective assessment tools. When the literature is generally reviewed, it is seen that the participants of the studies in Turkey generally consist of university students (e.g. Arslan and Şahin-Kızıl, Aydın, 2014; Çifçi, 2009, 2010; Ekinçi, 2017; Kayacan, 2017; Özdemir and Aydın, 2015, Şahin and Arslan, 2012; Şimşek, 2009, Tekinarslan, 2008). Therefore, it is seen that there is a lack of research studies investigating the impact of blog writing on the language skills of adolescent participants (Akdağ and Özkan, 2017). As Pinkman (2005) pointed out the importance of age factor in technology use, conducting a study with adolescents might reveal different results in terms of blog use and language skills. Last but not the least, it seems that the research studies conducted in a long term are quite limited in number (e.g. Akdağ and Özkan, 2017; Aydın, 2014; Çiftçi, 2009; Tekinarslan, 2008); herewith, it seems to be a need to conduct more longitudinal studies in order to scrutinize blog implementation in the Turkish context. To sum up, there is a need to construct a new study by taking into account the paucities in the aforesaid studies.

3. METHODOLOGY

This chapter presents an overview of the research design, the participants, the instruments, the testing materials, and data collection of the study.

3.1. Research Design

The present study adopts *Mixed-Methods Design* in which both quantitative and qualitative data are used for the aim(s) of a study. More specifically, Johnson and Onwuegbuzie (2004) defines Mixed Methods Research as “the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study” (p. 17). Based on this definition, it can be deduced that the rationale for using Mixed Methods is to integrate two different research methods (quantitative and qualitative) under the scope of the research question(s). Creswell (2012) suggests various types of Mixed Method designs based on the research aims and sequence of data collection (p. 541). Among these types, the current study applies *Explanatory Sequential Design* regarding sequence of data collection (see Figure 3).

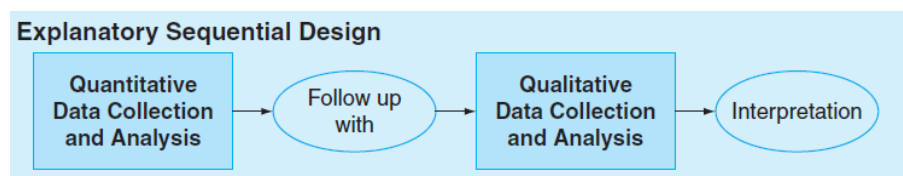


Figure 3. *Explanatory Sequential Design* (Creswell, 2012, p. 541)

Creswell (2012) claims that employing Explanatory Sequential Design in a study gives more in depth information about the quantitative data owing to the qualitative phase of the study. Therefore, it is possible to better understand the phenomena of an application (p. 552). Likewise, in the current study, as the first and the main concern, quantitative data were analyzed in order to find out any impact of blog use on both the writing and vocabulary development of the Turkish EFL learners. The quantitative data were gathered from the participants’ both writing and vocabulary tests besides vocabulary profile analysis of their written texts. Following the quantitative data, in order to gather more in-depth information about the blog implementation and evaluate the blogging process from the participants’ perspectives, a question regarding their perceptions about blogging process was posed to all participants at the end of the study. The answers by the

participants constituted the qualitative data of the study. The question aimed to discover the participants' point of views with regard to the blogging process in six different aspects; technology use, vocabulary knowledge, reading skill, general world knowledge and culture, time and interaction. The question was asked in Turkish (L1) in order to encourage them to write more (see Appendix A). At the end of the study, a general evaluation was obtained based on the analysis of both quantitative and qualitative data sequentially. Therefore, the research design of the current study best fits to Explanatory Sequential Design.

3.2. Participants

The participants of the study were delimited to 35 Turkish EFL high school students in Eskişehir, and they were selected based on *a non-random purposeful-convenience sampling*. Most of the participants (24) were the researcher's own students enrolling in language classes. These students were deliberately included in the study since they were "willing to participate and available to reach" (Creswell, 2012, p. 145); thus, it was practical to adopt the purposeful-convenience sampling in the current research study. At the beginning of the study, only 24 students attending the 11th and 12th grade Foreign Language Classes in Prof. Dr. Orhan Oğuz Anatolian High School were considered as the participants of the study. By selecting the researcher's own students, it was aimed to both reach the students easily and get insight information about their experience. However, in order to conduct the study with a larger population, it was decided to include other volunteer students in the same school as well. For this aim, firstly the study was introduced to all volunteer students in different grades (9th, 11th and 12th) in the school. However, it was reminded to them that there were some prerequisites to participate in the study. Lin et al. (2013) highlight that the L2 proficiency level of the participants is one of the important factors to be able to write and make comments on weblogs. Moreover, they may feel embarrassed when their written tasks are not comprehended by the readers due to many grammatical mistakes. Based on these notices, the participants in the current study were required to have a certain language proficiency level. More specifically, the pre-conditions to be a participant in the study were to have receptive vocabulary knowledge at minimum 2000 level which is considered as a basic level in order to understand a text and communicate in a foreign language (Adolphs and Schmitt, 2003) and to be willing to write blog posts and give comments on the blog posts

throughout the 18-week implementation session. Because the researcher selected them according to research aims and the criteria of the study, it can be said that a purposive sampling was adopted in the study. After sampling, it was seen that the age range of the participants varied from 15 to 18. At the beginning of the study, totally 69 students volunteered to participate in the study; however, most of them quitted writing after a while and eventually 37 students completed all blog entries by the end of the implementation. From 37 students, two students did not complete the posttests; thus, at the end of the study, it was seen that there were 35 students left who could write regularly and do all the requirements of the study. The final distribution of the participants is shown in Figure 4.

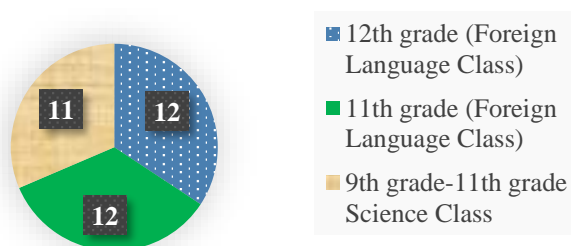


Figure 4. *Distribution of the Participants in the study*

As seen in Figure 4, the students in the Foreign Language Classes (11th and 12th grades) constitute most of the participants (24 students) in the study. The students enrolling in Foreign Language Classes have an intense language course program. In this program, 12 class hours are allocated for English lessons per week. From these class hours, four hours of grammar lessons are devoted to improve the students' grammar knowledge and to accelerate their pace to do in the tests. In other words, grammar lessons are conducted to help students to do well in the university entrance exam in a foreign language. The other eight class hours are advocated to develop the students' fluency in four language skills; reading, writing, speaking and listening. In this skill lesson, all language skills are taught integratedly and the students have a coursebook in which all the skills are integrated as well.

Figure 4 also indicates that besides the students in language classes, there were 11 students who were enrolling in other classes. Of these 11 students, eight students were at the 9th grade and three students at the 11th grade enrolled in a science class. Unlike the

students in language classes, these students had only four class hours of English lessons. However, as it is in foreign language classes, all language skills are taught integratedly based on a coursebook in English lessons. To be more specific, they have a practice of reading, writing, listening and speaking skills during their class hours. Vocabulary and grammar are taught in the context of reading and no extra time allocated to teach these subskills. Both the 11th grade students enrolling in the science class and the 9th grade students volunteered to participate in the study because they stated that they were interested in writing in English and desired to improve their English proficiency at the end of the study. Their exam scores in English were about 90 and above. For this reason, it was thought that they had a satisfactory language proficiency in English; and thus, fulfilled the pre-conditions of the study.

As a precaution, it was confirmed that all of the participants had a technology literacy in terms of using the internet since they had been actively using the internet via their personal computers, smart phones and tablets. However, it was seen that none of the students had an experience with blog writing before. Therefore, a brief explanation was given to the participants about why and how blogs would be used in the current study. Furthermore, a pilot session was conducted to make them familiar with the blog program.

The study was conducted in the spring semester of the 2016-2017 academic year. In the study, the researcher was also an English teacher who taught language skills in the Foreign Language Classes. During the implementation, the researcher had only a mentor role without intervening the flow of the implementation. As a mentor, the researcher only introduced the study and guided the participants to write regularly each week. Moreover, she did not give any feedbacks on the written texts of the participants in order not to intervene in their writing process.

3.3. Instruments

3.3.1. Blog website

As the first data collection instrument, a new blog website named *epdooalenglishblog.com* was designed by both a web developer and the researcher in tune with the aims of the study. At the time of implementation, different blog websites on the market were examined and it was seen that none of them could fulfil the requirements of the study. For example, as one of the most popular blog servers www.blogger.com has been commonly used in the previous studies since it is free and easy to use (e.g. Arslan

and Şahin-Kızı1, 2010, Glymph, 2012; Pinkman, 2005). However, in this server, it is probable for users to cheat one another because the users can see every post on the blog platform, and there is not an option to both hide posts until a specific time and then open it later. However, in the current study, it was desired to close each participant's blog post for a while, and then make it visible to the other members after being sure that all of the participants have posted the texts about the topics. In addition, there is no minimum word limit in many blog websites. However, it is necessary to put a minimum word limit in the blog posts in order to promote participants to write more (Cheng, 2012; Dickinson, 2013). Based on the deficiencies of the previous blog websites on the market, this blog website was constructed in tune with the scope of the study. Constructing and hosting costs of this new website were funded by the budget of Anadolu University Scientific Research Projects. It was designed as a private learner blog with a password protection feature. Therefore, it was visible to only the classroom students and the researcher. Owing to employing a private learner blog, it was aimed to provide a virtual platform in which the participants could write their posts freely without feeling any public pressure (Avellaneda, 2016; Guo, 2013). There were two screen panels in the blog program; one for the students and one for the teacher (researcher). The dashboard of students' blog panel is indicated in Figure 5.

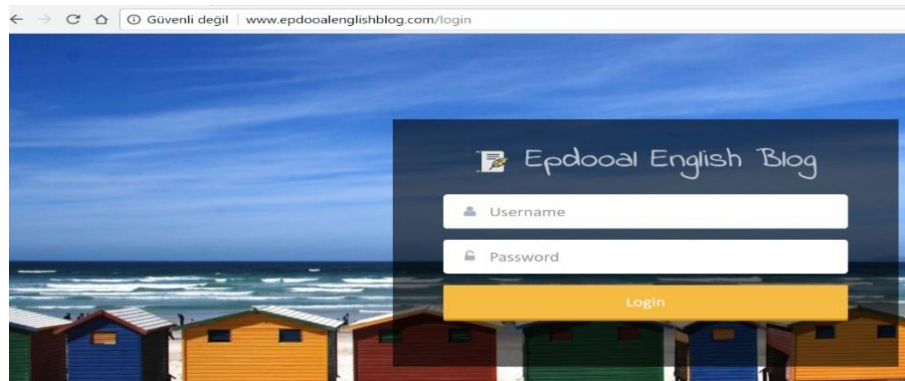


Figure 5. *Dashboard of the students' blog panel*

As seen in Figure 5, the participants are required to enter their usernames and passwords given by the researcher. That is, they have their own blog accounts. The participants are able to change their usernames and passwords at any time they want. All the changes can be seen in the teacher's blog panel. Therefore, when they forget their passwords or usernames, the teacher has an opportunity to remind them.

The dashboard of the teacher’s blog page is different from those of the students (see Figure 6). In her panel, it is possible to track all the changes the students have done. Therefore, this panel is used as a kind of monitoring system.

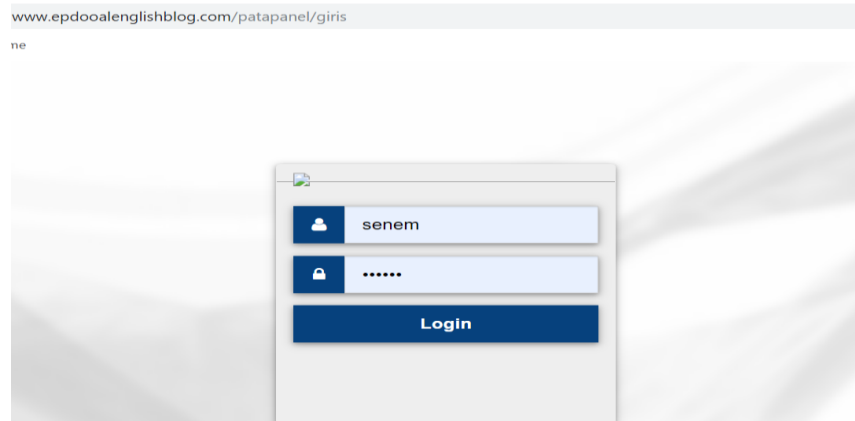


Figure 6. Dashboard of the teacher’s blog panel

In this study, the participants were required to publish an opinion essay on their blog page based on the weekly assigned topics. Taking into account the suggestions of Aydan (2014) and Guo (2013), the topics were designed based on the students’ own interests and preferences in order to increase their motivation to write more. In accordance with this purpose, prior to the implementation sessions, the teacher asked all of the participants to write what 10 topics they would like to write about in their blog pages. All the participants wrote their favorite topics on a piece of paper and the teacher piled them up and applied content analysis of the written papers. The topics of writing tasks were diverse according to the students’ own preferences. After overall analysis, 20 common topics were detected as the most favorable by the students as indicated Table 1.

Table 1. Favourite topics of the students

School	Love	Dreams	Living abroad
Education	Sports	Horoscopes	Media
Video games	Parents	Make-up	Books
Friendship	Criminals	Animals	Colours
Happiness	Clothes, jewellery, piercing	TV series and movies	Success

After identifying the common topics, the teacher generated 18 questions in line with the topics and consulted her colleagues in the same school about the appropriateness of the questions considering the students' ages, language proficiency and course contents. In regard to each topic, the participants were required to write an opinion essay during the implementation session. This means that all the questions were used as the prompts to write an opinion essay. The questions posed each week are displayed respectively as follows:

1. Technology is everywhere nowadays. Do you think it is always useful for human beings?
2. Which one is more important; money or job satisfaction? Why?
3. Which school subjects are the most important for students to learn? Why?
4. What are the three greatest inventions of all time?
5. Are video games beneficial or harmful for young people?
6. Which one is more important to have success in a job; working in a disciplined manner, intelligence or taking risks?
7. How do you describe a person as a best friend?
8. Which one is more effective on a child's behaviour; family or environment?
9. Do you think colours have an effect on human behaviour?
10. Should security cameras be everywhere? Is it an invasion of privacy or not?
11. Should students wear a uniform? Why/ Why not?
12. Do art activities and sportive facilities in schools affect the students' grades in a positive or negative way?
13. Do you think there is any effect of horoscopes in human life?
14. Where is the best place to bring up a child; a village or a city?
15. Does facebook or other forms of social media lead people to an isolation from the society?
16. Do you think it is right to keep animals in a zoo?
17. What is the perfect age for parents to have a baby? Why?
18. Would you like to be a famous singer or artist? Why/ Why not?

The study was conducted at the beginning of the spring semester in 2016-2017 academic year. However, before implementing the study, the researcher aimed to be sure that all the participants had an access to the blog website with their passwords, they had already learnt how to write an opinion essay and give comments on the content of the written texts. For this aim, the researcher handed out some samples of an opinion essay to illustrate and elicit some features of the opinion essay. As for comments, the teacher wrote some sample commentary feedbacks on the board and encouraged them to write

more in diverse ways. However, the participants were warned about not giving any grammar feedbacks on the blog posts of their peers in order not to offend their peers and not to interrupt the flow of writing. Instead, the participants were asked to comment on the content of the blog posts. Some samples for the comments were given by the researcher. The comments included the expressions that indicated if the reader agreed or disagreed with the opinion of the writer. As an alternative to them, the readers were also allowed to ask any clarification in terms of content of the peers' essays.

The reason to focus on the content instead of the form of the essays is that the participants may have a fear of writing and feel anxious when they know they will be evaluated according to grammatical correctness of their blog posts. For this reason, it was aimed to create a non-threatening environment in which the participants' ideas were more important than their correct use of sentences.

After making sure that all the students knew how to write an opinion essay and give comments on the blog posts, a pilot session was conducted. In the pilot session, it was aimed to make the students familiar with the blog website by viewing all segments in it. Throughout the pilot session, any possible technical problems were identified and appropriate time intervals for both the blog posts and the comments were determined. Kenworthy (2006) mentions that when learners are given a long time interval to complete their tasks, they tend to produce more and write in a better way. The pilot session confirmed the suggestions of Kenworthy and revealed that five week days for writing opinion essays and two days (weekend) for giving comments should be advocated in the study.

After the pilot session, the students were required to write an opinion essay each week in a certain time interval (from Monday at 8:00 until Friday at 22:00). During this time interval, only the teacher was able to track all the posts that the students wrote in their panels. Within this specified time, the students could write and save their blog posts in a draft version as many times as they wanted. They were also able to send it any time within this time interval for the teacher's approval. Before the approval of the posts, all the blog entries were scanned in *Google* by the teacher in order to identify if there was any plagiarism from the internet. Furthermore, the teacher read all the blog entries in order to check if they include any offensive phrases or swearwords in them. After the teacher ensured that each student wrote the essay by himself/herself and the posts did not include

any unethical or swear words, she granted an approval to the posts as indicated in Figure 7.

395	Ozlem Ates	8.Which one is more effective on a child's behaviour; family or environment?	159	Approved	Details →
396	Esra Kapucu	7- How do you describe a person as a best friend?	45	Draft	Details →
397	Ece Vatansever	7- How do you describe a person as a best friend?	164	Waiting For Approval	Details →
398	Sevil Mutlu	7- How do you describe a person as a best friend?	160	Waiting For Approval	Details →
399	Ecem Nur Sen	7- How do you describe a person as a best friend?	288	Waiting For Approval	Details →
400	Irem Hilal Özgün	7- How do you describe a person as a best friend?	295	Approved	Details →

4 / 8 Previous 1 2 3 4 5 ... 8 Next

Figure 7. The screenshot of students' blog posts waiting for the Teacher Approval.

Throughout blog writing sessions, the students had an opportunity to insert any kind of multimedia such as pictures, videos or links into their essays to make their entries more appealing for the readers. A sample blog post included a picture in an opinion essay is indicated in Figure 8.

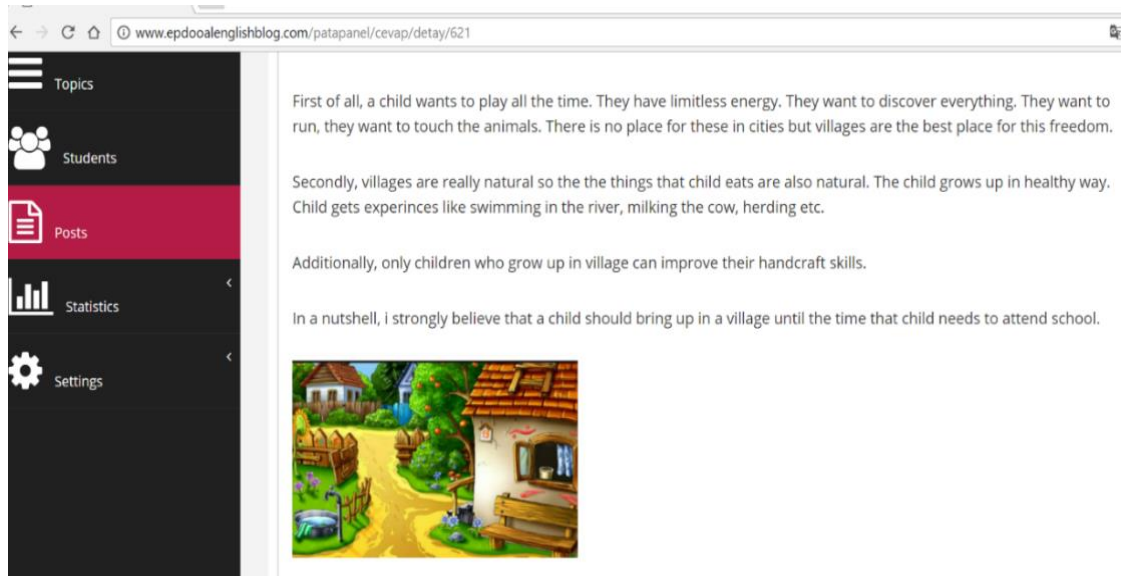


Figure 8. Use of pictures in the blog posts

As seen in Figure 8, a student can insert a picture of village to elaborate his/her opinion essay with regard to raising a child in a city or in a village.

As for inserting a video into the opinion essays, a sample blog post is indicated in Figure, 9.

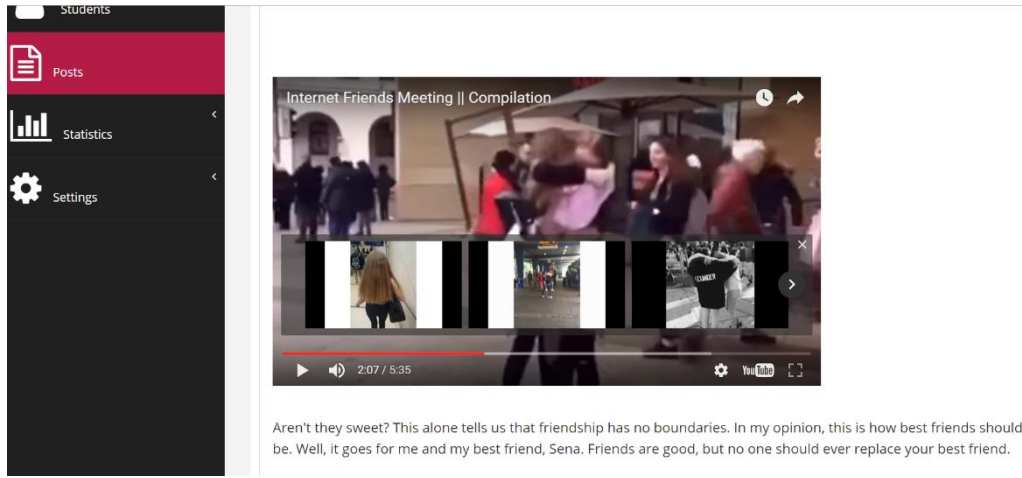


Figure 9. Use of videos in the blog posts

Figure 9 indicates that the video in the blog post might also be used to attract the reader's attention because the essay starts with a comment of the video at first. As seen in both figures above, the participants could benefit from various kinds of multimedia in different ways.

Following the teacher's approval, the blog program assigned two randomly chosen essays to each participant. In other words, each student was required to make comments on the posts of two students each week. As for the content of the comments, they were asked to express their idea on the content of the written texts by stating their agreement or disagreement with reasons. A sample of the students' comments is indicated in Figure 10.

5	123	A Grubu	Aleyna Canbaz	Ozlem Ates	I partially agree with you about money is more important than job satisfaction and low salary makes us joyless and depressive. However, money can not make everything better.
6	124	A Grubu	Aleyna Canbaz	Elif Kaya	You can be right, yet I do not agree with all of you said. I think that money is not enough for us to make us happy. Job satisfaction is more important for us than money.
7	133	A Grubu	Ozlem Ates	Aleyna Canbaz	I mostly agree with you. If we have a job that satisfies us but not make us enough money, our satisfaction and love for job can decrease more and more everyday.

Figure 10. A sample of the students' comment

The commentary sessions were implemented at the weekends and in these two days. During this time, the students shared their viewpoints about the written texts. There was not a minimum or maximum word limit for the comments. Thus, the length of the comments depended on the students' preferences. After reading peer comments on their own texts, the students could also reply to the commentaries again during the weekend. In this way, they could add as many comments as they wanted.

Both the teacher and the students were able to use this blog website either in school or out of the school via smartphones, tablet PCs, computers and class smartboard. Therefore, it was possible for the teacher and the students to reach and log in their accounts wherever and whenever they wanted. Avellaneda (2016) suggests that researchers should guarantee that there is technical support for learners in case any technical problem occurs; therefore, in the study the researcher reminded the participants that they could call or text her in case of having any technical problem throughout the implementation. The teacher also set up a Whatsapp group including all of the participants in order to keep in touch with them constantly. The group had a name *Blog Group*, and it was possible for all the members of the group to send any question to the teacher regarding their technical problems via dealing with their blog posts. Via this Whatsapp group, the researcher also reminded the students due time for both blog posts and comments.

3.3.2. Testing materials

Testing materials comprised of three vocabulary tests (2 receptive, 1 productive) and a writing test, all of which were employed as both pre and post-tests in the study. The details about the tests are as follows:

3.3.2.1. Vocabulary levels test (VLT- Version 2)

It is a tool to diagnose the receptive vocabulary knowledge of learners. In this aspect, it is considered practical in order to profile the vocabulary knowledge of learners in receptive skills (Schmitt, Schmitt and Clapham, 2001). It was originally developed by Paul Nation in the 1980s and was subsequently revised by Schmitt, Schmitt and Clapham in 2001. The test measures learners' word knowledge in a discrete form. The test comprises of four frequency levels of English word families; *2000*, *3000*, *5000* and *10000*

and *Academic Word List (AWL)*. Each section of VLT consists of 30 items in a multiple choice format. Vocabulary items are clustered in 10 groups in the test. In each cluster, there are six words in a column on the left and corresponding meaning senses of three of these in another column on the right. A sample from the Vocabulary Levels Test (VLT-Version 2) indicated in Figure 11.

Version 2 The 2,000 word level

1 copy	_____ end or highest point	1 admire	_____ make wider or longer
2 event	_____ this moves a car	2 complain	_____ bring in for the first time
3 motor	_____ thing made to be like	3 fix	_____ have a high opinion of
4 pity	_____ another	4 hire	_____ someone
5 profit		5 introduce	
6 tip		6 stretch	
1 accident	_____ loud deep sound	1 arrange	_____ grow
2 debt	_____ something you must pay	2 develop	_____ put in order
3 fortune	_____ having a high opinion of	3 lean	_____ like more than something
4 pride	_____ yourself	4 owe	_____ else
5 roar		5 prefer	
6 thread		6 seize	

Figure 11. A sample from the Vocabulary Levels Test (VLT- Version 2)

As seen in Figure 11, test takers are asked to match the short explanations on the right with the correct word on the left column. There are three nouns, two verbs and one adjective within each level, and these word classes are fixed in order to represent different types of word classes in each level. Thus, the test allows to profile learner's word knowledge at each word class and frequency level. That is, it does not give an overall score. Instead, it gives different scores in each section of the test. The maximum score for each frequency level is 30 and the total maximum score for the test is 90. The cut-off point for requirement in each level is 24 out of 30 points which refers %80 success in each level. In the present study, the participants' vocabulary knowledge was examined in four frequency-based sections (2000- 3000- 5000, and 10000 levels). Since AWL is not based on frequency levels and contains specialized vocabulary of university texts, it was excluded from the test and was not considered in the study. VLT test is freely available on the website <http://lextutor.ca/tests/> in both online and printable versions.

3.3.2.2. The new vocabulary levels test (NVLT)

It is a diagnostic test that measures learners' receptive vocabulary knowledge at different vocabulary frequency bands like the VLT-Version 2 test. The NVLT was piloted and validated in the study by McLean and Kramer (2015), and then was constructed based

on the limitations of previous receptive vocabulary tests. The test possesses some advantages over the previous receptive vocabulary tests. First, it measures vocabulary knowledge of learners in different bands ranging from 1,000 to 5,000 frequency levels. Second, it was built based on recent British National Corpus (BNC) / Corpus of Contemporary American English (COCA) (Nation, 2012). Third, it accounts for 1000 and 4000 levels that is not included in the previous vocabulary tests; therefore, it may be possible for researchers to better scrutinize learners' vocabulary development in lower frequency levels (Webb, Sasao and Ballance, 2017, p. 36). Fourth, it adopts a multiple choice format and owing to its format, teachers or researchers can easily use it in online testing platforms such as Survey Monkey or Moodle; and thus, it can be administered to a large number of participants.

Besides its advantages, McLean and Kramer (2015) suggest employing the test in further studies to check its utility and potential use. The test consists of six sections depending on different frequency levels. It measures knowledge of the most frequent 5,000 word families with an AWL section. There are 24 items in each section of total 5,000 word families and 30 items in the AWL section. When at least 23 test items in each band are answered correctly, it indicates mastery of the words at that particular word-frequency level (Hsu, 2018). It includes 150 test-items in total, and the suggested time to complete the whole test is 30 minutes (McLean and Kramer, 2015). In the test, the students are required to select the option which has the closest meaning to the word in bold as indicated in Figure 12.

The New Vocabulary Levels Test

This is a vocabulary test.
Please select the option a, b, c, or d which has the closest meaning to the word in **bold**.

Example question

see: They **saw** it.
a. cut
b. waited for
c. looked at
d. started

The correct answer is **c**.

If you do not know the word at all, please do not answer the question and continue to the next question.
However, if you think that you may know the word, please try to answer.

Let's begin.

Figure 12. *The New Vocabulary Levels Test (NVLT)*

In the study, this test was utilized as a second receptive vocabulary test. Since it has a matching format and serves the target word in a context, it is considered to be easy to answer by learners and more practical to conduct by researchers as compared to most vocabulary tests (McLean and Kramer, 2015).

3.3.2.3. Productive vocabulary levels test

In order to profile the participants' productive vocabulary, Productive Vocabulary Levels Test developed by Laufer and Nation (1999) was used in the study. It was conducted in order to assess the participants' controlled productive vocabulary knowledge. The test comprises of three versions (A, B, C). However, in the study, only two versions (Version A and Version B) were used as both pre and post-tests. Like the receptive vocabulary tests, this test comprises of different frequency levels (the 2000, 3000-,5000-, and 10000 word levels). Each frequency level contains 18 vocabulary items which are situated in a sentence as a context. The first several letters of the target word are provided within a sentence as a prompt and test takers are asked to complete the target word as indicated in Figure 13.

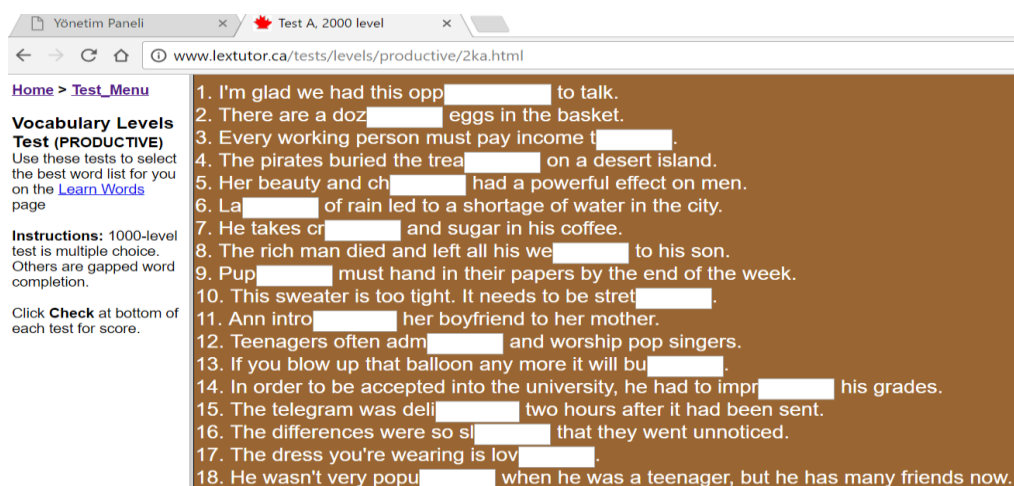


Figure 13. Productive Vocabulary Levels Test

For this test, the maximum score for each frequency level is 18, and the total maximum score for the whole test is 54. The cut-off point for mastery of that level is accepted as 15 out of 18 points.

In sum, since Laufer (1998) propounded that both receptive and productive dimensions of vocabulary should be examined in order to probe comprehensive aspects

of vocabulary knowledge (p. 257), the present study employed both receptive and productive vocabulary tests to assess vocabulary knowledge of learners in both dimensions. All the vocabulary tests had been validated by the previous studies and they have been widely used by both teachers and researchers in order to provide an estimate of students' receptive and productive vocabulary knowledge in English. All the vocabulary tests are freely available and can be downloaded from www.lex tutor.ca website. Therefore, it was practical to conduct all these tests in the study.

3.3.2.4. FCE writing test

In order to profile the participants' writing proficiency, the writing section of Cambridge-First Certificate in English Exam (FCE) was employed in the study. FCE is a valid and reliable test comprising of five sections including speaking, listening, reading, use of English and writing skills tests. That is, each section is devoted to measure learners' overall score in one skill. As a first section of the test, the speaking test measures learners' ability to communicate in English. It is conducted face to face, with two candidates and two examiners. 20 minutes are allocated to the test. As another section of this comprehensive test, the listening test measures learners' ability to understand different spoken materials, such as news programs, presentations and everyday conversations. The test consists of 30 questions in multiple choice, fill-in the blanks and matching formats. 40 minutes are allocated to answer all the questions. The reading test consists of 30 questions and one hour is allocated to answer all the questions. The reading section includes a range of texts such as fiction, newspapers and magazines in it. The reading questions are presented in multiple choice, cloze test and matching format. The use of English section is used in order to assess how well test takers can control their grammar and vocabulary in a context. This section consists of 42 questions including multiple choice, fill in the blank, derivation of words and restatements. 45 minutes are allocated to answer all the questions. As the last section of this comprehensive test, the writing test includes two discrete writing tasks in it. The time limit to perform both writing tasks together is 1 hour and 20 minutes. In each task, test takers are asked to write in a specific genre format with grammatically correct sentences, accurate spelling and punctuation. In the first part of the writing test (Section A), a statement is given and test takers are asked to write a transactional letter related to the statement. The second part (Section B) comprises of five questions and test takers are required to choose one of the questions,

and then write about it in an appropriate style with 120-180 word counts. The questions direct learners to write in one of the three formats; a story, an article or an opinion essay. In tune with the design of the current study, from these formats, only the question which requires writing an *opinion* essay was adopted as a writing test. An hour was allocated to the participants in order to complete the task. The writing test used in the study is depicted in Figure 14.

Name:	Surname:	Class:	Date:
1-Write your answer in 120-180 words in appropriate style on the page.			
You have recently had a discussion in your English class about teenage fashions. Now your teacher had asked you to write an essay , answering the following question:			
<i>-Do you think that you have to spend a lot of money on fashion to look good?</i>			

Figure 14. *The writing test of the study*

The question of an opinion essay was deliberately chosen because the participants were expected to write an opinion essay each week throughout the study; and thus, they would work on a similar task beforehand. In this respect, its format would be familiar to the participants and the writing test would have inherently content validity in it. As another remarkable reason for choosing this question is that the test topic was related to teenage fashion which is considered catchy by many teenagers nowadays. Hence, the participants were expected to write elaborately on this specific topic.

The participants' writing test was assessed with reference to two different rubrics. One of them was the FCE General marking scale, the other was the ESL Composition Profile. The FCE General marking scale is approved as a holistic rubric including two exclusive parts in it. The first part comprises of *Task Specific Mark Scheme* which assesses a written task based on different criteria (See Appendix B), the second part is *General Impression Mark Scheme* which focuses on an examiner's overall impression regarding the description of each band (see Appendix C). As the first part, Task Specific Mark Scheme includes six criteria in it; 1) content, 2) organization and cohesion, 3) register and format, 4) range, 5) accuracy, and 6) target reader traits. The examiner makes comments on the script based on these criteria. In the General Impression Mark Scheme part, examiners read the description of each band and judge about the quality of written

task by assigning a band number. In the graded bands, while Band (0) indicates the least irrelevant and illegible written task, Band 5 refers to the most relevant and appropriate one. In this assessment, learners who fully satisfy the Band 3 descriptor demonstrate an adequate performance in writing at FCE level. As the last step of this assessment, a single score (band) is given for the written task considering both Task specific and General Impression Mark Schemes criteria.

Besides the holistic rubric, an analytic rubric was also used in order to assess the writing tests of the participants in the current study. It has been mentioned in the literature that holistic and analytic rubrics have different foci regarding writing assessment (e.g. Barkaoui, 2007; Huang and Han, 2013, Kuo, 2007). To be more specific, while holistic rubrics are used to rate the written task as a whole, the analytic rubric is used to examine the written task in different traits of writing (Barkaoui, 2007; Kuo, 2007). Thus, applying different rubrics might reveal different perspectives on the written task (Kuo, 2007, p. 192). In the current study, both holistic and analytic rubrics were used to assess the written tests of the participants from two different perspectives; overall and in detailed investigation. In line with this aim, an analytic rubric called ESL Composition Profile was utilized as a second rubric in the study (see, Appendix D). The test was adapted from Holly L. Jacobs, V. Faye Hartflel, Jane B. Hughey, and Deanna R. Wormut (1981) and it was considered as one of the best representatives of the analytical rubrics in the literature. It contains different writing components such as mechanics, sentence construction, vocabulary, discourse markers, organization and content in it. Each component is scored individually based on particular range and criteria. At the end of each individual score, a final score is graded as a summation of each score. The overview of the range and criteria of ESL Composition Profile is indicated in Figure 15.

ESL Composition Profile		
	Range	Criteria
Mechanics	(2-5)	
Sentence Construction	(6-30)	
Vocabulary	(2-15)	Excellent to Very Good
Discourse Markers	(1-10)	Good to Average
Organization	(2-15)	Fair to Poor
Content	(5-25)	Very Poor

Figure 15. *The overview of Range and Criteria of the ESL Composition Profile*

As seen in Figure 15, maximum score in each criterion is as such: content (25 points), organization (15 points), discourse markers (10), vocabulary (15 points), sentence construction (30 points), and mechanics (5 points). These criteria also stand for different writing components (traits). In the current study, the writing ability of the participants is assessed according to five writing traits as well as overall writing scores. The participants' essays were marked by two raters; both the researcher and her colleague in the same school in order to have inter-rater reliability of test scores. The researcher's colleague has been teaching English for 29 years and she has attended several in-service courses related to testing and evaluation. She was informed about the scope of the study and how to assess the students' writing tests according to two assessment forms. Each rater read and scored the writing tests individually, and then an average score of two raters was assigned as each participant's final test score.

In sum, both writing and vocabulary tests were conducted in the students' class hours in on successive days. All the tests were administered twice, once at the beginning and once at the end of the semester, and thereby the same tests were conducted twice as both pre- and post-tests of the study.

3.3.3. Question regarding the students' perceptions about the blog implementation

In order to probe the participants' perceptions about the blog writing process, a question was directed to all of the participants at the end of the study. By directing such a question, it was aimed to both have a general overview about the blogging process and take some precautions for further practices. It was constructed in Turkish in order to encourage the participants to write more in their native language. In order to guide them to evaluate the process from different aspects, six subheadings were also served under a general statement. The subheadings were formed by both one of the thesis committee members and the researcher after a brief negotiation. The subheadings were designated as technology use, vocabulary knowledge, reading skill, general world knowledge and culture, time and interaction. Besides these predetermined ones, it also included *others* option which allows the students to write some other points they noticed with regard to the blog implementation. The question was delivered to the participants via either printed form or an e-mail. For the students who have still enrolled in the same school, the printed version of the question was given. However, it was not possible to reach some of the students, especially 12th grades, at the end of the implementation. Therefore, online

version of the question was sent to them. In this way, it was possible to reach all of the participants in the end.

3.4. Data Collection

This study was held in the spring semester of the 2016-2017 academic year, and all the implementation sessions were carried out throughout 20 weeks in total. Every step of the data collection procedure was planned meticulously. Each stage of data collection is listed based on a chronological order.

- 1) As the first and foremost step of the study, an approval was obtained by both Anadolu University Ethics Committee (Appendix E) and Eskişehir Provincial Directorate of National Education (Appendix F) to be able to conduct the current study.
- 2) Before conducting the study, all the participants and their parents signed a consent form (see Appendix G and Appendix H) since most of the participants were under the age of 18 at the time of implementation.
- 3) The teacher asked the students to jot down 10 topics that they wanted to write about in the blog website. After identifying the favourite topics, the teacher prepared questions and consulted to her colleagues about the appropriateness of the questions.
- 4) Pre-tests (vocabulary and writing tests) were conducted on successive days in the end of the first semester of 2016-2017 academic year.
- 5) The students were familiarized to the functions of the new weblog page and given clear instructions on how to use it efficiently. Subsequently, they created their own blog accounts with the user name and password given by the researcher.
- 6) The students were informed that blog implementation would be a part of their course requirement in their English lessons. In order to encourage frequent and active use of the blog website, the students were also said to get extra marks if they performed all the requirements of the study.
- 7) The researcher gave a training to the students about how to give feedback and comment on one's post. Following the training session, a pilot session was conducted in order to both identify any technical problems while the students were using the blog website and regulate time intervals for both writing essays and giving comments.

8) After pre-tests and pilot session, the teacher broadcasted a question (writing prompt) in her panel each week during the implementation. Every student in the study received the same weekly writing prompt to write an opinion essay.

9) Each week, the students were asked to publish at least one blog post and give comments on the blog posts of two other classmates which were randomly assigned by the blog program. Lee (2010) emphasizes that peer feedback on the blogs may prompt additional interaction and elaborate discussion of ideas. For this reason, the students in the current study were encouraged to read the essays of two peers and make comments on them. Commentary sessions include offering different viewpoints, suggesting additional reasons to support the author's position, asking clarifying questions, or requesting elaboration to further develop the author's argument. In other words, all the feedbacks were on content focus rather than syntactical accuracy. Anastasiadou and Aristotelous (2015) suggest that one of the prerequisites to enhance EFL students' writing development is to comment on the content such as ideas, examples, etc. instead of grammatical correctness of the written texts. Therefore, the students were notably asked *not* to correct any grammar or vocabulary mistakes on the blog posts. Furthermore, Barnett (1992) states that receiving any negative feedbacks from their peers might spark off students' writing anxiety. In the same vein, Karakaya and Ülper (2011) allege that the primary reason for writing anxiety is the idea of being evaluated by the readers. Therefore, the participants were warned against making offensive comments on the blog posts of their peers.

10) All the posts and comments in the blog page were automatically saved in the program, so that the students and the teacher could go back and check their essays anytime and anywhere they wanted.

11) After the 18-week implementation session, the researcher conducted the post-tests (vocabulary and writing tests) on successive days.

12) In the last week of the implementation, the students were invited to answer a question regarding their perceptions about blog the writing process. The question was delivered to the students via paper or e-mail.

13) A certificate of participation was given to each participant who fulfilled all the requirements of the study (Appendix I)

3.5. Data Analysis

As mentioned in 3.1. Research design, both quantitative and qualitative data were used in order to answer the research questions. While the quantitative data were gathered from test scores and vocabulary profile of learners, the qualitative data were gathered from the question regarding the participants' perceptions about the blogging process.

The quantitative data were analyzed by conducting both Inferential and Descriptive Statistics in "SPSS 24.0" program. As for the statistical analyses, 'p<0.05.' was adopted as the cut-off value for significance.

The qualitative data were probed by conducting content analysis of the students' comments regarding the blog writing process. The content analysis was implemented by both the researcher and her colleague. In the analysis, all the answers by the participants were read and coded individually. Then, idea units were detected under each aspects. Following independent content analysis and identifying idea units, peer debriefing session was conducted in order to establish inter-rater reliability (Spillett, 2003, p. 2).

The detailed analyses of both quantitative and qualitative data are as follows:

First, vocabulary test scores of the participants were automatically calculated by the test program of www.lex tutor.ca. Then, the automatic test results were saved in the excel program under the headings of pre and post test scores for each vocabulary frequency level. One screenshot for NVLT vocabulary test scores in excel program is depicted in Figure 16.

NAME	pretest 1000	pretest 2000	pretest 3000	pretest 4000	pretest 5000	posttest 1000	posttest 2000	posttest 3000	posttest 4000	posttest 5000
ECE NUR	24	17	14	12	10	24	17	14	12	11
SERKAN	24	20	15	17	17	24	22	21	21	21
ALEYNA	24	22	18	23	21	24	24	19	22	17
ÖZLEM	24	20	16	11	14	24	23	17	16	12
CANBERK	23	22	15	18	17	24	23	21	20	21
SELENAY	22	18	13	16	21	23	19	16	21	16
HİLAL	23	15	13	13	13	24	19	15	15	16
SENA	20	11	6	10	8	23	14	13	13	7
FATİH	19	8	8	5	8	21	11	5	10	8
BÜŞRA	20	16	19	17	21	19	14	13	7	11
SADIK	23	17	15	14	15	22	20	13	12	15

Figure 16. Screenshot for NVLT Vocabulary Test Scores in Excel program

All the saved test scores were later analyzed by using the statistics program. In this program both inferential and descriptive statistics were used in order to examine the

test results comprehensively. To be more specific, in order to find out any significant differences between the students' vocabulary pre-test and post-test scores in each frequency level in each vocabulary test, a *dependent samples t-test (paired samples t-test)* was utilized as inferential statistics. In order to describe the basic features of the data, descriptive statistics including pie charts and simple tables were also used in the study.

The writing tests were assessed by two raters according to two assessment forms. First of all, the students' essays were assessed according to FCE Marking Scale as a holistic rubric. All the essays of the participants were assessed based on both the General Impression Mark Scheme and the Task Specific Marking Scheme in this scale. As for the Task Specific Mark Scheme, the essays were evaluated under subheadings like Content and Organization, Appropriacy of Register, Range, Target Reader and Accuracy and some comments were written under these subheadings. Based on the comments written by the raters, a particular band score was assigned for each essay by each rater. At the end, inter-rater consistency of the scores was calculated. When any difference occurred in terms of band scores, two raters negotiated and the final decision was entered as the final band score of a student. One screenshot for sample analysis in FCE marking scales was depicted in Figure 17. (For the whole analysis, see Appendix J).

FIRST CERTIFICATE IN ENGLISH							
11 F	Content	Organization and Cohesion	Appropriacy of Register & Format	Range	Target Reader	Accuracy	Marks Awarded (PRETEST)
SERKAN	partially	weak	partially-informal use	partially	partially	few grammar mistakes	Band 3
ALEYNA	not adequately achieved	lack of cohesion and transition	partially -informal use	wide range of structure	be informed	no grammar mistake	Band 4
ÖZLEM	not adequately achieved	not clearly paragraphed	partially -informal use	partially	weak	many grammar mistakes	Band 2
CANBERK	not adequately achieved	lack of cohesive devices	partially-informal use	partially	partially	many grammar mistakes	Band 2
SELENA	fully achieved	not clearly paragraphed	partially -informal use	fully achieved	be informed	many grammar mistakes	Band 3
HILAL	fully achieved	clearly paragraphed- use of transitions	partially -informal use	fully achieved	be informed	a few grammar mistake	Band 4
SENA	not adequately achieved	weak	partially-informal use	weak	partially	a few grammar mistake	Band 2
FATİH	partially	not clearly paragraphed	partially-informal use	partially	be informed	a few grammar mistake	Band 3
BÜŞRA	fully achieved	clearly paragraphed- use of transition	appropriate to the task-a few informal use	fully achieved	be informed	punctuation+grammar mis	Band 4
ŞADIK	not adequately achieved	wrong use of transitions-not clearly paragraphed	partially-informal use-	weak	partially	many grammar mistakes	Band 2
MERVE	fully achieved	paragraphed-use of transition but not con	partially-informal use of transitions	fully achieved	be informed	no grammar mistake	Band 4
EÇENUR	partially	clearly paragraphed- lack of transitions	partially-informal	partially	be informed	a few grammar mistake	Band 3

Figure 17. Screenshot for Sample Analysis in FCE Marking Scales

As seen in Figure 17, the explanations were written under the title of each part of the marking scale in order to depict Task Specific Mark Scheme. Based on the explanation and the descriptions of five band scales situated in General Impression Mark Scheme, a band score was allocated for each paper. For the aim of describing the basic features of the data gathered from FCE Marking Scale, pie charts and simple tables were also used as descriptive statistics.

As an analytic and second assessment form, ESL Composition Profile was used in the current study. In this rubric, the students' essays were scored under different traits such as Mechanics, Sentence Construction, Vocabulary, Discourse Markers, Organization and Content. The total writing test score of each student was calculated by adding each trait score in the rubric. A screenshot for the sample ESL Composition Profile is depicted in Figure 18 and the whole analysis is indicated in Appendix K.

ESL COMPOSITION PROFILE							
11 F	Mechanics	Sentence Construction	Vocabulary	Discourse Markers	Organization	Content	Total Score (PRETEST)
SERKAN	5	23	10	5	12	20	75
ALEYNA	5	25	15	5	10	25	85
ÖZLEM	3	15	7	5	10	15	55
CANBERK	2	15	8	3	12	15	55
SELENAY	5	23	10	5	12	25	80
HİLAL	4	23	10	5	12	21	75
SENA	2	15	7	5	10	16	55
FATİH	4	18	7	6	10	20	65
BÜŞRA	5	25	15	8	15	22	90
SADIK	2	17	8	6	10	17	60
MERVE	5	25	15	8	14	23	90
ECENUR	4	20	12	5	12	17	70

Figure 18. Screenshot for Sample Analysis in ESL Composition Profile

After assessing all essays based on two rubrics individually, the average score of two raters was given on each criterion for each learner. The mean and final scores were used for statistical calculation. A screenshot for the sample mean and final scores of the participants in writing test is indicated in Figure 19.

	Rater 1 (ESL pretest)	Rater 2(ESL pretest)	Mean- ESL pretest	Rater 1(ESL posttest)	Rater 2 (ESL posttest)	Mean-ESL posttest	Rater 1(FCE_PRE)	Rater 2(FCE_PRE)	Mean-pretest-Band
SERKAN	75	75	75	90	87	89	3	3	3
ALEYNA	85	85	85	100	100	100	4	4	4
ÖZLEM	55	55	55	75	75	75	2	2	2
CANBERK	55	55	55	80	84	82	2	2	2
SELENAY	80	80	80	100	100	100	3	3	3
HİLAL	75	75	75	85	85	85	4	4	4
SENA	55	60	58	75	75	75	2	3	2

Figure 19. Screenshot for the mean and final scores of the participants in the Writing test

After saving pre and post test scores in the Excel program, a *dependent sample t-test* in SPSS program was run in order to investigate if there were any significant differences between pre and post-tests scores in four tests (three vocabulary + one writing). Furthermore, in order to have more specific information about the participants' writing ability, their pre-and post-tests were compared regarding each trait of writing in the ESL Composition Profile by conducting paired samples t-test. As another inferential

statistic, *Pearson Correlation Test* was utilized in order to see how consistent both raters are in terms of writing tests scores.

Besides assessing the participants' vocabulary knowledge by pre-tests and post tests, VocabProfile program was also run in order to examine if there was any improvement in terms of participants' productive vocabulary in the written texts. In line with this aim, writing pre-test and post-tests of 35 students were compared via VocabProfile program. The program was developed by Laufer and Nation (1995) and it is still available and free on the <https://www.lextutor.ca/vp/eng/> website. In the program, as suggested by Johansson (2008), the students' productive lexical profile was examined by calculating the lexical density and diversity of the written texts. As mentioned in section 2.1., lexical diversity refers to how many different words are used in a text; hence, it indicates the *lexical richness* of a written text (Daller, Roeland and Jeanine, 2003). It is calculated by type/token ratio. VP-Compleat analysis in VocabProfile program was used to reveal the lexical diversity of the written texts. One sample for lexical diversity analysis is indicated in Figure 20.

Freq. Level	Families (%)	Types (%)	Tokens (%)	Cumul. token %	RELATED RATIOS & INDICES
K-1 Words :	89 (72.95)	103 (74.10)	242 (86.43)	86.43	<i>Pertaining to whole text</i>
K-2 Words :	15 (12.30)	15 (10.79)	18 (6.43)	92.86	Words in text (tokens): 280
K-3 Words :	9 (7.38)	9 (6.47)	9 (3.21)	96.07	Different words (types): 139
K-4 Words :	3 (2.46)	3 (2.16)	3 (1.07)	97.14	Type-token ratio: 0.50
K-5 Words :	2 (1.64)	2 (1.44)	2 (0.71)	97.85	Tokens per type: 2.01
K-6 Words :					
K-7 Words :	2 (1.64)	2 (1.44)	2 (0.71)	98.56	<i>Pertaining to onlist only</i>
K-8 Words :	1 (0.82)	1 (0.72)	1 (0.36)	98.92	Tokens: 278
K-9 Words :	1 (0.82)	1 (0.72)	1 (0.36)	99.28	Types: 137
K-10 Words :					Families: 122
K-11 Words :					Tokens per Family : 2.28
K-12 Words :					Types per Family : 1.12

Figure 20. A Sample for Lexical Diversity Analysis

As seen in Figure 20, lexical diversity (type-token ratio) of a sample essay is calculated as 0.50. On the left side of the figure, the quantity and percentage of words in each vocabulary frequency level can be seen. Therefore, it is possible to detect the cumulative word frequencies in a text.

Lexical density shows the proportion of content words to total words in a text. To be more clear, if a text includes more content word (i.e. nouns, adjectives, verbs) than function words (i.e. pronouns, determiners, prepositions), it holds high lexical density. Alternatively, if there are more function words than content words in a text, it indicates low lexical density. To reveal the lexical density of the written texts in both pre and post

writing tests, VP-Classic analysis in the VocabProfile program was used in the present study. One sample for a lexical density analysis is indicated in Figure 21.

⇓⇓EDIT-TO-A-PROFILE SPACE

WEB VP OUTPUT FOR FILE: Untitled (1.81 kb)

Words recategorized by user as 1k items (proper nouns etc): NONE (total 0 tokens)

	Families	Types	Tokens	Percent
K1 Words (1-1000):	116	139	286	83.38%
Function:	...	...	(181)	(52.77%)
Content:	...	...	(105)	(30.61%)
> Anglo-Sax	...	...	(68)	(19.83%)
K2 Words (1001-2000):	11	13	25	7.29%
> Anglo-Sax	...	...	(24)	(7.00%)
1k+2k	...	...	...	(90.67%)
AWL Words:	12	13	13	3.79%
> Anglo-Sax	...	...	()	(0.00%)
Off-List Words:	2	17	19	5.54%
139+?	182	343		100%

Current profile	
%	Cumul.
83.38	83.38
7.29	90.67
3.79	94.46
5.54	100.00

Words in text (tokens):	343
Different words (types):	182
Type-token ratio:	0.53
Tokens per type:	1.88
Lex density (content words/total)	0.47
<i>Pertaining to onlist only</i>	
Tokens:	324
Types:	165
Families:	139
Tokens per family:	2.33
Types per family:	1.19
Anglo-Sax Index: (A-Sax tokens + functors / onlist tokens)	%
Greco-Lat/Fr-Cognate	%

Figure 21. A Sample for Lexical Density Analysis

As seen in the Figure 21, the lexical density (content words/total) of the sample essay is calculated as 0.47. Even if one may calculate lexical diversity of the text by this analysis program, it is not possible to see what percentage of vocabulary is used in each frequency level. Therefore, VP-Compleat analysis was used as well as the VP-Classic analysis in VocabProfile program. As well as lexical diversity and density of the texts, words in the first 1000 and 2000 frequency level (1k+2k), Function words (FW), Content words (CW) in the writing tests were also examined in order to have a general overview of the students' productive vocabulary (see, Appendix L).

All these analyses were conducted for each participant's writing pre-test and post-tests. Thus, it was possible to compare the participants' writing pre and post-tests in term of lexical richness and quality as well.

As well as statistical analyses, in order to scrutinize the participants' perceptions about the blog writing process, the feedbacks from the students were compiled and recorded in a word document by the researcher in order to analyze them later. After documenting the perceptions, a thematic analysis was conducted by both the researcher and her colleague who has prior experience with content analysis in order to ensure the trustworthiness of the findings. In the analysis, idea units were determined under each thematic group by both raters. After individual analysis, peer debriefing technique was

conducted so as to have a consensus on the idea units and ensure the validity of information (Spillett, 2003).

4. RESULTS

This chapter starts with a broad overview of the current study. Then, the findings drawn from both quantitative and qualitative data analyses are explained under the light of each research question of the study.

4.1. Overview of the study

Before revealing and discussing the results under each research question, some brief information about blog implementation is elucidated in order to have a general overview about the study.

When it is viewed from the overall framework of the study, it is seen that all the implementation lasted 18 weeks and was finalized at the end of the spring semester in June, 2017. During this process, it was found that there were 37 students who could write all the essays regularly and incessantly. The consistent participation of the students might be explained that they would get extra marks when they performed all the requirements of the study. It might be a motivating factor to pursue this application till the end of the semester.

The essay which had the least word count was 150 since it was the minimum word limit that the participants had to write, and it belonged to one of the 12th grade student. The topic of the essay was “the features of best friend” and it was broadcasted as the 7th topic in the blog website. The longest essay also belonged to another 12th grade student and it had 719 word count. The topic of this essay was “if facebook or other forms of social media create an isolation from the society” and it was broadcasted as the 15th topic in the blog website. In sum, the length of the written essays ranges from 150 to 719 word counts and even if both students are at the 12th grades, they had totally different word counts. This result emphasizes the importance of individual motivation to write rather than grade difference. During the blog writing process, the participants were also required to write comments on two essays of their peers each week. As mentioned in 3.4. Data Collection section, commentaries include offering different viewpoints, suggesting additional reasons to support the author's position, asking clarifying questions, or requesting elaboration to further develop the author's argument. These comments were also postulated as feedbacks on the content of the written essays by the participants; therefore, there was a feedback section for comments in the program.

The number of comments throughout the study was counted and it was seen that a total of 569 commentary feedbacks were submitted during the whole study. It means that the mean number for the comments during the study is 31,6. The distribution of the comments for each topic is shown in the Figure 22.

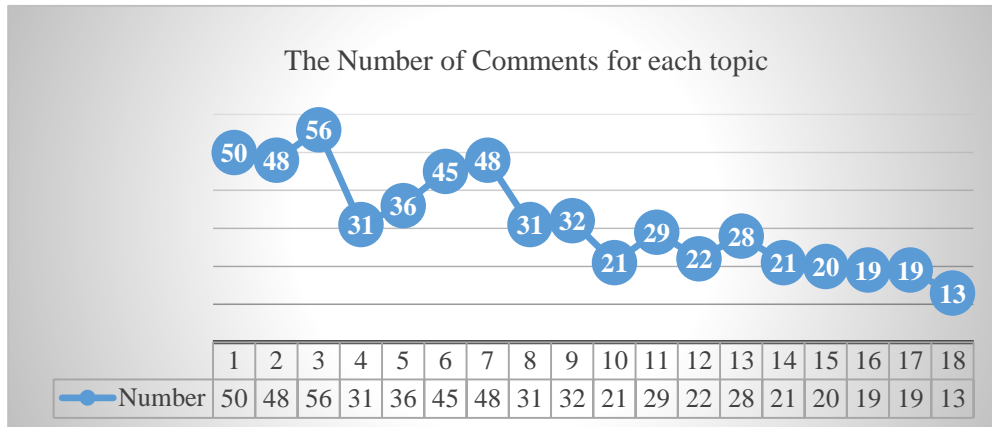


Figure 22. *The number of Comments given for each topic*

As seen in Figure 22, there is a consistent decrease in the number of comments by the time. The figure also indicates that the participants made the most frequent comments on the 3rd topic and least frequently on the 18th (the last) topic. It might be explained with time factor. Since the last entries were conducted towards the end of the term, and there were exams in the schools in this period, they might have been tired of towards the end of the study.

Since the comments were not checked and approved by the researcher, the students might have tended to write comments less frequently towards the end of the term. Another explanation might be the content of the writing prompts. To be more specific, the most frequently comments were made on the third topic which was related to important school subjects. As this topic was related to the students’ own school life, they tempted to speculate more often on their friends’ essays as compared to any other topics. However, the last writing prompt was related to their idea about being a famous person in the future. As they were high school students, this topic might have been seen a future hypothetical situation by them. Moreover, the students’ world knowledge tends to be more limited as compared to the ones of adults. Therefore, they might have had restricted world and word knowledge about the topic. All these factors might have effected the number of comments on each topic during the implementation process.

In the study, the shortest commentary feedback was formed with three words; ‘‘I agree with you.’’ However, the comment with the most word count was 168 in the second topic related to the comparison of having a lot money to job satisfaction. The longest feedback belonged to one of the 9th grade students and the topic was whether money or job satisfaction was more important.

After revising general findings regarding blog entries, the test results were scrutinized under each research question.

4.2. Does Blog Writing Help Turkish EFL High School Students to Develop their Writing Ability?

The first research question was: Does blog writing help Turkish EFL high school students to develop their writing ability? In order to find out if there was any impact of blog writing on the participants’ writing development, as a first step, the written papers of the participants in both pre-test and post-tests were scored based on two writing rubrics; ESL Composition Profile and FCE Marking Scale separately. Both the researcher and her colleague scored each paper based on two rubrics individually and then inter-rater reliability of both raters was calculated in both writing pre and posttests based on each rubric by conducting *Pearson Correlation Analysis* in the SPSS program. The result of the analysis is displayed in Table 2.

Table 2. *Inter-rater Reliability Scores between Two Raters*

	Pretest	Posttest
ESL Composition Profile	$r=.994^*$	$r=.989^*$
FCE General Marking Scale	$r=.995^*$	$r=.968^*$

* Correlation is significant at the 0.05 level (2-tailed).

As seen in Table 2, there is a high inter-rater reliability of the scores in both writing pre and posttests, and it is statistically significant. To be more specific, as for ESL Composition Profile rubric, the inter-rater reliability coefficients of the two raters in pre-test and post-test was found as 0.994 and 0.995 respectively. Likewise, as for for FCE General Marking Scale, the inter-rater reliability coefficient of the two raters in pretest and posttest was calculated as 0.989 and 0.968 respectively. That is to say, there is a high

consistency between two raters' scores in two assessment forms. As seen in the table, it can be seen that the reliability scores in both writing assessment forms are comparable. Thus, it can also be inferred that there is a high consistency between two writing rubrics. After confirming the consistency in the raters' scores, the results were examined under each research question separately.

In order to answer the first research question, writing pre-test ad post-test scores of the participants were compared based on two rubrics.

As the first rubric, both writing pre-tests and post-tests were assessed by FCE Marking scale separately. As a holistic rubric, FCE General Marking Scale requires assigning a band number to the written papers of the participants. It ranges from 1 (not achieved the task) to 5 (fully achieved task) and each band has some exclusive properties. The band number is given by considering some features in Task Specific Mark Scheme part such as; Organization and cohesion, Appropriacy of register and format, Range, Target reader. Moreover, some notes and explanations are written under each feature and considering the explanations, an overall band is assigned for each paper (see Appendix J). The descriptive statistics for writing test scores assessed by FCE Marking scale is indicated in Table 3.

Table 3. *Descriptive Statistics for Writing pre- post test scores based on FCE Marking Scale*

	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test band	35	1,00	5,00	2,82	1,12
Post-test band	35	2,00	5,00	3,62	1,11
Valid N (listwise)	35				

As seen in Table 3, the minimum scores are different in writing pre-test and post-tests. While minimum Band score was 1 in the writing pre-test, it was Band 2 in writing post-test. Hence, there are not any students getting Band 1 in writing post-test. It indicates an improvement in minimum band score. When the mean band scores are compared, an increase is also seen in the writing post-test scores of the students. More specifically, while the mean score was 2,82 in the writing pre-test, it is 3,62 in the writing post-test of the students.

In order to see the frequency of the students in each band, a cumulative percent was also measured and displayed in Table 4.

Table 4. *The frequency of the students in each band in Writing pre-test*

Bands	Frequency	Percent	Cumulative Percent
1,00	3	8,6	8,6
2,00	14	40,0	48,6
3,00	6	17,1	65,7
4,00	10	28,6	94,3
5,00	2	5,7	100,0
Total	35	100,0	

As seen in Table 4, there are a wide range of students in each band of writing pre-test. In addition, the cumulative percentages of the students in each band are diverse in number. However, the frequency and cumulative percentage of the students in each band in the writing post- test seem to be close to each other as displayed in Table 5.

Table 5. *The frequency of the students in each band in the Writing post-test*

Bands	Frequency	Percent	Cumulative Percent
2,00	7	20,0	20,0
3,00	9	25,7	45,7
4,00	9	25,7	71,4
5,00	10	28,6	100,0
Total	35	100,0	

Both Table 4 and Table 5 reveal that after the blog implementation, the writing test scores of the students are close to each other in the post-test. Furthermore, the students' writing ability increased to a great extent after the implementation since there was no student in Band 1 and the cumulative percent of the students' scores was the most frequent in Band 5 in the posttest with 28,6 percent of the total number of students. The percentages of the students in each band as for both writing pre and post-test are also indicated as pie charts in Figures 23 and 24. As seen in the figures, while 9 % of the total number of the students had Band 1 in the writing pretest, there were no students in Band

1 in the writing posttest. It indicates a sharp increase in the writing quality of the students. In addition, Band 2 was the most frequent value with 40% in the writing pre-test. However, in the writing posttest, Band 2 was the least frequent one as seen in Figure 23. The percentages of the students in Band 3 and Band 4 were far from one another in the writing pretest, but they were exactly the same in the posttest. Thus, it indicates an equal distribution of the students in Band 3 and Band 4 in the posttest. Above all, the most striking result was that while the students having Band 5 were the least frequent with 6% in the writing pretest, they were the most frequent with 26 % in the writing posttest. Overall, it can be concluded that there was an increase in terms of writing ability of the students after the blog implementation.

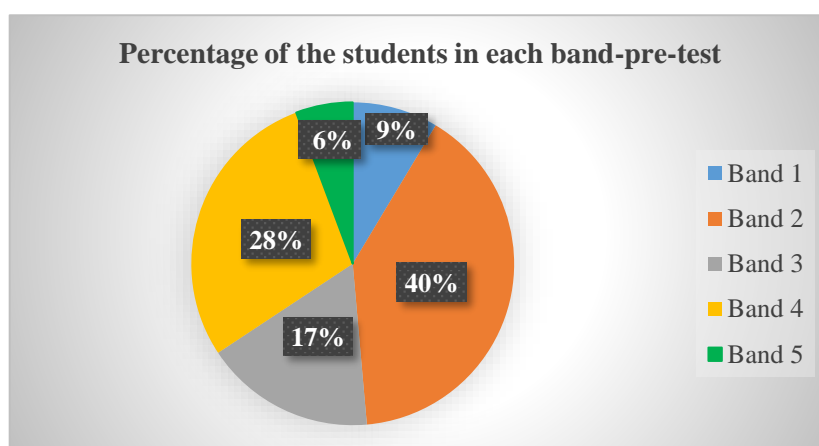


Figure 23. The pie chart of Writing Pretest scores in each band

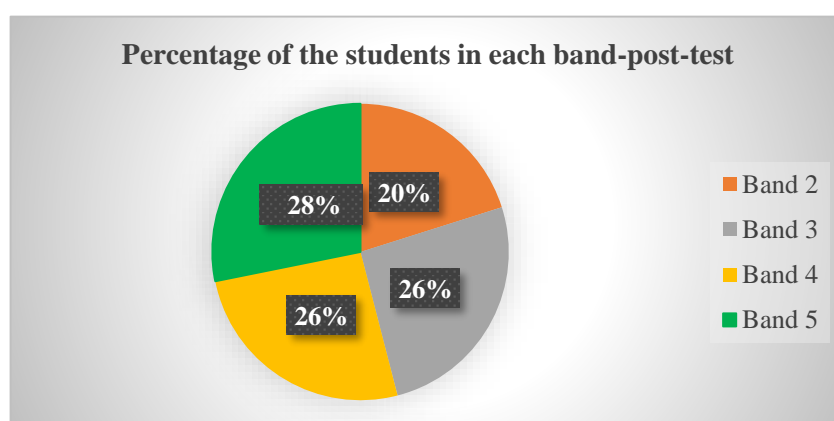


Figure 24. The pie chart of Writing Posttest scores in each band

Since it is not possible to examine the students' writing development in terms of each discrete writing trait in holistic scoring, ESL Composition Profile was used as an

analytic rubric. First, pre and post-tests of the participants were scored and then a *dependent (paired) samples t-test* was used in an attempt to find out any significant difference in terms of writing pre and posttest scores of the participants. The mean scores of writing pre and post tests were indicated in Table 6.

Table 6. Paired Samples Test for ESL Composition Profile

		Mean	Std. Deviation	Std. Error Mean	<i>t</i>	<i>Sig.</i>
<i>ESL Composition Profile</i>	Pre-test	68,68	15,56	2,63	-7,541*	,000
	Post-test	81,82	14,49	2,44		

* $p < 0,05$

As seen in Table 6, after 18 weeks of blog implementation, there was a sharp increase in the participants' overall writing post-test scores assessed by ESL Composition Profile. To be more specific, the result of the statistics indicated there was a significant difference between writing pre-test ($M=68,68$, $SD=15.56$) and post-test ($M=81,82$, $SD=14.49$) scores ($t(34)=-7,541 < .05$, $< .01$, $< .001$).

To sum up, writing test scores assessed by both rubrics indicate that the students' writing ability developed after the blog implementation. In other words, it could be claimed that the blog writing helped the Turkish EFL students to develop their writing ability significantly. This result is concurrent with the findings of the previous studies which indicate the facilitating effect of blog writing on writing improvement (Avellaneda, 2016; Arslan and Şahin-Kızıl, 2010; Blau, et.al., 2013; Bloch, 2007; Chen et al., 2011; Halic et al., 2010; Lee, 2010; Nguyen, 2012; Noytim, 2010; Sun, 2009; Taki and Fardafshari, 2012; Trajtemberg and Yiakoumetti, 2011; Vurdien, 2013).

However, Kim and Crossley (2018) state that by analyzing any variation in each writing trait, it might be possible to comment on the writing quality of the students (Kim and Crossley, 2018). Therefore, paired samples t-test was run to compare pre-post test scores of the participants in each trait of ESL Composition profile. Thus, it would be possible to find out in which traits of writing (content, organization, discourse markers, vocabulary, sentence construction and mechanics) the participants improved most. As aforementioned, ESL Composition Profile comprises of 6 traits in it and maximum score in each trait is as follows: content (25 points), organization (15 points), discourse markers (10), vocabulary (15 points), sentence construction (30 points), and mechanics (5 points). The graphical display of all results regarding 6 traits of Writing is indicated in Figure 25.

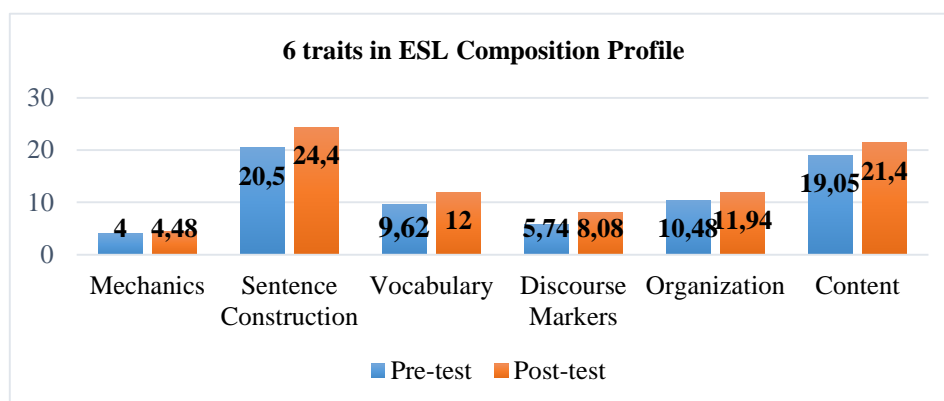


Figure 25. Pre-Post test results for each Trait of Writing in ESL Composition Profile

As seen in Figure 25, there is an increase in each trait of writing of the participants. It means that blog writing helped the participants develop their writing ability as indicated in their post-tests. However, in order to find out in which trait the participants made a significant improvement, for each trait of ESL Composition Profile, paired samples t-test was run for both writing pre and post test scores. The test result regarding each writing trait is indicated in Table 7.

Table 7. Paired Samples t-test for Writing Traits (components) in ESL Composition Profile

		Mean	Std. Deviation	Std. Error Mean	<i>t</i>	<i>Sig.</i>
Mechanics	Pre-test	4,00	1,08	0,18	-3,679*	,001
	Post-test	4,48	0,74	0,12		
Sentence Construction	Pre-test	20,05	4,46	0,75	-6,648*	,000
	Post-test	24,40	4,36	0,73		
Vocabulary	Pre-test	9,62	3,37	0,57	-4,163*	,000
	Post-test	12	3,30	0,55		
Discourse Markers	Pre-test	5,74	2,01	0,34	-7,381*	,000
	Post-test	8,08	1,93	0,32		
Organization	Pre-test	10,48	3,28	0,55	-2,611*	,013
	Post-test	11,94	2,75	0,46		
Content	Pre-test	19,05	3,99	0,67	-5,113*	,000
	Post-test	21,40	3,24	0,54		

*p<0,05

Table 7 indicates that there are statistically significant differences between pre-test and post-test scores regarding 6 writing components; Mechanics, Sentence Construction, Vocabulary, Discourse Markers, Organization and Content.

When investigated in detail for each trait, it is seen that there is a statistically significant difference between the pre-test ($M=4,00$, $SD=1,08$) and post-test scores ($M=4,48$, $SD=0,74$) in the *Mechanic* trait of the writing rubric ($t(34)=-3,679 <.05$, $<.01$). To be more specific, the participants made progress in a great deal in the mechanic aspects of writing. This means, blog use helped the students improve mechanics such as spelling and punctuation in their writings.

As for the second criterion of the rubric, *Sentence Construction* is related with effective use of complex sentences, transitions, verb tense, prepositions and pronouns. The result of paired sample t-test reveals that there is a statistically significant difference between the pre-test ($M=20,05$, $SD=4,46$) and post-test scores ($M=24,40$, $SD=4,36$) in the sentence construction component of the rubric ($t(34)=-6,648 <.05$, $<.01$, $<.01$). This means that blog use helped the students use more complex sentences and transitions in their texts. Moreover, they tended to use verb tense, prepositions and pronouns more effectively in their post-tests after blog implementation.

When the *Vocabulary* trait is considered, it is seen that there is a statistically significant difference between the pre-test ($M=9,62$, $SD=3,37$) and post-test scores ($M=12$, $SD=3,30$) in the vocabulary component of the rubric ($t(34)=-4,163 <.05$, $<.01$, $<.01$). This component of writing in the rubric includes using a wide range of words, idioms and appropriate words to the context. Thus, it can be concluded that blog writing helped the students use a wide range of words appropriately in different contexts. However, in order to have more detailed information for this result, lexical diversity and density in the written texts is necessary. By this way, it would be possible to see how different and which frequent words were used by the participants in their written texts. The analyses of lexical diversity and lexical density of the writing texts are examined under the second research question.

With respect to *Discourse Markers*, the writing tests were analyzed and scored based on the participants' appropriate use and wide range of cohesive devices. As seen in Table 7, there is a statistically significant difference between the pre-test ($M=5,74$, $SD=2,01$) and post-test scores ($M=8,08$, $SD=1,93$) in the discourse markers trait of writing ($t(34)=7,381 <.05$, $<.01$, $<.01$). That is to say, blog writing helped the participants use

linkers more efficiently, and they benefit from appropriate cohesive devices such as demonstratives, signal words, etc. in their texts.

As for the *Organization* trait of writing, there is a statistically significant difference between the pre-test ($M=10,48$, $SD=3,28$) and post-test scores ($M=11,94$, $SD=2,75$) of the participants ($t(34)=2,611 <.05$). This means that in their post-tests the participants were better in organizing sentences and dividing texts into separate paragraphs such as introduction, body and conclusion parts. Furthermore, they were more successful at supporting the ideas by giving reasons and examples in each paragraph.

As the last writing component in the rubric, *Content* measures the students' knowledge about a particular genre and relevant topic. Table 7 reveals that there is a statistically significant difference between the pre-test ($M=19,05$, $SD=3,99$) and post-test scores ($M=21,40$, $SD=3,24$) of the participants ($t(34)=5,113 <.05$, $<.01$, $<.01$) in terms of content. That is, they became aware of the basic features of opinion essay and wrote more details about the content of the assigned topics.

When data analysis in FCE Marking Scale was reviewed (see, Appendix J), it is seen that the findings in this scale confirm the test results depicted in Table 7. To be more specific, as for the *Content* section of the scale, the data analysis indicates that while the participants tend to partially inform readers about the content of the topic in their pre-tests, they tend to fully inform the readers in their post-tests.

As for *Organization and Cohesion*, while unclear paragraphs, limited transitions and linking words are noticed in their pre-tests, they had a good coherence with clearly defined paragraphs in their post-tests.

With regard to *Appropriacy of Register and Format*, the participants tend to write in more formal style using formal linking words and phrases such as *furthermore*, *however*, etc. Moreover, they were apt to obey the format of opinion essay in time.

In respect of *Accuracy*, it is seen that even though they still make some grammar mistakes in their texts, the mistakes seem to be minor and less as compared to the ones made in their pre-tests. Therefore, there were less distracting errors while a reader follows an argument.

To sum up, it is seen that there are statistically significant differences between pre- and post test scores of the students in each writing trait with a superiority of post-test scores. Therefore, it can be concluded that blog writing enhances the Turkish EFL students writing ability in terms of content, organization, discourse markers, vocabulary,

sentence construction and mechanics traits of writing. This result confirms the previous studies indicating positive effects of blog use on different traits of writing. To be more specific, as revealed in the previous studies, the current study confirms facilitating effect of blog use on organization (e.g. Arslan and Şahin-Kızı1, 2010; Cequena, 2013; Kavandı, 2012; Kayacan, 2017; Sun, 2010), content (Anderson, 2010; Arslan and Şahin-Kızı1, 2010; Cequena, 2013; Kavandı, 2012), mechanics (Dickinson, 2013; Kayacan 2017; Sun, 2010), vocabulary (Dickinson, 2013; Kavandı, 2012; Kayacan, 2017), sentence construction (Kayacan, 2017) traits in writing.

4.3. Does Blog Writing Help Turkish EFL High School Students to Develop their Vocabulary Knowledge?

In tune with the aim of the second research question, the effect of blog writing was examined on the Turkish EFL high school students' vocabulary knowledge in both receptive and productive aspects. As mentioned in 3.1. Research Design, three vocabulary tests were applied in the study. For all three vocabulary tests, the participants' pre and post test mean scores in each frequency level were compared by using dependent samples t-test. The first applied vocabulary test was VLT (2k-10k), and it tested the participants' vocabulary knowledge at the 2000, 3000, 5000 and 10000 frequency level. Paired samples t-test results for each frequency level are indicated in Table 8.

Table 8. Paired Samples t-test results for each frequency level in VLT (2k-10k)

		Mean	Std. Deviation	Std. Error Mean	<i>t</i>	<i>Sig.</i>
2000	Pre-test	25,45	4,12	0,69	-,823	,416
	Post-test	25,82	3,92	0,66		
3000	Pre-test	19,02	6,28	1,06	-2,45	,019*
	Post-test	21,65	6,99	1,18		
5000	Pre-test	14,34	7,94	1,34	-1,27	,211
	Post-test	15,82	8,24	1,39		
10000	Pre-test	4,71	5,53	0,93	-4,04	,000*
	Post-test	8,68	7,32	1,23		

*p<0,05

According to Table 8, there is a statistically significant difference between pre-test ($M=19,0286$, $SD=6.28951$) and post-test ($M=21,6571$, $SD=6.99135$) scores with regard to the 3000 vocabulary level ($t(34)=-2.457$, $p<.05$). Additionally, a statistically significant difference was observed between pre-test ($M=4,7143$, $SD=5.53901$) and post-test ($M=8,6857$, $SD=7.32751$) scores with regard to the 10000 vocabulary level ($t(34)=-4.042$, $p<.05, <.01, <.001$). However, there is not a statistically significant difference between pre-test ($M=25,4571$, $SD=4.12555$) and post-test ($M=25,8286$, $SD=3.92942$) scores with regard to the 2000 vocabulary level ($t(34)=.416$, $p>.05$). Likewise, no statistically significant difference was seen between pre-test ($M=14,3429$, $SD=7.94815$) and post-test ($M=15,8286$, $SD=8.24081$) scores with regard to the 5000 vocabulary level ($t(34)=-1.276$, $p=.211$). Figure 26 also depicts the participants' improvement in terms of vocabulary knowledge at each frequency level.

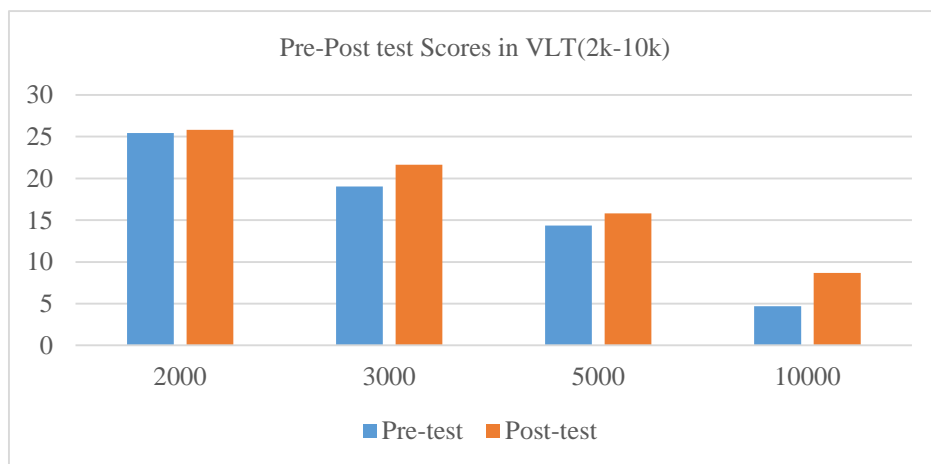


Figure 26. Pre and post test scores for each Vocabulary Level in VLT(2k-10k) test

As indicated in Figure 26, there is a gradual increase in all word levels in the post-tests. However, as compared to other frequency levels, there is a slight improvement at the 2000 word frequency level of the participants. It may be explained by the fact that the 2000 word frequency level provides a foundation for less frequent words and it was a basic level that the students had to have at the beginning of the study. As seen in the graphic, the students' receptive vocabulary increased most at the 3000 and 10000 word levels, which confirms the statistical calculation (t-test) of the scores. However, the figure also reveals that the most vocabulary improvement was realized at the 10000 level which

contains less frequent words. This result might be explained with the students' searching for the topic from academic papers or reading their peers' blog posts containing less frequent words.

In sum, the VLT (2k-10k) test scores indicate that after the implementation of blog writing, the participants' receptive vocabulary knowledge has significantly increased at the 3000 and 10000 frequency levels, and although no statistically significant was observed at the 2000 and 5000 frequency levels, there was still an increase in the scores after blog implementation.

The other vocabulary test which was used to investigate the students' vocabulary knowledge at receptive aspect was the New Vocabulary Levels Test (NVLT). It tested the participants' vocabulary knowledge at the 1000, 2000, 3000, 4000 and 5000 word levels. As applied in the VLT(2k-10k) test, the students' pre and post test mean scores in each frequency level were compared by using dependent samples t-test. The mean scores in both vocabulary pre and posttests in each frequency level are indicated in the Table 9.

Table 9. Paired Samples t-test results for each frequency level in NVLT

		Mean	Std. Deviation	Std. Error Mean	<i>t</i>	<i>Sig.</i>
1000	Pre-test	22,48	1,82	0,30	-,723	,475
	Post-test	22,65	1,43	0,24		
2000	Pre-test	18,14	4,31	0,72	-4,740	,000*
	Post-test	19,94	3,70	0,62		
3000	Pre-test	15,82	4,50	0,76	-2,079	,045*
	Post-test	17,14	4,20	0,71		
4000	Pre-test	14,22	5,45	0,92	-3,379	,002*
	Post-test	16,62	5,08	0,85		
5000	Pre-test	13,54	4,97	0,84	-1,508	,141
	Post-test	14,82	5,22	0,88		

*p<0,05

Table 9 indicates that there is not statistically significant difference between the pre-test ($M=22,4857$, $SD=1.82098$) and the post-test ($M=22,6571$, $SD=1.43369$) scores

with regard to the 1000 word level ($t(34)=-.723, p>.05$). Similarly, no statistically significant difference was found between the pre-test ($M=13,5429, SD=4.97844$) and the post-test ($M=14,8286, SD=5.22711$) scores in the 5000 word level ($t(34)=-.1,508, p>.05$). On the contrary, a statistically significant difference was found between pre-test ($M=18,1429, SD=4.31238$) and post-test ($M=19,9429, SD=3.70963$) scores with regard to the 2000 vocabulary level ($t(34)=-4.740, p<.05, <.01, <.001$), between the pre-test ($M=15,8286, SD=4.50154$) and the post-test ($M=17,1429, SD=4.20184$) scores with regard to the 3000 vocabulary level ($t(34)=-2.079, p<.05$) and between the pre-test ($M=14,2286, SD=5.45617$) and the post-test ($M=16,6286, SD=5.08218$) scores with regard to the 4000 vocabulary level ($t(34)=-3,379, p<.05, <.01$). Figure 27 also depicts the participants' improvement in terms of vocabulary knowledge in each frequency level.

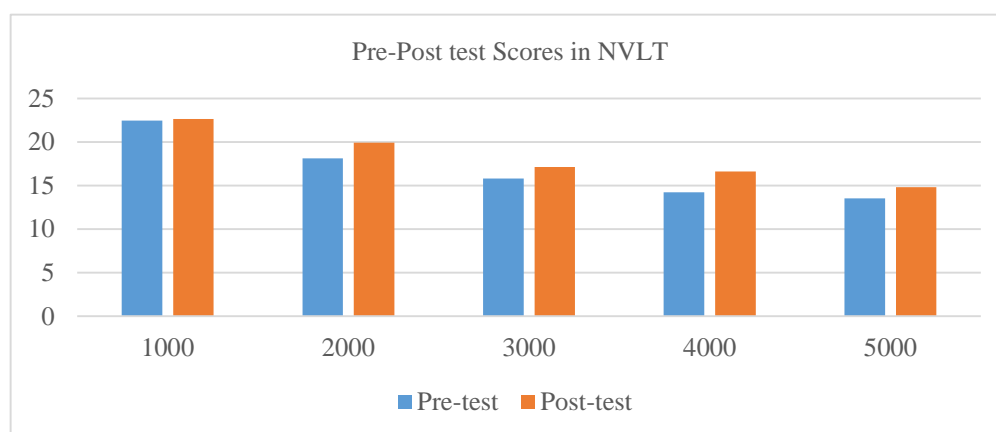


Figure 27. Pre and Post test scores for each Vocabulary Level in NVLT test

As seen in Figure 27, there is an improvement in the students' vocabulary knowledge in each word frequency level. However, while the improvement is slightly less in the 1000 and 5000 word levels, the improvement in the 3000 and the 4000 word levels seems to be higher. In accordance with the VLT (2k-10k), the significant difference was observed in the 3000 word level.

In sum, the NVLT test scores indicates that after blog writing, while the participants' receptive vocabulary knowledge has significantly increased in the 2000, 3000, 4000 frequency levels, no statistically significant increase was observed in the 1000 and the 5000 frequency levels after the implementation. No significant difference in terms of 1000 word level might be explained with the basic level of vocabulary knowledge. To be more clear, Nation (1990) suggests that the first 1000 words of English are basic and

crucial for learners to use the target language. Moreover, the first frequency level was derived from the spoken text rather than the written text (Web and Sasao, 2019). Therefore, it might be thought that the participants of the study have already had this level, and therefore, no improvement was seen in this level.

When two recognition vocabulary tests are compared, the general overview of the results is indicated in Figure 28.

Vocabulary Recognition Tests	
VLT, 2K-10K Test	The New Vocabulary Levels Test (NVLTL)
2000: non-significant	1000: non-significant
3000: significant	2000: significant
5000: non-significant	3000: significant
10000: significant	4000: significant
	5000: non-significant

Figure 28. The General Overview of the Results in both Recognition tests

Figure 28 indicates that at the end of the implementation, both recognition tests have similar findings regarding the improvement in the participants' receptive vocabulary knowledge. Both tests revealed that after the blog implementation, the participants made a significant progress in vocabulary at the 3000 frequency level. Mastering the most frequent 3000 word families is considered as basic level to be able to successfully participate in a spoken discourse since it covers 95 % of the words in spoken discourse (Adolphs and Schmitt, 2003; van Zeeland and Schmitt, 2013). Therefore, it may be inferred that blog writing might also help learners to participate in conversations. However, as depicted in the figure above, no significant increase was found at the 5000 word level. This can be explained that the words at the 5000 frequency level are much more demanding than the former word levels and this level is necessary for learners to carry out academic tasks at the university level (Shin, Chon, and Kim, 2011); therefore, it might be difficult for the high schools students to thrive on this level.

As aforementioned in this study, vocabulary knowledge includes two dimensions; recognition and production. Therefore, besides the recognition tests, a production test named Vocabulary Levels Test (Laufer and Nation, 1999) was employed in the study to measure the participants' productive vocabulary knowledge at the 2000, 3000, 5000 and 10000 frequency levels. As applied in recognition vocabulary tests, pre and posttest mean

scores of the students at each frequency level of productive test were compared by using dependent samples t-test. The mean scores in both vocabulary pre-test and post-test at each frequency level are indicated in Table 10.

Table 10. Paired Samples t-test for each frequency level in Vocabulary Levels Test

		Mean	Std. Deviation	Std. Error Mean	t	Sig.
2000	Pre-test	75,45	18,19	3,07	-3,340	,002*
	Post-test	83,00	16,91	2,85		
3000	Pre-test	52,17	27,79	4,69	-3,626	,001*
	Post-test	66,28	24,10	4,07		
5000	Pre-test	35,91	26,00	4,39	-4,607	,000*
	Post-test	53,54	27,05	4,57		
10000	Pre-test	19,20	22,04	3,72	-3,334	,002*
	Post-test	29,14	25,63	4,33		

*p<0,05

As seen in Table 10, there are statistically significant differences between the pretest and posttests scores at all frequency levels of Vocabulary Levels Test. To be more specific, there is a statistically significant difference between the pre-test ($M=75,4571$, $SD=18,19719$) and the post-test ($M=83,00$, $SD=16,91153$) mean scores with regard to the 2000 vocabulary level ($t(34)=-3,340$, $p<.05, <.01$). As for the 3000 vocabulary level, there is a statistically significant difference between the pre-test ($M=52,1714$, $SD=27,79281$) and the post-test ($M=66,2857$, $SD=24,10220$) scores ($t(34)=-3,626$, $p<.05, .01, <.001$). Regarding the 5000 vocabulary level, a statistically significant difference between the pre-test ($M=35,9143$, $SD=26,00947$) and the post-test ($M=53,5429$, $SD=27,05478$) scores was revealed ($t(34)=-4,607$, $p<.05<.01, <.001$). Lastly, a statistically significant difference was found between the pre-test ($M=19,2000$, $SD=22,04647$) and the post-test ($M=29,1429$, $SD=25,63447$) scores with regard to the 10000 word level ($t(34)=-3,334$, $p<.05, <.01$). Besides dependent samples t-test, all scores in the productive VLT test were depicted in a graphic form. Figure 29 depicts the participants' vocabulary development at each frequency level.

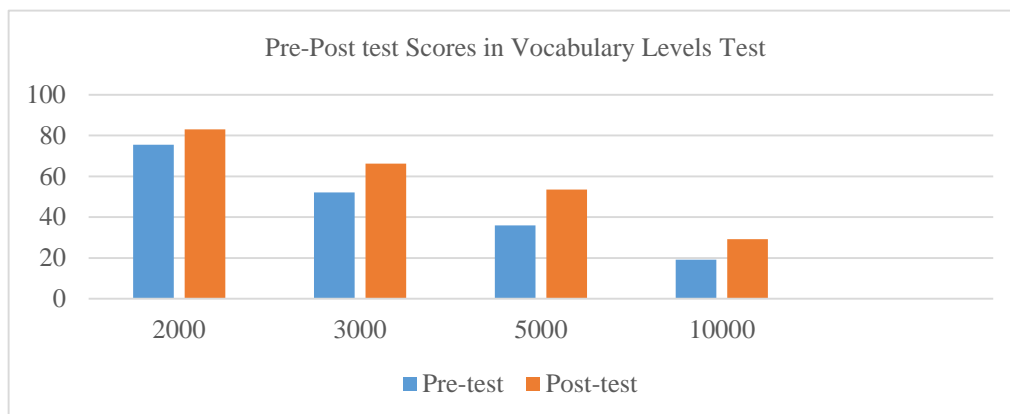


Figure 29. Pre and Post test scores for each Vocabulary Level in Vocabulary Levels Test

As seen in Figure 29, there is a significant increase at all vocabulary levels in the posttest. This indicates the positive effect of blog implementation on the students' productive vocabulary knowledge. In other saying, the Vocabulary Levels Test scores indicate that after blog writing, the participants' vocabulary knowledge at productive level has significantly increased at all frequency levels (2000, 3000, 5000 and 10000). Therefore, it can be concluded that blog writing helps the Turkish high schools students to develop their vocabulary knowledge in terms of not only the receptive aspect but also the productive aspect. Moreover, as compared to the participants' receptive vocabulary knowledge, an increase in their productive vocabulary knowledge seems to be higher since there are statistically significant differences between the pretest and posttests scores at all frequency levels in the Vocabulary Levels Test. For this reason, it may be concluded that blog writing helped the the participants to develop their productive vocabulary knowledge more than their receptive vocabulary knowledge. This finding is concurrent with the findings of the previous studies indicating a positive impact of blog use on the productive vocabulary development of EFL students (Akdağ and Özkan, 2017; Dickinson, 2013; Ghaderi, Behjat and Rostampour, 2014; Noytim, 2010).

Besides evaluating the participants' productive vocabulary conducting a dependent samples t-test, VocabProfile program was run in order to examine if there was any improvement in the participants' productive vocabulary use in the written texts after the blog implementation. For this aim, writing pre-test and post-test of 35 students were profiled by calculating both lexical density and diversity of the written texts. As mentioned in the Data Analysis section, VocabProfile program developed by Laufer and Nation (1995) was run in order to analyse the results. More specifically, in this program

while VP-Compleat analysis was used to indicate lexical diversity, VP-Classic analysis in the same program was utilized in order to calculate lexical density of the texts. Both analyses were conducted for each participant's writing pre-test and post-test. The result of the analyses is indicated in Table 11.

Table 11. *VocabProfile Analysis of the Writing tests*

	TTR (Lexical Diversity)-Pre	Lexical Density-Pre	TTR (Lexical Diversity)-Post	Lexical Density-Post
SERKAN	0,69	0,53	0,66	0,43
ALEYNA	0,54	0,51	0,51	0,48
ÖZLEM	0,59	0,48	0,54	0,49
CANBERK	0,39	0,53	0,52	0,45
SELENAY	0,58	0,59	0,61	0,53
HILAL	0,55	0,51	0,45	0,5
SENA	0,61	0,51	0,66	0,45
FATİH	0,55	0,55	0,57	0,6
BÜŞRA	0,57	0,45	0,66	0,55
SADIK	0,53	0,56	0,61	0,55
MERVE	0,51	0,44	0,53	0,47
ECENUR	0,46	0,51	0,63	0,58
YAĞIZ	0,54	0,47	0,57	0,53
ERTUĞRU	0,64	0,49	0,64	0,5
ELIF	0,55	0,48	0,52	0,55
SARE	0,5	0,55	0,6	0,57
ECEMİNUR	0,67	0,51	0,52	0,52
DAMLAR	0,59	0,52	0,59	0,52
BÜŞRA	0,65	0,49	0,45	0,46
BERKAY	0,62	0,47	0,55	0,49
SEVİL	0,69	0,53	0,46	0,5
TUĞÇE	0,56	0,46	0,57	0,44
ECE	0,48	0,44	0,48	0,44
ASLİNUR	0,55	0,47	0,57	0,49
Egehan Ağ	0,72	0,55	0,6	0,46
İrem Koyu	0,66	0,51	0,58	0,51
Dide Zülal	0,48	0,46	0,58	0,6
Vela Deniz	0,45	0,45	0,65	0,54
Berfin 10	0,71	0,52	0,66	0,53
Cüneyt Şik	0,79	0,55	0,63	0,48
Sinem Dur	0,63	0,48	0,64	0,46
Neslişah	0,63	0,52	0,66	0,53
PINAR	0,54	0,57	0,53	0,48
DZAN	0,61	0,54	0,61	0,54
Maide	0,46	0,51	0,47	0,49
	0,579714286	0,506	0,573714286	0,506

Table 11 indicates both individual and overall mean scores of the participants in terms of lexical diversity and density. When lexical diversity mean scores of the pretest and posttests are compared, no increase was detected in terms of lexical diversity of the written texts. Likewise, lexical density of the texts did not improve in the writing posttests. In sum, overall result of these analyses revealed no improvement in both lexical diversity and density in the participants' writing posttests (see Figure 30). For detailed analyses, see Appendix L.

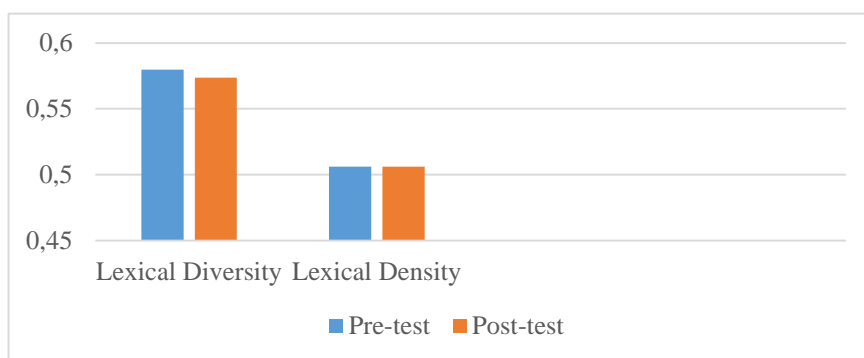


Figure 30. *Vocabulary Profile of the participants' writing pre and post tests*

As seen in Figure 30, almost no change was identified between writing pretest and posttests of the students in terms of lexical diversity and density. This result is not concurrent with the findings of the study by Akdağ and Özkan (2017) since in their study, it was found that the students created more complex sentences and there existed lexical variety in their latter blog posts. However, in the current study neither lexical diversity nor lexical density improvement was detected in the writing posttest of the students. This result may be explained with the same writing prompt for both writing pre and posttests. Because the participants were required to write about the same topic and in the same genre in their posttest, they were limited to use some particular words in their texts. Thus, it did not lead to a change in the posttest in terms of lexical diversity and density. Besides that, this result might be explained with the students' limited world knowledge about the topic. As they were under 18, they might have had less world knowledge about spending money on clothes as compared to ones above 18. Therefore, their lexical diversity and density in the writing tests might be restricted to a certain level.

4.4. What are the Perceptions of Turkish EFL High School Students about Blog Writing Process?

After answering the first two research questions, the third research question regarding the participants' perceptions about the blog writing process were examined from different aspects. Specifically, in order to evaluate the blog writing process from the point of the participants' view, and see whether or not their perceptions about the blog implementation also confirm the test results of the study, the students were asked to interpret the blog writing process from different aspects; technology use, vocabulary knowledge, reading skill, general world knowledge and culture, time management, interaction and others (see Appendix A). The evaluations of the students for each aspect were analyzed under thematic groups (aspects) and a peer debriefing session was conducted between the researcher and her colleague to have a consensus on the idea units and ensure the validity of information (Spillett, 2003). In total, 35 students answered the guided question including different aspects in it. The whole idea units gathered from the participants' answers in each aspect are indicated in Appendix M. Except for two students, all of the participants wrote their feedbacks in Turkish. The findings gathered for each aspect are documented as follows:

4.4.1. Technology use

Most of the participants recited that blog writing enhanced their technology use since they got profit from the internet, computer and mobile phone while executing their tasks. Half of the students compared the blog writing process to the paper-pen writing process, and stated that writing in a blog platform was more practical than writing in paper and pen style. It is because they could write their essays in their blogs wherever and whenever they wanted. An excerpt from a 12th grade student is as follows:

“ This project was in tune with era of Communication. It was more enjoyable to write on blogs instead of using paper and pen. During the application, I could write my essays by using both mobile phone and personal computer. Furthermore, I could write the essays either in a library or on a bus on the way” (B.A., 12th grade)

Additionally, the participants stated that they could write and correct the mistakes faster in their weblogs; thus, no problem occurred because of their handwriting illegibility as well. As for technological knowledge, some of the students claimed that they learned how to integrate a link, image and video into a written text. Besides these positive perceptions, some neutral feedbacks were also gathered from 6 students. Moreover, they claimed that the blog application did not improve their technology use since they had already been experts in using technology in their daily life. In that point, no improvement was perceived by some of the students during the blog writing process. This result supports the idea that the students of the current age have already been familiar with technological advances (Prensky, 2001, p. 1). Therefore, engaging with technology is not a novel implementation for them. However, they also confessed that integrating blog technology into lessons was quite new and satisfactory despite their familiarity with technology. Therefore, most of the participants had a desire to implement blog writing in their future English lessons as well.

4.4.2. Vocabulary knowledge

A content analysis of the students' feedbacks regarding blog writing process and vocabulary knowledge revealed that most of the students (24) found blog writing beneficial in terms of vocabulary development. They stated that their vocabulary knowledge has improved to a great extent by means of searching for a specific topic, reading their peers' written texts and both reading and giving the comments. Specifically,

the students claimed that they learned various phrases, conjunctions and academic words while engaging in the blog application. One sample excerpt from a 9th grade student is as follows:

“I learned different phrases such as *one upon a time, to sum up, from my point of view* in the essays owing to reading the blog posts of our peers. I used these expressions in my daily speech as well”, (C. Ş., 9th grade)

This indicates that communication with other peers through receiving and giving comments on the blog platform helped them to enhance their vocabulary knowledge. Furthermore, two students asserted that while writing their essays on the blog platform, they could remember the appropriate words in a short time and use it in the appropriate contexts immediately. Thus, it demonstrates a promoting effect of blog writing on the students’ vocabulary fluency as well. As another positive effect of the blogging process, it raised an awareness about the students’ lack of vocabulary knowledge. A few students pointed out that while reading their peers’ essays and comments, they had difficulty with comprehension because of their limited vocabulary knowledge; therefore, they searched for the meanings of unknown words, thereby leading to enrich their vocabulary knowledge. An excerpt from a 11th grade student is as follows:

“I sometimes felt obliged to search for the meaning of unknown words while reading my peers’ text, especially in case I could not derive the meaning from the context. In that case, I searched the meaning of unknown words to be able to comprehend the text. As a result, this application helped me to acquire lots of new words” (N.K., 11th grade)

Of all the students, only four students claimed that they could not realize any change on their vocabulary knowledge. To be more specific, they asserted that they had already had a considerable amount of vocabulary knowledge and one of them confessed that the topics were not challenging enough to facilitate their lexical knowledge. An excerpt of a 12th grade student, who was also one of the students writing point of view about the blogging process in English, is as follows:

“ Frankly, my vocabulary has not improved by a great deal and I believe this is because my English was adequate.....most of the writing topics provided weekly were not challenging to write about, and usually consisted of daily matters and topics that do not require much intellectual growth to write on...I believe more challenging topics such as psychology,

sociology, economics and governmental actions would prove to be much more fruitful in terms of improving one's English'' (D.Ç.,12th grade)

This result suggests that even though all topics were made up based on the participants' own preferences, some other challenging topics could also be included in order to promote the students to search more about the topic and to trigger the participants to use different words.

4.4.3. Reading skill

The facilitating effect of blog use on reading development was confirmed by most of the students in the study. They reported that they had a reading practice while searching for the topic and reading their peers' essays. Moreover, they claimed that they had different points of view about a specific topic while reading their peers' texts. Due to their regular reading practice during blog implementation, they felt more patient while reading the long texts and they could comprehend academic texts easily by the time of progress. An exemplary excerpt from a 9th grade student is as follows:

“ Reading patiently and objectively was not easy at the first sessions of the implementation. However, in the process of time I could achieve it. Therefore, not only did my writing skill develop, but also my reading skill improved owing to blog writing.....Now I can understand an academic text better’’ (B.S., 9th grade)

However, there were a few students who claimed no improvement in their reading skills during the blog writing process. They explained that the topics were not challenging enough to search more about the topics, reading from the computer screen was tiring, the essays of the peers were too long including some unknown words, thereby interrupting their reading fluency. One of the students also argued that there was no difference between reading from a screen and a paper. Therefore, they could not recognize any changes with regard to their reading skills.

4.4.4. General world knowledge and culture

Nearly all of the students concluded that there has been improvement in their world knowledge owing to searching about the topic, reading their peers' essays and reading the peers' comments on their own essays. They underlined that they learned

about different cultures, proverbs and idioms during the process of searching about a specific topic and comparing their own text with the ones of their peers. As a different perspective, one of the students also mentioned that she gathered different point of view by reading the essays of her peers in different ages. Therefore, she suggested such kind of applications more often for further English lessons. The excerpt from her statement is as follows:

“ While reading my peers’ essays, I recognized both similarities and differences between my point of view and the students whom I thought from different ages. Thus, I could examine the topics from different perspectives as well. Therefore, blog writing is an useful application” (D.Z.K., 9th grade)

Her assertion confirmed the findings of the study by Guo (2013). As it is in the current study, the students in the study of Guo mentioned the enhancing effect of blogging on having different points of view. Moreover, they claimed that by interacting with other peers, they could evaluate topics from different perspectives; therefore, they could develop different thinking skills in the end. This result also highlights that blog writing triggers students’ various thinking strategies. In addition, since it enhances different thinking skills, it can be said that blog writing also provokes a constructivist application.

Besides most of the students, a few students also claimed that there has been no improvement in their cultural knowledge because there was nothing new in the written texts of their peers. However, as compared to the others, these students are quite few. Therefore, it can be concluded that blog writing helps the participants develop their general world knowledge and culture.

4.4.5. Time management

The positive effect of blog writing on time management was confirmed by most of the students in the study. The explanations for effective time management were that a) they had time limitation to complete their essays and give comments on the essays so they could arrange their time accordingly, b) the practice of writing and reading the texts on blog platform accelerated their speed on practicing all language skills, c) they had already studied English while writing and reading the text; thus, they did not need to spend extra time on practicing these skills, d) owing to mobile application, they could write in any convenient place and time. However, a few students also noted that they spent much more

time because of three major reasons. The first reason is that they spent a lot of time on searching for the topic before writing on the blog platform. As a second reason, they spent time on trying to write elaborately and proficiently since their peers would read them. As for the last reason, blog writing was perceived as a novel application by the participants in the beginning of the implementation. Therefore, they had to spend more time to get used to the application as compared to their conventional writing practices. A quotation from a 11th grade student is as follows:

“...even if I was a bit slow at writing at the beginning of the blog implementation, I got used to the program in process of time and I could have many practices. Hence, the more I practiced in the blog platform, the faster I could write in the latter sessions. Therefore, I think, I could use time efficiently in time.” (H. D., 11th grade)

These results corroborate the findings of the previous studies emphasizing that blog application occupies much time of the students because of its novelty in education (Akdağ and Özkan, 2017; Aydan, 2014). For this reason, it can be suggested that practitioners should spend some time on a new blog program in order to get used to and handle the program.

4.4.6. Interaction

Except for a few ones, all of the students emphasized that their interaction with their peers increased considerably throughout the blog application. This finding confirms the previous studies indicating the facilitating effect of blog writing on the students' interaction (Bakan, 2016; Carlino, 2009; Dickinson, 2013; Ekinçi, 2017). The responses of the students revealed that interaction among the students was actualized by reading and giving comments on each other's blog posts. The majority of the students also stated that they felt less anxious while giving comments because they did not know anything about the identity of the audiences. That is, the anonymity of the participants helped learners to defend their ideas in a relaxed atmosphere. The positive effect of blog use on lowering learner anxiety in this study was concurrent with the findings of the previous studies emphasizing a positive effect of blog use on lowering learner anxiety (e.g. Avellaneda, 2016; Carlino, 2009; Cequena, 2013; Lin et al., 2014; Zhaou, 2015). Besides blog platform, having chats about the assigned topic in the classroom environment also

increased interaction among the students. The students stated that they had discussed about the topic at the break time in the school before writing on their blogs; thereby, their social relationship was strengthened as well. This explanation indicates that the students took blog application seriously and tried to write their blog posts elaborately by discussing the topics beforehand. Interestingly, one of the students claimed that he felt as if he had a real communication with his peers while reading and writing comments; therefore, he liked this application a lot. Another student also emphasized that she could communicate with the people whom she does not know very well on the web platform after the blog implementation because she got used to communicating with anonymous people during the blog application. For this reason, blog use is suggested when a face to face communication is impossible for learners. As another perspective, a few students asserted that not only did their interaction increase with their peers, but also with their teacher. Throughout the implementation, the teacher assisted the students in dealing with any technological problems and sometimes reminded them due time for writing the essays and comments. Therefore, there has been naturally an interaction between the teacher and the students. Despite the majority of the students, there were a few students who pointed out no change in their interaction skills because of the virtuality of the blog application, the anonymity of the peers and individual writing practices. An excerpt from a 9th grade participant is as follows:

“Even if anonymity of the respondents provides some advantages, in my opinion, it did not contribute to my interaction with other participants. In other saying, interaction in a virtual platform seems to be talking to a robot which does not have any emotions...” (C.Ş., 9th grade)

To be more specific, while some students perceived anonymity of the peers as an advantage for interaction, it was perceived as a disadvantageous by other students. All in all, the answers gathered from the students revealed different views on the impact of the blog application on their interaction skills.

4.4.7. Other aspects

Besides the categorized aspects mentioned above, the answers of the students revealed different points of view in terms of the blogging process. Among different

thematic categories found in the analysis, the most frequent one was the impact of the blogging process on the students' writing development. Most of the students mentioned that throughout the study, they could learn how to construct an essay and organize a text by using appropriate cohesive devices, syntactic structures and coherent sentences in their texts. Moreover, one of the currently graduated students pointed out that blog writing application helped him to write more easily in his writing lessons at the university. A quotation of him is as follows:

“ ...I have been taking Advanced Writing Lesson in this term at the university. Owing to my experience with blog writing, now I can write the essays easily without having any problem in this lesson, I would like to thank once more” (B. E., 12th grade)

In more detail, because he got used to writing an opinion essay beforehand, he could easily transfer this information into his writing practices at the writing lessons. Thus, he could be successful in the lesson. Along these lines, another student attending at a state university confirmed that blog writing contributed to her success in writing practices. An excerpt from this student is as follows:

“Even if I study another Foreign Language at the university now, I am aware of various essay types and I know how to give feedback on the content of the essays. As compared to other students attending in the preparatory schools, I can write better. In a four-month application, I could reach this level”. (B.A., 12th grade)

Based on this result, it can be concluded that the facilitating effect of blog application on writing development revealed with the quantitative data was also confirmed by the qualitative data of the study.

Another most frequent thematic category was the fun factor during the blog application. Nearly all of the students perceived blog process as an enjoyable application especially for their writing practice. This finding is concurrent with the findings of the studies featuring the fun element in blog use (e.g. Akdağ and Özkan, 2017; Bakan, 2016; Cequena, 2013; Şimşek, 2009). The students in the study asserted that blog writing was a novel application as an alternative to their conventional writing lessons. The topics were chosen from the current issues, and they could insert different applications such as

images, videos, links into their texts. Therefore, they enjoyed a lot while writing their texts on the learner blogs. A quotation from a 11th grade student is as follows:

“Although I did not have much experience with writing activities before, writing on a blog platform was really enjoyable because I could insert different pictures and videos into my blog posts....” (A. C., 11th grade)

The last point revealed from the analysis was the necessity of blog application in contemporary language classrooms. The students mentioned that using blogs in their language learning process would be a good opportunity to use technology in the lessons. Therefore, they would like to pursue this application in their further lessons as well. An excerpt of a 11th grade student is as follows:

“ It was the first time that I had ever written an essay without using a paper and pen. I think, it is an easy but essential application in today’s modern world. Thus, I found this project useful and counted myself lucky that I had such an experience” (P.K. 11th grade)

As seen in the excerpt, the participants think that it is necessary to employ blog application in their educational practices as well.

In sum, the students’ perceptions on the blogging process seem to be positive in terms of different perspectives. Even though there were some neutral answers about the impact of blogging in some aspects such as vocabulary and general world knowledge, there seems to be no negative attitude of the students towards the blog writing process. Therefore, it may be concluded that the perceptions of the students on the blog process were favourable.

5. CONCLUSION, DISCUSSION AND IMPLICATIONS

This section includes a summary of the findings gathered from both quantitative and qualitative data, a conclusion derived from the discussions of the findings, some pedagogical implications for educators and the recommendations for further research studies.

5.1. Summary of the Study

The present study investigated the effect of blog writing on two dimensions; both the writing ability and vocabulary knowledge of Turkish EFL high school students. Moreover, the students' perceptions about the blog writing process were examined in detailed as another research concern. As for the participants of the study, Turkish EFL High School students were selected purposefully and conveniently in tune with the scope of the study. To be more specific, because the majority (24) of the participants were the researcher's own students and it was practical to reach them in case of need, they were included in the study. As most of the participants were under the age of 18, the consent forms were delivered to both the students and their parents to confirm the students' agreement in participating and doing all requirements of the study.

As for the implementation, the participants wrote a blog post in accordance with a writing prompt each week on a blog platform called *epdooalenglishblog.com*. Writing prompts were used to have the participants write an opinion essay which includes expressing and defending an idea about a topic. Thus, it was possible for the participants to give comments on their peers' ideas as well. In the study, nearly all of the writing prompts were chosen based on the participants' suggestions in order to promote them to write more enthusiastically about the topics. Besides writing essays on the blog platform, the participants were also required to write comments on the blog posts of randomly chosen two friends each weekend. In order to see the impact of blogging on the students' writing ability, the participants took a writing test both at the beginning and at end of the study. Both writing pre and posttests were totally same and required the participants to write an opinion essay about the chosen topic. The students' writing tests were assessed using both a holistic and an analytical rubric. As the second concern of the study, it was aimed to investigate any impact of blog writing on the participants' both receptive and productive vocabulary knowledge. In tune with this aim, the students took two receptive and one productive vocabulary test both at the beginning and the end of the

implementation. Moreover, in order to probe the students' active vocabulary use in the texts, the writing pre and post tests were analyzed in terms of lexical diversity and density by conducting VocabProfile program. The third research aim was to scrutinize the participants' perceptions about blogging process. For this aim, after completing blogging process, all of the participants were asked to evaluate the blogging process from different aspects such as technology use, vocabulary knowledge, reading skill, general world knowledge and culture, time management and interaction. They were also asked to specify any other aspects besides the predetermined ones. After completing all requirements of the study, an attendance certificate was distributed to each participant who fulfilled all the requirements of the study.

5.2. Conclusion and Discussion

Conducting the 18-week study, a general overview of the results is given in this section. First of all, when all blog posts were examined, it was seen that even though the minimum word count was 150 for each post, the word count of the texts increased by the time and it reached to 719 during the implementation. It shows that the students got used to writing more in time. As Dickinson (2013) suggested, the participants recorded their blog posts weekly and the word count of the posts was tracked by the researcher each week in attempt to observe the process regularly. Moreover, the majority of the blog prompts (topics) were made up based on the students' preferences in order to encourage them to write more willingly on the blog platform. As Guo (2013) suggested, instead of a teacher's assigned topic, the students' preferences on the topics should come into prominence in order to motivate them to write more. For this reason, the students in the study were thought to be more motivated to write on the blog platform throughout the study.

As for the comments the students made each week on the blog posts, it was revealed that there was a consistent decrease in the process of time. More specifically, while the participants gave the most frequent comments on the 3rd topic, the least frequent comments were given on the 18th (the last) topic. First and foremost, this result might have been explained by the process of implementation time. To be more specific, as the students had to write two comments on the writing prompts each week, they might have been tired towards the end of the study. In addition, the last weeks of the school are devoted to the exams; therefore, they might have concentrated on the exams more than

their blog tasks. Besides the time factor, the content of the writing prompts might have affected this result. Since the content of the third prompt was a relevant and current issue regarding the students' opinion about the most important school subjects, they might have given more comments on the third topic than any other topic. However, the content of the last prompt was about their opinion about being a famous person or not. Even though the students had chosen this topic beforehand, they did not comment on it quite frequently since being a famous person might have been a further and hypothetical situation for them. Therefore, it can be speculated that the topic of the writing prompts might have affected the frequency of the comments given by the students. In sum, it can be concluded that the number of comments might have fluctuated depending on time and the topics.

As for the first research aim, it was investigated if blog writing enhanced Turkish EFL high school students' writing ability. The result of the analyses revealed that blog writing helped the students to develop their writing ability since there were statistically significant differences between writing pre-test and post-test scores of the students. Furthermore, it was found that the writing ability of the students were close to each other after the implementation. It was seen that the frequency of the students in each band of the FCE marking scale was distributed comparable in the posttest. More specifically, it was seen that in the writing pretest, the highest cumulative band number of the students was Band 2, and there were students in each frequency band. Thus, the percentage of the distribution was heterogeneous. However, in the writing posttest, it was revealed that there were not any students in Band 1, and the cumulative frequency distribution was close to each other in Band 3, 4, and 5. This result indicates that blog writing not only helped the students to improve their writing ability but also eliminated a major discrepancy among the students in terms of writing ability. As for the writing traits (mechanics, sentence construction, vocabulary, discourse markers, organization and content), it was seen that blog writing enhanced Turkish EFL students' writing ability in all aspects since there were significant improvements between the students' pretest and posttest scores in all writing traits. Moreover, when compared with other traits, it was seen that the students made progress on sentence construction, discourse markers and vocabulary traits more than the others. This indicates that blog writing specifically helped the students in terms of effective use of sentences, transitions and cohesive devices with a wide range of vocabulary. In regard to sentence construction, the current study does not corroborate the findings of the study by Özdemir and Aydın (2015). In their study, it

was found that blog use did not spark off any significant improvement on the participants' sentence construction. However, this result might be explained with restricted implementation time of the study. In other words, because of limited implementation time, it might not have been possible to see any significant improvement on the papers of the participants in terms of sentence construction. In contrast to the study by Özdemir and Aydın (2015), in the current study, the implementation session lasted 18 weeks (a semester); thus, it was possible to scrutinize the effect of blog use on each writing trait in process of time. As underscored in Swain's Comprehensible Output Hypothesis (1985), the more learners practice writing, the more they become aware of their production. That is, owing to constant practice, they may notice their deficiencies and try to improve their production. Concluding from this hypothesis, it might be suggested that the duration of practice time may affect the results with regard to the impact of blog writing on learners' writing ability.

As for the second research aim, the impact of blog writing was examined on Turkish EFL high school students' vocabulary knowledge. In tune with this aim, both receptive and productive vocabulary of the students were investigated by comparing vocabulary pre-test and post-test scores. Moreover, in order to assess the students' lexical performance in the written texts, the writing pre-test and post-tests were examined in terms of lexical diversity and density. After statistical calculations, it was concluded that blog writing helped Turkish EFL high school students to develop their vocabulary in both receptive and productive aspects. However, it was also found that blog writing enhanced the students' productive vocabulary more than their receptive vocabulary. It is because statistically significant improvement was observed in each frequency level in the productive test. In contrast to the productive vocabulary test, a consistent significant difference was not found in each frequency level of the receptive vocabulary test. A possible explanation for this result might be the students' writing practice. To be more clear, productive vocabulary knowledge includes use of words in productive skills such as speaking and writing (Web, 2005). Therefore, blog writing might have provided a platform in which the students activated their productive vocabulary in a context. However, when the students' writing pre and post tests were examined in a detailed way, no remarkable differences were found in terms of lexical diversity and density of the texts. That is, the writing pre and post tests did not differentiate remarkably from each other in point of type/token and content/function words ratios. A possible explanation for this

result might be the fact that the students took the same writing test both at the beginning and at the end of the implementation; therefore, they were restricted to write in a particular topic and genre. Because of this restriction, almost no difference was revealed in terms of lexical diversity and density of the texts. Thus, it might be concluded that the content and genre restriction may have affected lexical richness of the written texts.

As the last concern of the study, the students' perceptions on blog writing process were examined in detail. For this aim, the students were asked to evaluate the process in different perspectives such as technology use, vocabulary knowledge, reading skill, general world knowledge and culture, time management and interaction. In addition, they were allowed to add some other aspects they noticed with regard to the implementation. After analyzing the feedbacks, it was seen that most of the participants highlighted the enhancing effect of blog writing on all mentioned aspects. To be more specific, as for technology use, most of the students benefitted from the internet, computer and mobile phone while executing their tasks. Furthermore, via the program, they could find a chance to integrate a link, image and video into their blog posts. Therefore, it may be concluded that blog writing helped the students to integrate technology into their learning tasks. Besides its favorable effect on technology use, blog application was also found to be more practical than paper-pen writing because of its asynchronous hallmark. For this reason, the students in the current study also suggested integrating blogs into their further learning practices. Based on these findings, it can be concluded that blog use promoted the students' technology use; and therefore, it is advisable to integrate it into further education processes.

As for vocabulary knowledge, the students claimed that via searching for the topics, reading the peers' posts and giving the comments on them, their vocabulary knowledge improved to a great extent. It was confirmed with the analysis of writing post-tests which were enriched with more academic words as compared to their pre-tests. Based on these results, it can be concluded that the blog platform assisted the students not only with interaction skills via reading and commenting on blog posts, but also using various ranges of words in appropriate contexts, which in turn leads to increase in productive vocabulary knowledge of the students. In this respect, it can be claimed that interaction among the students helped them to construct their own knowledge, which is considered as a kind of constructivist application. Moreover, as stated by some of the students, the students could also notice their gaps in terms of their vocabulary knowledge

throughout blogging practices. Therefore, it can be said that blog writing also triggered the students' metalinguistic awareness which is also underscored by Swain's Comprehensible Output Hypothesis (1985). Besides these positive statements, a few students also confessed that nothing has changed with regard to their vocabulary knowledge since the topics chosen were not so challenging for them to search for new words. In that case, it can be deduced that writing topics might affect the range of words used by the students.

The blog writing process also provided an opportunity for the students to have a reading practice by both searching for the topics and reading the peers' essays. Owing to this practice, the students could be more patient while reading, comprehend the blog posts easily, and gather different points of view from the blog posts. Besides these positive effects, the lengths of the blog posts, unknown words in the texts and reading from the computer screen were stated as the disadvantages of the blogging process by the students. Yet, it was seen that the students' overall perception about the impact of blog writing on the reading skill was positive.

While searching about the topics, reading the blog posts and giving comments on them, the students also learned about different cultures with some proverbs and idioms belonging to these cultures. Moreover, they gained different viewpoints about the specific topics from their peers throughout the blogging process. Therefore, it can be deduced that this process can trigger different thinking skills through interaction with peers and have the students gather new knowledge in the end, which are considered as hallmarks of constructivism (Allen, 2008).

In terms of time management, it was found that during the blogging process most of the students could manage the time efficiently. It was stated that it is because they had a limited time to write their blog posts and comments. In addition to that, owing to its asynchronous feature they could write their blog posts any time and place they wish. In progress of time they could also have a chance to practice writing and reading on the blog website. Thus, blog writing improved their reading and writing skills in the end. Yet, there were still a few students devoting much more time on writing on the blog website as they searched a lot about the topics and tried to write more elaborately considering the audiences. This enterprise supports Self-Determination Theory of Ryan and Deci (2008). According to this theory, if one has an intrinsic motivation which stems from interest, enjoyment and satisfaction of a situation, it leads that person to have intrinsic regulation

in the end. In that sense, it also triggers autonomous motivation. In the study, most of the students said that they could manage their time efficiently on blog writing in a specific time period. Nevertheless, for some students keeping audiences in mind while writing blog posts may seem time consuming on completing the tasks.

When it comes to interaction among the students, it was revealed that it increased a lot via the students' reading and giving comments on the blog posts of one another. The blog posts were written by the students with the intent to be read and to get comments from their peers. Therefore, interaction naturally occurred between a writer and reader of the blog posts. Another point to enhance interaction between the writer and reader was the anonymity of the audiences. That is, because they did not know the identity of the audiences, they could write and comment on the blog posts in a more relaxed way. This finding supports Krashen's Hypothesis (1982) which emphasizes a low anxiety atmosphere to have an ideal learning atmosphere. Evaluating the process from another perspective, a few students also asserted that they had better interaction with the teacher throughout blogging process since they could reach the teacher in case of any technological problem, and the teacher often reminded them due time to complete blog posts and comments via a Whatsapp group. In this way, they felt close to the teacher. Despite these positive statements by most of the students, there were still a few students stating no change in terms of interaction with their peers during the blog writing process. These students found the blogging task as an individual and artificial practice since they were not faced to the audiences, and so they did not notice any interaction atmosphere. In this aspect, it can be concluded that while the anonymity of the audiences is perceived as an advantage to enhance peer interaction by most of the students, it may not be perceived as a real interaction by a few students.

The content analysis of the students' responses disclosed some other aspects with regard to the blog writing process. The first and the most frequent mentioned one was the writing improvement after the blogging process. It was stated by most of the students that they could learn how to organize an essay by using appropriate cohesive devices and syntactic structures in their blog posts. This result confirmed that the writing ability of most students developed due to blog writing. Having enjoyable time all along the blogging process was another frequently mentioned aspect by the students. The students underlined that blog writing was a current and an alternative application to their conventional writing lessons and the topics were quite appealing to them. Moreover, via

the blog program it was possible for them to insert images, videos, links into their writing tasks. Therefore, not only did the students have a writing practice, but they also had enjoyable time during blogging process. As another remarkable point, the students stated that integrating Web 2.0 tools into lessons is a need for contemporary classrooms. Thus, integrating blog technology as a Web 2.0 tool into their language practices was a good opportunity for them and they suggested using this technology in their further lessons as well.

To sum up, analyses of both quantitative and qualitative data revealed that blog writing had a positive impact on both the writing ability and the vocabulary knowledge of Turkish EFL high school students. Moreover, the process of blog writing was perceived as facilitating in terms of different aspects such as reading, interaction, general world knowledge and culture, time mangament and enjoyment of writing by Turkish EFL high school students. Based on this conclusion, some pedagogical implications and suggestions for further research are presented in the following sections.

5.3. Pedagogical Implications

In consideration of the current study's findings, some pedagogical implications are suggested in this section. As the first finding of the study, it was revealed that blog writing helped the participants to improve their writing ability. Moreover, the improvement was seen in each trait of writing. The enhancing effect of blog use on the writing ability was also confirmed by the statements of the students in the qualitative data. In this respect, using blog programs in writing lessons can be suggested for language teachers. In this way, it would be practical to enhance learners' writing skills without giving constant feedbacks. By employing blogs as a supplementary tool in writing lessons, teachers do not need to devote extra time for writing instruction and feedbacks, so they may devote the rest of the class time to teach other language items. However, before employing the blog technology for language teaching, the teachers should also take some decisions about how to supplement this tool into lessons. For instance, it should be taken into account what type(s) of writing the students will do, whether writing tasks will be individual or collaborative, whether the students will be required to comment on one another's work or not and whether it will be a private or a public application. Furthermore, it is important to decide on which blog platform (free or commercial) will

be used and how often the students are required to write the blog posts on the platform. Another remarkable point is that it should be considered whether the blog tasks will be assessed based on a rubric or not. To be more clear, the students might benefit from the blogs just for the sake of fun or the blog posts might be used as an assessment tool by the teachers. Last but not least, the teachers should decide on their roles while incorporating this tool into the lessons. In other words, depending on their choices, the teachers may hold an authority, a facilitator or a monitor role while employing the blog tool in the lessons.

Second, it was revealed that the students could practise reading regularly throughout the blogging process via searching for the topics and reading the peers' essays. Therefore, this application might also be used in a reading lesson to enhance EFL students' reading skill. For instance, the students might do reading practice while reading the blog posts of one another or they might read different articles while searching about the topics from the internet.

Third, the current study revealed that the students were motivated to write on blogs since they found blog writing enjoyable and practical as compared to their conventional practices. In addition, most of the students desired to use blogs in their following lessons. Therefore, it can be recommended for language teachers to benefit from blogs to motivate the students for writing practices. In this way, as Smetanova (2013) suggests, it would also be possible to practice writing outside the classroom and eliminate the students' negative perceptions about writing tasks without time constraints, which is considered as a serious problem in EFL environment (Kim and Kim, 2005).

Fourth, in the study it was seen that blog writing helped the the students to develop their vocabulary knowledge. Moreover, it enhanced their productive vocabulary more than their receptive vocabulary knowledge. In this way, it can be concluded that blog writing assisted the learners to activate their productive vocabulary which is known as more challenging than receptive vocabulary knowledge (Web, 2005). For this reason, blogs can be used by language teachers to activate students' productive vocabulary. In the study, it was also seen that the students learned some new phrases and academic words in a context via reading and commenting on the blog posts. For this reason, the blog website provided an environment for the students to learn vocabulary implicitly. As an implication, it can be said that language teachers may benefit from blog websites to promote the students to learn new words and phrases implicitly out of the classrooms.

Fifth, it was found that during the blog writing process, the interaction among the students increased a lot since they could express their ideas freely due to the anonymity of the audiences. In this respect, as Avellaneda (2016) suggests blog application should be employed especially for the introverted students since they would feel more relaxed without fear of ridicule while writing and receiving comments on blog posts. As an application, the students may also adopt pseudonym or alias in order to conceal their identities while writing on the blog platform.

Sixth, it was revealed that the students had responsibility and authorship of their writing because they had to regulate their time to complete the tasks and they wrote the blog posts to be read by other participants. In that sense, this application seems to spark off learner autonomy as well (Jee, 2008). For this reason, blogs could be used to make learners feel responsible for their own learning. It would also be possible to trigger the intrinsic motivation of learners in language learning eventually.

Seventh, because each blog entry is automatically recorded in a blog website, blogs can be used as an e-portfolio by language teachers. Thus, both teachers and students can keep, collect and review all tasks at an online platform. By this way, it would be possible to track students' learning process at regular intervals as a formative assessment.

In the study, a few students surprisingly complained about the simplicity of writing prompts even if nearly all of the topics were constructed based on their preferences. To be more specific, they wished to write about more challenging topics such as scientific and global issues in the blog platform. For this reason, it can be suggested that besides contemporary issues, more challenging topics be implemented in writing sessions in order to encourage the students search and write more on the topics.

Finally, the results of the study suggest supplementing blog application in language lessons because the students liked the application and found it beneficial in terms of language learning process. Therefore, it may be concluded that with the use of blogs in the education environment, the novelty factor which suppresses the drawbacks of traditional learning environment comes into play in the learning process. However, in order to employ this tool in the education context, both curriculum and material developers should also be prepared profoundly. That is, they should supply some materials, techniques and methods for blog integration into the lessons. As another important issue, teachers should be ready and enthusiastic to implement this technology into the lessons. Additionally, they need to be supported by the administrators as for

implementing technology in the lessons. As a suggestion, a discussion platform called www.edublogs.com would be a good opportunity for colleagues to share their activities, practices and projects for educational purposes. Above all, teachers are required to be qualified with pedagogy in terms of how to integrate Web 2.0 technologies into the lessons. That is, they should have Technological Pedagogical Content Knowledge (TPACK) including “knowledge of content, pedagogy, and technology” and how they can be employed in the classrooms effectively (Mishra and Koehler, 2006). In this way, teachers know what, when and how to teach a subject by integrating technology into lessons.

5.4. Suggestions for Further Research

This study aims to shed light in the literature in terms of blog use and its effect on both the writing and vocabulary development of Turkish EFL high school students. As reviewed in the literature, most of the studies were conducted to explore the impact of blogs on students’ writing skill, but the current study adds one more dimension to the literature by including students’ vocabulary knowledge as well. As different from the studies conducted in a short time period, the implementation session of the current study lasted one semester. Thus, it was possible to track and scrutinize the whole blogging process in time. Another distinctive feature of the current study is that corrective feedbacks from both the teacher and peers were eliminated in the study in order not to intervene in the blogging process. In this respect, the results of the present study might make a contribution to the field with regard to the interpretation of the blogging process in its natural flow. Originally, the study commenced with an experimental design; however, in order to evaluate blog writing process from the students’ points of view, their perceptions were gathered by the researcher as well. Thus, this mixed-methods design study aimed to have a comprehensive insight regarding the blog writing process and its impact on writing ability and vocabulary knowledge. Besides a general framework of the current study, some recommendations for further studies might also shed light into literature.

First, this study employed a blog application as a Web 2.0 tool in an EFL context. Further studies might apply some other forms of Web 2.0 technology such as Wiki, Twitter, Facebook to see their impacts on different language skills. In addition, different

Web 2.0 tools might be compared between each other in terms of their impacts on different language skills in the further studies.

In the current study, it was examined whether blog writing helped the students to develop writing ability and vocabulary knowledge. Further studies might also interrogate the impact of blog writing on different language skills such as reading and speaking. For instance, as the latest version of blogs, vblogs can be employed to see its impact on speaking and listening skills of the practitioners. More specifically, in vblogs, users are able to tell their experiences, ideas etc. via videos. Therefore, by integrating vblogs into lessons, more comprehensive results can be revealed regarding blog use and other language skills. In this way, it would be reasonable to benefit from blogs to develop other language skills as well.

In the current study, only students' perceptions were under investigation. A further study might also examine the teacher's perception about blogging process. Especially, perceptions of the teacher who monitors the whole blogging process might reveal different points of view in terms of blog application in language teaching. In short, both the students' and the teacher's perceptions about blogging process might reveal a comprehensive result in terms of the significance of blogs in an education context.

The data of the current study were collected via writing and vocabulary tests as well as a question regarding the students' perceptions on the blog writing process. It can be recommended for further research studies to include some other techniques such as diary keeping, observation notes, interviews to triangulate the techniques and have more generalizable results as for evaluating blog writing process.

This research study is delimited by 35 Turkish high school students in Eskişehir. Further research studies might be conducted with primary or secondary school students with larger populations to reveal any impact of blogging on different age groups. Because there is a paucity in the studies conducted with primary or secondary schools students in Turkey, conducting such research studies might contribute to the literature and break new grounds in the area.

In the present study, due to the limited number of students meeting the criteria of the study, the participants comprised of only one experimental blog group and their pre and post-test scores were compared in order to see the impact of blog use on both writing and vocabulary development. However, further research studies could also include a

control group to have comparable results with the experimental group.

As a final point, affective and personality traits of the students were not concerned in the current study. Thus, further research might examine participants' personal and affective traits and investigate any relationship between these personal traits and blogging practice. By this way, it might add a different dimension to the previous research studies.

REFERENCES

- Adolphs, S., and Schmitt, N. (2003). Lexical coverage of spoken discourse. *Applied Linguistics*, 24(4), 425–438.
- Agesta, S., and Cahyono, B. Y. (2017). Effect of process-genre approach on the Indonesian EFL writing achievement across personality. *International Journal of English Language and Linguistics Research*, 5(3), 39-48.
- Ajan, H., and Hartshorne, R. (2008). Investigating faculty decisions to adopt Web 2.0 technologies: Theory and empirical tests. *Internet and Higher Education*, 11, 71-80.
- Akinwamide, T. K. (2012). The influence of process approach on English as second language students' performances in essay writing. *ELT*, 5(3), 16-29.
- Akdağ, E., and Özkan, Y. (2017). Enhancing writing skills of EFL learners through blogging. *The Reading Matrix: An International Online Journal*, 17(2), 79-95.
- Al-Jarf, R. S. (2004). The effects of web-based learning on struggling EFL college writers. *Foreign Language Annals*, 37(1), 49-57.
- Alharbi, S. H. (2017). Principled eclecticism: Approach and application in teaching writing to ESL/EFL students. *English Language Teaching*, 10(2), 33-39.
- Allen, M. (2008). Promoting critical thinking skills in online information literacy instruction using a constructivist approach. *College & Undergraduate Libraries*, 15(1-2), 21-38.
- Altunkaya, H., Ateş, A., and Doğan, B. (2018). Using the weblog in the Turkish writing skills as a foreign language, *International Journal of Eurasia Social Sciences*, 9 (31), 366-393.
- Anderson, D. B. (2010). The Effect of Blogging and Electronic Journaling on Writing Skills Development in High School Freshmen. The unpublished doctoral Dissertation, Walden University, The USA.

- Arslan, R., and Şahin-Kızıl, A. (2010). How can the use of blog software facilitate the writing process of English language learners? *Computer Assisted Language Learning*, 23(3), 183-197.
- Arteaga-Lara, H. M. (2017). Using the process-genre approach to improve fourth-grade EFL learners' paragraph writing. *Latin American Journal of Content and Language Integrated Learning*, 10(2), 217-244.
- Atakent, A. (1999). The Effects of Teaching L2 Rhetorical Organization on Turkish Freshman Students' L1 Expository Writing. Unpublished Master's Thesis. Middle East Technical University, Ankara, Turkey.
- Avellaneda, E. (2016). Foreign Language College Achievement and the Infusion of Three Selected Web 2.0 Technologies: A Mixed Method Case Study. Unpublished Doctoral Dissertation, University of South Florida, the USA.
- Aydan, L. S. (2014). Student and Teacher Perceptions on Benefits and Challenges of Using Blogs in English in Foreign Language Classes. Unpublished Master Thesis, Middle East Technical University, Turkey.
- Aydın, S. (2014). The use of blogs in learning english as a foreign language. *Mevlana International Journal of Education (MIJE)*, 4(1), 244-259.
- Babalola, L. H. A. (2012). Effects of process-genre based approach on the written english performance of computer science students in a Nigerian polytechnic. *Journal of Education and Practice*, 3(6), 1-7.
- Badger, R., and White, G. (2000). A process genre approach to teaching writing. *ELT Journal*, 52(2), 153-160.
- Bakan, J. A. (2016). The Impact of Blogs in the Classrooms: A Qualitative Analysis of Elementary Students Using Blogs to Respond to Texts. Unpublished Master Thesis, Rowan University, The USA.
- Barkaoui, K. 2007. Rating scale impact on EFL essay marking: A mixed-method study. *Assessing Writing*, 12, 86–107.
- Barnett, M. A. (1992). Writing as a process. *The French Review*, 63(1), 31-44.

- Başal, A., and Aytan, T. (2014). Using web 2.0 tools in English language teaching. Conference proceedings. *ICT for language learning*, 372.
- Bishop, M. (2010). Virtual Teacher Talk: Blogging with and by Pre-Service Teachers. Unpublished Doctoral Dissertation. Lindenwood University.
- Blake, C. (2009). Potential of text-based internet chats for improving oral fluency in a second language. *The Modern Language Journal*, 93(2), 227-240.
- Blankenship, M. (2011). How social media can and should impact higher education. *Education Digest*, 76(7), 39-42.
- Bloch, J. (2007). Abdullah's blogging: A generation 1.5 student enters the blogosphere. *Language Learning & Technology*, 11(2), 128-141.
- Blood, R. (2004). How blogging software reshapes the online community. *Communications of the ACM*, 47(12), 53-55.
- Brookhart, S. M. (1999). The art and science of classroom assessment: The missing part of pedagogy. *ASHEERIC Higher Education Report*, 27(1), 48-53.
- Cameron, L. (2002). Measuring vocabulary size in english as an additional language. *Language Teaching Research*, 6(2), 145-173.
- Campbell, A. P. (2003). Weblogs for use with ESL classes. *The Internet TESL Journal*, 9 (2), <http://iteslj.org/Techniques/Campbell-Weblogs.html>.
- Castañeda, D. A. (2011). The effects of instruction enhanced by video/photo blogs and wikis on learning the distinctions of the spanish preterit and imperfect. *Foreign Language Annals*, 44(4), 692-711.
- Carlino, F. (2009). The electronic discussion visits the spanish-as-a-foreign-language class: Backstage and insights from an action-research project. *International Journal of Research & Review*, 331-349.
- Cequena, M. B. (2013). Does blogging facilitate the development of students' writing skills? *Philippine ESL Journal*, 10, 126-147.

- Cheng, H. Y. (2012). Applying Twitter to EFL Reading and Writing in a Taiwanese College Setting. Unpublished Doctoral Dissertation. Indiana State University, the USA.
- Cheng, K. (2006). A research study on students' level of acceptance in applying e-learning for business courses – a case study on a technical college in Taiwan. *Journal of American Academy of Business*, 8(2), 265-270.
- Chen, Y. L., Liu, E. Z. F., Shih, R. C., Wu, C. T., and Yuan, S. M. (2011). Use of peer feedback to enhance elementary students' writing through blogging. *British Journal of Educational Technology*, 42(1), 1-4.
- Cohen, A. D., and Robbins, M. (1976). Toward assessing interlanguage performance: The relationship between selected errors, learners' characteristics, and learners' explanations. *Language learning*, 26(1), 45-66.
- Cobb, P. (1994). Where is the mind? Constructivist and socio-cultural perspective on mathematical development. *Educational Researcher*, 23(7), 13–20.
- Cobb, T. (1997). Is there any measurable learning from hands-on concordancing? *System*, 25, 301–315.
- Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34(2), 213-238.
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research (2nd ed.)*, Upper Saddle River, N. J.: Pearson Merrill Prentice Hall.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.)*, Boston, MA Pearson.
- Crossley, S. A., and McNamara, D. S. (2012). Predicting second language writing proficiency: The roles of cohesion and linguistic sophistication. *Journal of Research in Reading*, 35(2), 115–135.
- Crossley, S. A., Kyle, K., and McNamara, D. S. (2016). The development and use of cohesive devices in L2 writing and their relations to judgments of essay quality. *Journal of Second Language Writing*, 32, 1–16.

- Çiftçi, H. (2009). The Effect of Blog Peer Feedback on Turkish EFL Students' Writing Performance and their Perceptions. Unpublished Master Thesis, Yeditepe University, Turkey.
- Daller, H., Roeland, H., and Jeanine T-D. (2003). Lexical richness in the spontaneous speech of bilinguals. *Applied Linguistics*, 24(2), 197-22.
- De Silva, R. (2014). Rubrics for Assessment: Their Effects on ESL Students' Authentic Task Performance. *Center for English Language Communication 4th Symposium Proceedings*. Singapore: National University of Singapore.
- Dickinson, P. (2013). Promoting learner autonomy language awareness through blogging. *Journal of Niigata University of International and Information Studies*, 16, 1-11.
- Downes, S. (2003). More than personal: The impact of weblogs. *TeleEducation*, (May 1), 1-6.
- Downes, S. (2005). E-learning 2.0, *ACM eLearn Magazine*.
<http://www.elearnmag.org/subpage.cfm?section=articles&article=29->
- Ducate, C. L., and Lomicka, L. L. (2005). Exploring the blogosphere: Use of weblogs in the foreign language classroom. *Foreign Language Annals*, 38(3), 410-421.
- Ducate, L. C., and Lomicka, L. L. (2008). Adventures in blogosphere: From blog readers to blog writers. *Computer Assisted Language Learning*, 21(1), 9-28.
- Efimova, L., and Fiedler, S. (2003). Learning webs: Learning in weblog networks. In P. Kommers, P. Isaias and M. B. Nunes (Eds.), *Proceedings of the IADIS International Conference Web Based Communities 2004* (pp.490-494), Lisbon: IADIS Press.
- Ekinci, E. (2017). Tweet Circle: Effects of Twitter on EFL Students' Writing Skill Development. Unpublished Master Thesis, Çukurova University, Adana, Turkey.
- Ellis, N. (2002). Frequency effects in language processing. *Studies in Second Language Acquisition*, 24(2), 143-188.
- Elson, J. M. (2011). A Process-Genre Approach to Teaching Argumentative Writing to Grade Nine Learners. Unpublished Master's Thesis. University of Rhodes, South Africa.

- Engber, C. A. (1995). The relationship of lexical proficiency to the quality of ESL compositions. *Journal of Second Language Writing*, 4, 139–55.
- Fellner, T., and Apple, M. (2006). Developing writing fluency and lexical complexity with blogs. *The JALT CALL Journal*, 2(1), 15–26.
- Ferris, D. R. (1995). Student reaction to teacher response in multiple-draft composition classrooms. *TESOL Quarterly*, 29(1), 33-53.
- Flower, L. and Hayes, JR. (1981). A cognitive process theory of writing. *College Composition and Communication*, 32, 365-387.
- Gabrielatos, C. (2002). *EFL writing: Product and process*. <http://www.gabrielatos.com/Writing.pdf>.
- Gamaroff, R. (2000). Rater reliability in language assessment: The bug of all bears. *System*, 28(1), 31-53.
- Ganji, M., and Beikian, A. (2013). Iranian university english majors' knowledge of lexical collocations: Its relationship with speaking and writing proficiency. *Journal of Basic and Applied Scientific Research*, 3(2), 330-335.
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold Publishers.
- Glymph, O. (2012). The Effect of the Private Classroom Blog on the Acquisition of Formal Writing Proficiency with Spanish III High School. Unpublished Doctoral Thesis. Liberty University, Spain.
- González-Bueno, M. (1998). The effect of electronic mail on Spanish L2 discourse. *Language Learning and Technology*, 1(2), 55-70.
- Guo, Y. (2013). The Class Blog: Chinese EFL Non-English Major College Students' Online Writing Experiences. Unpublished Doctoral Dissertation, University of Missouri, The USA.
- Haastrup, K., and Henriksen, B. (2000). Vocabulary acquisition: Acquiring depth of knowledge through network building. *International Journal of Linguistics*, 10(2), 221-240.

- Halic, O., Lee, D., Paulus, T., and Spence, M. (2010). To blog or not to blog: Student perceptions of blog effectiveness for learning in a College- Level Course. *Internet and Higher Education*, 13(4), 206-213.
- Harmer, J. (2004). *How to teach writing*. London: Longman.
- Harmer, J. (2007). *The practice of English language teaching*. Harlow: Longman.
- Harwood, C. (2010). Using blogs to practice grammar editing skills. *English Language Teaching World Online*, 2, 1-13.
- Hasan, K., and Akhan, M. (2010). Approaches to writing in EFL/ESL context: Balancing product and process in writing class at tertiary level. *Journal of NELTA*, 15(1-2), 77-88.
- Hashemi, M., and Najafi, V. (2011). Using blogs in English language writing classes. *International Journal of Academic Research*, 3(4), 599-604.
- Hashemnezhad, H., and Hashemnezhad, N. (2012). A comparative study of product, process, and post-process approaches in Iranian EFL students' writing skill. *Journal of Language Teaching and Research*, 3(4), 722-729.
- Hattie, J., and Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
- Hawks, S. (2014). Education news: The flipped classroom: now or never?, *AANA Journal*, 82(4), 264-269.
- Hedgcock, J., and Lefkowitz, N. (1996). Some input on input: Two analyses of student response to expert feedback in L2 writing. *The Modern Language Journal*, 80(3), 287-108.
- Henriksen, B. (1999) Three dimensions of vocabulary development. *Studies in Second Language Acquisition*, 21(2), 303–317.
- Herawati, Y. W. (2015). The Effect of Process-Genre Approach on Students' Argumentative Essay in a Tertiary EFL Classroom. Unpublished PHD Dissertation. Malang: State University of Malang.
- Hijikata-Someya, Y., Ono, M., and Yamanishi, H. (2015). Evaluation by native and non-native english teacher-raters of japanese students' summaries. *English Language Teaching*, 8(7), 1-12.

- Horowitz, D. M. (1986). Process, not product: Less than meets the eye. *TESOL Quarterly*, 20, 141-144.
- Hu, M., and Nation, I. S. P. (2000). Vocabulary density and reading comprehension. *Reading in a Foreign Language*, 13(1), 403-430.
- Hu, X. Y. (2003). Process writing and its application. *Foreign Languages and Their Teaching*, 9, 21-28.
- Huang, C.-K., Chao, Y.-C., and Lin, C.-Y. (2008) Web 2.0 in and out of the language classroom. *Proceedings of the 2008 World CALL: Using technologies for language learning*. Foukoka, Japan.
- Huang, J., and Han, T. (2013). Holistic or analytic – a dilemma for professors to score EFL essays? *Leadership and Policy Quarterly*, 2(1), 1-18.
- Hsu, W. (2018). The most frequent BNC/COCA mid- and low-frequency word families in English-medium traditional Chinese medicine (TCM) textbooks. *English for Specific Purposes*, 51, 98-110.
- Hussen, M. (2015). Assessing Students' Paragraph Writing Problems: The Case of Bedeno Secondary School, Grade 10 English Class in Focus. Unpublished Master Thesis. Haramaya, Haramaya University.
- Hyland, K. (2003). *Second language writing*. Cambridge: Cambridge University Press.
- Hyland, K. (2007). Genre pedagogy: language, literacy, and L2 writing instruction. *Journal of Second Language Writing*, 16, 148-164.
- Illés, E. (2012). Learner autonomy revisited. *ELT Journal*, 66(4), 505-513.
- Jacobs, H., Zinkgraf S., Wormuth D., Hartfield V., and Hughey J. (1981). *Testing ESL composition: A practical approach*. Rowley, Mass: Newbury House.
- Jee, M. J. (2008). Using blogs as eportfolios in ESL/EFL writing classes. *SLWIS News*, 3(2), 1-9.
- Jepson, K. (2005). Conversations and negotiated interaction in text and voice chat rooms. *Language Learning & Technology*, 9(3), 79-98.

- Ji, L., and Qiao, J. (2018). China cohesion and coherence: Teaching writing in English to Chinese high school learners. *Humanising Language Teaching*, 20(4). <https://www.hltmag.co.uk/aug18/cohesion-and-coherence>.
- Johansson, V. (2008). Lexical diversity and lexical density in speech and writing: A developmental perspective. *Working Papers*, 53, 61-79.
- Johnson, A. (2004). Creating a writing course utilizing class and student blogs. *The Internet TESL Journal*, 10(8), 32-45. <http://iteslj.org/Techniques/Johnson-Blogs>
- Johnson, T. J., and Kaye, B. K. (2004). Wag the blog: How reliance on traditional media and the internet influence perceptions of credibility of weblogs among blog users. *Journalism & Mass Communication Quarterly*, 81(3), 622-642.
- Johnson, R. B., and Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Research*, 33, 14–26.
- Jones J. S. (2016). An Exploratory Study of the Use of Classroom Blogs to Improve Student Writing. Unpublished Doctoral Dissertation. The University of Alabama, The USA.
- Kajder, S. B., and Bull, G. (2004). A space for "writing without writing". *Learning & Leading with Technology*, 31(6), 32-35.
- Kain, D. J. (2003). Teacher-centered versus student-centered: Balancing constraint and theory in the composition classroom. *Pedagogy Critical Approaches to Teaching Literature Language Composition and Culture*, 3(1), 104-108.
- Karakaya, İ., ve Ülper, H. (2011). Yazma kaygısı ölçeğinin geliştirilmesi ve yazma kaygısının çeşitli değişkenlere göre incelenmesi. *Kuram ve Uygulamada Eğitim Bilimleri*, 11, 691-707.
- Karakoç, D., and Durmuşoğlu-Köse, G. (2017). The impact of vocabulary knowledge on reading, writing and proficiency scores of EFL learners. *Journal of Language and Linguistic Studies*, 13(1), 352-378.
- Karsak, H. G. O., Fer, S., and Orhan, F. (2014). The effect of using cooperative and individual weblog to enhance writing performance. *Educational Technology & Society*, 17(4), 229–241.

- Kashani, H., Mahmud, R.B., and Kalajahi, S.A.R. (2013). Comparing the effect of blogging as well as pen-and-paper on the essay writing performance of Iranian graduate students. *English Language Teaching*, 10(6), 202-218.
- Kavandı, E. (2012). The Effects of Blogs on the Development of Foreign Language Writing Proficiency. Unpublished Doctoral Dissertation, Gazi University, Ankara, Turkey.
- Kaya, S. (2013). The Effect of English Opinion Essay Writing Instruction on Turkish Essay Writing: A case of University Preparatory School Students. Unpublished Master Thesis, Middle East Technical University, Turkey.
- Kayacan, A. (2017). The Effect of Providing Self and Anonymous Peer Feedback on Writing Assignments in a Digital Environment Among Turkish EFL High schools Learners. Unpublished Master Thesis. Çanakkale Onsekiz Mart University, Turkey.
- Kenworthy, R. (2006). Timed versus at-home assessment tests: Does time affect the quality of second language learners' written compositions? *TESL-EJ*, 10(1), 1-10.
- Khan, K., and Bontha, U. R. (2015). How blending process and product approaches to teaching writing helps efl learners: A case study. *Methodologies for Effective Writing Instruction in EFL and ESL Classrooms*, 94-114.
- Kim, M., and Crossley, S. A. (2018). Modeling second language writing quality: A structural equation investigation of lexical, syntactic, and cohesive features in source-based and independent writing. *Assessing Writing*, 37, 39–56.
- Kim, Y., and Kim, J. (2005). Teaching Korean University writing class: Balancing the process and the genre approach. *Asian EFL Journal*, 68-89.
- Klimova, B. F. (2011). Evaluating writing in English as a second language. *Procedia - Social and Behavioral Sciences*, 28, 390 – 394.
- Koda, K. (1993). Task-induced variability in FL composition language specific perspectives. *Foreign Language Annals*, 26, 332-346.
- Kumar, C. P. (2013). The eclectic method-theory and its application to the learning of English. *International Journal of Scientific and Research Publications*, 3, 1-4.
<https://doi.org/10.15373/22778179/July2014/173>.

- Kumaravadivelu, B. (2001). Toward a post-method pedagogy. *TESOL Quarterly*, 35, 537-560.
- Kuo, S. A. (2007). Which rubric is more suitable for nss liberal studies? Analytic or holistic?, *Educational Research Journal*, 22(2), 179-199.
- Kurt, A., Izmirlı, S., and Şahin-Izmirlı, O. (2011). Student experience in blog use for supplementary purposes in courses. *Turkish Online Journal of Distance Education*, 12(3), 78-96.
- Kyle, K., and Crossley, S. (2016). The relationship between lexical sophistication and independent and source-based writing. *Journal of Second Language Writing*, 34, 12–24.
- Lacina, J., and Griffith, R. (2013). Blogging as a means of crafting writing. *The Reading Teacher*, 66(4), 316.
- Lam, F. S., and Pennington, M. C. (1995). The computer vs the pen: A comparative study of word processing in a Hong Kong secondary classroom. *Computer Assisted Language Learning*, 8(1), 75-92.
- Lam, R. (2015). Convergence and divergence of process and portfolio approaches to L2 writing instruction: Issues an implications. *RELC Journal*, 1-16.
- Lan, Y., Hung, C., and Hsu, H. (2011). Effects of guided writing strategies on students' writing attitudes based on media richness theory. *TOJET: The Turkish Online Journal of Educational Technology*, 10(4), 148-164.
- Lantolf, J. (2000). *Sociocultural theory and language learning*. Oxford: Oxford University Press.
- Laufer, B., and Nation, P. (1995). Vocabulary size and use: Lexical richness in L2 written production. *Applied Linguistics*, 16, 307-322.
- Laufer, B., and Nation, P. (1999). A vocabulary size test of controlled productive ability. *Language Testing*, 16(1), 33-51.
- Laufer, B., and Nation, P. (2004). Size and strength: Do we need both to measure vocabulary knowledge?, *Language Testing*, 21, 202-226.

- Laufer, B., and Paribakht, T. S. (1998). The relationship between passive and active vocabularies: Effects of language learning context. *Language Learning*, 48(3), 365-391.
- Lee, L. (2010). Fostering reflective writing and interactive exchange through blogging in an advanced language course. *ReCALL*, 22(2), 212–227.
- Lee, S. H., and Muncie, J. (2006). From receptive to productive: Improving ESL learners' use of vocabulary in a post-reading composition task, *TESOL Quarterly*, 40(2), 205-320.
- Lin, C.C., Hsiao, H.S., Tseng, S.P., and Chan, H.J. (2014). Learning english vocabulary collaboratively in a technology-supported classroom. *Turkish Online Journal of Educational Technology*, 13(1), 162-173. from <https://www.learntechlib.org/p/153663/>.
- Lin, M. H. (2015). Learner-Centered Blogging: A preliminary investigation of EFL student writers' experience. *Educational Technology & Society*, 18(4), 446–458.
- Lin, M. H., Groom, N., and Lin, C.-Y. (2013). Blog-assisted learning in the ESL writing classroom: A phenomenological analysis. *Educational Technology & Society*, 16(3), 130-139.
- Lin, M. H., Li, J. J., Hung, P. Y., and Huang, H. W. (2014). Blogging a journal: Changing students' writing skills and perceptions. *ELT Journal*, 68(4), 422-431.
- Lin, M. H., Lin, C. Y., and Hsu, P. Y. (2011). The unrealistic claims for the effects of classroom blogging on English as a second language, students' writing performance. *British Journal of Educational Technology*, 42(6), 148-151.
- Llach, M. P. A., and Terrazas, M. (2009). Examining the relationship between receptive vocabulary size and written skills of primary school learners. *ATLANTIS Journal of the Spanish Association of Anglo-American Studies*, 31(1), 129-147.
- Long, P. (2002). Blogs: A disruptive technology coming of age? *Syllabus*. <http://www.campus technology.com / article.asp? id=6774>.
- MacIntyre, P. D., and Gardner, R. C. (1991). Language anxiety: Its relationship to other anxieties and to processing in native and second languages. *Language Learning*, 41,513-534.

- Maskor, Z. M., and Baharudin, H. (2016). Receptive vocabulary knowledge or productive vocabulary knowledge in writing skill, which one important? *International Journal of Academic Research in Business and Social Sciences*, 6(11), 2222-6990.
- McLean, S., Kramer, B., and Beglar, D. (2015). The creation and validation of a listening vocabulary levels test. *Language Teaching Research*, 19(6), 741-760.
- Meara, P. (2002). The rediscovery of vocabulary. *Second Language Research*, 18(4), 393-407.
- Mishra, P., and Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for integrating technology in teachers' knowledge. *Teachers College Record*, 108(6), 1017–1054.
- Moffett, J. (1982). Writing, inner speech, and meditation. *College English*, 44(3), 231-246.
- Mokhtar, A. A. (2010). Achieving native-like english lexical knowledge: The nonnative story. *Journal of Language Teaching and Research*, 1(4), 343-352.
- Murray, L., and Hourigan, T. (2008). Blogs for specific purposes: Expressivist or socio-cognitivist approach? *ReCALL*, 20(1), 82–97.
- Nation, I. S. P. (1990). *Teaching and learning vocabulary*. New York: Newbury House
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.
- Nazim, M., and Ahmad, J. (2012). Developing writing skills: A practical remedy of common writing problems among students of writing skills courses at preparatory year. *Journal of Language in Indi*, 12(3), 348-360.
- Nguyen, P. T. (2012). Peer feedback on second language writing through blogs: The case of a vietnamese EFL classroom. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, 2(1), 13–23.
- Nizonkiza, D. (2016). First-year university students' receptive and productive use of academic vocabulary. *Stellenbosch Papers in Linguistics*, 45, 169-187.
- Noytim, U. (2010). Weblogs enhancing EFL students' English language learning. *Procedia Social & Behavioral Sciences*, 2(1), 127–132.

- Oatman, E. (2005). Blogomania. *School Library Journal*, 51(8), 36-39.
- Okan, Z., and Taraf, U. H. (2013). The use of blogs in second language teacher education. *Procedia - Social and Behavioral Sciences*, 83, 282 – 289.
- Okojie, M. C. P. O., Olinzock, A. A., and Okojie-Boulder, T. C. (2006). The pedagogy of technology integration. *Journal of Technology Studies*, 32(2), 66-71.
- Oravec, J. A. (2002). Bookmarking the world: Weblog applications in education. *Journal of Adolescence & Adult Literacy*, 45(7), 616–621.
- Ortega, L. (2015). Syntactic complexity in L2 writing: Progress and expansion. *Journal of Second Language Writing*, 29, 82–94.
- O'Reilly, T. (2005). *What Is Web 2.0 Design Patterns and Business Models for the Next Generation of Software*. <http://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html>.
- Othman, S. B., and Mohamad, F. (2009). *Student response to teacher feedback on multiple-draft compositions in ESL classroom*. Paper presented at the 2nd International Conference of Teaching and Learning, INTI university college, Malaysia (1-12).
- Özdemir, E., and Aydın, S. (2015). The effects of blogging on EFL writing achievement. *Procedia - Social and Behavioral Sciences*, 199, 372–380.
- Palpanadan, S., Salam, A. R. B., and Ismail, F. B. (2014). Comparative analysis of process versus product approach of teaching writing in Malaysian schools: Review of literature. *Middle-East Journal of Scientific Research*, 22(6), 789-795.
- Paltridge, B. (2014). Genre and second-language academic writing. *Language Teaching*, 47(3), 303–318.
- Pham, V., and Usaha, S. (2009). Blog-based peer response for EFL writing: A case study in VietNam. *AsiaCall Online Journal*, 4(1), 1-29.
- Piaget, J. (1955). *The construction of reality in the child*. Routledge and Kegan Paul. <http://www.marxists.org/reference/subject/philosophy/works/fr/piaget2.htm>.

- Pinkman, K. (2005). Using blogs in the foreign language classroom: Encouraging learner independence. *The JALT CALL Journal*, 1(1), 12-24.
- Polovina, S. (2006). *About the learning pyramid* [Online], Goldsmiths (University of London). <http://homepages.gold.ac.uk/polovina/learnpyramid/index.html>.
- Pop, A. (2009). Quality standard and the new technologies (NT) in higher education foreign language instruction. *Annals of DAAAM & Proceedings*, 1721-1722.
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1-6.
- Pudra, Y. (2009). The Relationship between Vocabulary Size and Writing Ability of English Language Laboratory Students at Universitas Pelita Harapan. Unpublished BA Thesis. Karawaci, Universitas Pelita Harapan.
- Pujianto, D., Emilia, E., and Sudarsono, S. (2014). A process genre approach to teaching writing report text to senior high school students. *Indonesian Journal of Applied Linguistics*, 4(1), 99-110.
- Qian, D. D. (1999). Assessing the roles of depth and breadth of vocabulary knowledge in reading comprehension. *Canadian Modern Language Review*, 56, 282-307.
- Qian, D. D. (2002). Investigating the relationship between vocabulary knowledge and academic reading performance: An assessment perspective. *Language Learning*, 52, 513-536.
- Rahmany, R., Sadeghi, B., and Faramarzi, S. (2013). The effect of blogging on vocabulary enhancement and structural accuracy in an EFL context. *Theory and Practice in Language Studies*, 7(3), 1288-1298.
- Raimes, A. (1991). Out of the woods: Emerging traditions in the teaching of writing. *TESOL Quarterly*, 25, 407-430.
- Read, J., and Chapelle, C. A. (2001). A framework for second language vocabulary assessment. *Language Testing*, 18(1), 2-33.
- Reyhan, A. (2012). The use of guided writing and sequences of pictures as teaching techniques to enhance the ability of writing narrative of students in “different English course”. *Anglicist*, 1(2), 1-6.

- Richardson, W. (2009). *Blogs, wikis, podcasts, and other powerful web tools for classrooms*. SAGE Publications.
- Rusinovci, X. (2015). Teaching writing through process-genre based approach. *US-China Education Review*, 5(10), 699-705.
- Ryan, R. M., and Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68.
- Sadeghi, K., and Dilmaghani, S. K. (2013). The relationship between lexical diversity and genre in Iranian EFL learners' writings. *Journal of Language Teaching & Research*, 4(2), 328-334.
- Sa'diyah, H. (2010). Improving students' ability in writing descriptive texts through a picture series aided learning strategy. *The English Teacher*, 164-182.
- Saito, H. (1994). Teachers' practices and students' preferences for feedback on second language writing: A case study of adult esl learners. *TESL Canada Journal*, 11(2), 46-70.
- Salma, U. (2015). Problems and practical needs of writing skill in EFL context: An analysis of Iranian students of Aligarh Muslim University. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 20(11), 74-76.
- Sarala, T., Rahim, A., and Ismail, F. (2014). Comparative analysis of process versus product approach of teaching writing in Malaysian schools: Review of literature. *Middle-East Journal of Scientific Research*, 22(6), 789-795.
- Savas, P. (2013). Thematic blogs: Tools to increase interaction, collaboration and autonomy among pre-service foreign language teachers. *Journal of Interactive Learning Research*, 24(2), 191-209.
- Schmitt, N., Ching, Ng, J. W., and Garras, J. (2010). The word association format: validation evidence. *Language Testing*, 1-22.
- Schmitt, N., Schmitt, D., and Clapham, C. (2001). Developing and exploring the behavior of two new versions of the vocabulary levels test. *Language Testing*, 18(1), 55-88.

- Schoonen, R., Van Gelderen, A., De Glopper, K., Hulstijn, J., Simis, A., Snellings, P., and Stevenson, M. (2003). First language and second language writing: The role of linguistic knowledge, speed of processing and metacognitive knowledge. *Language Learning*, 53(1), 165-202.
- Seitzinger, J. (2006). Be constructive: Blogs, podcasts, and wikis as constructivist learning tools. <https://www.elearningguild.com/pdf/2/073106des.pdf>.
- Shariatmadari, M. S., and Mazandarani, O. (2016). Process-genre approach and efl learners' writing ability. *International Journal of Research in Linguistics, Language Teaching and Testing*, 1(4), 124- 129.
- Shin, D., Chon, Y.V., and Kim, H. (2011). Receptive and productive vocabulary sizes of high schools learners: what next for the basic word list. *English Teaching*, 66(3), 123-148.
- Silva, T. (1993). Toward and understanding of the distinct nature of l2 writing. *TESOL Quarterly*, 27(4), 657-677.
- Smetanova, E. (2013). Writing as part of foreign language acquisition. *Procedia - Social and Behavioral Science*, 106, 3375–3380.
- Staehr, L. S. (2008). Vocabulary size and the skills of listening, reading and writing. *The Language Learning Journal*, 36(2),139-152.
- Stæhr, L. S. (2009). Vocabulary knowledge and advanced listening comprehension in english as a foreign language, *Studies in Second Language Acquisition*, 31(4), 577–607.
- Spillett, M. A. (2003). Peer debriefing: Who, what, when, why, how. *Academic Exchange Quarterly*, 7(3), 36–41.
- Stevenson, M., and Hedberg, J. G. (2013). Learning and design with online real-time collaboration. *Educational Media International*, 50(2), 120-134.
- Sun, Y. C. (2009). Voice blog: An exploratory study of language learning. *Language Learning & Technology*, 13(2), 88–103.
- Sun, Y. C. (2010). Extensive writing in foreign language classrooms: A blogging approach. *Innovations in Education and Teaching International*, 47(3), 327-339.

- Sun, Y., and Chang, Y. (2012). Blogging to learn: Becoming EFL academic writers through collaborative dialogues. *Language Learning & Technology*, 16(1), 43-61.
- Strake, E., and Kumar, V. (2010). Feedback and self-regulated learning: Insights from supervisors' and PHD examiners reports. *Reflective Practises*, 1, 19-32.
- Stuart, W. (2005). Receptive and productive vocabulary learning: The effects of reading and writing on word knowledge. *Studies in Second Language Acquisition* 27(1), 33-52.
- Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In Gass, S. and Madden, C. (Eds.) *Input in Second Language Acquisition*, pp. 235-256. New York: Newbury House.
- Swain, M. (1995). *Three functions of output in second language learning*. In G. Cook and B. Seidlhofer (Eds.), *Principle and practice in applied linguistics: Studies in honour of H. G. Widdowson* (pp. 125-144). Oxford: Oxford University Press.
- Steele, V. (2004). *Product and process writing*. <http://www.teachingenglish.org.uk/think/write/approaches.html>.
- Şahin-Kızıl, A., and Arslan, R. Ş. (2012). *EFL students' experiences with blog-integrated writing instruction*. International Conference "ICT for Language Learning" 5th Edition, Florence, Italy, 15-16 November 2012.
- Şimsek, O. (2009). The effect of weblog integrated writing instruction on primary school students writing performance. *International Journal of Instruction*, 2(2), 157-160.
- Taki, S., and Fardafshari, E. (2012). Weblog-based collaborative learning: Iranian EFL learners' writing skill and motivation. *International Journal of Linguistics*, 4(2), 412-429.
- Tekinarslan, E. (2008). Blogs: A qualitative investigation into an instructor and undergraduate students' experiences. *Australasian Journal of Educational Technology*, 24(4), 402-412.
- Trajtemberg, C., and Yiakoumetti, A. (2011). Weblogs: a tool for efl interaction, expression, and self-evaluation. *ELT Journal*, 65(4), 437-445.

- Tu, C., Blocher, M., and Ntoruru, J. (2008). Integrate web 2.0 technology to facilitate online professional community: EMI special editing experiences. *Educational Media International*, 45(4), 335-341.
- Tyagi, S. (2012). Adoption of web 2.0 technology in higher education: A case study of universities in the National Capital Region, India. *International Journal of Education and Development using ICT*, 8(2), 28–43.
- Van Zeeland, H., and Schmitt, N. (2013). Lexical coverage in L1 and L2 listening comprehension: The same or different from reading comprehension? *Applied Linguistics*, 34(4), 457-497.
- Vaughan, N., Nickle, T., Silovs, J., and Zimmer, J. (2011). Moving to their own beat: Exploring how students use web 2.0 technologies to support group work outside of class time. *Journal of Interactive Online Learning*, 10(3), 113-127.
- Vurdien, R. (2013). Enhancing writing skills through blogging in advanced English as a foreign language class in Spain. *Computer Assisted Language Learning*, 26(2), 126-143.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wang, Y. C. (2014). Promoting collaborative writing through wikis: A new approach for advancing innovative and active learning in an ESP context. *Computer Assisted Language Learning*, 1-14.
<https://www.tandfonline.com/doi/abs/10.1080/09588221.2014.881386>.
- Ward, J. (2004). Blog assisted language learning (BALL): Push button publishing for the pupils. *TEFL Web Journal*, 3(1). http://www.teflwebj.org/v3n1/blog_ward.pdf.
- Webb, S. (2005). Receptive and productive vocabulary learning: The effects of reading and writing on word knowledge. *Studies in Second Language Acquisition*, 27, 33-52.
- Webb, S., and Sasao, Y. (2013). New directions in vocabulary testing. *Language Testing*, 44, 263-277.

- Webb, S., Sasao, Y., and Ballance, O. (2017). The updated vocabulary levels test: Developing and validating two new forms of the VLT. *International Journal of Applied Linguistics*, 168(1), 33-69.
- Wesche, M., and Paribakht, T.S. (1996). Assessing second language vocabulary knowledge: Depth versus breadth. *The Canadian Modern Language Review*, 53(1), 13-40.
- Wilson, B. (1996). *Constructivist learning environments: Case studies in instructional design*. Englewood Cliffs, NJ: Educational Technology Publications.
- Witte, S. P., and Faigley, L. (1981). Coherence cohesion, and writing quality. *College Composition and Communication*, 32(2), 189–204.
- Worley, P. (2008). Not just for english classes: Writing skills essential in tech ed today. *Tech Directions*, 68(2), 17-19.
- Wu, H. J. (2015). The Effects of Blog-supported Collaborative Writing on Writing Performance, Writing Anxiety and Perceptions of EFL College Students in Taiwan. Unpublished Doctoral Thesis. University of South Florida.
- Yan, G. (2005). A process genre model for teaching writing. *English Teaching Forum*, 43(3), 18-26.
- Yüksel, İ. (2012). Cross-Sectional Evaluation of Turkish ELT Majors' General and Academic Lexical Competence and Performance. Unpublished Doctoral Dissertation. Anadolu University.
- Zamel, V. (1985). Responding to student writing. *TESOL Quarterly*, 19(1), 79-101.
- Zhai, L. (2016). A study on Chinese EFL learners' vocabulary usage in writing. *Journal of Language Teaching and Research*, 7(4), 752-759.
- Zhang, D. (2009). The application of blog in English writing. *Journal of Cambridge Studies*, 4(1), 64-72.
- Zhou, H. (2015). An empirical study of blog-assisted efl process writing: Evidence from Chinese non-English majors. *Journal of Language Teaching and Research*, 6(1), 189-195.

Zimmerman, C.B. (1997). Historical in second language vocabulary instruction. In J. Coady and T. Huckin (Eds). *Second language vocabulary instruction* (pp. 5-19). Cambridge: Cambridge University Press.

APPENDICES

APPENDIX A- Question about the students' perceptions about blog writing process

Sevgili öğrenciler,

2016-2017 eğitim öğretim yılının ikinci döneminde yer alan blog yazma sürecine katıldığınız için teşekkür ederim. Hem bu uygulamanın genel işleyişi hakkında bilgi edinmek hem de daha sonraki uygulamalarda gereken önlemleri alabilmek için sizin dönütlerinize ihtiyaç duyulmaktadır. Şimdi sizden bu süreci aşağıda belirtilen konular açısından değerlendirmenizi rica ediyorum. Eğer bunların dışında da belirtmek istediğiniz sürece ilişkin görüşleriniz varsa lütfen onları da yazınız.

- a) Teknoloji kullanımı:
- b) Sözcük dağarcığımız:
- c) Okuma beceriniz:
- d) Genel dünya bilgisi ve kültürünüz:
- e) Zaman:
- f) İletişim:
- g) Diğer:

APPENDIX B- Task Specific Mark Scheme in FCE rubric

Mark scheme and sample script with examiner comments

QUESTION 4: CANDIDATE D

■ Content

The **essay** should give reasons for and against spending a lot of money to look good.

■ Organisation and cohesion

Clear organisation of ideas, with suitable paragraphing and linking.

■ Range

Language of describing, explaining and giving opinion with vocabulary relating to money and fashion.

■ Appropriacy of register and format

Consistent register suitable to the situation and target reader.

■ Target reader

Would be informed.

Candidate D

Spending a lot of money is not the only way that make you look good. I think it is not nessecery to spend heap of money for fashion. You can also look good with your own style. Fashion is changeble. There always have new style of fashion come in. It is not mean that you have to alway spend money for new arrive fashion. You would rather look good in your own style.

In 2010 everyone has right to decide what they want to dress up. You don't have to alway update and get in fashions. Find your own style. Think what you really want. Do not let these fashions or fancy external stuffs influenced you.

Woman have naturally beautifuness from inside. We just need some colour to make up us. Make up and dress up suitibly. We can use the method of mix and match. We can matching our old clothes together to make up a new one.

Spending too much money on fashion is worthless. You have right to have your own fashion!

Examiner comments

■ Content

An attempt at the task set but not adequately achieved.

■ Organisation and cohesion

Clearly paragraphed but linking devices rarely used.

■ Appropriacy of register and format

Appropriate to the task.

■ Range

Limited range of structures but some attempt at range of vocabulary appropriate to task set.

■ Accuracy

A number of basic errors, particularly verb forms, which distract.

■ Target reader

Reader may have some difficulty following argument due to the number of distracting errors.

■ Marks awarded

Band 2.

APPENDIX C- General Impression Mark Scheme in FCE rubric

BAND 5	For a Band 5 to be awarded, the candidate's writing fully achieves the desired effect on the target reader. All the content points required in the task are included* and expanded appropriately. Ideas are organised effectively, with the use of a variety of linking devices and a wide range of structure and vocabulary. The language is well developed, and any errors that do occur are minimal and perhaps due to ambitious attempts at more complex language. Register and format which is consistently appropriate to the purpose of the task and the audience is used.
BAND 4	For a Band 4 to be awarded, the candidate's writing achieves the desired effect on the target reader. All the content points required in the task are included*. Ideas are clearly organised, with the use of suitable linking devices and a good range of structure and vocabulary. Generally, the language is accurate, and any errors that do occur are mainly due to attempts at more complex language. Register and format which is, on the whole, appropriate to the purpose of the task and the audience is used.
BAND 3	For a Band 3 to be awarded, the candidate's writing, on the whole, achieves the desired effect on the target reader. All the content points required in the task are included*. Ideas are organised adequately, with the use of simple linking devices and an adequate range of structure and vocabulary. A number of errors may be present, but they do not impede communication. A reasonable, if not always successful, attempt is made at register and format which is appropriate to the purpose of the task and the audience.
BAND 2	For a Band 2 to be awarded, the candidate's writing does not clearly communicate the message to the target reader. Some content points required in the task are inadequately covered or omitted, and/or there is some irrelevant material. Ideas are inadequately organised, linking devices are rarely used, and the range of structure and vocabulary is limited. Errors distract the reader and may obscure communication at times. Attempts at appropriate register and format are unsuccessful or inconsistent.
BAND 1	For a Band 1 to be awarded, the candidate's writing has a very negative effect on the target reader. There is notable omission of content points and/or considerable irrelevance, possibly due to misinterpretation of the task. There is a lack of organisation or linking devices, and there is little evidence of language control. The range of structure and vocabulary is narrow, and frequent errors obscure communication. There is little or no awareness of appropriate register and format.
BAND 0	For a Band zero to be awarded, there is either too little language for assessment or the candidate's writing is totally irrelevant or totally illegible.

APPENDIX D- ESL Composition Profile (Adapted from Holly L. Jacobs, V. Faye Hartflel, Jane B. Hughey, and Deanna R. Wormut (1981). Newbury House Publisher)

ESL COMPOSITION PROFILE*		
	RANGE	CRITERIA
Content	25-22	EXCELLENT TO VERY GOOD: knowledgeable—substantive—thorough development of thesis/genre—relevant to assigned topic
	21-17	GOOD TO AVERAGE: some knowledge of subject—adequate range—limited development of thesis/genre—lacks detail
	16-11	FAIR TO POOR: limited knowledge of subject—little substance—inadequate development of thesis/genre
	10-5	VERY POOR: does not show knowledge of subject—non-substantive—not pertinent—OR not enough to evaluate
Organization	15-13	EXCELLENT TO VERY GOOD: organization clearly stated and supported—well organized and very through development of introduction, body and conclusion, well-organized and very through development of supporting details
	12-9	GOOD TO AVERAGE: somewhat choppy—main ideas stand out, but organization unclear—limited development of introduction, body and conclusion—and/or limited development of supporting details
	8-5	FAIR TO POOR: ideas confused or disconnected—lacks logical sequencing and development of introduction, body and conclusion, and/or limited development of supporting details
	4-2	VERY POOR: does not communicate—no organization—OR not enough to evaluate
Discourse Markers	10-9	EXCELLENT TO VERY GOOD: Appropriate use and wide range of cohesive devices (signal words, pronouns, key words, demonstrative adjectives)
	8-6	GOOD TO AVERAGE: Mostly appropriate use and range of cohesive devices (signal words, pronouns, key words, demonstrative adjectives)
	5-3	FAIR TO POOR: Limited use and range of cohesive devices (signal words, pronouns, key words, demonstrative adjectives)
	2-1	VERY POOR: little or no linkage between sentences
Vocabulary	15-13	EXCELLENT TO VERY GOOD: sophisticated range—effective word/idiom choice and usage—word form mastery—appropriate register

	12-9	GOOD TO AVERAGE: adequate range—occasional errors of word/idiom form, choice, usage but meaning not obscured
	8-5	FAIR TO POOR: limited range—frequent errors of word/idiom form, choice, usage and/or meaning confused or obscured
	4-2	VERY POOR: essentially translation—little knowledge of English vocabulary, idioms, word form OR not enough to evaluate
Sentence Construction	30-26	EXCELLENT TO VERY GOOD: effective use of simple, compound, and complex sentences—effective use of coordinators, subordinators, and transitions—few errors of S-V agreement, verb tense, number, word order/function, articles, pronouns, prepositions
	25-20	GOOD TO AVERAGE: inconsistent control of simple, compound and/or complex sentences—minor problems in the use of coordinators, subordinators, and transitions—several errors of S-V agreement, verb tense, number, word order/function, articles, pronouns, prepositions
	19-14	FAIR TO POOR: major problems in simple, compound and/or complex sentences—frequent errors of negation, agreement, tense, number, word order/function, articles, pronouns, prepositions and/or fragments, run-ons, comma splice—meaning confused or obscured
	13-6	VERY POOR: virtually no mastery of sentence construction rules—dominated by errors—does not communicate—OR not enough to evaluate
Mechanics	5	EXCELLENT TO VERY GOOD: demonstrates mastery of conventions—few errors of spelling, punctuation, capitalization—includes clearly defined paragraphs and title—legible handwriting
	4	GOOD TO AVERAGE: occasional errors of spelling, punctuation, capitalization—unclear paragraphing—but meaning not obscured
	3	FAIR TO POOR: frequent errors of spelling, punctuation, capitalization, paragraphing—poor handwriting—meaning confused or obscured
	2	VERY POOR: no mastery of conventions—dominated by errors of spelling, punctuation, capitalization, paragraphing—handwriting illegible—OR not enough to evaluate
OFF TOPIC	0	Off-topic and /or off-genre Failure to understand and /or complete the task

APPENDIX E- Approval of Anadolu University Ethics Committee

ANADOLU ÜNİVERSİTESİ BİLİMSEL ARAŞTIRMA PROJELERİ



Hos Geldiniz senemk@anadolu.edu.tr

Proje ▾ Profil ▾ S.S.S. Çıkış

Başvuru Aşamasındaki Projelerim

Başvuru aşamasında olan projeleriniz aşağıda listelenmektedir. Bu projeler değerlendirilmek üzere henüz BAP Komisyonu'na gönderilmemiş, üzerinde değişiklik yapabileceğiniz veya silebileceğiniz durumdadır. Proje ile ilgili şu ana kadar girmiş olduğunuz bilgileri görüntülemek, proje bilgilerinde değişiklik yapmak veya projenizi değerlendirilmek üzere BAP Komisyonu'na göndermek için AYRINTI linkine tıklayınız. Projenizi silerek tamamen kaldırmak için ise SİL linkini kullanabilirsiniz. "YAYIN EKLE" butonu kullanılarak, projeden çıkan yayınlar projeye eklenebilir.

NO	PROJE ADI	PROJE TÜRÜ	PROJE ÇALIŞANLARI	PROJE ÖNERİSİ BAŞLANGIÇ TARİHİ	DÖNEM	DURUM	SİL	YAYIN	AYRINTI
1	The Impact of Blog Writing on Turkish High School EFL Learners' Writing Ability and Vocabulary Knowledge	Doktora Tez Projeleri	gdurmuso@anadolu.edu.tr	27 Şubat 2017	Ocak 2017	Kabul edildi/Proje Numarası:1702E040	<input type="button" value="Ekle"/>	<input type="button" value="Ekle"/>	<input type="button" value="Ekle"/>

Ana. Üni. Evrak Tarih ve Sayısı: 20/12/2016-E.102098



T.C.
ESKİŞEHİR VALİLİĞİ
İl Millî Eğitim Müdürlüğü



Sayı : 88074293/605.01/14174260
Konu: Araştırma Projesi

15.12.2016

ANADOLU ÜNİVERSİTESİ
(Genel Sekreterlik Yazı İşleri Müdürlüğü)

İlgi : a) 12/12/2016 tarih ve 14024159 sayılı olur.
b) 28/11/2016 tarih ve E.142796 sayılı yazınız.

İlgi (b) yazı ile istemiş olduğunuz "Araştırma Projesi" incelenmiş ve uygun görülmüş olup, ilgi (a) Olur ekte sunulmuştur.
Bilgilerinize rica ederim.

Necmi ÖZEN
Vali a.
İl Millî Eğitim Müdürü

EKLER :
1-İlgi (a) Olur (1 sayfa)
2-Araştırma Değerlendirme Formu (2 sayfa)

Adres :
Yunus Emre Kampüsü
26470/ ESKİŞEHİR

Aşılı ile Ayındır
5078 Sayılı Yasa ile
elektronik olarak
16-12-2016
Önder ÜLKE
Memur

Büyükdere Mah. Atatürk Biv. No:247 ESKİŞEHİR
Elektronik Ağ: www.eskisehir.meb.gov.tr
e-posta: strateji26@meh.gov.tr

Ayrıntılı bilgi için: L.TOKAT
Tel : (0 222) 239 72 00/213-425
Faks: (0 222) 239 39 22

Bu evrak güvenli elektronik imza ile imzalanmıştır. <http://evraksorgu.meb.gov.tr> adresinden 7554-a860-3b09-a207-c5f7 kodu ile teyit edilebilir.

APPENDIX F- Approval of Eskişehir Provincial Directorate of National Education



T.C.
ESKİŞEHİR VALİLİĞİ
İl Millî Eğitim Müdürlüğü



Sayı : 88074293/605.01/14024159
Konu : Araştırma Projesi

12.12.2016

VALİLİK MAKAMINA

İlgi: Anadolu Üniversitesi Genel Sekreterlik Yazı İşleri Müdürlüğü'nün 28/11/2016 tarih ve E.142796 sayılı yazısı.

İlgi yazı ile; Anadolu Üniversitesi Eğitim Bilimleri Enstitüsü Yabancı Diller Eğitimi Anabilim Dalı İngilizce Öğretmenliği Doktora Programı öğrencisi Senem CELLAT'ın "Blog Yazmanın Yabancı Dil Olarak İngilizce Öğrenen Türk Lise Öğrencilerinin Yazma Becerisinde ve Sözcük Bilgisindeki Etkisi" başlıklı doktora tez çalışması Araştırma İzin Komisyonu tarafından incelenmiş ve komisyon tarafından sakınca görülmediği tespit edilmiş olup, komisyon tarafından belirtilen okullarda yukarıda adı geçen projenin gerçekleştirilmesi uygun görülmektedir.

Makamlarınızca da uygun görülmesi halinde takdirlerinize arz ederim.

Bariş HANCI
Müdür Yardımcısı

OLUR
.../12/2016

Necmi ÖZEN
Vali a.
İl Millî Eğitim Müdürü

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Faks: (0 222) 239 39 22

Bu evrak güvenli elektronik imza ile imzalanmıştır. <http://evraksorgu.meb.gov.tr> adresinden ae64-e0d6-307d-bd47-b1c7 kodu ile teyit edilebilir.

APPENDIX G- Consent Form for Students

ARAŞTIRMA GÖNÜLLÜ KATILIM FORMU

Bu çalışma, “Blog Yazmanın Yabancı Dil Olarak İngilizce Öğrenen Türk Lise Öğrencilerinin Yazma Becerisinde ve Sözcük Bilgisindeki Etkisi” başlıklı bir araştırma çalışması olup blog yazmanın İngilizce yazma becerisi ve sözcük bilgileri üzerinde herhangi bir etkisi olup olmadığını bulmayı amaçlamaktadır. Çalışma, Senem CELLAT tarafından yürütülmekte ve sonuçları ile blog yazmanın İngilizce öğrenen Türk lise öğrencilerinin hem İngilizce yazma becerisi hem de İngilizce sözcük bilgileri üzerinde bir katkı sağlayıp sağlamadığı ortaya konacaktır /böylelikle İngilizce derslerinde yeni bir uygulamanın gelişimine ışık tutulacaktır.

- Bu çalışmaya katılımınız gönüllülük esasına dayanmaktadır.
- Çalışmanın amacı doğrultusunda, sizden hem nicel hem de nitel veriler toplanacaktır.
- İsminizi yazmak ya da kimliğinizi açığa çıkaracak bir bilgi vermek zorunda değilsiniz/araştırmada katılımcıların isimleri gizli tutulacaktır.
- Araştırma kapsamında toplanan veriler, sadece bilimsel amaçlar doğrultusunda kullanılacak, araştırmanın amacı dışında ya da bir başka araştırmada kullanılmayacak ve gerekmesi halinde, sizin (yazılı) izniniz olmadan başkalarıyla paylaşılmayacaktır.
- İstemeniz halinde sizden toplanan verileri inceleme hakkınız bulunmaktadır.
- Sizden toplanan veriler gizlilik yöntemi ile korunacak ve araştırma bitiminde arşivlenecek veya imha edilecektir.
- Veri toplama sürecinde/süreçlerinde size rahatsızlık verebilecek herhangi bir soru/talep olmayacaktır. Yine de katılımınız sırasında herhangi bir sebepten rahatsızlık hissederseniz çalışmadan istediğiniz zamanda ayrılabilirsiniz. Çalışmadan ayrılmanız durumunda sizden toplanan veriler çalışmadan çıkarılacak ve imha edilecektir.

Gönüllü katılım formunu okumak ve değerlendirmek üzere ayırdığınız zaman için teşekkür ederim. Çalışma hakkındaki sorularınızı Prof. Dr. Orhan Oğuz Anadolu Lisesi İngilizce öğretmeni Senem CELLAT’a (Senem114@gmail.com), tel:0505 270 48 60) yöneltebilirsiniz.

Araştırmacı Adı : Senem CELLAT
Adres : Prof. Dr. Orhan Oğuz
Anadolu Lisesi, Toplum sokak, No:32. Tepebaşı
İş Tel : 0(222)322 20 03
Cep Tel : 05052704860

Bu çalışmaya tamamen kendi rızamla, istediğim takdirde çalışmadan ayrılabileceğimi bilerek verdiğim bilgilerin bilimsel amaçlarla kullanılmasını kabul ediyorum.
(Lütfen bu formu doldurup imzaladıktan sonra veri toplayan kişiye veriniz.)

Katılımcı Ad ve Soyadı:

İmza:

Tarih:

APPENDIX H- Consent Form for Parents

VELİ İZİN FORMU

Bu çalışma ‘Blog Yazmanın Yabancı Dil Olarak İngilizce Öğrenen Türk Lise Öğrencilerinin İngilizce Yazma Becerisinde ve Sözcük Bilgisindeki Etkisi’ başlıklı bir araştırma çalışması olup blog yazmanın İngilizce yazma becerisi ve sözcük bilgileri üzerindeki etkisini bulma amacını taşımaktadır. Çalışma, Senem CELLAT, tarafından yürütülmekte ve sonuçları ile blog yazmanın İngilizce öğrenen Türk lise öğrencilerinin hem İngilizce yazma becerisi hem de de İngilizce sözcük bilgileri üzerinde bir katkı sağlayıp sağlamadığı ortaya konacaktır /böylelikle İngilizce derslerinde yeni bir uygulamanın gelişimine ışık tutulacaktır.

- Çocuğunuzun bu çalışmaya katılımı gönüllülük esasına dayanmaktadır.
- Çalışmanın amacı doğrultusunda, çocuklarınızdan hem nicel hem de nitel veriler toplanacaktır.
- Çocuğunuz ismini yazmak ya da kimliğini açığa çıkaracak bir bilgi vermek zorunda değildir/araştırmada katılımcıların isimleri gizli tutulacaktır.
- Araştırma kapsamında toplanan veriler, sadece bilimsel amaçlar doğrultusunda kullanılacak, araştırmanın amacı dışında ya da bir başka araştırmada kullanılmayacak ve gerekmesi halinde, sizin (yazılı) izniniz olmadan başkalarıyla paylaşılmayacaktır.
- İsteminiz halinde çocuğunuzdan toplanan verileri inceleme hakkınız bulunmaktadır.
- Çocuklarınızdan toplanan veriler gizlilik yöntemi ile korunacak ve araştırma bitiminde arşivlenecek veya imha edilecektir.
- Veri toplama sürecinde/süreçlerinde çocuklarınıza rahatsızlık verebilecek herhangi bir soru/talep olmayacaktır. Yine de çocuklarınız katılımınız sırasında herhangi bir sebepten rahatsızlık hissederse çalışmadan istediği zamanda ayrılabilir. Çocuğunuzun çalışmadan ayrılması durumunda sizden toplanan veriler çalışmadan çıkarılacak ve imha edilecektir.

Veli izin formunu okumak ve değerlendirmek üzere ayırdığınız zaman için teşekkür ederim. Çalışma hakkındaki sorularınızı Prof. Dr. Orhan Oğuz Anadolu Lisesinden Senem CELLAT’a (Senem114@gmail.com , tel:0505 270 48 60) yöneltebilirsiniz.

Araştırmacı Adı :Senem CELLAT

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Velisi olduğum öğrencinin bu çalışmaya kendi rızasıyla katılmasını ve istediği takdirde çalışmadan ayrılabilceğini bilerek toplanan bilgilerin bilimsel amaçlarla kullanılmasını kabul ediyorum.

(Lütfen bu formu doldurup imzaladıktan sonra veri toplayan kişiye veriniz.)

Veli Ad ve Soyadı:

İmza:

Tarih

APPENDIX I- A Certificate of Participation



CERTIFICATE OF PARTICIPATION

This is to certify that has successfully participated in the Anadolu University Scientific research project No:1702E040 entitled “ **The Impact of Blog Writing on Turkish High School EFL Learners' Writing Ability and Vocabulary Knowledge**”. The project was held under the guidance of English Teacher Senem CELLAT and was carried out during the spring semester of 2016-2017 academic year.

Senem CELLAT

Project Researcher

Prof.Dr. Gül DURMUŞOĞLU KÖSE

Project Manager

Bülent SONGUR

School Headmaster

APPENDIX J- Data Analysis in FCE marking Scales

FIRST CERTIFICATE IN ENGLISH														
IELT	Content	Organization and Cohesion	Appropriacy of Register & Format	Range	Target Reader	Accuracy	Marks Awarded (PRET)	Content	Organization and Cohesion	Appropriacy of Register & Format	Range	Target Reader	Accuracy	Marks Awarded (POST)
SEKLA	partially	weak	partially-informal use	partially	partially	few grammar mistakes	Band 3	fully achieved	better- clearly paragraphed	fully	fully achieved	be informed	only few grammar mistakes	Band 4
ALETA	adequately achieved	lack of cohesion and transition	partially-informal use	de range of structure	be informed	no grammar mistake	Band 4	fully achieved	clearly paragraphed-use linking devices fully		wide range of structures	be informed	no grammar mistakes	Band 5
ODIEN	adequately achieved	not clearly paragraphed	partially-informal use	partially	weak	many grammar mistakes	Band 2	partially achieved	clearly paragraphed-use linking devices	fully	partially	partially	less grammar mistakes	Band 3
CANBE	adequately achieved	lack of cohesive devices	partially-informal use	partially	partially	many grammar mistakes	Band 2	partially achieved	using more linking devices correctly	partially	partially	be informed	only few grammar mistakes	Band 4
SELEA	fully achieved	not clearly paragraphed	partially-informal use	fully achieved	be informed	many grammar mistakes	Band 3	fully achieved	paragraphed-use linking devices-formal and more	fully-formal-academic	fully achieved	be informed	only one grammar mistakes	Band 5
HELAL	fully achieved	clearly paragraphed- use of transitions	partially-informal use	fully achieved	be informed	a few grammar mistakes	Band 4	fully achieved	clearly paragraphed- use of transitions	still informal use of lang but less	fully achieved	be informed	only one grammar mistakes	Band 4
SENA	adequately achieved	weak	partially-informal use	weak	partially	a few grammar mistakes	Band 2	partially achieved	better- clearly paragraphed with linking words	partially-informal use	better- still not adequate	partially	only one grammar mistakes	Band 3
FATHE	partially	not clearly paragraphed	partially-informal use	partially	be informed	a few grammar mistakes	Band 3	fully achieved	better- still not well organized	partially-more formal	better- still not adequate	be informed	only one grammar mistakes	Band 3
BUSRA	fully achieved	clearly paragraphed- use of transitions	rate to the task-a few informal us	fully achieved	be informed	vocabulary-grammar m	Band 4	fully achieved	clearly paragraphed- use of transition	fully achieved	fully achieved	be informed	no grammar mistakes	Band 5
SADIK	adequately achieved	use of transitions-not clearly para	partially-informal use-	weak	partially	many grammar mistakes	Band 2	partially achieved	wrong use of transitions-not clearly para	partially-informal use	weak	partially	less grammar mistakes	Band 2
SEVVE	fully achieved	paragraphed-use of transition but not	partially-informal use of transition	fully achieved	be informed	no grammar mistake	Band 4	fully achieved	clearly paragraphed-better use of transition	fully-formal-academic	perfect	be informed	no grammar mistakes	Band 5
EVCENB	partially	clearly paragraphed- lack of transitions	partially-informal	partially	be informed	a few grammar mistakes	Band 3	partially achieved	clearly paragraphed-good coherence (some)later	partially-informal use	better	partially-informal	only a few mistakes	Band 3
Total														
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IELT	Content	Organization and Cohesion	Appropriacy of Register & Format	Range	Target Reader	Accuracy	Marks Awarded (PRE)	Content	Organization and Cohesion	Appropriacy of Register & Format	Range	Target Reader	Accuracy	Marks Awarded (POST)
MAZU	partially achieved	clearly paragraphed-lack of transio	partially	partially	partially	no serious grammar mist	Band 2	fully achieved	iter-more use of linking words-clearly paragraph	partially- but better	partially	be informed	less grammar mistakes	Band 4
ERTUGU	fully achieved	clearly paragraphed-lack of transio	Appropriate to the task	fully achieved	be informed	a few grammar mistakes	Band 4	fully achieved	iter-more use of linking words-clearly paragraph	appropriate to the task	worse-partially	partially	partially	Band 3
ELIF	fully achieved	clearly paragraphed- use of transitions	appropriate to the task	partially	partially	no grammar mistakes	Band 4	fully achieved	arty paragraphed- use of transitions-more comp	appropriate to the task	fully achieved	be informed	no grammar mistakes	Band 5
SARE	fully achieved	perfect	Appropriate to the task	perfect	be informed	a few grammar mistakes	Band 5	fully achieved	perfect	appropriate to the task	perfect	be informed	all a few grammar mistakes	Band 5
EYEMU	weak	weak	not clearly paragraphed	weak	be informed	a few grammar mistakes	Band 2	weak	weak	not clearly paragraphed	weak	be informed	a few grammar mistakes	Band 2
DAMA	fully achieved	clearly paragraphed- use of transitions	Appropriate to the task	fully achieved	be informed	no grammar mistakes	Band 5	fully achieved	clearly paragraphed- use of transitions-complex	appropriate to the task	fully achieved	be informed	no grammar mistakes	Band 5
BUSRA	partially achieved	smooth transition between paragrap	Appropriate to the task	partially	be informed	a few grammar mistakes	Band 3	fully achieved	good coherence- more complex cononctions	appropriate to the task	fully achieved	be informed	a few minor mistakes	Band 5
BEKAY	partially achieved	paragraphed-lack of transitions-lack o	partially	weak	partially	a few but major mistakes	Band 2	fully achieved	paragraphed- use of transitions-more complex- i	appropriate to the task	fully achieved	be informed	no grammar mistakes	Band 5
SEVIL	weak	paragraphed-lack of transitions-lack o	partially	weak	partially	many major mistakes	Band 1	partially	iter-more use of linking words-better paragraph	partially- but better	better-partially	be informed	a few minor mistakes	Band 3
TUGCE	fully achieved	not clearly paragraphed-good cohesio	Appropriate to the task	fully achieved	be informed	no grammar mistakes	Band 4	fully achieved	not clearly paragraphed-good coherence	appropriate to the task	fully achieved	be informed	no grammar mistakes	Band 5
ECE	fully achieved	not clearly paragraphed-good cohesio	Appropriate to the task	fully achieved	be informed	a few grammar mistakes	Band 4	fully achieved	not clearly paragraphed-good coherence	appropriate to the task	fully achieved	be informed	a few grammar mistakes	Band 5
ASLIMUR	fully achieved	clearly paragraphed-lack of transio	Appropriate to the task	partially	be informed	a few grammar mistakes	Band 3	fully achieved	clearly paragraphed- use of transitions	appropriate to the task	partially	be informed	a few	Band 4
Total														
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IELT	Content	Organization and Cohesion	Appropriacy of Register & Format	Range	Target Reader	Accuracy	Marks Awarded (PRE)	Content	Organization and Cohesion	Appropriacy of Register & Format	Range	Target Reader	Accuracy	Marks Awarded (POST)
Egehan	very limited	clearly paragraphed-lack of transio	partially, format is not suitable	partially	partially	only one grammar mistake	Band 2	almost achieved	better- clearly paragraphed- use of transitions	partially minor problem in format	better- achieved	be informed	only one grammar mistakes	Band 3
Irem Kay	weak	clearly paragraphed-lack of transio	not appropriate format	weak	partially	only one grammar mistake	Band 1	partially	better in coherence-clearly paragraphed	not appropriate format	better- achieved	be informed	only one grammar mistakes	Band 2
Dile ZU	partially	clearly paragraphed-lack of transio	partially	partially	partially	many grammar mistakes	Band 2	partially	better but still have a problem	partially	partially	be informed	few basic grammar mistakes	Band 2
Veila De	partially	clearly paragraphed-lack of transio	appropriate to the task	weak	partially	many grammar mistakes	Band 2	partially	fill not clearly paragraphed-but use of transition	appropriate to the task	better- achieved	be informed	few minor grammar mistakes	Band 3
Berfin Il	partially	clearly paragraphed-lack of transio	appropriate to the task	weak	partially	ny grammar mistakes/ee	Band 2	almost achieved	better in coherence-linking words	appropriate to the task	fully achieved	be informed	few minor grammar mistakes	Band 3
Cineyt S	weak	clearly paragraphed-lack of transio	not appropriate to the task	weak	partially	only one grammar mistake	Band 1	fully achieved	a coherence-linking words-still not clearly para	appropriate to the task	fully achieved	be informed	few grammar mistakes (see	Band 4
Sinem D	partially	clearly paragraphed-lack of transio	not appropriate to the task	weak	partially	minor grammar mistakes	Band 2	partially	not clearly paragraphed-lack of transitions	not appropriate to the task	weak	partially	minor grammar mistakes	Band 2
Nesimph	fully achieved	clearly paragraphed-but have cohesio	appropriate to the task	fully achieved	be informed	only one spelling mistake	Band 4	fully achieved	not clearly paragraphed-but have coherence	appropriate to the task	fully achieved	be informed	no mistakes	Band 4
PINAR	partially	clearly paragraphed but no coherence	partially	partially	partially	some grammar mistakes	Band 2	almost achieved	clearly paragraphed-good coherence	appropriate to the task	better- achieved	be informed	minor grammar mistakes	Band 3
ODAN	fully achieved	clearly paragraphed but no coherence	appropriate to the task	partially	partially	a few grammar mistakes	Band 4	fully achieved	arty paragraphed-good coherence-limited transio	appropriate to the task	fully achieved	be informed	no mistakes	Band 5
Melide	partially	clearly paragraphed-lack of transio	not appropriate to the task	partially	partially	a few grammar mistakes	Band 2	partially	not clearly paragraphed-but more organized	not appropriate to the task	partially	partially	few grammar mistakes (see	Band 2

APPENDIX K- Data Analysis in ESL Composition Profile

ESL COMPOSITION PROFILE															
11 F	Mechanics	Sentence Construction	Vocabulary	Discourse Markers	Organization	Content	Total Score (PRETEST)	Mechanics	Sentence Construction	Vocabulary	Discourse Markers	Organization	Content	Total Score (POSTTEST)	
SERKAN	5	23	10	5	12	20	75	4	26	13	10	15	22	90	
ALETNA	5	25	15	5	10	25	85	5	30	15	10	15	25	100	
ÖZLEM	3	15	7	5	10	15	55	4	20	10	8	12	21	75	
CANBERK	2	15	8	3	12	15	55	4	25	12	8	10	21	80	
SELENAY	5	23	10	5	12	25	80	5	30	15	10	15	25	100	
HILAL	4	23	10	5	12	21	75	4	24	15	10	12	20	85	
SENA	2	15	7	5	10	16	55	4	23	6	7	15	20	75	
FATİH	4	18	7	6	10	20	65	4	20	15	7	9	20	75	
BÜŞRA	5	25	15	8	15	22	90	5	30	15	10	15	25	100	
SADIK	2	17	8	6	10	17	60	3	19	8	5	8	22	65	
MERVE	5	25	15	8	14	23	90	5	30	15	10	15	25	100	
ECEMUR	4	20	12	5	12	17	70	5	21	14	10	12	18	80	
12 F	Mechanics	Sentence Construction	Vocabulary	Discourse Marker	Organization	Content	Total Score (PRET)	Mechanics	Sentence Construction	Vocabulary	Discourse Marker	Organization	Content	Total Score (POST)	
YAGIZ	3	18	5	4	10	20	60	5	25	10	9	12	22	83	
ERTUĞRU	5	26	15	5	14	25	90	5	22	10	9	12	22	80	
ELİF	5	27	10	5	15	25	87	5	27	15	8	15	25	95	
SARE	4	30	15	10	15	25	99	4	30	15	10	15	25	99	
ECEMUR	2	14	10	4	10	15	55	2	20	5	5	8	17	57	
DANLA	5	30	15	10	15	25	100	5	30	15	10	15	25	100	
BÜŞRA	4	20	10	7	9	22	72	5	30	14	8	14	25	96	
BERKAY	3	19	8	6	10	20	66	5	30	13	9	15	23	95	
SEVİL	2	14	8	5	5	16	50	3	18	12	7	8	17	65	
TUĞÇE	4	17	10	10	17	20	78	5	26	15	9	13	24	92	
ECE	5	22	8	10	14	17	76	4	30	15	10	10	25	94	
ASLİNUR	4	20	10	6	9	20	69	4	25	15	10	15	21	90	
İrem Hilal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9th&11th	Mechanics	Sentence Construction	Vocabulary	Discourse Marker	Organization	Content	Total Score (PRE)	Mechanics	Sentence Construction	Vocabulary	Discourse Marker	Organization	Content	Total Score (POSTEST)	
Egehan A	4	20	8	5	7	13	57	5	26	12	9	15	21	88	
İrem Koyu	5	19	5	4	5	12	50	5	19	8	5	10	15	61	
Dide Zülal	3	15	6	4	8	18	54	4	18	6	5	10	18	61	
Vela Deniz	4	19	7	4	8	18	60	5	22	10	5	12	21	73	
Berfin 10	3	18	6	4	6	18	55	4	20	12	7	11	21	75	
Cüneyt Şü	5	14	5	5	5	13	47	5	25	15	7	13	20	85	
Sinem Dur	5	19	7	5	7	17	50	5	19	7	5	7	17	50	
Neslişah	5	24	15	7	9	25	85	5	24	13	9	9	25	85	
PINAR	5	15	7	5	7	15	54	5	22	7	9	8	17	68	
OZAN	4	20	15	8	15	18	80	5	30	15	9	10	25	94	
Maide	5	18	8	2	8	14	55	5	18	8	4	8	14	57	
Barışın	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

APPENDIX L- A detailed analysis of Lexical Diversity and Density of Writing Tests

	TTR-pre	1k+2k-pre	FW-pre	CW-pre	LD-pre	wc-pre	TTR-post	1k+2k-post	FW-post	CW-post	LD-post	wc-post
SERKAN	0,69	92,20	47,4	37,66	0,53	154	0,66	95,59	56,62	29,41	0,43	136
ALEYNA	0,54	92,19	49,48	32,81	0,51	192	0,51	92,67	52,36	31,42	0,48	191
ÖZLEM	0,59	88,64	52,27	30,11	0,48	176	0,54	91,13	50,81	36,29	0,49	124
CANBERK	0,39	93,9	47,33	38,17	0,53	131	0,52	92,97	55,47	28,91	0,45	128
SELENAY	0,58	85,02	40,53	32,6	0,59	227	0,61	90,63	46,88	32,29	0,53	192
HİLAL	0,55	95,24	48,68	39,15	0,51	189	0,45	95,07	49,75	36,95	0,5	203
SENA	0,61	94,26	50	37,71	0,51	122	0,66	95,46	54,55	36,36	0,45	110
FATİH	0,55	94,69	45,45	37,88	0,55	132	0,57	92,08	40,27	42,07	0,6	164
BÜŞRA	0,57	94,14	55,32	31,91	0,45	188	0,66	86,78	44,63	34,71	0,55	121
SADIK	0,53	80,54	43,62	30,22	0,56	149	0,61	88,98	44,92	38,98	0,55	118
MERVE	0,51	91,54	55,88	27,94	0,44	272	0,53	90,67	52,77	30,61	0,47	343
ECENUR	0,46	98,29	49,57	36,75	0,51	117	0,63	93,5	42,28	41,46	0,58	123
YAĞIZ	0,54	94,45	53,17	30,95	0,47	126	0,57	92,9	46,75	40,24	0,53	169
ERTUĞRU	0,64	92,14	50,71	35,71	0,49	140	0,64	94,82	49,63	38,52	0,5	135
ELİF	0,55	95,32	52,34	32,81	0,48	128	0,52	97,84	44,6	39,57	0,55	139
ŞARE	0,5	86,68	44,57	35,87	0,55	368	0,6	90,98	42,86	38,84	0,57	133
ECEMnur	0,67	95,33	50,95	36,07	0,51	108	0,52	94,04	47,62	36,9	0,52	84
DAMLA	0,59	88,66	48	35,33	0,52	150	0,59	88,66	48	35,33	0,52	150
BÜŞRA	0,65	95,37	50,93	37,04	0,49	108	0,45	94,72	53,52	34,51	0,46	284
BERKAY	0,62	94,91	53,39	33,05	0,47	118	0,55	94,7	50,76	37,88	0,49	132
SEVİL	0,69	95,35	46,51	44,19	0,53	86	0,46	97,6	49,6	37,6	0,5	125
TUĞÇE	0,56	96,6	54,42	34,69	0,46	147	0,57	95,93	56,1	31,71	0,44	123
ECE	0,48	96,98	56,28	30,15	0,44	199	0,48	96,98	56,28	30,15	0,44	199
ASLINUR	0,55	92,76	53,29	30,26	0,47	152	0,57	93,51	50,65	28,57	0,49	154
Egehan Ağ	0,72	95,65	44,93	40,58	0,55	70	0,6	92,22	54,44	34,44	0,46	90
İrem Koyu	0,66	97,14	48,57	40	0,51	70	0,58	99,28	48,92	46,04	0,51	139
Dide Zülal	0,48	95,71	54,29	36,43	0,46	140	0,58	96,7	39,56	49,45	0,6	91
Vela Deniz	0,45	95,38	55,38	33,85	0,45	130	0,65	85	45,83	30	0,54	120
Berfin 10	0,71	89,54	47,67	31,4	0,52	86	0,66	94,16	46,67	36,67	0,53	120
Cüneyt Şık	0,79	92,11	44,74	36,84	0,55	38	0,63	93,94	51,52	36,36	0,48	165
Sinem Dur	0,63	98,3	51,69	41,53	0,48	118	0,64	96,15	53,85	35,9	0,46	78
Neslişah	0,63	88,76	48,12	36,25	0,52	160	0,66	94,63	47,31	36,63	0,53	93
PINAR	0,54	93,6	43,2	41,6	0,57	125	0,53	96,51	52,45	39,16	0,48	143
OZAN	0,61	91,24	45,99	38,69	0,54	137	0,61	91,24	45,99	38,69	0,54	137
Maide	0,46	93,94	49,49	33,33	0,51	198	0,47	94,51	51,1	31,87	0,49	182
	0,579714	93,06971	49,54743	35,41514	0,506	147,1714	0,573714	93,50143	49,29486	36,12829	0,506	146,8

TTR: Type-token ratio (lexical diversity)

1k+2k: words in the first 1000 and 2000 frequency level

FW: Function words

CW: Content words

LD: Lexical Density

APPENDIX M- Idea Units of Content Analysis

1. Technology Use	2. Vocabulary Knowledge	3. Reading Skill
<p>*Improvement</p> <ul style="list-style-type: none"> - Use of internet, mobile phones - Technical knowledge <ul style="list-style-type: none"> - integrate a link, image and video into a written text - Blog writing vs. paper-pen - more practical - more enjoyable <p>*No development</p> <ul style="list-style-type: none"> - Competent in technology 	<p>* Improvement</p> <ul style="list-style-type: none"> - while writing the blog posts <ul style="list-style-type: none"> - different phrases, academic words, daily expressions, verbs, proverb, conjunctions, antonymy and synonymy - use the words in context - vocabulary fluency - while searching the topic from the internet - while reading the peers' posts - while giving and reading comments <p>* No improvement</p> <ul style="list-style-type: none"> - not challenging topics 	<p>*Improvement</p> <ul style="list-style-type: none"> -while reading academic texts related to topics - while reading the peers' blog posts - reading comprehension - regular reading practice <ul style="list-style-type: none"> - different text types - more patient - different points of view <p>* No improvement</p> <ul style="list-style-type: none"> - ordinary blog posts of the peers - not challenging topics - too long blog posts of the peers - not different from reading from a paper - tiring to read from screen
4. General World Knowledge & Culture	5. Time management	6. Interaction
<p>* Improvement</p> <ul style="list-style-type: none"> - while searching the topic from the internet -different contents - attractive topics -different quotations - while reading the blog posts of the peers - compared the blog posts - different points of view - while reading the comments of the peers <p>* No improvement</p>	<ul style="list-style-type: none"> - write and read in shorter time - write easily - time limit for blog plat. - enjoy time - no extra time for lang. skills - use time for searching topic and write elaborately - less time as compared to class application - more time as compared to class application 	<p>* Interaction with peers</p> <ul style="list-style-type: none"> -while reading posts and giving comments <ul style="list-style-type: none"> - reading without prejudice - learning new ideas - like face to face communication - talking about the topics in the classroom environment - interaction with foreign people * interaction with the teacher <ul style="list-style-type: none"> - ask technical questions about the blog application - feel sincere owing to WhatsApp group <p>* No effect on interaction</p> <ul style="list-style-type: none"> - individual practice - artificial - anonymity
7. Other aspects		
<p>* Writing practice</p> <ul style="list-style-type: none"> - write better essays at university - better organization - more academic and interesting sentences <p>* Fun element</p> <ul style="list-style-type: none"> - enjoyed while writing - more enjoyable - insert various media into texts - up-to-date topics <p>* Significance of using technology in the lessons</p>		