FLIPPED VOCABULARY LEARNING AMONG TURKISH LEARNERS OF ENGLISH AS A FOREIGN LANGUAGE: A SEQUENTIAL EXPLANATORY MIXED METHOD STUDY

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ABSTRACT

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This study tries to gain an insight into to what extent flipped learning (FL) enhances learning of new vocabulary items and what the students' opinions are about the flipped approach in enhancing their overall English proficiency and the learning of new English vocabulary items. To this end, the current study designed in a sequential explanatory mixed method recruited 55 pre-intermediate EFL students attending a private language institution in Denizli, Turkey. The treatment was implemented in two different semesters for four weeks each, and 10 words selected from their coursebook were assigned to the students to learn per week. The quantitative data was collected through a self-efficacy scale, a FL attitude scale, pre- and post-tests, while the qualitative data was obtained from two primary sources: individual interviews and weekly reflection reports. The non-class material was published online, and the students were engaged in related activities in the class. The pre- and post-test results revealed that the flipped class significantly outperformed the traditional one. Moreover, the findings signalled an overall positive attitude towards FL, substantiating the previous studies. However, certain drawbacks encountered and

specific suggestions to leverage the flipped implementation were also reported. In addition, the use of FL was favoured in social science courses, while it was not preferred in science courses. The participants also appreciated the flipped vocabulary instruction in the learning of new words, yet they reported mixed opinions on FL in enhancing their overall English proficiency.

Keywords: Flipped Learning (FL), vocabulary, sequential explanatory mixed method, attitude

ÖZ

YABANCI DİL OLARAK İNGİLİZCE ÖĞRENEN TÜRK ÖĞRENCİLER ARASINDA TERSYÜZ EDİLMİŞ KELİME ÖĞRENİMİ: AÇIKLAYICI KARMA YÖNTEM

ÖZKAL, Ceyhun
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Bu çalışma, tersyüz edilmiş öğrenmenin (FL), yeni kelimelerin öğrenilmesini ne ölçüde arttırdığına ve öğrencilerin genel İngilizce yeterliliklerini ve yeni İngilizce kelime öğreniminde öğrencilerin tersyüz edilmiş yaklaşım hakkındaki düşüncelerinin ne olduğuna dair bir fikir edinmeye çalışmaktadır. Bu amaçla, sıralı ve açıklayıcı bir karma yöntemle tasarlanan bu çalışma Denizli, Türkiye'deki özel bir dil kurumuna devam eden, 55 alt-orta seviyedeki yabancı dil öğrencisini araştırmaya dahil etmiştir. Uygulama dört hafta boyunca iki ayrı yarıyılda uygulandı ve öğrenmeleri için ders kitaplarından seçilen haftalık 10 kelime öğrencilere ödev olarak verildi. Nicel veriler, öz yeterlik ölçeği, tersyüz edilmiş öğrenme tutum ölçeği, ön ve son testler yoluyla toplanırken, nitel veriler iki ana kaynaktan elde edilmiştir: bireysel mülakatlar ve haftalık düşünce notları. Sınıf dışı materyaller çevrimiçi ortamda yayınlanıp öğrenciler sınıfta konuyla ilgili etkinliklere katıldılar. Ön ve son test sonuçları, tersyüz edilmiş sınıfın geleneksel olandan anlamlı ölçüde daha iyi performans gösterdiğini ortaya koydu. Ayrıca, bulgular önceki çalışmaları doğrulayan tersyüz edilmiş öğrenime karşı genel olarak olumlu bir tutum olduğuna işaret etti. Ancak, karşılaşılan bazı aksaklıklar ve tersyüz edilmiş uygulamayı geliştirmek için belirli

öneriler de sunuldu. Bununla birlikte, tersyüz edilmiş öğrenim, sayısal derslerde destelenmezken sözel derslerde kullanılması tercih edilmiştir. Katılımcılar ayrıca yeni sözcüklerin öğrenilmesinde tersyüz edilmiş öğretimini beğendiler, ancak genel İngilizce yeterliliğini arttırmada tersyüz edilmiş öğretim hakkında çelişkili görüş bildirdiler.

Anahtar Sözcükler: Tersyüz Edilmiş Öğrenme (FL), kelime bilgisi, sıralı açıklayıcı karma yöntem, tutum.

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CHAPTER 1

INTRODUCTION

1.1 Presentation

This chapter is comprised of five sections, as follows: background to the study, statement of the problem, statement of purpose, research questions, and significance of the study. First, the fundamentals, scope, and history of FL will be introduced to the reader in the *background* section by also referring to the pertaining literature. Then, the *statement of the problem* section will outine the knowledge gap in flipped vocabulary learning by citing some of the existing body of research. The next section will be *statement of purpose* which will address why this study was carried out. Afterwards, the *research questions* will be listed to inform the reader about the concerns and hypotheses of this study. Finally, the *significance of the study* section will state what and how this study can contribute scientifically as well as who may benefit from its findings.

1.2 Background

Countries all across the world mostly complain about their inefficient educational systems that fail to keep up with the demands of the 21st century (Schleicher, 2012). Yet, there has been a lack of ground-breaking educational theory since the middle of the last century, when humanistic, constructivist, and behaviourist schools of thought had a great impact upon mainstream educational mindset (McInerney, 2005). With the advent of technology, the globe has undergone a remarkable transformation in almost all segments of life, and education is no exception. Every decade tends to revolutionize the pedagogical mindset, and along with the integration of technology and digital environment into classroom settings, the face of education has changed accordingly. Though teachers in many parts of the world still try hard to explain subject matters while chalk dusts float in the air, technical improvements

have transformed the very nature of education. The tools of education have not only equipped the classroom environment with new, smart gadgets but also helped professionals break the routine and go beyond the traditional ethos. In recent decades, pedagogical circles have embraced technology as a new breath and seemed eager to integrate it into their classrooms in the hope of receiving better academic outcomes and preparing individuals better for the future.

Among those innovative concepts is "flipped learning", which basically reverses the traditional flow of lessons: moving the learning of course content outside the class, while doing homework and other educational practices inside the classroom. As in many other innovations, the concept of flipped learning came on the scene due to certain challenges faced in education. In 2007, once Jonathan Bergmann and Aaron Sams, two chemistry teachers working at Woodland Park High School, Colorado, the US, was faced with the challenge that some students had to miss their classes because of sporting activities, they decided to record their lesson content for their students to watch and revise at home so that they could make up for their absences. Then, this new idea spread first to nearby schools, then across the US, and finally all over the world (Bergmann & Sams, 2012).

Berrett (2012) stated that flipped learning is a recent concept in education, though not totally original. From 2000 onwards, several different names, such as inverted classroom (Lage & Platt, 2000), just-in-time teaching (Novak, 2011), flipped classroom (Bergmann & Sams, 2012), and inverted learning (Davis, 2013), have been offered in an attempt to define this new approach. Indeed, Figure 1 clearly illustrates when the foundations of FL were laid and how it has reached our day. The Flipped Learning Network™ (2016) gives quite a detailed description of flipped learning as:

> a pedagogical approach which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter.

As flipped learning requires students to master the course content at their own pace through pre-recorded lectures and allocates more time and opportunities for in-class inquiry-based activities, presentations, experiments, collaborative tasks, and other engaging experiences, it has grown popular among universities lately (Saitta et al., 2016). Hsiu-Ting Hung (2015) suggested that particularly STEM disciplines (science, technology, engineering, and mathematics), which are heavily based on lectures, were more enthusiastic about experimenting with this approach. On the other hand, the reason why the flipped approach has drawn comparatively less interest from humanities disciplines might be that humanities disciplines already adopt an inductive teaching approach to help students digest and construct knowledge.

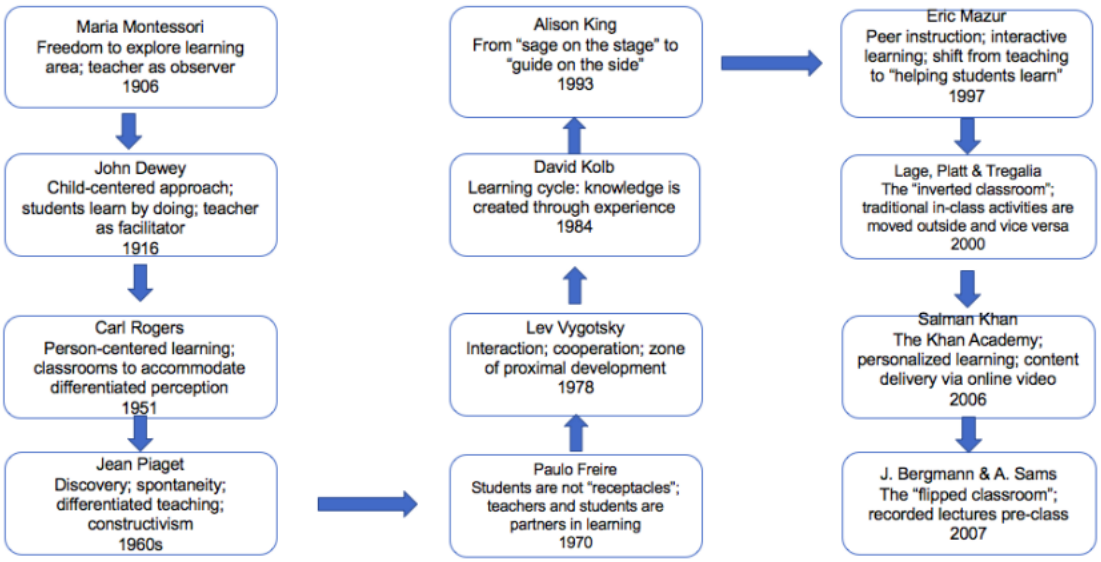


Figure 1. The Time Travel of Flipped Learning (Mohan, 2018)

The existing literature cites a number of benefits of flipped learning, among which are promoting academic achievement (Missildine et al., 2013), leading to engagement (McLaughlin, 2014), producing student satisfaction (Mason et al., 2013), appealing to high cognitive skills (Gilboy et al., 2015), and allotting more time for in-class activities (Leis et al., 2015).

A growing body of research into the flipped model of instruction cites its benefits on students' enhanced academic achievement and better learning outcomes. Han and

Finkelstein (2013), Brown et al. (2014), and Lock (2015) argued that if instruction was integrated with technology, this would lead up to students' academic achievement. In his book, Bane (2014) maintained that flipped learning had produced better student assessments and content retention. Moravec et al. (2010) suggested that flipped instruction ultimately resulted in enhanced academic performance in biology class. Moreover, after Baepler et al. (2014) employed flipped teaching in chemistry class and Schlingensiepen (2014) in engineering course, they claimed that the flipped approach could improve learning outcomes and yield better pass rates. In the realm of EFL, similar findings have been reported as to how flipped teaching can produce academic achievement. Kang (2015) concluded that flipped teaching significantly increased both grammar and vocabulary knowledge of students. After implementing flipped instruction in the academic writing class, Gasmi (2016) claimed that it could ameliorate students' learning outcomes and pass rates. Likewise, Engin (2014) and Farah (2014) taught writing lessons through flipped instruction and reported that students' writing performance was significantly enhanced by flipped learning. In the two studies into flipped approach in a TOEIC course, Ishikawa et al. (2015) reported that the students in the experimental group improved their TOEIC scores by about 150 points, while the experimental group outperformed the control group by 32 points in Obari and Lambacher's study (2015).

Needless to say, academic achievement is followed by an engaging process through which learners pass while experiencing a self-satisfying education. Some of the research in the literature has also focused on how flipped learning influences student engagement. Bormann's study (2014) investigated the impact of flipped instruction upon student engagement and achievement and concluded that it could pave the way for an engaging opportunities resulting in higher academic success and a better preparedness for 21st century learning. McLaughlin et al. (2014) conducted their study with 162 students and found that students viewed flipped instruction more engaging, which enhanced their learning experience. Gilboy et al. (2015) implemented flipped learning in two undergraduate nutrition classes attended by 196 students and reported enhanced student engagement through flipped approach. Roehl et al. (2013) suggested that taking out in-class lecturing allowed the instructor more time for engagement with students individually. Similarly, having implemented the

flipped approach in their EFL writing course, Leis et al. (2015) reported that the teacher was able to work independently with the students since they watched the pre-recorded videos and mastered what their teacher explained before the class time. Moran (2014) gauged students' engagement with the flipped learning in English Language Arts (ELA) classrooms. On the one hand, her study demonstrated that flipped learning might be an effective tool to engage students in an ELA classroom, but, on the other hand, she cautioned that it is not the only way to promote engagement of all students.

Higher academic success and engagement through flipped learning can be explained by students' feeling of satisfaction with this model, and an overwhelming number of studies on flipped learning report high satisfaction rates. Mehring (2015) pointed out that collaboration and interaction with other students in an EFL flipped classroom enabled them to increase their confidence with which they viewed their language learning. Al-Zahrani (2015) explored the students' views about the flipped classroom and found that they were largely satisfied with this approach. Further, the qualitative data of Prefume's study (2015) conducted in a Japanese language classroom indicated that the participants developed positive attitudes towards flipped learning. Exploring the usefulness of flipped learning on engagement, satisfaction, and academic success, Gross et al. (2015) concluded that the flipped courses were characterized by increased engagement and course satisfaction. ALRowais (2014) investigated the impact of flipped learning on academic performance and attitudes in higher education and reported the students' positive attitudes towards studying courses.

A possible factor as to why more teachers tend to adopt flipped learning in their classes could be the fact that activities requiring higher cognitive abilities can be carried out in the classroom, while those demanding lower-level skills can be done at home. Alsowat (2016) posited that flipped learning rests on the constructivist theory in which Bloom's taxonomy is turned upside down. He pointed out that learners are supposed to practice lower-order thinking skills (remembering, understating and applying) at home by visiting relevant websites or watching videos, whereas the activities requiring deeper learning (analysis, evaluation and creation) are done inside

the classroom. Brookhart (2010) claimed that these higher levels of cognitive skills could boost students' engagement and success as well as their sense of control over ideas, since “thinking is much more fun than memorizing”. Furthermore, flipped learning improves upper-level skills which prepare learners for the real life outside the classroom by presenting relevant problems and important facts for them to work on rather than offering only some facts to memorize (Conklin, 2012). When it comes to language classrooms, language is a means of improving high cognitive skills; after all, language is not acquired for its own sake but to make use of their thinking skills in the cases well beyond the language (Burns & Richards, 2012). Mehring (2016) was of the opinion that reviewing the course material prior to class and scaffolding learning in line with pre-class activities during the in-class time enable students to engage in authentic learning situations requiring upper-level thinking skills.

As mastering the course content is transferred out of classroom in the flipped model, the in-class time can be devoted to any practical work. Given more in-class time, students are provided with more activities to engage in, and teachers are given the opportunity of scaffolding the learners individually. Ultimately students can be satisfied with dealing with real-life tasks characterized by higher levels of thinking during this longer period of time.

1.3 Statement of the Problem

A substantial body of research reveals that FL proves effective in better learning outcomes with overall positive student perception (Abdelrahman et al., 2017; Wu et al., 2017; Roth & Suppasetseree, 2016; Prefume, 2015; Gross et al., 2015; Lock, 2015; ALRowais, 2014; Bormann, 2014; Schlingensiepen, 2014; Missildine et al., 2013; Conklin, 2012). That said, EFL researchers and pedologists woldwide have taken a close interest in undestanding the nature and functioning of FL by extensively experimenting with it. Does this close interest from EFL circles correspond to Turkish context? Though there is a growing interest in FL among language instructors and researchers currently, it seems not to suffice to show the full picture in terms of how it works among Turkish learners. In a very recent meta-analysis, Orhan (2019) validates this by being able to include only two studies

related to ELT among 13 FL studies that have been conducted in the context of Turkey since 2015.

Not to mention the research on flipped vocabulary instruction in Turkish EFL context, vocabulary research into FL is rather scarce on global scale, and the available research output is not adequate to make conclusive comparisons. Comprehensive studies with robust designs which draw upon rich data collection tools are needed to uncover if FL is instrumental to vocabulary learning in a foreign language.

Furthermore, although quantitative studies on flipped vocabulary learning can afford researchers some idea about its overall effect, rich qualitative data is also needed to delve into what learners feel and what sort of process they go through when learning new words. Both domestically and internationally, such research output is in short supply.

A further point that needs caution is that research on FL tends to report its positive aspects, rarely citing its shortcomings. Nevertheless, it would probably be illusionary to find a flawless technique that acts like a panacea. Therefore, more research is needed to inform scholars about the potential challenges that can be come across during FL implementations.

1.4 Statement of Purpose

In the light of available research, the current research study sought to come up with an answer to the questions of to what extent FL enhances the learning of new vocabulary items and what the students' opinions are about FL in enhancing their overall English proficiency as well as in enhancing the learning of new English vocabulary items in Turkish context. The current study also aimed to present potential challenges, fruitful suggestions and relevant implications for flipped vocabulary learning, by trying to fill the paucity of research in the pertaining literature.

1.5 Research Questions

1. To what extent does flipped learning enhance learning of new vocabulary items among 28 B1 level EFL students at a private language course?

2. What are the students' opinions about the flipped approach:

a. in enhancing their overall English proficiency?

b. in enhancing the learning of new English vocabulary items?

1.6 Significance of the Study

Although a growing number of scholarly studies are being carried out in the realm of FL, more research is needed to understand its nature and behaviour in vocabulary learning. Previous studies abroad investigating the effect of FL on vocabulary learning tried to measure it quantitatively and qualitatively as well as directly and indirectly. This study set out to investigate this phenomenon both through quantitative and qualitative data collection instruments by directly focusing on vocabulary learning rather than by exploring its effect as the by-product of developing other skills. In fact, the number of FL vocabulary studies is very scarce not only in Turkey but also in the world, thus this study will try to offer insights into the literature in this field, and to the best of the researcher's knowledge, will be a first in exploring FL in direct vocabulary teaching in Turkey.

What few FL studies related to vocabulary commonly report (1) consolidated vocabulary building process (Xiao-Qing, 2016), (2) significant content and language mastery (Kang, 2015), (3) marked improvement of vocabulary (Kim, 2018), (4) positive attitudes towards FL in vocabulary learning (Alnuhayt, 2018), (5) high satisfaction rates (Zhang, 2015), (6) marked increase in motivation (Fethi & Marshall, 2018), (7) learner autonomy (Han, 2018), (8) better learning outcomes within less time (Zhang et al., 2016), and (9) better engagement (Chen Hsieh et al., 2016). This study will demonstrate if this is the case in Turkish context. In addition to these cited positive findings, the present study will also try to delve into learner's

challenges in handling vocabulary and FL process, by reporting the difficulties suffered during this process, if any.

If very little can be achieved without grammar but nothing can be achieved without vocabulary (Wilkins, 1972), both vocabulary itself and its investigation should be taken heed. With this in mind, this study takes vocabulary learning seriously and will try to vigorously investigate whether and how FL brings about a change in vocabulary learning. The last but not the least, this study may appeal to those interested in learning more about FL, vocabulary, and their interaction in the realm of EFL.

CHAPTER 2

LITERATURE REVIEW

1.7 Presentation

This chapter will critically summarize, classify, compare, and assess the published sources on EFL vocabulary and FL under four main sections. First, *EFL vocabulary teaching and learning* section will present historical background and some current issues, such as explicit and implicit vocabulary learning, breadth and depth of vocabulary, and learning vocabulary in context. The next section, *teaching vocabulary by using instructional technology*, will analyze use of technology in EFL classrooms as well as EFL vocabulary and instructional technology, including MALL, multimedia, digital glossing, computer games, e-dictionary, e-flashcards, and software without multimedia components. Later, *FL in EFL classrooms* section will inform the reader about four skills (writing, speaking, listening, reading), affective issues (motivation, engagement, satisfaction), academic achievement and learning outcomes, and finally cognitive skills. The last section, *FL and vocabulary in EFL*, will explain how FL research explores vocabulary as the by-product and as the focus.

1.8 EFL Vocabulary Teaching and Learning

1.8.1 Historical Background to Vocabulary Teaching in EFL

Throughout the EFL history, different methods have approached vocabulary instruction from different perspectives, based on their pedagogical mindset. For example, the Grammar-Translation Method viewed vocabulary learning as words lists with L1 equivalents to memorize, while the Direct Method put the emphasis on the L2 definitions or explanations of words (Ketabi & Shahraki, 2011). On the other hand, vocabulary played second fiddle to grammar in the Audio-lingual Method

since the principal aim of this method was the acquisition of grammatical and phonological structures rather than that of vocabulary (Zimmerman, 1997).

In the 1950s, Noam Chomsky challenged the prevailing behaviourist and structuralist notions of the period and came up with his transformational generative approach to language learning, which includes the internalization of a rule-governed system (Stern, 1983). Though the role of vocabulary was laid more emphasis than ever before, the main focus during this period was still on the acquisition of rules (Celce-Murcia, 2001).

However, during the 1970s, the term "communicative competence" began to gain ground in opposition to "linguistic competence" and exerted an enormous influence on the course of language teaching (Hadley, 2003). Therefore, with a main paradigm shift in EFL, the emphasis on grammar in language teaching came to be substituted by the one on communicative competence, thus paving the way for the birth of Communicative Language Teaching (CLT). As in the preceding methods, vocabulary was not of top priority but played a facilitative role in fostering functional language use (DeCarrico, 2001). The proponents of this approach usually presumed that vocabulary could be learned somehow during the language learning process and that vocabulary did not need to be taught directly (Schmidt, 2000).

Apart from CLT, some other language teaching methods, notably those based on humanistic psychology, emerged in the 1970s and proposed their own way to teaching vocabulary. For example, being an interesting method of rapid vocabulary acquisition, Suggestopedia went so far as to make a phenomenal claim that 5 to 50 times more vocabulary could be acquired with this method than with its conventional counterparts by maximizing brain capacity (Crow & Quigley, 1985). Besides, Community Language Learning (CLL) did not follow an established syllabus and got the learners to design the content of the lesson, to identify the words to be learned with the help of their counsellor, and to practise the words and other language skills through a human computer (Rivers, 1981). On the other hand, the underlying principle of Total Physical Response (TPR) was the notion that language can be acquired most effectively if words are associated with physical movement because in

this way various brain areas begin to operate and the learner's schemata is activated in many different ways (Oxford & Crookall, 1990). In a typical TPR setting, the vocabulary activities were practised through pictures and films so that learners could acquire the actions and pronunciations for the targeted words in the course. (Kuo et al., 2014). The Silent Way, another method based on humanistic psychology, basically made use of coloured rods and 12 sets of wall charts on which 500 functional words were presented; in addition, books and wall pictures were integrated into the learning process to further enhance learners' vocabulary knowledge (Larsen-Freeman, 2000).

Until the 1980s, vocabulary was an area still undervalued in foreign language teaching (Carter & McCarthy, 2014). As Schmitt (2000) notes, "language teaching methodology has swung like pendulum between language instruction as language analysis and as language use", and vocabulary teaching was not at the core of any method or approach. However, with the late 1980s, there was a surge of interest in vocabulary among mainstream L2 researchers (Nation 1997). They found out that the main challenges of learners, not only at the receptive level but also at the productive one, were related to poor vocabulary knowledge, and that they demanded more vocabulary regardless of their level of competence and performance (Laufer 1986).

This change in language teaching mindset had a place in the basic tenets of Natural Approach by Krashen and Terrell. In this approach, in which the primacy of meaning and communication was attached the utmost importance, the role of the vocabulary was highlighted, yet vocabulary needed to be comprehensible and slightly above the learners' current proficiency level (Richards & Rodgers, 2014). What Krashen and Terrell recommended to teach vocabulary was to lay the groundwork for interesting and appropriate input, thus directing the learner attention to the comprehension of messages (Zimmerman, 1997). For Krashen (1989), the most reasonable means to maximize vocabulary knowledge should be reading, most notably free voluntary reading, and students should be guided to find interesting books in popular literature, magazines, and newspapers.

Another approach in which vocabulary learning came to the fore was Content-Based Instruction (CBI), though it was not the only and top priority. The nature of CBI provided an appropriate setting for vocabulary learning through experience, collective and guided tasks due to the meaningful interdependence between the content-based vocabulary and units of work (Nation & Webb, 2011). Further, embedded in CBI were extensive reading activities, one of whose main benefits was improved vocabulary knowledge (Grabe & Stoller, 1997). Extensive reading also afforded learners to increase their vocabulary in addition to improving their four basic skills and achieving better grammatical and spelling accuracy (Dupuy, 2000).

In a similar vein, Task-Based Instruction (TBI) highlighted the salience of vocabulary in the language learning process, but vocabulary learning was a means to achieving communication goals though meaningful tasks, rather than the focus of instruction. TBI advocates suggested that just as L1 speech processing was intrinsically lexical and rests on the reception and production of multi-word phrases, L2 processing could draw on lexical chunks (Richards & Rodgers, 2014). To this end, communication strategies in TBI were related to lexicalized communication because, in this way, learners could draw on multi-word phrases to overcome communication challenges, especially when they are under time pressure to convey the meaning across (Skehan et al., 1996).

Arguably the best example for a language teaching method or approach in which vocabulary played the first and foremost role was the Lexical Approach by Michael Lewis. Declaring that "language consists of grammaticalized lexis, not lexicalized grammar", Lewis (1993) argued that lexis rather than grammar was both the essence of language and a prerequisite to successful communication. In addition to drawing learners' attention to acquiring individual words, lexical chunks (or multi-word units, such as *mop the floor*) were also emphasized in a lexical syllabus. For Lewis (1997), language teaching needed to encompass common fixed expressions in spoken language instead of originally created sentences, and in this context, corpora studies and technology could be conducive to classroom practice.

1.8.2 Current Issues in Vocabulary Teaching and Learning in EFL

1.8.2.1 Explicit (Intentional) vs. Implicit (Incidental) Vocabulary Learning

During the heyday of the communicative approach during the 1970s and 1980s, implicit learning was emphasized, and learners were expected to notice the cues for word meanings in context, to look up the unknown words in monolingual dictionaries instead of bilingual dictionaries, and to use the contextual clues to infer the meaning of words (DeCarrico, 2001). As a matter of fact, academic research also supported the value of such instruction. Coming up with the term "incidental vocabulary learning", Nagy, Herman and Anderson (1985) hold that more vocabulary in L1 can be acquired by exposing learners recurrently to the same lexical items in different contexts. They further posit that explicit vocabulary teaching falls short of meeting the need for the multitude of vocabulary that learners should absorb in the process. Krashen (1989) adopts a similar view towards L2 and believes that large vocabulary gains can be obtained through free voluntary reading, if done extensively, rather than focusing on teaching students words deliberately. Likewise, Saragi, Nation and Meister (1978) find out that the meanings of a majority of target words, particularly the frequent ones, could be accurately identified by the participants in their study, concluding that L2 vocabulary can be learned incidentally by reading. Pitts, White, and Krashen (1989) replicate this study and find similar vocabulary gains to those in Saragi, Nation and Meister's study, suggesting that a great amount of comprehensible reading should be done by L2 learners to enhance their vocabulary knowledge.

However, the effectiveness of incidental learning came to be questioned over time as the primary source of vocabulary acquisition. Swain (1988) challenges depending on implicit strategy alone for vocabulary learning and argues that the improvement process in such a strategy is sluggish and haphazard. Paribakht and Wesche (1993) demonstrate that learners tend to adopt the law of minimum effort and skip unknown words in texts if not specifically required to answer comprehension questions. Along the same line, Nation and Coady (1988) put forward that readers are inclined to guess the meanings of unknown words among the wealth and abundancy of information in a reading text, yet this does not guarantee the mastery of those words since they can

understand that text without knowing the word. In addition, researchers also tried to predict the pick-up rate accrued from this kind of learning. For example, Horst, Cobb and Meara (1998) specified this proportion as around one word out of five. Though this might seem a favourable rate, it should be noted that this rate came from recognition tests rather than production ones. In Waring and Takaki's (2003) study, the subjects recognized the meaning of 10.6 out of 25 words on the immediate post-test and 6.1 on the retention test, but they translated 4.6 out of 25 words on the immediate post-test and 0.9 on the retention test. Another issue investigated by the SLA researchers is how much exposure is needed for durability of words learned incidentally. For instance, Chun and Plass (1996) report that the likelihood of implicitly learning a word at first exposure is only 5% to 15%. In his review, Schmitt (2008) analyzes several studies conducted on this issue and concludes that learners should be exposed to a word 8–10 times in order to master it receptively. To acquire 2000 words at the aforementioned pick-up and exposure rates, Hill and Laufer (2003) calculate that a learner has to read 420 novels, or alternatively encounter more than 8 million words in written texts, a goal unattainable for most L2 students. In conclusion, it seems better not to rely on incidental vocabulary learning as the primary source. Rather, it could facilitate and consolidate the vocabulary gains obtained through intentional vocabulary learning and might be an efficient means to master low frequency words.

While some advocate the benefits of teaching vocabulary in context and believe that learning vocabulary intentionally may not work well in the course of second language acquisition, some others convincingly claim that explicit instruction or vocabulary enhancement activities does yield better and quicker results for L2 users. Beginners should be taught a large sight vocabulary quickly because these learners feel a compelling need to increase their vocabulary, and instructors should be able to cater for those expectations in their classes (DeCarrico, 2001). Indeed, there is a great deal of empirical evidence pointing the way for the impact of explicit vocabulary teaching in L2. For example, Groot (2000) used bilingual word lists as the explicit means and reported that the participants recalled 99% of the passive vocabulary and 61% of the active one on the immediate post-test, and the rates were 76% and 45% respectively on the retention test, which was still far ahead of those

found in implicit teaching studies. Rosszel (2003) made use of reading texts and vocabulary sheets as the explicit sources to teach vocabulary and found out that the subjects achieved 46% of the passive and 58% of the active vocabulary on the post-test, while they recalled 48% and 59% of the words, respectively on the retention test. On the other hand, some other studies compared the explicit and implicit vocabulary gains and presented similar results in favour of explicit vocabulary instruction. In one of those studies, Qian (1996) reported that those studying words in the form of lists significantly outscored the ones learning words in context. Along the same lines, in Mondria's (1993) study, the students who learned words from lists recalled 50% of them, whereas those inferring the words from the context and checking them in dictionaries recalled 47%. Note that the former method must have taken the students considerably shorter time to remember the words than the latter method. Among the wealth of research into explicit vocabulary instruction, Sökmen (1997) specifies seven themes to implement this effectively: (1) constructing a large sight vocabulary, (2) connecting new words with the previous ones, (3) creating opportunities for multiple encounters with lexical items, (4) encouraging deep processing, (5) capitalizing on images and concreteness, (6) trying out different techniques, and (7) fostering learner autonomy. She finally concludes that "the pendulum has swung from direct teaching of vocabulary…to incidental…and now, laudably, back to the middle: implicit and explicit learning". Though explicit exposure is quite effective in improving vocabulary learning, it will inevitably be too challenging for teachers and materials writers to organize the frequency of the target vocabulary that students are supposed to absorb, so they should also maximize contextualized vocabulary learning while promoting explicit vocabulary learning (Schmitt, 2008). Therefore, the most sensible approach to vocabulary teaching may be to adopt a careful and balanced blend of both explicit and implicit instruction in which one complements the other (van den Broek et al., 2018; Nunes & Karpicke, 2015).

1.8.2.2 Breadth of Vocabulary vs. Depth of Vocabulary

Breadth of vocabulary, or sometimes referred as vocabulary size, denotes *how many* words a learner knows. The issue of breadth of vocabulary is crucial because there

are countless words in a language, and L2 learners are faced with the daunting task of which vocabulary they should learn first. Naturally, the answer lies in the frequency of the words in a language because it would be plausible to think that the most frequent ones will primarily benefit the students rather than the less frequent ones. To this end, researchers set out to identify which words are the most frequent both in the written and spoken corpus. Hu and Nation (2000) state that 98–99% coverage is needed to understand a written or spoken text, and this percentage amounts to 6000-7000 word families for spoken text and 8000-9000 for written text. Schmitt and Schmitt (2012) also categorize the first 3000 word families as high-frequency, 3000-6000 as mid-frequency and 8000-9000 as low-frequency words. Common sense tells that learners should start to study the most frequent words to effectively function in L2, and those frequent words (first 2000) are included in General Service List, an important handbook material for both teachers and courseware developers for decades (Gilner, 2011). Apart from the frequency concerns, how to measure learners' lexical knowledge caused controversy among L2 researchers, and different tests targeting both active and passive vocabulary with varying formats were proposed for this purpose (see Table 1).

Though knowing a number of words, especially more frequent ones, highly matters while learning a new language, an equally important issue is *how well* or *deeply* learners know them. Then, a critical question at this point is "What does it take to know a word?" For instance, the word *present* refers to both *a gift* and *the current time* as a noun, while meaning *to give, to provide* as a verb and *happening now* as an adjective, and note that the pronunciation differs in both cases. If this word appears as a *noun* and means *a gift*, then one can expect to see other associated words such as *birthday*, *wedding*, *Christmas* (as nouns), *expensive*, *cheap*, *beautiful* (as adjectives), *buy*, *receive*, *give* (as verbs), and *for*, *from*, or *to* (as prepositions). When used to mean *to give*, the word *present* can be followed by affixes like *–ed*, *–ing*, *–s*, or preceded by function words like *to*, *will*, *can*, *which*, *who*, etc., which all indicates how this word behaves syntactically in a sentence. Further, this word can turn morphologically into such words as *presence* and *presently*. In short, knowing a word is far from only learning one of its meanings and knowing how to write it.

Table 1. Vocabulary Size Tests

Name	Year	Researcher(s)	Format Sample
Productive Vocabulary Levels Test	1999	Laufer & Nation	On Sunday, in his last se_____ in Church, the priest spoke against child abuse.
Vocabulary Levels Test	1983	Nation	1. blend 2. devise ____ mix 3. embroider ____ plan or invent 4. hug ____ hold in your arms 5. imply 6. paste
Computer Adaptive Test of Size and Strength	2004	Laufer & Goldstein	Active Recall (retrieval of form/supply the L2 word) a _____ שפע Passive Recall (retrieval of meaning/supply the L1 word) affluence _____ ש Active Recognition (retrieval of form/select the L2 word) שפע a. precision b. affluence c. axis d. episode Passive Recognition (retrieval of meaning/select the L1 word) affluence a. דיוק b. פרק c. ציר d. שפע
Vocabulary Size Test	2007	Nation & Beglar	1. miniature: It is a <u>miniature</u>. a. a very small thing of its kind b. an instrument for looking at very small objects c. a very small living creature d. a small line to join letters in handwriting

Table 1. Vocabulary Size Tests (*Continued*)

Eurocentres Vocabulary Size Test	1987	Meara & Buxton	acute	
	1992	Meara	Yes ☝	Next

In addition, Laufer (2005) states that knowing a word includes knowledge of spoken and written forms, morphological features, grammatical behaviour, different affective meanings, associative relations with other words, and usage limitations.

Nation (2001) gives a more detailed description of what the concept of depth of vocabulary means by outlining word knowledge aspects under three main headings as form, meaning, and use and dividing them again into three subcategories with related questions.

Schmitt (2008) underscores the salience of knowing different word aspects since certain aspects better suit explicit learning than implicit learning or vice versa. He also makes the point that some aspects are acquired earlier than other, requiring the adjustment of teaching to the different acquisition stages of a word, and learners need a variety of contexts to learn the multifaceted aspects of words.

Likewise, Nassaji (2004) maintains that the skills for inferring words from context and learner strategies significantly correlate with the depth of vocabulary, and so understanding a text rests more heavily on the depth of vocabulary than breadth of vocabulary.

This being the case, as in vocabulary size tests, researchers attempted to come up with different tests to measure the depth of vocabulary of L2 learners, and Table 2 provides the most common ones.

Table 2. Depth of Vocabulary Tests

Name	Year	Researcher(s)	Format Sample
Vocabulary Knowledge Scale	1996	Wesche & Paribakht	I. I don't remember having seen this word before. II. I have seen this word before, but I don't know what it means. III. I have seen this word before, and I think it means _____. (synonym or translation) IV. I know this word. It means _____. (synonym or translation) V. I can use this word in the sentence: _____. (if you do this section, please also do section IV)
Word Associates Test	1993	Read	dynamic *(synonym)* active excitement greedy leader meeting serious
Word Associates Test	2000	Read	sudden beautiful quick surprising thirsty change doctor noise school
—	1990	Nation	run ___ to move with quick steps ___ a run in your hair ___ to run in a race ___ a river runs ___ to run a business

1.8.2.3 Learning Vocabulary in Context

Oxford and Crookall (1990) group popular vocabulary teaching techniques under four headings of context: (1) de-contextualising (flashcards, word lists and dictionary use), (2) semi-contextualising (word grouping, association, visual imagery, aural imaginary, keyword, physical response, physical sensation, and semantic mapping),

(3) fully contextualising (four basic language skills), (4) adaptable (structured reviewing). What might be interesting in this categorization is the inclusion of images as a part of contextual learning. The term context is frequently thought as the combination of words in a written or spoken discourse, yet Paivio (1991) argues in his theory that human cognition is made up of two systems: verbal and non-verbal. While the former is associated with the words, the latter is composed of imageries; and these two systems interact with one another through referential connections. Therefore, pictures or videos are also an integral part of contextual learning, and it is hardly surprising that they are added in Oxford and Crookall's categorization.

A large amount of vocabulary can be acquired from context, and teaching new words in contexts can be quite operative and produce better learning outcomes (Sternberg, 1987). The reason which accounts for this edge might be that L2 students can recognize target words, notice the adjoining meanings, retrieve words, transfer them into their long-term memory and have a good command of vocabulary in reading, writing, speaking, and listening (Coady, 1993). Prince (1996) argues that what makes contextual learning valuable is its authenticity, which has some noteworthy benefits. First, experimenting with the meaning of a word helps to develop strategies and assures self-confidence. Second, steadily encountering new words in context makes learners aware that words exist to communicate in the language. Thirdly, learning new vocabulary in context illustrates how words are used. The last but not the least, these benefits might, undeniably, lead to independent learning skills. Monsell (1985) also refers to the psycho-linguistic advantages of using context, suggesting that the meaning of a word encountered in different contexts evolves in the learner's mental lexicon as new and better semantic relations are established.

On the other hand, learning words from contextual cues is not without setbacks, and researchers and theorists urge some caution for using context to master vocabulary. For instance, Hulstijn (1992) points to the effectiveness of such learning in establishing form-meaning relationship, but not in expanding lexical competence. On top of that, using content may not result in a quick rise in the mental lexicon quantitatively, nor does it help to transfer the words into the long-term memory immediately, and even worse this error-prone process might jeopardize what is remembered (Laufer & Sim, 1985). As a result, integrating authentic input into

vocabulary learning process ought to be based on clear premises to enlarge the number of words in the learner's mental lexicon (Chen & Graves, 1995).

In conclusion, using context to teach vocabulary is much like having nuclear power that can be used either to contribute to a sustainable development or to devastate an ongoing process. On the one hand, it can facilitate and consolidate L2 vocabulary learning process through its meaning-rich environment, thereby developing learners' self-reliance; but on the other side, it can give rise to frustration and total withdrawal among learners, particularly when not shown how to use properly.

1.9 Teaching Vocabulary by Using Instructional Technology

1.9.1 Use of Technology in EFL Classrooms

The use of computer, coupled with deployment of the Internet later, has revolutionized almost every aspect of people's lives, and the realm of education has been immensely affected by their wide-scale use, too. Though there are numerous names and acronyms for using computer technology in language learning, the most-widely accepted one is CALL (Computer-Assisted Language Learning), which can be described as 'the search for and study of applications of the computer in language teaching and learning' (Levy, 1997). The idea of CALL can be traced back to 1950s, when computers for learning a language were available only in university campuses (Beatty, 2013). Along with the Cold War period, more funds were granted for research in this field in the USA, although the main motives were, expectedly, military and political and the efforts were predominantly aimed at teaching Russian. However, real advances in CALL began from 1960s onwards. Warschauer and Healey (1998) give an overview of the development of CALL in language learning by dividing it into three major categories: behaviouristic CALL, communicative CALL, and integrative CALL. While behaviouristic CALL, which was practised in the 1960s and 1970s, underscored drills, communicative CALL appeared in the early 1980s and emphasized functions over forms and implicit grammar instruction. On the other hand, integrative CALL emerged in the early 1990s and involved integrating four skills by incorporating technology into the language learning process. As Torsani (2016) states, with the introduction of more consistent and wide-

band internet connection worldwide, social networks began to emerge from the early 2000s on. He adds that the diffusion of smartphones during the early 2010s launched an "apps" era in which social networks flourished and multi-media contents could be disseminated. It was inevitable that CALL would adapt itself to such ground-breaking changes in the world of technology. Loewen and Reinders (2011) state that CALL studies shifted from what the learner characteristics in web environment are into how online interaction fosters L2 development.

In addition to CALL, another key concept comes to the fore while mentioning the use of instructional technology in EFL: mobile-assisted language learning (MALL), which is "any educational provision where the sole or dominant technologies are handheld or palmtop devices" (Traxler, 2005). Within this frame, MALL then includes not only mobile or smart phones but also laptops, MP3 players, tablet PCs, personal digital assistants (PDAs), and palmtop computers. With the introduction of mobile technologies, learning transcended the classroom environment, and they evolved from rare and supplementary use of computer labs to common and integral use of handheld technology (Roschelle, 2003). Stockwell (2007) holds that language teachers, expectedly, began to take the advantage of this new technology, and the range of activities in which learners engaged largely paralleled the types of activities carried out in computer-based settings. Thornton and Houser (2005) establish that the reactions of learners to mobile devices as well as the potential of these devices on language learning were quite favourable. When the years from 2001 to 2010 are separated as two different periods, even the academic research into mobile learning in EFL domain quadrupled in the second half in comparison to the first half (Hwang & Tsai, 2011). They find that studies over ubiquitous language learning witnessed a sharp increase between 2005–2010 (especially at a fast pace from 2008), in line with the proliferation of mobile phones and hence the use of m-learning. Furthermore, as the technological potential and storage volume of mobile devices developed, the nature of MALL in the field of L2 learning evolved too. In their meta-analysis of studies on m-learning from 2000 to 2012, Duman et al. (2015) track down the research trends in MALL and conclude that the most widely-researched area was vocabulary teaching, followed by usability of MALL and perceptions towards MALL, whereas grammar and writing skills were mostly ignored in those studies.

They also find that various new topics in MALL research, such as listening, speaking and pronunciation, learners' attitudes and multimedia use, began to appear from 2008 onwards.

1.9.2 EFL Vocabulary and Instructional Technology

A wide range of language skills, from speaking to reading, grammar to vocabulary, and from metacognition to learning strategies, have been researched in CALL and MALL environment. A large body of research (Table 3) in CALL and non-CALL environments has highlighted the salience of vocabulary learning in L2 acquisition.

1.9.2.1 MALL

Both used today as a communication technology and as an information gathering source, the mobile phone has paved the way for a new approach to scaffold learners in their L2 learning process. Vocabulary teaching through mobile technology has not gone unnoticed by EFL researchers, and they have carried out insightful studies on how best to integrate it into foreign language learning process. The study by Thornton and Houser (2005) suggests that offering opportunities for students to study through mobile e-mail can lead them to learn new vocabulary thanks to rich multimedia. Chen and Chung (2008) developed a personalized mobile vocabulary learning system and consolidated the learners' vocabulary knowledge by suggesting proper vocabulary in line with their memory cycles and vocabulary proficiencies. Their results indicate that such a system can both boost their vocabulary performance and arouse their interests. Lu (2008) argues for the use of mobile phone as an operative platform to promote autonomous vocabulary learning, and she believes that by provoking learners' motivation, this platform can encourage more frequent study and maximize the exposure to L2. Çavuş and İbrahim (2009) developed an SMS system to teach technical words by sending 16 messages every half an hour from 9:00 a.m. to 5:00 p.m., and their findings indicate that the participants' vocabulary knowledge almost quadrupled. Re-examining the efficacy of learning vocabulary by means of mobile phones, Zhang et al. (2011), on the other hand, attempt to draw a fine distinction between learning via mobile phones and traditional paper-based model. Their study concludes that studying vocabulary through two different ways

Table 3. Distribution of Commonly Investigated Topics in the MALL Studies from 2004 to 2012

Topic	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
Vocabulary	2	1	–	2	7	–	8	4	4	28
Grammar	–	–	–	–	1	–	–	–	–	1
Listening	–	–	–	–	2	1	–	3	2	8
Speaking/Pronunciation	–	–	–	–	2	2	1	1	–	6
Reading	1	–	–	1	1	–	1	1	–	5
Writing	–	–	–	–	–	–	–	–	1	1
Integrated skills	–	–	–	–	1	1	1	1	–	4
Dictionary use	–	–	–	1	1	1	–	1	–	4
Assessment-evaluation	–	–	–	–	–	–	–	1	1	2
Multimedia use/Design	–	–	–	–	1	1	2	2	–	6
Instructional design	–	–	–	–	–	–	–	1	1	2
Identity/Sense of community	–	–	–	–	1	1	1	–	–	3
Usability	–	1	–	3	5	1	4	1	1	16
Potential uses/Drawbacks	–	–	1	–	3	1	2	1	1	9
Interaction/Collaboration	1	–	–	–	–	2	1	–	–	4
Perception/Attitude	–	–	–	–	1	1	1	3	5	11
Academic achievement	–	–	–	–	–	1	–	–	1	2
Total	4	2	1	2	26	13	22	20	16	

has their own pros and cons and that a blended approach might maximize the efficiency in terms of sustained retention rates. In their meta-analysis, Sung et al. (2016) suggest that intervention periods with mobile devices might play a role in developing the different language skills. For them, while bite-size materials and shorter periods may fit better in with vocabulary-learning, more complex skills or methods (e.g. cooperative learning) might require long-term treatments. In another meta-analysis study on MALL and vocabulary relationship, Mahdi (2018) concludes that mobile technology has a moderate effect size on both productive and receptive vocabulary learning, that adults find learning words via mobile devices more beneficial than the young, and that MALL technology seems to be moderately effective on every aspect of vocabulary learning.

1.9.2.2 Multimedia

Multimedia is an integral part of successful skill-building software in computer-aided environment (Constantinescu, 2007). Çakmak and Erçetin (2018) argue that enhanced multimedia input has attracted a surge of interest in vocabulary learning

since verbal and visual input is believed to promote meaning-making processes for L2 learners. Kabooha and Elyas (2018) state that a considerable number of SLA researchers investigated how multimedia instruction facilitates vocabulary development and highlighted the favourable effect of pictures and videos in L2 vocabulary learning. In one of those studies, Chun and Plass (1996) suggest that the recall and retention of words can be achieved by supplementing vocabulary learning through pictorial and verbal cues. Having presented ALEXIA (a vocabulary learning platform for French), which consists of a text corpus, a general and an individual dictionary, and a lexical activities unit, Chanier and Selva (1998) lay stress on the value of multimedia support in improving L2 vocabulary. In a similar vein, Groot (2000) presented CAVOCA, another multimedia-based vocabulary learning platform developed to accelerate the vocabulary learning process. He argues that rigorous engagement with words is supposed to enable deeper processing and longer-term retention than learning bilingual word lists by heart. Al-Seghayer (2001) holds that the video clips with a text definition prove to be more effective than pictures with a text definition while learning new words. Tozcu and Coady (2004) carried out a case study aimed at investigating the results in vocabulary acquisition through interactive computer-based texts vs. traditional materials. The findings suggest that using computer-assisted courseware produce better results in enhancing vocabulary knowledge, thereby highlighting the benefits of embedding technology into the language classroom for vocabulary development. With YouTube growing popular after 2006, the access to countless number of videos and their limited length along with their incredible varieties received much attention from EFL teachers and researchers. Arndt (2016) compared written blog posts and YouTube video blogs in terms of incidental vocabulary gains. Her results indicate that learners' vocabulary knowledge improved through both media, but reading the written blogs resulted in better gains in orthographic knowledge, while watching YouTube videos enabled better recognition and recall of meanings of the lexical items in addition to better recall of their grammatical functions. Kabooha and Elyas (2018) integrated YouTube into the reading classes and investigated whether learners' vocabulary comprehension and retention could be improved in this way. The findings suggest that using YouTube yields good results in facilitating vocabulary acquisition as well as improving learners' vocabulary achievement.

1.9.2.3 Digital Glossing

Substantial body of research so far has underscored the positive effects of multimedia glossing on learning new vocabulary (Myong, 2005; Huang, 2003; Rott et al., 2002; Gettys et al., 2001). By means of definitions or synonyms, glossaries enable learners to overcome inadequate contextual cues when they encounter new vocabulary while reading or listening (Ko, 2012). Further, the more often learners resort to textual glosses, the more vocabulary they notice (Çakmak & Erçetin, 2018). Studies have also investigated whether text- or image-based glossaries are more effective in vocabulary learning in the multimedia environment. In one of those studies, Yanguas (2009) demonstrate that textual-only, pictorial-only and textual-plus-pictorial glossing yield better results than only reading the text without a glossary, yet whether glossaries consist of only text, only pictures or text + pictures do not make a difference. On the other hand, Plass and Jones (2005) put forward that engaging in the passage with both verbal and visual glosses can make the input more meaningful, thereby directing attention to linguistic information. Another controversial issue was the effect of using L1 and L2 definitions in textual glossing. Alghamdi (2018) maintains that this issue have produced inconclusive results about vocabulary acquisition. He adds that SLA researchers tend to believe L1 glossing is more conducive for elementary level learners because their linguistic competency is not enough to understand L2 glosses and relate them directly to their images. The studies on glossing generally provide their rationale within the framework of Schmitt's noticing (2001) and engagement (2008: 338) notions. Noticing hypothesis argues that attention and noticing are essential to turn input into intake, while engagement hypothesis suggests that if learners frequently engage with a new word, then they are highly likely to learn it.

1.9.2.4 Computer Games

Undountedly, the advent of digital video games has revolutionized the entertainment industry, but over time EFL researchers have taken an interest in exploiting these games in the language learning process. Gamers may derive great pleasure from playing these games just for the sake of having fun, yet the linguistic input that L2

learners receive while playing video games also promotes their language learning (Bytheway, 2014). A considerable body of research has emphasized the contribution of digital video games in facilitating vocabulary acquisition (Shintaku, 2016; Ghanbaran & Ketabi, 2014; Rosman et al., 2013; Chen & Yang, 2012; Aghlara & Tamjid, 2011). Huang and Yang (2012) posit that L2 learners unconsciously acquire new vocabulary while gaming in digital environment. One reason for such gains could be that video game platforms, by its very nature, provide much meaning-focused vocabulary. Gamers definitely have to make sense of the rules and opportunities in these games in order to move on to the next stage. Another reason is that the learners do not have a passive role but rather act as active players as they need to get through the stages and carry out the missions in the game successfully. In this way, they "notice" lexical items. Alghamdi (2018) holds that noticing new vocabulary is important in that the learners first receive the word, then process it in the working memory and finally transfer it to the long-term memory. He also suggests that digital game platforms can be favourable for beginners because word meaning can be readily elicited from the visual cues in the game setting. Researchers have also studied how interactivity and engagement contributes to vocabulary learning in simulation and video game settings. Mohsen's (2016) study investigates the role of interactivity in learning new vocabulary in a simulation environment, and the results indicate that players did better than the viewers both in comprehension and vocabulary learning. Chen and Yang (2012) tries to gain insight into how engagement in video games facilitates vocabulary acquisition, and their findings suggest that playing digital games fosters learning new vocabulary and that learners develop positive attitudes toward video games in their L2 process.

1.9.2.5 E-Dictionary

Butler-Pascoe and Wiburg (2003) find out that electronic dictionaries turn out to be highly effective in vocabulary development since they incorporate a number of built-in aids which lack in printed dictionaries. In a more recent study, Wang (2012) tries to find out the pedagogical outcomes of using e-dictionaries in intermediate and advanced groups. The results indicate that the intermediate group bridged the vocabulary gap between themselves and their advanced counterparts by acquiring

new words through the e-dictionary, whereas the advanced group benefited less from the e-dictionary.

1.9.2.6 E-Flashcards

The advent of electronic flashcards (or word carts) actually dates back to the early 1980s (Baker, 1984) although, with the technological developments, their nature have come to be more sophisticated. Christensen et al. (2007) point to the relative efficacy of e-flashcards showing merely words and definitions, just as Nakata (2008) suggests that when designed according to the above spaced learning principles, L2 - L1 e-flashcards are equally effective compared with their physical counterparts. In addition, Chen et al. (2008) validate the positive effect of MALL-based flashcards on the retention of words in the short-term memory. On the other hand, Dodigovic (2013) claim that learners improve the target vocabulary through interactive flashcards, yet teacher-designed cards are more effective than student-designed cards.

1.9.2.7 Software Without Multimedia Components

Some software aimed at improving vocabulary lacks multimedia modules. The best-known example of software without multimedia components is concordance lines, and it yields favourable results because lexical, syntactic, and semantic properties can be analysed by learners in a wide array of passages and contexts (Anderson, 1999). Besides, concordance software is of great value since it enables learners to notice lexical items within authentic contexts and offers them chances to develop their lexical knowledge with non-threatening class environment (Butler-Pascoe & Wiburg, 2003).

1.10 Flipped Learning in EFL Classrooms

Just as moving away from oral tradition to text-based education was revolutionary in ancient Greece, and also just as the printing press transformed the control of information based on textbooks from monks to other learned people, today's technology renovates the acquisition of knowledge by moving it from textbooks to

screens (Project Tomorrow Report, 2016). One of the ground-breaking changes that come with technology is the concept of flipped learning, which has turned out a buzzword in educational circles. For centuries the traditional flow of lessons has always been to learn the content with instructors in the classroom environment while assigning the homework to be done at home. However, the idea of flipped learning reverses the course of this usual educational practice by moving the mastery of content to outside the class while devoting the in-class time to engaging activities. This idea has gained increasing favour, notably among universities, as it requires students to master the course content at their own pace through pre-recorded lectures and allocates more time and opportunities for in-class inquiry-based activities, presentations, experiments, collaborative tasks, and other engaging experiences (Saitta et al., 2016). Though STEM fields seem to have embraced flipped learning to a large extent, EFL circles has also extensively experimented with it and reported accumulating evidence for promising results. In general, EFL researchers have tried to have an insight into the nature of flipped learning not only in four basic skills (reading, listening, writing, speaking) but also in learner autonomy, metacognitive skills, learning strategies, upper and lower thinking skills, motivation, attitudes and perceptions, as will be elaborated in the following headings.

1.10.1 Writing

Among the four basic language skills, writing seems to have attracted the most attention from researchers interested in EFL flipped learning, and so the research output is more abundant in this domain. In a quite recent study, Yuliani et al. (2018) tried to help 40 Indonesian adolescents enhance their writing skills with the combination of flipped approach and project-based learning. Their findings indicate that the experimental group significantly outpaced the control group in the writing competency test by also developing positive attitudes towards the project-based flipped learning, actively engaging during the teaching and learning process, and enjoying a less stressful environment. In another recent study, Buitrago and Díaz (2018) helped learners create a compare-and-contrast essay via flipped writing workshops, and report that the flipped approach in composition writing proves successful in an L2 setting. Similarly, Abdelrahman et al. (2017) asked their

participants (28 Sudanese teenagers) to write a descriptive paragraph before and following the treatment and exposed them to the flipped learning for four weeks. They conclude that the experimental group significantly outscored the control group, was quite satisfied with the process, and interacted more with the teacher and their peers. In addition, after implementing flipped instruction in the academic writing class, Gasmi (2016) claimed that it could ameliorate students' learning outcomes and pass rates. In another study into writing by Ahmed (2016), the experimental group taught via flipped model significantly outperformed the control group in writing scores, developed positive attitudes towards the flipped model, and were more motivated and engaged. Likewise, Engin (2014) and Farah (2014) taught writing lessons through flipped instruction and report that students' writing performance can be significantly enhanced by flipped learning.

1.10.2 Speaking

Overall, the output of the research into the effect of flipped learning on oral skills is high and also report positive results similar to those in writing. For instance, Teng (2018) highlights the affordances of the flipped approach in enhancing the oral performance of EFL students along with their higher academic success. Besides, Wu et al. (2017) carried out their study on second-year students majoring in English in a speaking class and investigated how an online learning community contributes to their speaking proficiency in a flipped classroom. They suggest that the online learning community can both lead to positive collaboration and enhance speaking competency. Teaching the learners of Chinese in a speaking class for 16 weeks by means of mobile-assisted flipped approach, Mu (2017) state that the learners are more active during class time, and that their oral competence significantly improves since they are offered more abundant communication chances, collaborate effectively, and have flexible self-direction. In Obari and Lambacher's study (2015), the participants were exposed to 24-week flipped instruction and then took TOEIC and OPIc (Oral Proficiency Interview by computer-based) exams. Not only did their oral scores improve by 24%, but their oral summary skills were also enhanced after they were exposed to online courses and some software. Exploiting the flipped model in English speaking classes, Zuo Xin-yue (2016) argues that students put in more

time and effort before the class, participate more eagerly during the in-class time, and significantly improve their oral performance.

1.10.3 Listening

The research into the effect of flipped learning on listening skills began to appear until quite recently. In a study which set out to study the link between listening abilities and flipped learning with junior Egyptian students at a university, Ahmad (2016) finds that flipped approach yields significant results in improved listening skills of EFL students. Obtaining similar results, Roth and Suppasetseree (2016) conclude that flipped approach has the potential to leverage learners' listening competency by also helping them develop positive attitudes towards learning English in this way. On the other hand, having taught the experimental group in five areas (reading, listening, writing, grammar, and vocabulary) for 15 weeks through flipped approach and control group through traditional methods, Iyitoğlu and Erişen (2017) come up with conflicting results with the aforementioned studies and report significant results in all areas, except listening. They attribute these contradictory findings to the methodological differences and their participants' inadequate listening practice.

1.10.4 Reading

Thus far, few studies in the relevant literature have revealed the relationship between flipped learning and improving reading skills. In one of those rare studies, Brown (2018) report that learners can better assimilate language as well as content and appreciate enriched learning experience in the academic reading English class taught through the flipped approach. She also suggests that they are satisfied with their improvement in learning and applying their advanced reading skills needed for further readings in English. Conducting their research on 77 high school students, Huang and Hong (2016), similarly, find out that the flipped learning can facilitate their reading comprehension in English by promoting autonomy.

1.10.5 Motivation, Engagement, and Satisfaction

As far as learners' engagement is concerned, flipped learning seems to afford overwhelming success because a great number of studies report more student engagement during the pre-class and in-class period. As mastering the course content is transferred out of classroom in the flipped model, the in-class time can be devoted to any practical work. Given more in-class time, students are provided with more activities to engage in, and teachers are given the opportunity of scaffolding the learners individually. Ultimately students can be satisfied with dealing with real-life tasks characterized by higher levels of thinking during this longer period of time. Ahmed (2016) stresses that the flipped writing class was more motivated and engaged than the non-flipped class. Having implemented the flipped approach in their EFL writing course, Leis et al. (2015) report that the teacher was able to work independently with the students since they watched the pre-recorded videos and mastered what their teacher explained before the class time. Higher engagement through flipped learning can be explained by students' feeling of satisfaction with this model, and many studies on flipped learning report high satisfaction rates. The qualitative data of Prefume's study (2015) conducted in a Japanese language classroom indicates that the participants were satisfied with flipped learning. Moran (2014) gauged students' engagement with the FL in English Language Arts (ELA) classrooms. On the one hand, her study demonstrated that flipped learning might be an effective tool to engage students in an ELA classroom, but, on the other hand, she cautioned that it is not the only way to promote engagement of all students.

1.10.6 Academic Achievement and Learning Outcomes

Needless to say, academic achievement is followed by an engaging process through which learners pass while experiencing a self-satisfying education. Some studies related to learning outcomes and academic success demonstrate how flipped learning can lead to better academic achievement. In Iyitoğlu and Erişen's study (2017), the learners in flipped classroom achieved significantly better scores than those in the control group both in immediate and delayed post-tests in areas, such as reading, writing, grammar, and vocabulary. In a similar vein, Webb and Doman (2016) demonstrate that the experimental group exposed to grammar instruction through

flipped approach achieved their learning outcomes and recommend that this approach be viable for EFL classes. In a study into flipped approach in a TOEIC course, Ishikawa et al. (2015) report that the students in the experimental group instructed with flipped approach improved their TOEIC scores by about 150 points. The last but not the least, Kang (2015) concludes that flipped teaching significantly increased both grammar and vocabulary knowledge of students.

1.10.7 Cognitive Skills

A possible factor as to why more teachers tend to adopt flipped learning in their classes could be the fact that activities requiring higher cognitive abilities can be carried out in the classroom, while those demanding lower-level skills can be done at home. Alsowat (2016) posits that flipped learning rested on the constructivist theory in which Bloom's taxonomy is turned upside down in the flipped model. He points out that learners are supposed to practice lower-order thinking skills (remembering, understating and applying) at home by visiting relevant websites or watching videos, whereas the activities requiring deeper learning (analysis, evaluation and creation) are done inside the classroom. Brookhart (2010) claims that these higher levels of cognitive skills could boost students' engagement and success as well as their sense of control over ideas, since “thinking is much more fun than memorizing”. Furthermore, flipped learning improves upper-level skills which prepare learners for the real life outside the classroom by presenting relevant problems and important facts for them to work on rather than offering only some facts to memorize (Conklin, 2012). When it comes to language classrooms, language is a means of improving high cognitive skills; after all, language is not acquired for its own sake but to make use of their thinking skills in the cases well beyond the language (Burns & Richards, 2012). Mehring (2016) is of the opinion that reviewing the course material prior to class and scaffolding learning in line with pre-class activities during the in-class time enable students to engage in authentic learning situations requiring upper-level thinking skills. In his study with higher education students, Al-Zahrani (2015) argues that the flipped approach can foster creative thinking, notably in terms of flexibility, fluency, and novelty. Based on the student interviews, the findings in Mehring’s study (2015) suggest that the flipped approach paves the way for more interaction

and peer-evaluation among the students, which leads them to use meta-cognitive skills. In their mixed method study with 50 upper-intermediate students, Wu et al. (2017) argues that the students appreciated the value of the feedback and comments they got from their instructors, which helped them to be metacognitively aware of their abilities and to develop better answering strategies.

1.11 Flipped Learning and Vocabulary in EFL

Language standards call for absorbing vocabulary by way of inferring the meaning with the contextual cues, analyzing the roots of the words, grasping the 35ite connotations, and taking in academic vocabulary (Helgeson, 2015). Basically, making instructional videos that explicitly or implicitly encourage students to study vocabulary may save extra time 35iteratü to meet these requirements beyond the classroom walls. Thus, the in-class time can be better employed to focus on different skills like task-based speaking, creative writing, learning more advanced or sophisticated words, to name a few. Flipped learning seems to have much to offer in this sense, not only for teachers but also for language learners. If learners take in the vocabulary associated with a particular lesson in advance, then they will be endowed with enough time to consolidate their pre-studied vocabulary and engage in real-life tasks during the in-class time. On the other hand, if teachers can prepare their learners 35iterat next class lexically, then they will be able to organize the class time for engaging activities, scaffold them individually where they need support, and help their students develop 21st century skills. In a nutshell, vocabulary learning through flipped approach can bring about bilateral satisfaction for both groups in the course of their educational process.

As a matter of fact, research into vocabulary–flipped learning duo in the relevant 35iteratüre is scarce, compared to other language areas, such as speaking and writing. This could be because the concept of flipped learning has a relatively recent origin, or because there is a lack of academic interest in exploring vocabulary learning in this way.

EFL studies on flipped learning investigate vocabulary in two ways: explicit vocabulary teaching through flipped learning and vocabulary learning as the by-product of teaching other skills via flipped instruction. In other words, some studies directly concentrate on vocabulary teaching by using flipped learning, whereas others report vocabulary gains in their studies while actually focusing on exploring other skills, such as listening, speaking, or writing.

1.11.1 Vocabulary as the By-Product

Fethi and Marshall (2018) adopted a flipped approach to film-watching with 110 intermediate adolescents at a language course in Morocco. In this intriguing study, the participants viewed teacher-created flipped videos about the language and the themes of the movies before the class time, watched the movies in the classroom, and expressed their ideas about the movies during the in-class time. The results of the qualitative data obtained from the participants' reflection papers revealed that there was noticeable improvement in their listening and speaking abilities as well as a marked increase in their motivation. The researchers noted that a flipped approach to film-watching has an additional advantage since the participants learn many curious details and enrich their vocabulary knowledge.

Han (2018) flipped his content-based EAP course at a college in the U.S. and noted that the learners significantly achieved content and language mastery by also developing independent learning skills. During the in-class time, the participants used the new words, idioms, and expressions that they had learned from the flipped instruction videos. As the final project, the students were supposed to form a group of four and prepare and act out a talk show interview in which one member was the host and the others were the guests. They were expected to duplicate and use the vocabulary, idiomatic phrases, and other expressions learned from the flipped videos and subsequently presented the instructor the new words used in their talk show in a list. At the end of the implementation, Han stressed the significant gains in the learner autonomy and content mastery as well as language use, including the marked improvement of vocabulary.

Iyitoğlu and Erişen (2017) adopted a mixed methods study with 41 participants aged 19-20 who study prep class at Gebze Technical University, Turkey. The experimental group was exposed to flipped approach in five areas (reading, listening, writing, grammar, and vocabulary) for 15 weeks. While the quantitative data was obtained by way of an EFL Achievement Test, serving as both the pre-test and the post-test, the qualitative data came from semi-controlled interviews. The learners in flipped classroom achieved significantly better scores than those in the control group both in immediate and delayed post-tests in all areas (reading, writing, grammar, and vocabulary), except listening.

Oh (2017) tried to gain an insight into how peer teaching through flipped learning affects engagement and vocabulary knowledge as well as its perceived pros and cons. The participants were 61 freshmen who were at A2 level by CEFR standards and studied at a university in South Korea. She adopted a mixed-method design, consisting of a diagnostic vocabulary test (acting as the pre-test), two mid-terms and a final exam (functioning as the post-test), and an adapted class engagement survey in addition to reflection papers (serving as qualitative measures). After a 5-week intervention period, the results indicate that the difference between the flipped and non-flipped learning setting was non-significant with respect to vocabulary achievement and class engagement. These results were associated with not viewing the videos before the class, low proficiency levels of the participants, not training the participants on how to watch the videos, and adopting a reciprocal peer teaching design. On the other hand, it is noted that the participants in flipped learning conditions showed less reliance on the initial vocabulary knowledge, and the significant difference (32.4%) in vocabulary gains only in the experimental group could be explained by the model of class engagement.

Karmaker and Singh (2016) conducted a mixed-methods study in which statistical data come from pre-test, post-test, and the post questionnaire, whereas qualitative data consist of interviews and student logs. The general English course in the study was flipped for 8 weeks at a university in South Korea, and the participants were 17 undergraduate students whose ages range from 21 to 28. The main findings of the study demonstrate that the students in the flipped condition significantly

outperformed those in the control group in terms of vocabulary knowledge with overall high satisfaction rates. The students reported that the flipped assignments were instrumental in enhancing their vocabulary knowledge (60.8%).

In a mixed-method study with the 500 Chinese EFL university students aged between 18 and 22, Zhang (2015) turned his business English course into the flipped model by using teacher-created videos. He made use of post-flip surveys and structural written interviews as the main source of data. The results of the post-flip surveys reveal high satisfaction rates of the learners with the flipped approach. As far as the written interviews are concerned, one of the chief reasons why the students were satisfied with the intervention was that they mastered many words and terms in English.

Leis et al. (2015) flipped their writing classes with Japanese university students, and the results revealed that the experimental group instructed through the flipped model significantly spent more time in pre-class activities and outscored the control group on the post-test in addition to using a larger amount of vocabulary in their written post-test.

1.11.2 Vocabulary as the Focus

In a quite recent study, Kim (2018) investigated the effect of flipped approach on Korean university students' acquisition of receptive and productive vocabulary. For three months, 57 freshmen at the beginner level participated in the study in which the effects of flipped learning were explored through immediate and delayed post-tests. The findings reveal that flipped learning group achieved significantly higher vocabulary scores than the control group both in receptive and productive vocabulary, and the effects of the treatment endured two weeks later, too.

In another recent study, Alnuhayt (2018) tried to find out the effect of flipped learning in EFL vocabulary classes. Being at intermediate level, 45 female freshmen students, aged 18-19, participated in the study. The intervention took place in Shaqra University, Saudi Arabia and lasted for about 8 weeks. In this quasi-experimental

study, the data was collected through a pre-test, a post-test, and a questionnaire. The results suggest that the experimental group significantly outscored the control group, which indicates that flipped learning worked well in improving the students' vocabulary knowledge. Alnuhayt also reports positive attitudes towards flipped learning in the EFL vocabulary class.

Chen Hsieh et al. (2016) carried out a mixed methods study with 48 participants aged between 19 and 20 years who studied at a university in Taiwan and were at upper-intermediate level. In fact, they had rich data collection tools: pre- and post-tests, two questionnaires, in-class observations, and interviews. The study which took place for 8 weeks aimed at teaching idiomatic expressions at an oral training course. The main quantitative results of the study suggest that the experimental group outperformed the control group by significantly enhancing their idiomatic knowledge. The qualitative measures indicate that the flipped model increased the participants' motivation by making them more engaged in using idioms during the in-class time.

Xiao-Qing (2016) aimed to investigate efficacy of flipped learning on vocabulary knowledge in college English with university students in Shanghai, China. The statistical evidence revealed that the experimental group (81.26%) outscored the control group (72.85%) in mastering the required vocabulary. The study concluded that flipped vocabulary instruction is better than its traditional counterpart, and that flipped instruction can afford learners with the opportunity to consolidate their vocabulary building process.

Zhang et al. (2016) carried out a mixed-method study with 64 freshmen English majors studying at a university in China. The quantitative data was collected through two measures, one of which was 70-item vocabulary test and the other was to write a short story by using at least ten target words. The qualitative data came from 11-15 questions in the interviews conducted with 12 participants in total from both experimental and the control group. As far as all the findings in this study are concerned, flipped vocabulary learning increased classroom efficiency by helping the students master more vocabulary in a shorter time. This type of teaching aroused more interest in vocabulary learning among learners with its enriched content and

engaging activities in the class. The last but not the least, the flipped model improved the students' view of learning achievements by achieving better learning outcomes within relatively less time.

In a mixed-methods study by Kang (2015), the traditional and the flipped classrooms were compared in terms of grammar and vocabulary knowledge. 66 participants, aged between 19 and 28, took part in the research conducted for 14 weeks at a university in South Korea. The data was obtained from a pre-test, a post-test, student logs, a post-questionnaire, and interviews. The results report significant increases in vocabulary knowledge of the experimental group, and suggest that flipped learning could be implemented in EFL classrooms in order to attain better learning outcomes and engagement.

CHAPTER 3

METHODOLOGY

2.1 Presentation

This chapter will include eight main sections, including research design, context, participants, demographic information based on the self-efficacy scale, FL treatment, data collection, procedure, and data analysis. First, *research design* section will present what sort of study method is adopted in this research. Next, the *context* section will deal with where and when the present study takes place. Afterwards, there will be specific information about the *participants*, such as demographics as well as their technological and proficiency perception based on the self-efficacy scale. Then, the *FL treatment* section will mention the pre-determined criteria in picking up the targeted vocabulary along with the duration of the non-class materials. Subsequently, the *data collection* section will describe which, why and how qualitative and quantitative instruments were used to gather the data. The following section, *procedure*, will present how the data were collected in a chronological order by the researcher within the stated dates by describing the process the participants go through. The final section, *data analysis*, will explain how the hard and soft data was analyzed by elaborating on the software programmes used, variables, accepted significance level, and analysis models.

2.2 Research Design

The current study adopts a *mixed-methods* study, which includes both quantitative and qualitative phases. According to Creswell (2003), if collecting and analysing the quantitative data precedes that of qualitative data in such a study, it can be designated as a *sequential explanatory* mixed-methods study (Figure 2). The rationale for

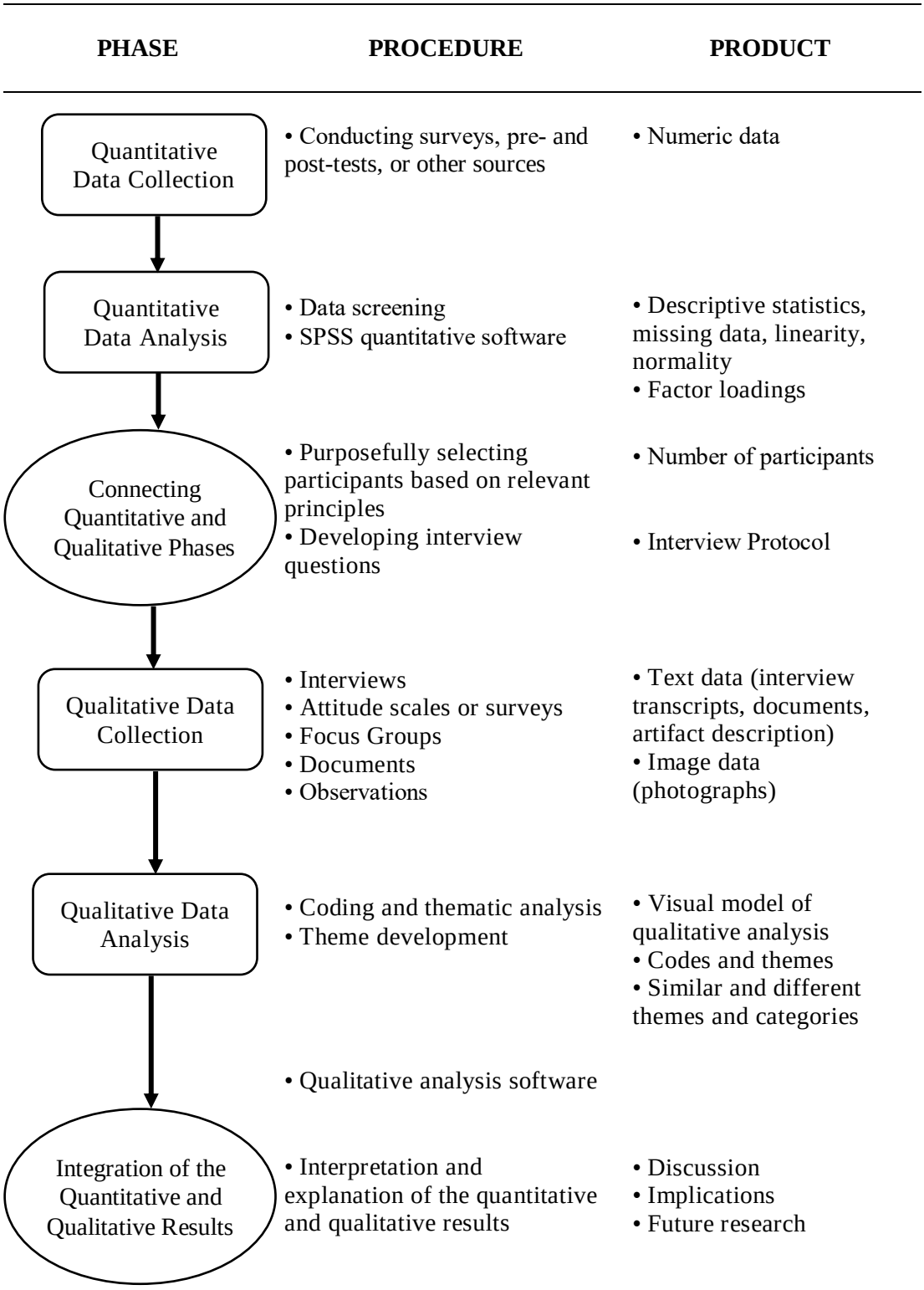


Figure 2. Visual Model for Mixed-Methods Sequential Explanatory Design [*Adapted and revised from Ivankova et al. (2006)]*

adopting this research design is that the quantitative data can provide an overview of the research problem, while the subsequent qualitative data can offer an insight into the numeric data by investigating participants' thoughts and feelings in depth (Tashakkori & Teddlie, 1998). The major three components of this type of design are *priority*, *implementation*, and *integration*. (Creswell et al., 2003). Morgan (1998) suggests that *priority* can be described as whether quantitative or qualitative (or both) carries more weight while collecting and analysing the data in the study. He further explains that *priority* is given to the quantitative data in a typical sequential explanatory design because its collection and analysis precede in the sequence and constitutes the primary phase of the data collection process, while the qualitative approach is at the subordinate phase of the research. Green and Caracelli (1997) state that *implementation* refers to which data collection and analysis precedes or follows the other during the course of the study. They elaborate that, in the sequential explanatory design, a researcher primarily gathers and analyzes the numeric data, and the text data are collected in the next stage and are associated with the results from the first stage. Finally, *integration* refers to the phase of the research process in which the quantitative and qualitative data are mixed (Creswell et al., 2003). In sequential explanatory designs, the quantitative and qualitative data are coupled in the intermediate stage at which the statistical results guide the text data collection (Hanson et al., 2005).

This study fits in with the *sequential explanatory* mixed-methods design (Figure 3). because it first collected and analyzed numeric data to shed light on whether FL had a significant effect on students' vocabulary knowledge, and then utilized text data and analysis to explain why FL proved to be effective and how it assisted students in enhancing their vocabulary knowledge.

The *priority* in this study was on the quantitative approach since pre-tests and post-tests came first in the sequence and represented the initial stage of the data collection process, followed by qualitative data, which covered interviews, attitude scale, and reflection papers. In the *implementation* stage of this study, after the researcher collected and analyzed the statistical data, the text data were collected and linked with the outcomes from the first stage. In the *integration* phase, the hard data from

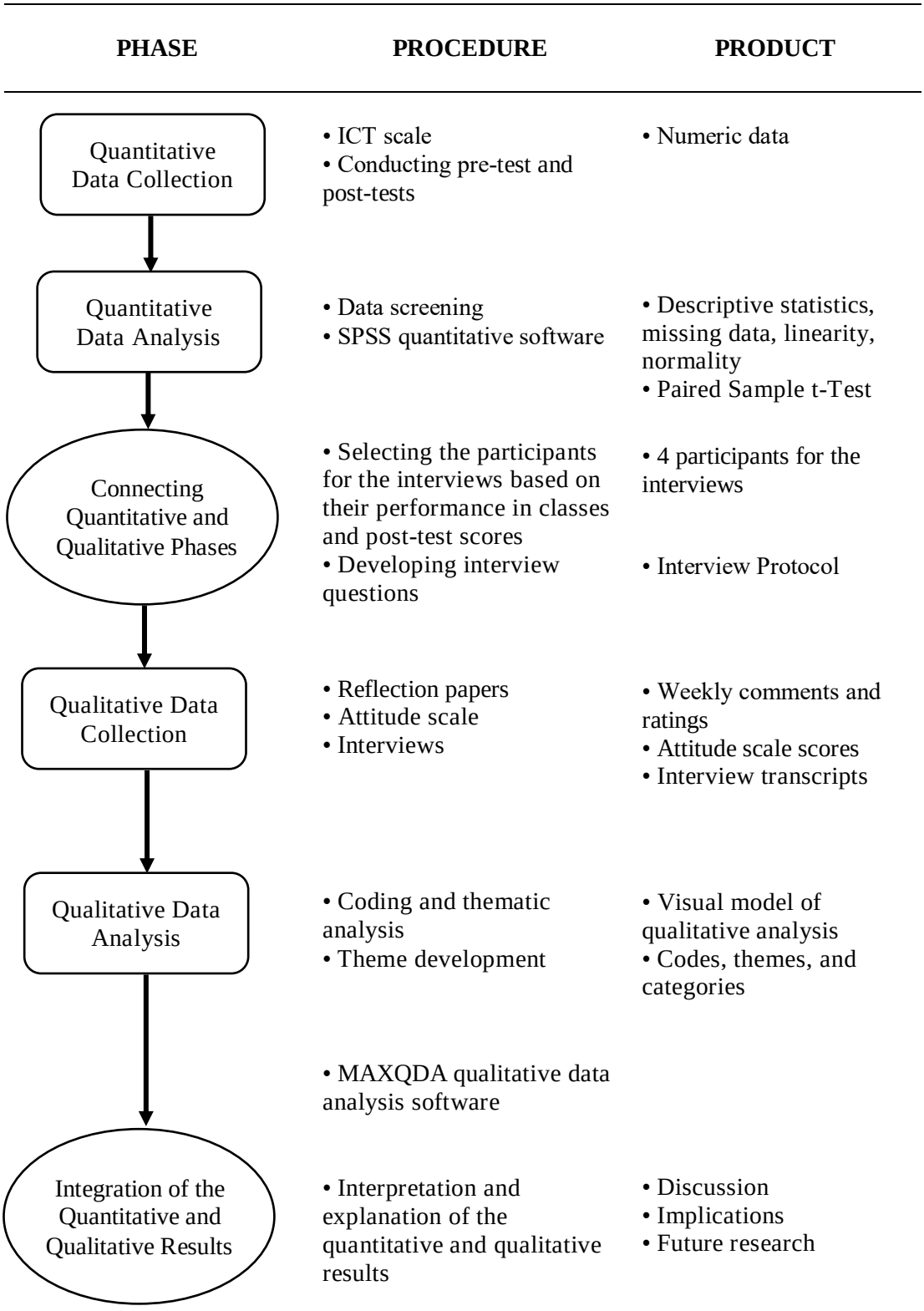


Figure 3. Visual Model for the Present Study [*Adapted and revised from Ivankova et al. (2006)]*

the pre-tests and post-tests were mixed with the soft data from interviews, attitude scale, and reflection papers in the intermediate stage when the results of the former guided the data collection of the latter.

The quantitative phase of this study adopts a quasi-experimental design consisting of one experimental group and a control group. The independent variable is the use of flipped learning, whereas the dependent variables are the students' pre-test and post test scores. The experimental group in this study is the one taught through flipped approach, and the control group is taught through traditional instruction. In the beginning, the experimental group was given an ICT literacy scale to ensure that they had enough skills to handle the flipped instruction model. Then, a pre-test was provided to make sure that there was no significant difference between both groups and that they were at equal levels at the outset. In the implementation process, the participants were supposed to watch the videos uploaded on the web four days before the class, perform a wide range of activities (gap filling, multiple choice questions, picture/word/phrase matching, dialogue/sentence completion, sentence writing, answering questions orally, writing a short paragraph, and role-plays) during the class time, and complete a form concerning their FL experience in that particular week. During the in-class activities, the learners worked either in pairs or small groups in line with the tenet that knowledge is best acquired when co-constructed, and the instructor monitored the course of their learning process and scaffolded them when necessary. Subsequent to the treatment period, a post-test was given to both the control group and the experimental group in order to find out the learning outcomes and the effect of the treatment.

On the other hand, the qualitative phase is comprised of three major instruments, such as individual interviews, flipped learning attitude scale, and weekly reflection papers. To gain an insight into the students' perceptions of the flipped learning model, the participants in the experimental group were asked to write down their thoughts and feelings about the flipped instruction in that week on a sheet of paper at the end of each week, which could be either in Turkish or English. This proved to be very fruitful in tracking down the shifts in their attitudes towards the flipped approach throughout the intervention period. After the implementation ended, the

experimental group was also supposed to fill out a “flipped learning attitude scale” because the second research question of this study is related to the participants’ overall attitudes towards the flipped approach. Later, individual interviews were conducted with the participants to collect in-depth data, receive further feedback, and gather first-person assessments. The interview data was also used to triangulate the data collected from the surveys, reflection questions as well as pre- and post-tests. These interviews were semi-structured in nature, so the participants were expected to talk about the open-ended questions which had been pre-determined by the researcher.

2.3 Context

The present study took place in a private language school in Denizli, an industrial and student city in the Aegean Region, Turkey which earned the status of metropolitan city in 2012. Boasting textile and marble industries predominantly, Denizli is among the top 10 exporting cities in Turkey, which underlines the prominence of learning foreign languages. Besides, Pamukkale University, situated in Denizli, has now around 60,000 students and was the most preferred state university in 2014. The university also includes some departments where the medium of instruction is English, so students are seeking chances to improve their foreign language. Further, not only the university students and academicians but also the civil servants in Denizli take the nationwide and international English exams, and they are looking for institutions to guide and prepare them for these examinations, as well.

In this context, the major aims of the language institution where the current study is carried out are to enable the learners to express themselves verbally and in written form in daily life and to get the required points in the nationwide and international exams. Indeed, the needs of the course attendees vary considerably, ranging from primary school and high school students trying to learn how to communicate in English and earn better grades at school, to university students required to pass Erasmus or preparatory proficiency tests, and even to graduate and undergraduate students wishing to get certain points in nationwide exams (i.e. YDS, YÖKDİL, and

YDT) and international exams (TOEFL, IELTS, and PTE). More importantly, a majority of the attendees seek to improve their communication skills in English. Therefore, the language school, where this study is performed, attempts to address those above-mentioned needs.

For those who attend the course, acquiring vocabulary is one of the most important components of their language learning process. As vocabulary is the building block of a language, learning more words is one of the primary goals for the course attendees. With his 14-year experience in EFL field, the researcher, who is also the practitioner of the current study, has been listening to learners who complain about falling short of communicating in English or getting satisfactory points in exams due to the lack of adequate vocabulary. Thus, this study, which solely and exclusively aims at improving vocabulary in L2, also benefits the learners and guides them though the vocabulary learning process.

The language school consists of two buildings: the headquarters which is in the downtown and the campus branch which is close to the university. The exam groups as well as German, Russian, and French classes take place in the headquarters, while the campus branch mainly provides general English courses. The language school employs 13 instructors, 10 of whom teach English. The present study is conducted in the campus branch, which is predominantly made up of university students. Each classroom seats maximum 12 students, though the number of students differs from one level to another. In the classrooms where the intervention takes place, the number of the participants ranges between 6 and 11.

The language school has 13 classrooms (7 in the headquarters, 6 in the campus branch) and around 350 attendees in one semester on average, though the numbers may fluctuate over time. While some classrooms can seat up to 25 students (exam groups only), most can seat 12 students.

The instructional program at the language school is divided into three main periods: October-November-December (Fall Term); March-April-May (Spring Term); and July-August (Summer School). The classes are held in three days of the week and the

attendees receive 8-hour education a week and 32 hours a month. The students receive 90-hour language education throughout the 3-month course period. Apart from the regular in-class education, the course also offers its attendees grammar clubs and speaking clubs for one hour free of charge every week. In addition, social club nights are organized in a bar every two weeks so that the students have the opportunity to practise what they learn with Turkish and foreign teachers, foreign students, and their friends.

The language school follows a functional syllabus because the primary purpose is the communicative use of language. Therefore, the course content embraces the functions performed while using the language. Yet, that is not to say that grammar teaching is absent during the course of the lessons, though structure is subordinated to functions in the syllabus. In line with this syllabus, CLT (Communicative Language Teaching) is performed throughout the classes in the language school, which puts communication, rather than structure, in its central vision. To this end, the courseware includes the student's book, workbook, and CD materials of *Oxford English File* for beginner, pre-intermediate, and intermediate groups. Upper-intermediate and advanced classes use the coursebook *Speak Now*. The children and teenage groups, on the other hand, are taught through a number of coursebooks, depending on their level and age, ranging from Marathon, Everybody Up, English File (Pre-intermediate), Focus, and Family & Friends.

To encourage the students to attend the course regularly and get ready for their lessons at any time, pop-quizzes are handed out unannounced. Though not often, homework is given to students to practise what they have learnt in the class, and three writing assignments are graded because they will form part of their end-of-term points. The students' verbal performance is also graded by the teachers so that it can be added to the end-of-term points.

The attendees at each level take the end-of-term test, which questions grammar, vocabulary, listening, and reading skills. The course offers free repetition of the same level for the next semester, if the attendees fall behind 70 points in total (final exam, assignments, pop-quizzes, verbal performance) and if they have attended 70% of the

classes. The final exam is composed of four main sections: listening, vocabulary, grammar, and reading. The listening section is also sub-divided into three parts, each including 5 multiple choice questions about a small dialogue. The vocabulary part is also divided into two sub-sections: one about matching the words with their definitions (10 items) and the other writing the verb forms of the given verbs (5 items). The grammar section includes 15 multiple-choice items questioning the grammatical structures covered in the classes. The last but not the least, the reading section includes 2 reading passages, each followed by 5 comprehension questions in multiple choice format. Each section has 15 points, which amounts to 60 points in total.

Two writing assignments given within the semester constitutes 10% of the total scores. Three pop-quizzes are worth another 10% of the attendees' total scores. Verbal performance, which is assigned by the foreign teacher as a process-oriented evaluation, also amounts to the remaining 10% of their end-of-term scores. In a nutshell, the attendees' end-of-term scores are calculated by considering their final exams (60%), assignments (10%), pop-quizzes (10%), and verbal performances (10%).

2.4 Participants

As Table 4 indicates, the present study consisted of 55 participants who were attending a private language course in Denizli, Turkey. There were A2-B1-B2-C1 level English classes in CEFR standards both during spring and fall semester of the course (2017), and this study included only B1 level attendees who had taken the proficiency level test before enrolling in the course.

The age range of the participants was between 15 and 29 ($\overline{x}$ = 21,1), and most of them were either university or high-school students, though there was one graduate student and one working individual. As far as gender is concerned, 30 female and 25 male students agreed to take part in the present study.

Table 4. Demographic Characteristics of the Participants

NUMBER of PARTICIPANTS			AGE		GENDER	
Total	**Experimental**	**Control**	**Range**	**Mean**	**Female**	**Male**
55 (100%)	28 (51%)	27 (49%)	15 – 29	21,1	30 (55%)	25 (45%)

EDUCATIONAL STATUS				PROFICIENCY	COURSE PERIOD
High School	**University**	**Graduate**	**Working**		
11 (20%)	42 (76%)	1 (2%)	1 (2%)	B1 *(in CEFR Standards)*	3 months

INSTRUCTION TIME (per hour)		TREATMENT PERIOD	RESEARCH SETTING
Week	**Total**		
8 hrs	90 hrs	1 month	Private Language School

The participants attended the course either on weekdays or at weekends. The weekday attendees were taught for three days and divided as morning (10:00-13:00) and evening groups (18:00-21:00). On the other hand, the other group of attendees came to the course on both Saturday and Sunday and, similar to their weekday counterparts, were divided into two groups as morning (10:00-14:00) and afternoon (14:00-18:00). In total, they attended the course for three months and received 8-hour language education per week, which amounted to around 90 hours of instruction. The treatment process included 2 or 3 hours of the weekly 50ort he50 50ort he experimental groups, thus the overall duration of the process was minimum 10 in-class hours in total for one month. Besides, each classroom was comprised of 11 students at most.

2.4.1 Demographic Information about the Participants Based on the Self-Efficacy Scale

Only filled by the experimental group before and after the treatment process, the Flipped Learning Opinion Scale is comprised basically of four sections: demographic information, technological perception, language proficiency perception, and post-treatment perception of FL. This scale was not aimed at any research question of the

current study but developed to gather demographic data on the participants' perceived technology proficiency.

2.4.1.1 Demographics

The number of the participants in the experimental group was 28. As illustrated in Figure 4, the majority of them were 21 years old (28,6%), followed by 20-year-olds (21,4%). While 23-year-olds formed 14,3% of the study population, both 22-year-olds and high schoolers (aged 16) made up 10,7% of the population, separately. The rest of the participants were 26-year-olds (7,1%), followed by 25- and 24-year-olds (3,6% each). In general, female students (64,3%) outnumbered their male counterparts (35,7%) in the current study.

The pie chart reveals that the participants were predominantly undergraduate students (85,1%), though there were high schoolers (10,7%) and one graduate student (3,6%). In adddition, a vast majority of the participants (92,9%) were not working, whereas only 7,1% of them were emloyed. Moreover, most of the participants were senior students (36%), followed by sophomores (28%) and juniors (20%). The remaining population was made up of freshman students (12%) and one graduate student (4%). The last but not the least, the undergraduate and graduate students came from different faculties and a wide range of departments. 56% of the students came from the faculty of enginerring, while 36% from the faculty of economics and administrative sciences. The rest came from the faculty of arts and sciences and the faculty of education, with 4% each. Among the enginnering students, industrial engineers made up 16% of the present study, followed by their biomedical and mechanical counterparts who formed 12% separately. Electrical and eletronics, mechatronics, geology, and textile engineers all constituted 4% separately. Besides, the participants studying at the bussiness and politics departments created 12% of the study separately, whereas labour economics, finance, and economics students all made up 4% separately. Finally, elementary school teaching and sociology students formed 4% of the study separately.

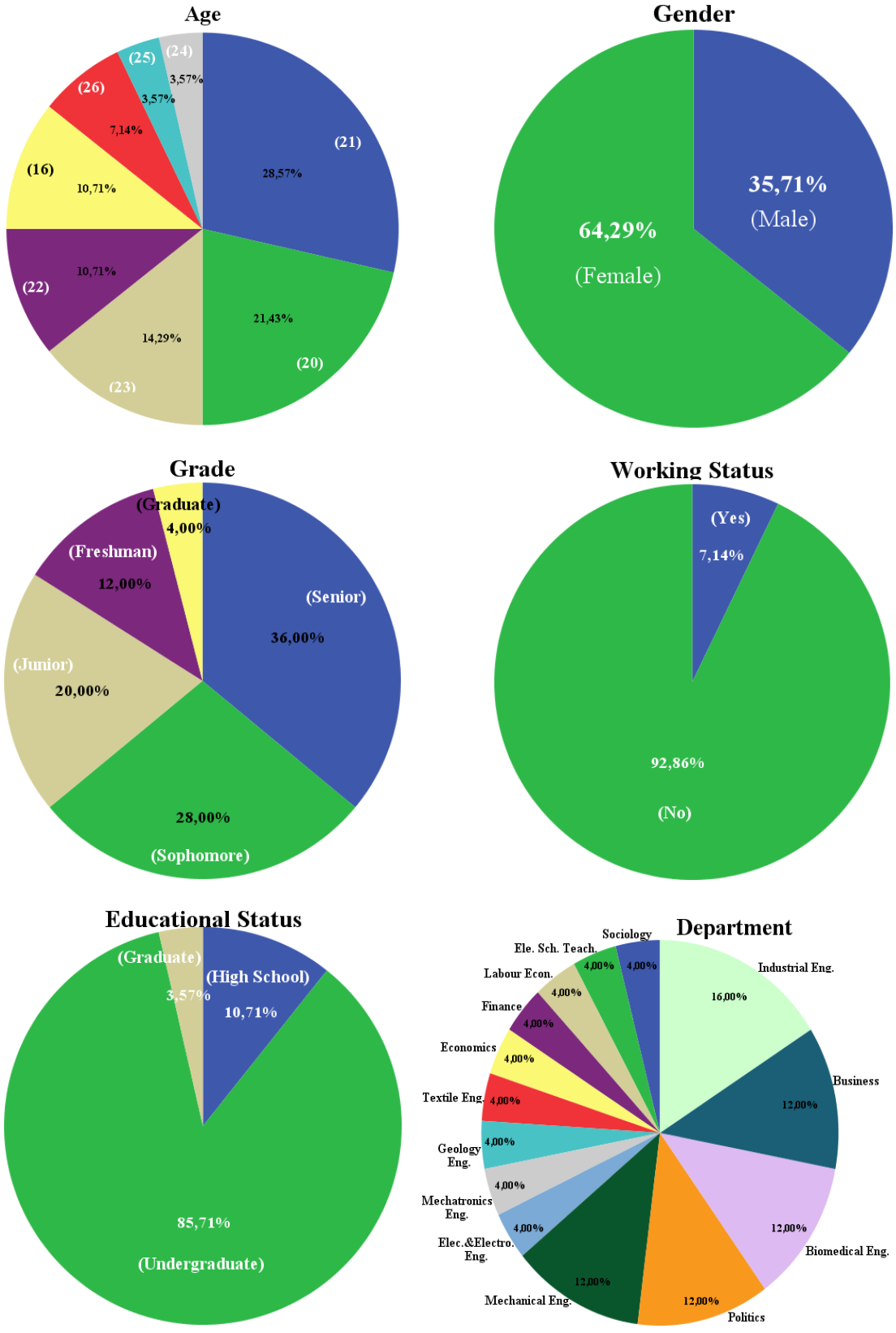


Figure 4. Demographic Information for Experimental Group

2.4.1.2 Technological Perception

Before the treatment process was launched, all the participants had been given a self-efficacy scale to find out their perceived technology proficiency. The technological perception section included 21 checkbox items and 1 open-ended question. In order to track down whether the treatment process led to any shift in their technological perception, the same items were asked again.

As seen in table 5, a great majority of the participants (86%) had their own computers, and again most of them (75%) considered themselves a good computer user, although 21% thought they could use a computer moderately, which all remained the same in the post-treatment. All the participants possessed their own mobile phones before and after the treatment. An overwhelming majority (93%) felt they were competent mobile phone users, which was almost the same after the treatment (86%).

Before the implementation, 75% gained access to the Internet from their mobiles, followed by those who accessed it via home (50%), school (25%), and dormitory (18%). These percentages did not differ considerably after the treatment. 71% accessed the Internet from their mobiles, followed by those who received internet service from their home (57%), school (36%) and dormitory (21%). A majority of the participants (54%) used a computer up to 1 hour a day, followed by those using it between 2 and 3 hours (39%). In the post-treatment, those spending 2 to 3 hours in a computer accounted for 50%, while those spending up to one hour made up 46%. However, it seems that the duration spent on mobiles a day was much longer in general. For example, while 38% spent 4-5 hours using their mobiles to connect to the Internet, 29% did so for 2-3 hours. Those who did so for 6-7 hours, up to 1 hour, and more than 7 hours were 18%, 11% and 7% respectively. After the implementation, this sequence was observed to have changed. The ones spending 2 to 3 hours accessing to the Internet via their mobiles made up 39% of the population, followed by those who spent 4-5 hours (36%), more than 7 hours (11%), 6 to 7 hours (7%), and up to one hour (7%).

Table 5. The Participants' Technological Perception Before and After the Treatment

Do you have your own computer?	**Pre.**	(Yes) 86%			(No) 14%	
	Post.	(Yes) 86%			(No) 14%	
How would you regard yourself as a computer user?	**Pre.**	(Good) 75%	(Medium) 21%		(Bad) 4%	
	Post.	(Good) 75%	(Medium) 21%		(Bad) 4%	
Do you have your own mobile phone?	**Pre.**	(Yes) 100%				
	Post.	(Yes) 100%				
How would you regard yourself as a mobile phone user?	**Pre.**	(Good) 54%	(Very Good) 39%		(Medium) 7%	
	Post.	(Good) 47%	(Very Good) 39%		(Medium) 14%	
Where do you access the Internet?	**Pre.**	Mobile 75%	Home 50%	School 25%	Dormitory 18%	
	Post.	Mobile 71%	Home 57%	School 36%	Dormitory 21%	
How many hours per day do you use a computer?	**Pre.**	(0-1 Hour) 54%	(2-3 Hours) 39%		(4-5 Hours) 7%	
	Post.	(2-3 Hours) 50%	(0-1 Hour) 46%		(4-5 Hours) 4%	
How many hours a day do you use mobile phone for internet access?	**Pre.**	(4-5 Hours) 38%	(2-3 Hours) 29%	(6-7 Hours) 18%	(0-1 Hours) 11%	(7^{+} Hours) 7%
	Post.	(2-3 Hours) 39%	(4-5 Hours) 36%	(7^{+} Hours) 11%	(6-7 Hours) 7%	(0-1 Hours) 7%
How many hours per day do you use the Internet?	**Pre.**	(2-3 Hours) 36%	(6-7 Hours) 29%	(4-5 Hours) 18%	(7^{+} Hours) 11%	(0-1 Hours) 7%
	Post.	(2-3 Hours) 36%	(6-7 Hours) 21%	(4-5 Hours) 21%	(7^{+} Hours) 14%	(0-1 Hours) 7%

Table 5. The Participants' Technological Perception Before and After the Treatment (*Continued*)

How many hours per day do you watch videos in Turkish or English over the Internet?	**Pre.**	(5-2 Hours) 57%	(2-3 Hours) 29%	(4-5 Hours) 11%	(6-7 Hours) 4%
	Post.	(5-2 Hours) 46%	(2-3 Hours) 43%	(4-5 Hours) 11%	
Do you watch educational videos over the Internet in Turkish?	**Pre.**	(Yes) 93%		(No) 7%	
	Post.	(Yes) 93%		(No) 7%	
How often do you watch educational videos over the Internet in Turkish?	**Pre.**	(1-2 hours a week) 41%	(1-2 hours a month) 41%	(1-2 hours a year) 11%	(1-2 hours a day) 7%
	Post.	(1-2 hours a week) 46%	(1-2 hours a month) 36%	(1-2 hours a day) 7%	(1-2 hours a year) 4%
Do you watch English teaching videos over the Internet?	**Pre.**	(Yes) 79%		(No) 21%	
	Post.	(Yes) 82%		(No) 18%	
How often do you watch English teaching videos over the Internet?	**Pre.**	(1-2 hours a month) 41%	(1-2 hours a week) 30%	(1-2 hours a year) 26%	(1-2 hours a day) 3%
	Post.	(1-2 hours a month) 39%	(1-2 hours a week) 29%	(1-2 hours a year) 25%	(1-2 hours a day) 4%
o you watch English teaching videos over the Internet for vocabulary?	**Pre.**	(Yes) 61%		(No) 39%	
	Post.	(Yes) 82%		(No) 18%	

Table 5. The Participants' Technological Perception Before and After the Treatment (*Continued*)

Do you watch English teaching videos over the Internet for grammar?	**Pre.**	(Yes) 61%		(No) 39%	
	Post.	(Yes) 61%		(No) 39%	
Do you watch English teaching videos over the Internet for listening?	**Pre.**	(Yes) 61%		(No) 39%	
	Post.	(Yes) 61%		(No) 39%	
Do you watch English teaching videos over the Internet for speaking?	**Pre.**	(Yes) 64%		(No) 36%	
	Post.	(Yes) 64%		(No) 36%	
Do you watch English teaching videos over the Internet for reading?	**Pre.**	(Yes) 57%		(No) 43%	
	Post.	(Yes) 57%		(No) 43%	
Do you watch English teaching videos over the Internet for writing?	**Pre.**	(Yes) 68%		(No) 32%	
	Post.	(Yes) 68%		(No) 32%	
How do you regard yourself in watching videos over the Internet?	**Pre.**	(Medium) 43%	(Good) 25%	(Very Good) 18%	(Bad) 14%
	Post.	(Medium) 43%	(Good) 29%	(Bad) 18%	(Very Good) 11%

Table 5. The Participants' Technological Perception Before and After the Treatment (*Continued*)

Which medium do you use to watch videos?	**Pre.**	(Mobile) 86%	(Computer) 61%	
	Post.	(Mobile) 86%	(Computer) 68%	
Which applications or websites do you watch videos from?	YouTube	Twitter	Instagram	Facebook
	Duolingo	Teacher Phil	Dizipub	Memrise
	Onedio	Twitch	BBC	English Control
	Jennifer ESL	İngilizce Bankası	Series websites	Anything

Furthermore, 36% of the participants used the Internet for 2 to 3 hours per day, followed by 29% who used it for 6-7 hours a day. The percentage of those using the Internet for 4-5 hours, more than 7 hours, and up to 1 hour per day was 18%, 11% and 7% respectively. In the post-treatment, this sequence remained the same, though the rates fluctuated slightly. Similarly, 36% of the participants used the Internet for 2 to 3 hours per day, followed by those using the Internet for 6 to 7 hours (21%), 4 to 5 hours (21%), more than 7 hours (14%), and up to one hour (7%).

57% watched videos in Turkish or English over the Internet up to 1 hour per day, followed by their counterparts that streamed videos for 2-3 hours per day (29%). Those watching videos for 4-5 hours and for 6-7 hours constituted 11% and 4% of the study population, respectively. After the implementation, the percentage of the students watching videos up to 1 hour was 46%, whereas those who did so for 2 to 3 hours were 43%, followed by those watching for 4 to 5 hours (11%).

43% of the students believed they were moderately capable of watching videos over the Internet, though a quarter of the participants regarded themselves as good at doing so. The ones thinking they were very good at streaming videos were 18%, closely followed by those who were bad at doing so (14%). After the treatment, the percentage of the moderate users did not change (43%), yet that of good users increased to 29%. Whereas the participants regarding themselves bad rose to 18%, those thinking they were very good at watching videos over the Internet fell to 11%.

Both before and after the implementation, the percentage of the users watching videos from their mobile phones remained the same (86%), while that of the students using their computers to watch them increased from 61% to 68%.

A vast majority (93%) streamed educational videos in Turkish over the Internet, which did not change after the treatment. Before the study began, the ones watching educational videos in Turkish for 1-2 hours per week and per month were 41% each, whereas those viewing such videos for 1-2 hours per year and per day are 11% and 7% respectively. After the study ended, the participants streaming educational videos in Turkish for 1-2 hours per week increased to 46%, but those who did so per month fell to 36%. Those viewing such videos for 1-2 hours per day remained the same (7%), while those who did so per year decreased to 4%. Moreover, a large majority (79%) viewed English teaching videos over the Internet in the pre-treatment, which rose to 82% after the implementation. Those who streamed such videos for 1-2 hours per month were 41% of the population, followed by their counterparts who did so per week (30%), per year (26%), and per day (3%). In the post-treatment, not only did this sequence remained unchanged, but these percentages also remained nearly the same.

With respect to language learning purposes, the rate of those viewing English teaching videos over the Internet to improve their vocabulary climbed from 61% to 82%. On the other hand, the participants streaming such videos to improve their grammar (61%), listening (61%), speaking (64%), reading (57%), and writing skills (68%) remained unchanged after the treatment. The range of the websites or application that the students made use of while streaming videos was wide indeed, yet YouTube was by far the most widely-used tool of all. The remaining channels can be listed as Teacher Phil, Jennifer ESL, Dizipub, Memrise, Duolingo, BBC, Onedio, Twitch, English Control, İngilizce Bankası, social media platforms such as Twitter, Facebook and Instagram, series websites in general, and any videos encountered.

As stated before, the same self-efficacy scale was administered after the treatment process was over in an attempt to measure the shift in their technological perception. The Kolmogorov-Smirnov test run to analyse the distribution of the self-efficacy scale indicated that the dataset had a normal distribution (p>.05), so Paired Samples T-test was carried out to report the significant results, if any. As understood from Table 6, there were some shifts in the participants' technological perception, though most of them did not show a changing pattern. As a matter of fact, even if they were certain variations in the percentage of some items, they were not found significant according to the T-test results.

Table 6. Paired Samples T-test Showing the Differences Between Pre- Treatment & Post-Technological Perception

		Paired Differences							
				Std. Error	95% Conf. Interval				Sig. (2-
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	tailed)
1.	How would you regard yourself as a computer user?	,000	,272	,051	-,106	,106	,000	27	1,000
2.	How would you regard yourself as a mobile phone user?	,071	,466	,088	-,109	,252	,812	27	,424
3.	Where do you access the Internet?	-,464	3,180	,601	-1,697	,769	-,773	27	,446
4.	How many hours a day do you use a computer?	-,036	,331	,063	-,164	,093	-,570	27	,573
5.	How many hours a day do you use mobile phone for internet access?	,071	,539	,102	-,138	,281	,701	27	,490
6.	How many hours a day do you use the Internet?	,000	,609	,115	-,236	,236	,000	27	1,000

Table 6. Paired Samples T-test Showing the Differences Between Pre- Treatment & Post-Technological Perception (*Continued*)

7.	How many hours a day do you watch videos in Turkish or English over the Internet?	-,036	,693	,131	-,304	,233	-,273	27	,787
8.	How often do you watch educational videos over the Internet in Turkish?	,115	,326	,064	-,016	,247	1,806	25	,083
9.	Do you watch English teaching videos over the Internet?	,036	,189	,036	-,038	,109	1,000	27	,326
10.	Do you watch English teaching videos over the Internet for vocabulary?	,214	,418	,079	,052	,376	2,714	27	,011
11.	How do you regard yourself in watching videos over the Internet?	,143	,356	,067	,005	,281	2,121	27	,043

The only significant changes occurred in the percentage of how competent the participants were in watching videos over the Internet ($p < .05$) along with the number of participants watching videos to improve their vocabulary in English. For instance, although the percentage of the students who regarded themselves as moderate users remained the same (43%), that of the participants who thought they were competent users changed from 43% to 40%. The students who designated themselves as poor users shifted from 14% to 18%. In a similar vein, the percentage of those streaming English teaching videos to enrich their vocabulary knowledge significantly climbed from 61% to 82%.

2.4.1.3 Proficiency Perception

The third section in the self-efficacy scale was designed to have an insight into the participants' experience with computer-assisted education as well as perception of their own language proficiency. The same questions and items were asked in the scale both at the pre-treatment and post-treatment stage to find out if any changes would occur in their perception after the implementation process. The main findings obtained from the descriptives are as follows.

Table 7 demonstrates that half of the participants were exposed to one sort of computer-assisted education in their school. In general, those with such an experience turned out to be engineering students who had received software courses and engineering program training. The participants had no experience with FL, nor did they use computer-assisted education in their English classes. Although the ones who used websites to learn English and who did not were almost half and half (46% and %54 respectively), a higher percentage (61%) tended not to use websites to improve their English. In addition, while more than half of the participants had been learning English for more than 10 years, whereas one-third had been exposed to English for 7 to 9 years. Slightly over 10% had been learning English for 4-6 years, and they are, expectedly, high school students.

When it comes to their perceptions of language proficiency, the participants were asked to designate themselves as very good, good, moderate, and poor in six areas, namely reading, writing, speaking, listening, grammar, and vocabulary. Overall, a shift – big and small – in their self-perception towards their proficiency was observed in the post-treatment period on the positive side (Table 8).

To begin with, those who thought they were good at reading jumped from 36% to 54%, while the ones who considered themselves moderate fell from 57% to 43%. These shifts were statistically significant ($p<0.05$), indicating that FL changed the students' perceptions. The students believing they were competent in writing rose from 21% to 32%, but those with moderate writing skills decreased from 57% to

Table 7. Students' Experiences with CALL

Have you used computer-assisted education in your school subjects?	**Pre-Treatment**		
	(Yes)	(No)	
	50%	50%	
	Post-Treatment		
	(Yes)	(No)	
	54%	47%	
Have you had any experience with Flipped Learning?	**Pre-Treatment**		
	(Yes)	(No)	
	0%	100%	
	Post-Treatment		
	(Yes)	(No)	
	0%	100%	
Have you used computer-assisted education in your English classes?	**Pre-Treatment**		
	(Yes)	(No)	
	0%	100%	
	Post-Treatment		
	(Yes)	(No)	
	0%	100%	
Do you use websites to learn English?	**Pre-Treatment**		
	(Yes)	(No)	
	46%	54%	
	Post-Treatment		
	(Yes)	(No)	
	39%	61%	
How long have you been learning English?	**Pre-Treatment**		
	(10^{+} Years)	(7-9 Years)	(4-6 Years)
	%54	%32	%14
	Post-Treatment		
	(10^{+} Years)	(7-9 Years)	(4-6 Years)
	57%	32%	11%

50%. On the other hand, around 20% still felt that they were poor at writing in English. Nevertheless, all these shifts in the percentages did not produce a significant change between the pre- and post-treatment ($p>0.05$). The percentage of the students with moderate listening skills remained the same (39%), yet those with good listening competence increased from 29% to 36%, in contrast to the ones with poor listening skills that dropped from 32% to 25%, signalling no significant change ($p>0.05$). Moreover, while those with poor spoken skills decreased from 63% to 43%, the percentage for the ones with moderate speaking skills climbed from 30% to 50%, which were statistically non-significant ($p>0.05$). As for grammar, the students with good grammar skills increased from 36% to 47%, whereas those with moderate

Table 8. Participants' Perceptions of Their Language Proficiency Before and After the Treatment

How well do you think you can read in English?		**Very Good**	**Good**	**Moderate**	**Bad**	**Sig.**
	Pre	0%	36%	57%	7%	,01
	Post	0%	54%	43%	4%	
How well do you think you can write in English?		**Very Good**	**Good**	**Moderate**	**Bad**	**Sig.**
	Pre	7%	14%	57%	21%	,21
	Post	7%	25%	50%	18%	
How well do you think you can listen in English?		**Very Good**	**Good**	**Moderate**	**Bad**	**Sig.**
	Pre	0%	29%	39%	32%	,10
	Post	0%	36%	39%	25%	
How well do you think you can speak in English?		**Very Good**	**Good**	**Moderate**	**Bad**	**Sig.**
	Pre	0%	7%	30%	63%	,06
	Post	0%	7%	50%	43%	
How good do you think you are at English grammar?		**Very Good**	**Good**	**Moderate**	**Bad**	**Sig.**
	Pre	4%	36%	50%	11%	,06
	Post	4%	47%	47%	4%	
How good do you think you are at English vocabulary?		**Very Good**	**Good**	**Moderate**	**Bad**	**Sig.**
	Pre	4%	14%	39%	43%	,00
	Post	7%	32%	50%	11%	

skills remained nearly the same at 50%, revealing a non-significant change ($p>0.05$). On the other hand, a noticeable shift, which is on the positive side, was observed in the participants' perception of their vocabulary skills. Just as those with good vocabulary knowledge jumped from 14% to 32%, the ones who had moderate vocabulary skills increased from 39% to 50%. More importantly, those who thought they had poor vocabulary knowledge plummeted from 43% to 11%. In addition, the

shifts in the perception of vocabulary learning among the participants were also statistically significant ($p<0.05$), underscoring the effect of FL in this language area.

2.5 Flipped Learning Treatment

The vocabulary included in this study was not randomly selected; rather, they were some criteria in picking up the targeted vocabulary. Expectedly, it would be easier to teach concrete nouns, verbs that can be clearly illustrated, or any one-word items. However, it would also be an object of curiosity whether flipped learning can facilitate the mastery of vocabulary, such as phrasal verbs, multiword units, and abstract concepts. To this end, a wide range of vocabulary items predicted to challenge the learners was selected and used in this study. Apart from the variety of lexical items, the preparation time was another issue to be addressed. The length of each video was 12.7 minutes on average, yet how much time was devoted to creating each video presentation is worth mentioning, too.

To begin with, the number of the targeted words per week was specified as 10. In fact, the students might have learned more words if they had been expected to use passive vocabulary, but considering that they were going to hear, write, read and speak the newly-learned vocabulary, 10 words per week seemed manageable. Besides, the words with different parts of speech were used. For example, 12 adjectives, 13 nouns, 6 verbs, 4 adverbs, 5 multiword units were selected for the second implementation, and multiword items encompass phrasal verbs (i.e. look after), idioms (i.e. roll one's eyes), and preposition phrases (i.e. in common). While some of these words are concrete concepts such as *fireplace* and *gadget*, others such as *amount* and *disease* are abstract. These words were selected from different sections (vocabulary, speaking, listening, reading) in the students' textbook.

Further, there was a regular sequence of the words presented in the videos. First, L1 and L2 definitions of the target words were provided. At this point, some may question the value of using the L1 translation of words, but as Schmitt (2008) states clearly, though it seems outdated to use L1 equivalents in L2 learning, L1 translations can be advantageous to establish the form-meaning relationship,

especially in beginning stages of acquiring a word. As the participants in the present study can be considered to be at the beginning phase of learning the target words and there were a multitude of other opportunities in the video-presentations to learn these words, using L1 translations did not seem inconvenient. Afterwards, some useful and commonly-used phrases in which the target word was used were listed. Then, two explanatory sentences were provided so that the learners could comprehend the target words at the syntactic level. As the final part of the verbal section, a small dialogue or paragraph where the target word was used twice to six times was given to teach the vocabulary at the discourse level. Following the verbal presentation of the target vocabulary, some images related to that vocabulary item were shown in one or two slides to strengthen their visualization. Because motion, sound, and image appeal to different senses and there is the curiosity factor, short videos in which the target words were embedded were inserted in the presentation. A sample procedure for a target vocabulary item in the study is presented below (Figure 5).

The video presentations assigned to the participants lasted between 11 and 14 minutes and there were four such presentations for each semester. Thus, 45-minute long video presentations were created for one semester, and similar ones with about the same length were prepared for the other semester. Thus, a 90-minute presentation in total were provided to the participants in both semesters. However, the preparation of the video presentations, their conversion to mpeg format, uploading them onto YouTube, and informing the participants that the videos were ready to watch took about 14 hours per week. In total, 112 hours of preparation time was invested throughout the current study.

2.6 Data Collection

The fundamental courseware of the current study is the third edition of Oxford English File Pre-Intermediate. The coursebook includes 12 units, yet this study covers the units between 1 and 6 for the second implementation, and the units between 7 and 12 for the first implementation. Moreover, each unit in the book is sub-divided into 3 lessons (i.e. 7A-7B-7C), and four skills (reading, writing, listening, speaking) are integrated. Grammar and vocabulary are also taught, though

Figure 5. The Sequence of Slides in the Video-Presentations

the role of the latter is more emphasized than the former. 3–4 words per lesson (i.e. 7B) are targeted for research purposes, and given that the students meet three days in a week, 10 words are targeted to be flipped per week. Considering that the intervention process takes 4 weeks, the total vocabulary items targeted are ultimately 40, separately for each group.

As Table 9 shows, the quantitative data of the present research was collected through an existing self-efficacy scale (see Appendix L and Appendix M), an adopted/ready-made flipped learning attitude scale (Appendix J and Appendix K), and a pre-test and a post-test (see Appendix G for both) designed by the researcher, including 40 questions with varying formats, such as multiple choice, filling the gaps, matching definitions/pictures, sentence writing, and sentence/dialogue completion. Since the pre-tests were collected and were not returned to the participants and because the answers were not presented to the learners after the pre-test, the questions in both pre-test and post-test were the same, which also contributed to increasing the reliability of the tests. The quantitative results from both pre-test and post-test address the first research question of this study, which is *to what extent flipped*

learning enhances learning of new vocabulary items. The quantitative data collected through these tests helped to determine the extent of how well the intervention had done to enhance the learners' vocabulary learning.

Though the current generation is considered to never know a world without the Internet and therefore called "digital natives" in Prensky's term (2001), there was nevertheless a need for gauging their ICT levels to make sure that they were capable enough to follow the flow of a flipped classroom. Three main sections constituted this self-efficacy questionnaire: demographic information, technology efficacy, and education/language learning. Initially, demographic information section questions the participants' age, gender, educational and work status. Secondly, the technology efficacy part aimed to find out (1) whether the participants possessed a computer or a mobile, (2) how competent they were at using them or watching videos, (3) how they had an access to the Internet, (4) how long they spent time while using computers, mobiles, the Internet, or watching videos, (5) whether and how often they watched instructional videos in Turkish or English, (6) for which language skills (i.e. reading) they watched instructional videos in English, and (7) which applications and media they used to watch videos. Besides, what was questioned in the final section was (1) whether the participants had used CBE in school subjects, (2) whether they had experienced flipped learning before, (3) whether they had used CALL in English classes, (4) how long they had learned English, (5) whether they used websites to learn English, and (6) how competent they considered themselves in four language skills.

At the end of the treatment process, an adopted flipped learning attitude scale was provided to the participants to gain an insight into their feelings about the flipping model. In addition to the components in the aforementioned questionnaire, the flipped learning attitude scale also required the participants to rate how effective and enjoyable the flipped learning was in their vocabulary acquisition through a 0-10 scale. Further, this scale tried to gain an insight into the participants' attitude towards the flipped learning through 41 items which were designed in a 4-point Likert Scale format (Completely Agree / Agree / Disagree / Completely Disagree). In the closing part of the scale were 7 open-ended questions, including which components of the

Table 9. Data Collection Tools

Data Collection Tool	Duration	Question Type	Number of Items	Research Question	Aim
ICT scale	15 mins	Yes/No Questions Open-ended questions	34	—	To gather demographic data on the participants' perceived technology proficiency
Pre-test	30 mins	Multiple Choice Gap filling Image matching Sentence writing Dialogue comp-letion	40	R1	to find out what the learners know on vocabulary prior to the implementation process
Weekly Reflection Forms	10 mins	4-Item Likert Scale Rating a continuum Open-ended questions	15	R2	to observe the shifts in their opinions and feelings as well as attitudes towards activities related to FL
Post-test	30 mins	Multiple Choice Gap filling Image match-ing Sentence writ-ing Dialogue comp-letion	40	R1	to see how much progress students have made in vocabulary learning via FL
Flipped Learning Scale	30 mins	Yes/No Questions Open-ended questions Rating a conti-nuum 4-Item Likert Scale Open-ended questions	83	R2	to gain an insight into their feelings about FL

Table 9. Data Collection Tools (*Continued*)

Interview	7-16 mins	Open-ended questions	7	R2	to gather data on their recommenda-tion and experience with FL

materials (L1 meaning, L2 definition, phrases, sentences, paragraphs, images, or videos) were the most effective for them, how much vocabulary they could learn through FL, what the advantages and the disadvantages of the FL were, what they recommended to improve FL, whether they opted for FL or traditional vocabulary learning activities or a combination of the two, and finally whether they had any other opinions, suggestions, or comments on FL. This scale was implemented to address the second research question, which is *what are the students' opinions about the flipped approach in the learning of new vocabulary items.*

On the other hand, the qualitative data was obtained from two primary sources: individual interviews performed at the end of the implementation process and the students' reflection papers conducted at the end of each week. Bearing in mind that some individuals could better reflect on their experience while writing rather than speaking, the participants were asked to note down their feelings on weekly reflection papers at the end of each implementation. This weekly reflection paper was divided into subgroups as Part A designed in a 4-point Likert scale with 10 items and Part B designed in an opened-ended question format. Part A asked the participants to rate whether FL experience of that particular week was informative and fun, whether the video presentation was at appropriate length, whether in-class activities were related to vocabulary in the uploaded material, whether the level of the vocabulary items was appropriate, and whether the definitions, phrases, example sentences, paragraphs/dialogues, pictures, and videos were helpful to remember the words. On the other hand, Part B asked the participants to comment on what the strengths and weaknesses of that week's FL vocabulary activity were, what they suggested to improve the flipped vocabulary learning experience, and what their

overall rating was for the effectiveness of that weeks' material by circling a number on the scale from 0 to 10. When the implementation ended, 4 participants selected through purposeful sampling were also asked to reflect on their experience during an individual interview. The reason why focused group interview was not preferred at this stage was that the group members might have been positively or negatively affected by each other's comments and may not have reflected an insightful account of their experiences. Besides, these four participants included slow, moderate, and high achievers in order to find out whether the participants with varying learning pace expressed different comments on the FL process. Lasting between 7 and 16 minutes, the interviews particularly focused on (1) whether the participants liked the FL experience, (2) what the advantages and disadvantages of FL could be, (3) whether FL was more beneficial and enjoyable than a typical lecturing format, (4) if they could learn vocabulary better through FL than traditional learning, (5) whether they would like to learn the entire course content for every subject subject/course, and (6) if they wished to learn grammar, writing, or speaking through FL (see Appendix E and Appendix F). As in the flipped learning attitude scale, interviews and weekly reflection forms intended to address the second research question, which is *what are the students' opinions about the flipped approach in the learning of new vocabulary items.*

2.7 Procedure

The treatment process of the current study was divided into two periods: May 1 – May 28 and November 20 - December 15. The reason why the treatment was divided into two separate periods was to include more participants into the study since the number of the students in the classrooms was limited, as can be expected from a private language school. The spring-term course schedule inaugurated in the middle of February and ended at the end of May for the first treatment, which amounted to about three and a half months. The treatment process included the last one month, namely May, of the course programme. On the other hand, the second treatment process took place in 2017–Fall semester, and lasted from October 9 to December 24, which amounted to three months. This second implementation included nearly the last one month of the course programme.

Upon the ethics committee approval (see Appedix O), some written documents, such as informed consent form (see Appendix A and Appendix B) and parent consent form for those under 18 (see Appendix C and Appendix D) were received from the participants. After the participants were given the self-efficacy scale to identify their technological competence, the pre-test was administered. As for the implementation of the flipped model (Figure 6), the students in the experimental group were informed in advance about how the process would take place so that it was clearer in their mind how they could deal with this new experience. The instructor, who was also the researcher of the current study, recorded the course-related material and then uploaded it on YouTube. The students had already formed a WhatsApp group, and the uploading time of the video presentation was informed to the students through this platform. Furthermore, the students were supposed to watch the video and learn the required knowledge at their own pace via the above-mentioned web platform. In the meantime, the video recordings lasting between 11 and 14 minutes were available four days before their class on this website. In this way, the learners were able to master the understanding stage in Bloom's taxonomy. When they had difficulty grasping particular points in the content, the instructor provided clear explanations pertaining to the content either through WhatsApp or in the class.

During the in-class time, after some pronunciation exercises were performed, the students were engaged in a wide variety of practical activities related to the vocabulary presented in the videos in which lower and higher thinking skills in Bloom's taxonomy were questioned (Figure 7). In parallel with the pre-test and post-test questions, the in-class materials encompassed word-matching, definition-matching, MC items, and gap-filling type of questions, which were guided exercises in nature. Moreover, there existed some semi-guided exercises, such as completing the rest of a sentence, writing a sentence for the given vocabulary, and answering some wh– questions (see Appendix N). That said, these exercises aimed at promoting some lower-level thinking skills in Bloom's taxonomy, namely remembering and applying. However, the learners were also engaged in higher thinking skills through unguided activities by role-playing and writing advertisements, small letters, and social-media texts.

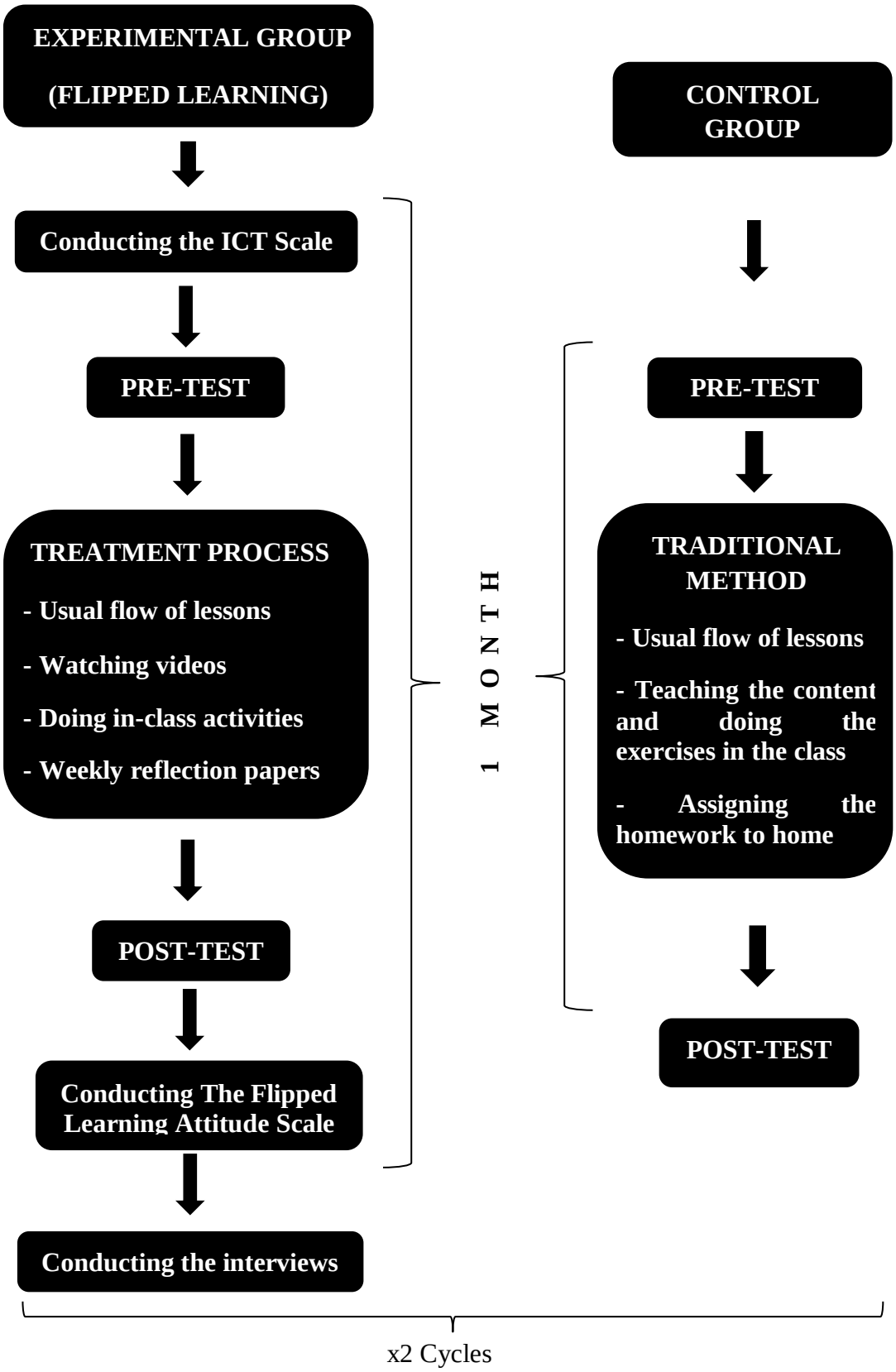


Figure 6. The Procedural Flow of the Study

All through the activities, the learners were encouraged to cooperate with their peers so that they could co-construct their knowledge. This collaboration came in the form of either pair-work or small-group work. One final word is for the recording of the sessions. With the permission and consent of the students, the in-class activities were recorded by the researcher to, later, investigate the student-student interaction during the course of the FL activities.

Figure 7. Some screenshots from the in-class activities

At the end of each implementation, the student reflection papers about what they thought or felt about the implementation in that particular week were collected (see Appendix H and Appendix I). This reflection writing time often took 5-15 minutes, depending on the learners.

When the treatment period ended completely, the students exposed to the treatment process were to fill in the attitude scale and talk about their flip learning experience in an interview with the instructor/researcher.

On the other hand, the participants in the control group followed a traditional flow of lessons in which the students communicated, answered the questions, and did the content-related exercises individually, in pairs, and as a group. In particular, vocabulary learning depended almost exclusively on what was covered in the student

book, unless the students made an extra effort to master vocabulary items via the internet or other reference sources. The students in the control group did not write weekly reflection papers, fill in an ICT or attitude scale, or talk in the interviews.

After the 4th week, both groups were supposed to take the post-test so that the researcher could find out what the learning outcomes were, how much had been achieved since the beginning of the intervention, and whether the flipped learning had a significant effect on students' vocabulary learning.

2.8 Data Analysis

As the current study adopts a *sequential explanatory mixed-methods* research design, it consists of both quantitative and qualitative data gathered during two one-month periods. While the quantitative data comes from pre-tests and post-tests, the data collection tools to measure students' perceptions of the flipped approach includes weekly reflections, flipped learning attitude scale, and interviews. SPSS Statistics 22 software package programme was used for the analysis of quantitative data. In order to analyse the pre-test and post-test scores, Independent Samples t-Test was run as there were two independent variables (experimental and control group) and two dependent variables (pre-test and post-test scores). In the light of the previous research, the significance level was set as 0.05. In the end, the results from the dataset were compared, and it was understood whether the type of instruction had an overall effect on the learning of the students or not. Additionally, the qualitative data was analysed by using MAXQDA software program devised to carry out qualitative data analysis for academic purposes. The data collected from the interviews, flipped learning attitude scale, and weekly reflections of the students were analysed through thematic coding (Strauss and Corbin, 1990), that is, by identifying the texts which share a common theme and dividing these texts into categories in order to establish an overall framework of thematic ideas about flipped learning in the end. Among the thematic coding styles, open coding, "the process of breaking down, examining, comparing, conceptualizing, and categorizing data", was applied while analyzing the students' responses (see Appendix P).

CHAPTER 4

RESULTS

3.1 Presentation

The chapter will report the findings of the data obtained through the data collection tools under two main sections: *results in relation to research question 1* and *results in relation to research question 2*. In the first section, the quantitative results coming from the pre-test and post-test will be presented to answer first research question. In the second section, the qualitative findings will be provided under three sub-sections, such as post-flipped learning opinion scale, weekly reflection reports, and interviews in order to answer second research question. The first two sections, namely findings from post-flipped learning opinion scale and weekly reflection reports, will be analyzed under two headings, such as questionairre and open-ended parts. Finally, the interview results will be reported under three headings, such as positive experiences, challenges, and preferences and suggestions.

3.2 Results in Relation to Research Question 1

The first research question of the current study is "to what extent does flipped learning enhance learning of new vocabulary items among B1 level EFL students at a private language course?". To this end, a pre-test consisting of 40 items in different formats was administered to find out what the learners had known on the target vocabulary prior to the implementation process. At the end of the fourth week, a post-test with the same design as the pre-test was implemented to see how much progress students made in vocabulary learning via FL. The collected data was analysed in SPSS Statistics 22 software package programme. Below are the results of the data analysis in relation to Research Question 1.

3.2.1 Pre-Test And Post-Test

Both the experimental and the control groups were subjected to the pre-test to find out whether they are at equal levels in the beginning of the study. Table 10 reveals that the descriptives of the experimental group for the pre-test scores were N= 28, $\bar{x}$= 16,80, SD= 9,13 while the pre-test descriptives for the control group were N= 27, $\bar{x}$= 17,57, SD= 8,67. In accordance with the results of the Kolmogorov-Smirnov test (Table 11), the pre-test scores of both groups did not show a normal distribution ($p<0,05$), thus the Mann-Whitney U non-parametric test was carried out to analyze the differences. The results of this test indicated that there was no significant difference between the experimental and control group at the outset (U= 351.5, p= .66), implying that the groups were at equal levels in the beginning of the study.

Table 10. Descriptive Statistics

	Group	N	Min.	Max.	Mean	Std. Dev.
Pre-test	Experimental	28	5	38	16,80	9,13
	Control	27	4	36	17,57	8,67
Post-test	Experimental	28	8	40	30,64	7,30
	Control	27	8	39	24,48	7,91

At the end of the treatment period, both groups took the post-test to assess how they improved after the implementation. The descriptive statistics of the experimental group for the post-test scores were N= 28, $\bar{x}$= 30,64, SD= 7,30 whereas the post-test descriptives for the control group were N= 27, $\bar{x}$= 24,48, SD= 7,91 (Table 12). A general overview of the post-test descriptives suggested that they differed noticeably in favour of the experimental group, yet a further analysis was needed to calculate their significance level.

Table 11. Kolmogorov-Smirnov Test

		Pre-test	Post-test
N		55	55
Normal Parameters	**Mean**	17,182	27,618
Test Statistic		,137	,086
Asymp. Sig. (2-tailed)		,012	,200

The final statistical analysis performed was about whether the difference between the pre-test and post-test scores of both groups was significant or not. As the pre-test scores showed non-normal distribution in contrast to the post-test scores having normal distribution (p>0,05), a Wilcoxon Signed-ranks test was run to compare the means. The output of the analysis indicated that the post-test scores were significantly higher than the pre-test scores, Z = -6.37, p < .001 (Table 12). This suggested that the experimental group significantly outperformed the control group, implying that the implementation created a difference.

Table 12. Wilcoxon Signed Ranks Test

		N	Mean Rank	Sum of Ranks	Z	Asymp. Sig. (2-tailed)
PostTest – PreTest	**Negative Ranks**	1	3,50	3,50	-6,365	,000
	Positive Ranks	53	27,95	1481,50		
	Ties	1				
	Total	55				

3.3 Results in Relation to Research Question 2

The second research question of the current study is “what are the students’ opinions about the flipped approach in enhancing their overall English proficiency and in enhancing the learning of new English vocabulary items?”. One of the data collection tool employed for this purpose was Flipped Learning Scale, including 83 items with varying formats and aiming to gain an insight into the students’ feelings about FL. Another instrument used to collect data related to this research question was Weekly Reflection Forms, including 15 items with varying formats and intended to observe the shifts in the students’ opinions and feelings as well as attitudes towards activities related to FL. The last data collection tool related to this research question was the semi-structured interviews lasting 7 to 16 minutes, asking 7 open ended questions, and aiming to gather data on the students’ experience with FL and their recommendations. The obtained data was analysed in MAXQDA qualitative data analysis software. Below are the findings of the data analysis in relation to Research Question 2.

3.3.1 Post-Flipped Learning Opinion Scale

3.3.1.1 Questionairre Part

The Flipped Learning Opinion Scale includes two rating continuums in the first section, 41 items designed in a 4-point Likert Scale format (Strongly Agree / Agree / Disagree / Strongly Disagree) in the following section, and 7 open-ended questions in the final section (Table 13). This scale was implemented following the treatment process to collect in-depth data on the participants' attitudes towards the FL and aimed to address the second research question "What are the students' opinions about the flipped approach in the learning of new vocabulary items?". In terms of the reliability analysis, Cronbach's Alpha for this survey is .903 (90%).

When the participants were asked to rate the whole FL process in terms of its *effectiveness*, the average rating turned out to be 8.4 out of 10 (84%), suggesting that they found the FL process highly effective overall. Likewise, when they were asked to rate the FL process in general concerning how *enjoyable* it was, the average rating was 8.7 out of 10 (87%), showing that they found the FL process quite enjoyable by and large.

The following 41 items in the opinion scale were designed to analyze how enjoyable and effective the whole process was and offer some explanations as to why the case was as such. The items can be classified under four sections, such as preparation issues, relation between the material and the in-class activities, application of FL to different language areas, and overall positive attitude towards FL.

For the preparation issue, everybody believed that watching the material before the class prepared them for the class activities, though only 18% say they did not watch the videos. A majority of the participants (61%) watched the videos more than once, and 89% re-watched the videos as much as they liked. In addition, almost everyone (96%) rewinded and re-watched the unclear parts by stopping the material at some points. An overwhelming majority (93%) reported that watching the videos at any place and time encouraged them to learn because they had no time problems

Table 13. Results of the Post-Treatment Flipped Learning Opinion Scale

	Strongly Agree (%)	**Agree (%)**	**Disagree (%)**	**Strongly Disagree (%)**
1. Watching the material before the class prepared me for the class activities.	89	11	0	0
2. I did not watch the materials before the class, although I had to.	0	18	36	46
3. Watching the material beforehand was necessary for me to participate in the lesson successfully.	82	18	0	0
4. The material uploaded on the Internet and in-class activities were interlinked.	93	7	0	0
5. Flipped Learning was a good learning experience for me.	75	25	0	0
6. The teacher wanted the student to participate in the in-class activities.	89	11	0	0
7. Flipped Learning encouraged me to learn.	68	32	0	0
8. There was more interaction in classroom activities.	68	32	0	0
9. We found the opportunity to work more in pairs in the in-class activities with Flipped Learning.	75	21	4	0
10. We had more chance to work in small groups in-class activities with Flipped Learning.	75	21	4	0
11. I wish other teachers would use the Flipped Learning model.	57	43	0	0
12. We used the in-class time more effectively with Flipped Learning.	50	50	0	0
13. I realized that, with Flipped Learning, I achieved self-discipline for stuyding.	43	46	11	0
14. Watching the videos wherever and whenever I wanted encouraged me to learn.	36	57	7	0
15. A classroom with Flipped Learning provides a flexible learning environment that fits my learning preferences.	50	50	0	0

Table 13. Results of the Post-Treatment Flipped Learning Opinion Scale (*Continued*)

	Strongly Agree (%)	**Agree (%)**	**Disagree (%)**	**Strongly Disagree (%)**
16. A classroom with Flipped Learning provides a flexible learning environment that fits my language level.	57	43	0	0
17. Practicing in class with exercises and speaking activities enabled me to consolidate the subject and make it memorable.	64	36	0	0
18. I find Flipped Learning useful.	79	21	0	0
19. I watched the videos more than once.	29	32	32	7
20. I re-watched the videos as much as I wanted.	39	50	4	7
21. With Flipped Learning, the words became more memorable.	79	21	0	0
22. With Flipped Learning, I could intervene and stop the lesson at any point, and it was much more efficient in terms of revising easily the points I missed or did not understand.	57	39	4	0
23. I regard Flipped Learning as an innovative point of view.	79	21	0	0
24. The teacher provided the necessary support for my language learning process and performance in a classroom with Flipped Learning.	64	36	0	0
25. I want the Flipped Learning to be implemented in English grammar.	64	36	0	0
26. I want the Flipped Learning to be implemented in English reading activities.	64	32	4	0
27. I want the Flipped Learning to be implemented in English speaking activities.	71	29	0	0
28. I want the Flipped Learning to be implemented in English writing activities.	71	29	0	0
29. I want the Flipped Learning to be implemented in English listening activities.	68	32	0	0

Table 13. Results of the Post-Treatment Flipped Learning Opinion Scale (*Continued*)

	Strongly Agree (%)	**Agree (%)**	**Disagree (%)**	**Strongly Disagree (%)**
30. With Flipped Learning, I stopped at the points I didn't understand and repeated the material as much as I could.	57	39	4	0
31. What enabled Flipped Learning to be efficient was that it was practised for the first time.	32	29	29	10
32. It might be a good idea to have a check that videos are being watched.	36	57	7	0
33. Flipped Learning is a system that encourages or even pushes the student to study.	18	61	11	10
34. Flipped Learning is more useful and memorable than the traditional vocabulary teaching in the classroom.	75	25	0	0
35. Following the subject on the Internet passively might make learning boring.	7	0	61	32
36. I had focusing problems while watching videos.	4	11	53	32
37. Flipped Learning is a way of rewinding and re-watching unclear parts of the subject.	46	50	4	0
38. The videos uploaded to the internet included enough fun items.	64	36	0	0
39. I had no time problems watching the videos outside the classroom and could take notes.	50	43	7	0
40. It is an advantage to control the course of the lesson while watching videos from the Internet.	61	39	0	0
41. The number of words in this implementation could be increased.	21	39	29	11

watching the videos and taking notes outside the classroom. In this way, as all the participants agreed, they could control the course of the lesson as they were watching the videos from the Internet. All the students also realized the necessity of watching the uploaded material beforehand to participate in the lesson successfully, which encouraged and pushed a large majority (79%) to study. Besides, nearly all the

students (93%) thought that following the subject on the Internet passively did not cause any boredom, just as most of them (85%) reported that they did not experience focusing problems while watching the videos. The reason for this, as everybody acknowledged, could be the fact that the videos uploaded to the internet included enough fun items. However, almost all of them (93%) urged the caution that it would be a good idea to check whether the videos were being watched.

Apart from the pre-class study, the relevance of in-class activities to the uploaded material may also explain why the FL process proved effective and enjoyable for a considerable majority of the participants. Everyone was of the opinion that the material uploaded on the Internet and in-class activities were interlinked, and that the in-class time was used more effectively through FL. Additionally, all the students acknowledged that the teacher wanted them to participate in the in-class activities, and hence more interaction was achieved in those activities. The explanation for this active participation, as almost all agreed (96%), may be that all the participants had ample opportunity to work in pairs and in small groups throughout the activities thanks to FL. Besides, everybody believed that practicing in class with exercises and speaking activities helped them to consolidate the subject by making it memorable. With respect to the role of the teacher in FL activities, all the participants agreed that he provided the necessary support both for their language learning process and in-class performance.

Another issue in the current scale directed at the participants is related to the application of FL to different language areas. Virtually all the students (96%) expected FL to be practiced in English reading activities. Similarly, every participant wanted FL to be implemented in other language areas, including speaking, writing, listening, and grammar. When it comes to vocabulary learning, all the students thought that, when compared to the traditional vocabulary teaching, FL was more useful in that the words became more memorable in their minds. Nevertheless, when asked whether the number of words in this implementation could be increased, 60% agreed on this, while the remaining 40% stated that the amount of vocabulary was adequate. Finally, all the students wished that other teachers would implement the FL model in their lessons.

The final matter questioned in this opinion scale is what kind of attitude the participants have developed towards FL in general, and the obtained findings signalled an overall positive attitude towards FL. To begin with, all the participants designated FL as a good learning experience, found FL useful and innovative, and thought that FL encouraged them to learn. Further, all of them agreed that a classroom with FL provided a flexible learning environment that fit both their learning preferences and their language level. While 89% thought that they achieved self-discipline for studying thanks to FL, the remaining 11% did not agree with them on this aspect. Finally, for most of the students (61%), one of the reasons why FL was quite efficient was that it was practised for the first time, though others (39%) believed that novelty factor was not key to the efficiency of FL.

3.3.1.2 Open-Ended Part

The last section of the Flipped Learning Opinion Scale contained 7 open-ended questions as to the most effective components of non-class materials, the amount of vocabulary per week, advantages and disadvantages of vocabulary learning with FL, suggestions to improve FL, preference of flipped or traditional vocabulary teaching, and other comments on FL. As in the Likert items, these questions also intended to offer some insight into what sort of attitude the participants developed towards FL and why all the FL process was enjoyable and effective.

3.3.1.2.1 The Most Effective Components of Non-Class Materials

The first open-ended question directed to the participants was "which part(s) was the most effective for you while studying the non-class materials (L1 definition, L2 definition, phrases, sentences, paragraphs, pictures, and videos)? What exactly was the reason for this?". The visual parts, namely pictures and videos ($f = 19$ and $f = 16$ respectively) were considered the most effective components in the flipped material (Table 14).

The reasons why the students favoured the pictures and videos seemed to be diverse. For instance, Participants 11, 14 and 21 believe that the visuals contributed to a

permanent learning, whereas pictures were quite effective for Participant 20 since they consolidated her learning. Similar to Participants 6 and 17, who think that the visuals worked well since they have a good visual memory, Participant 12 stated his reason as:

> The pictures and videos were effective because when I heard or read a word, I visualized them immediately.

Table 14. The Most Effective Components of Non-Class Materials

	Frequency	**Per cent**
1. Effective pictures	19	38
2. Effective videos	16	32
3. Effective L1 definition	5	10
4. Effective phrases	4	8
5. Effective paragraphs	2	4
6. Effective L2 definition	2	4
7. Effective sentences	2	4
TOTAL	50	100

On the other hand, some students found the L1 definitions quite effective ($f = 5$), followed by those who favoured the phrases ($f = 4$). Finally, the paragraphs ($f = 2$) along with the sentences ($f = 2$) and the L2 definitions ($f = 2$) were at the bottom of the list. Moreover, it seems as if some participants used the written context as the beginning and then visuals as a means of consolidation by stating:

> L1 definition, phrases, pictures, and videos were the most effective parts. After reading L1 definition and phrases, pictures and videos became more durable (Participant 1).

> Paragraphs and pictures were effective because trying to translate the paragraphs while reading helped me concentrate on it. Pictures also consolidated my learning (Participant 20).

3.3.1.2.2 The Amount of Vocabulary Per Week

The second question in this section was “how many words do you think you can learn per week with the FL technique and activities?”. As outlined in Table 15, 6 participants stated that they could learn up to 30 words in a week. Being among these students, Participant 1 stated:

> Considering that we have classes three days in a week, I can learn 30 words, 10 words per day.

5 students felt that the amount of vocabulary, that is 10 words per week, was sufficient. Even some frankly admitted that more than 10 words to be learned within a week would not be a goal within reach by saying:

> I think I learned 7 words per week. If this implementation hadn't been practised, I might not have made an extra effort to memorize the words (Participant 7).

Table 15. The Amount of Vocabulary Students Think They Can Learn Per Week

	Frequency	**Per cent**
1. 20-30	6	29
2. 0-10	5	24
3. 10-20	4	19
4. 30-40	2	9
5. 50-60	2	9
6. 60-70	1	5
7. 90-100	1	5
TOTAL	21	100

4 participants stated that they could learn up to 20 words in a week, followed by those who thought they could handle up to 40 and 60 words per week ($f = 2$ each). Finally, 1 participant who stated he could learn up to 70 and 1 participant believed he could learn even up to 100 words in a week. In conclusion, as far as the reponses of the participants are concerned, the average number of words that can be acquired through FL is around 32. Though 100 words per week might sound a phenomenal claim, some participants set certain conditions for their target numbers.

> Considering that I'll revise them every other day, I can learn 40 words (Participant 2).

> It depends on the number of hours, but I could learn 15 words per lesson (Participant 14).

> If it were not for one day but 3-4 days, we could learn 30-40 words (Participant 21).

3.3.1.2.3 Advantages of Vocabulary Learning with FL

Another open-ended question that the participants answered was "what do you think are the advantages of English vocabulary learning with FL technique and activities?". Table 16 provides an outline of the specific advantages of FL in the light of the participants' responses.

Table 16. The Advantages of Vocabulary Learning with FL

	Frequency	**Per cent**
1. Being more permanent	8	28
2. Powerful visuals	4	14
3. Effective pre-class study	4	14
4. Being enjoyable	4	14
5. Better sentence building	3	10
6. Efficient group interection	2	7
7. Quicker learning	2	7
8. Being able to control the flow	1	3
9. Efficient autonomous learning	1	3
TOTAL	29	100

To begin with, some of the responses highlighted that vocabulary learning became permanent thanks to FL ($f = 8$) and presented specific explanations for this claim. Whereas some students pointed to the consolidation of the words through different activities, others underlined how the permanence of FL encouraged the students to learn.

> We come to the class having learned the words, thus they become more permanent. And we consolidate them through the activities (Participant 6).

> The words become more permanent through FL and this method encourages us to learn more quickly (Participant 7).

> [Learning vocabulary with FL] is more permanent. The words are learnt with their English meaning and further consolidated (Participant 8).

As can be remembered from "the most effective components of non-class materials" heading, the participants cited the visual components as most effective as it made up 70% of all the responses. Therefore, it comes as no surprise that one of the

advantages of flipped vocabulary learning for the students is the power of pictures and videos (*f* =4).

> Watching short, nice and funny videos and pictures related to the words facilitate their permanence (Participant 4).

> The L1 meaning of words may be forgotten so easily, but visual activities help us visualize the words in our minds more easily (Participant 12).

In addition, effective pre-class study enabled the students to be better prepared for the class and facilitated their learning (*f* = 4). As can be recalled from the Opinion Scale, all the participants thought that watching the material before the class prepared them for the class activities. These ideas were also voiced by Participant 5:

> The biggest advantage is that FL helps us consolidate what we've learned when we come to the class, instead of learning everything from scratch.

It should also be remembered from the Opinion Scale that watching the uploaded material beforehand to participate in the lesson successfully encouraged a large majority (79%) to study. Hence, pre-class study not only seems to have facilitated learning but also enhanced the students' motivation by engaging them in the in-class activities.

> Having watched the video presentation, we were ready for what we would learn in the class, which encouraged more active participation in the lesson (Participant 1).

> Watching the videos before the class allowed us to be quite prepared for the lesson, which enhanced the interest in the lesson and made it more efficient (Participant 15).

Another issue articulated by the participants was the enjoyable nature of the implementation (*f* = 4). In the Opinion Scale, all the participants acknowledged that the online material included enough fun items. Open-ended questions also backed up this finding since some students highlighted "fun" as an advantage of FL:

> [FL] provides more permanent learning by supporting it with materials and combining learning with fun. Therefore, I benefited a lot from FL (Participant 11).

> It was nice to learn vocabulary with lots of fun and without spending too much time (Participant 14).

Some participants reported that they were able to build better sentences during the implementation process ($f = 3$). For example, Participant 20 pointed out that FL had great advantages for them in building sentences and comprehension. She also firmly believed that FL helped them both undestand and be understood.

In the opinion of the participants, yet another advantage of flipped vocabulary learning is efficient group interaction ($f = 2$). In the Opinion Scale, all the students agreed that the teacher wanted them to participate in the in-class activities, and hence more interaction was achieved in those activities. In a similar vein, almost all agreed that they had ample opportunity to work in pairs and in small groups throughout the activities. For instance, Participant 11 remarked that FL fostered group work; likewise, Participant 11 stated that they had been engaged in group work during FL activities.

According to some participants, FL ensured quicker vocabulary learning ($f = 2$). In this sense, one can safely arrive at the conclusion that FL not only facilitated the process of learning new lexial items but also accelerated this process.

> The words become more permanent through FL and this method encourages us to learn more quickly (Participant 7).

> It was nice to learn vocabulary … without spending too much time (Participant 14).

Being able to control the flow of the online materials was another cited advantage ($f = 1$). In the Opinion Scale, 93% reported that watching the videos at any place and at any time encouraged them to learn. In this way, they thought they could control the course of the lesson while watching the videos from the Internet.

> I think FL was quite an effective learning because I was able to stop and re-watch the video when I failed to understand some parts (Participant 13).

The last but not the least, the salience of autonomous learning was also highlighted (*f* = 1). In the Opinion Scale, 89% thought that they achieved self-discipline for studying thanks to FL, and this issue was disscussed by one of the participants, too:

> It was fairly advantageous for me to study on my own and at any time (Participant 9).

3.3.1.2.4 Challenges of Vocabulary Learning with FL

Another question in the open-ended section was "what do you think are the disadvantages of English vocabulary learning with FL technique and activities?". As can be clearly understood from Table 17, nine participants discussed the potential disadvantages of flipped vocabulary learning, and nearly every participant dwelled on different aspects. Indeed, in the Opinion Scale, 93% thought that following the subject on the Internet passively did not cause any boredom, and 85% reported that they did not experience focusing problems while watching the videos. This implies that some students nevertheless experienced focusing problems. For instance, in the Open-ended Questions, two participants cited one disadvantage of FL as losing concentration while viewing the videos by saying:

Table 17. The Challenges Posed by Flipped Vocabulary Learning

	Frequency	**Per cent**
1. Being distracted	2	25
2. Insufficient time for slides	1	13
3. Missing mentor	1	13
4. Being unable to watch the material	1	13
5. Non-thematic visuals	1	13
6. Being obliged to study	1	13
7. Rather long videos	1	13
8. Limited time	1	13
TOTAL	9	100

> If we pause the video presentation and begin to focus on something else or if we don't watch them at all, it may be bad. But of course this is in our power (Participant 4).

> I was distracted while watching the videos (Participant 9).

Apart from distraction, there were some individual comments on the challenges posed by flipped vocabulary learning. These challenges (f = 1 each) include insufficient time for slides, lack of a mentor when necessary, not watching the material before class, non-thematic visuals, being obliged to study, long videos, and limited time.

> It can disadvantageous for those with limited time (Participant 2).

> We had to study before the class (Participant 14).

> The visuals in the video were not related to each other (Participant 15).

> The only disadvantage is that I sometimes couldn't watch the videos before the class (Participant 16).

> There is not a mentor to ask for help at a moment when I am confused (Participant 17).

> I believe the disadvantages may be that the slides in which the definitions are written pass too quickly and that there is no explanation part (Participant 19).

3.3.1.2.5 Suggestions to Improve Flipped Vocabulary Learning

Yet another question directed to the participants was "what are your suggestions to further improve the experience of English vocabulary learning with FL technique and activities?". Table 18 illusrates clearly that the suggestions to improve flipped vocabulary learning can be categorized under four headings, namely improved visual design, further additions, demand for more FL, and optimal length.

3.3.1.2.5.1 Improved Visual Design

Embedded in improved visual design are better visuals (f = 4), more visuals (f = 4), better video arrangement (f = 1), and thematic design (f = 1). With respect to improving visuals, the participants suggested that the pictures and videos should be more clear, expressive, and intelligible. Besides, video parts should be slower and

subtitled, and movie lines would also add to the permanence of the words. When it comes to additional visual material, the students asked for further pictures and videos as well as seeing more animations in the online materials. Furthermore, one of the participants recommended a more personalized video arrangement and thematic design:

> It would be a lot more interesting to design the video presentation around a certain scenerio, subject or theme, as in the TV series. If you can arouse people's curiosity, the interest will increase. Besides, the videos can be arranged according to the educational level, gender, and status of people (Participant 15).

Table 18. Suggestions to Improve Flipped Vocabulary Learning

		Fre.	**%**
IMPROVED VISUAL DESIGN	1. Better visuals	4	14
	2. More visuals	4	14
	3. Better video arrangement	1	4
	4. Thematic design	1	4
FURTHER ADDITIONS	5. Further additions to the material	3	11
	6. Larger amount of vocabulary	3	11
	7. More pronunciation work	2	7
DEMAND FOR MORE FL	8. More frequent FL	4	14
	9. Further FL in other skills	3	11
OPTIMAL LENGTH	10. Shorter material	3	11
	TOTAL	28	100

3.3.1.2.5.2 Further Additions

The category of further additions embodied further additions to the material (f = 3), larger amount of vocabulary (f = 3), and more pronunciation work (f = 2). To begin with, Participant 10 wishes the words could been more emphasized, that is, they could have been repeated more frequently. Just as Participant 10 recommended that games be added to the online materials, Participant 7 suggested some games for these materials, yet she asked for the following additions, too:

> What I suggest is that small games, exercises, etc. such as matching or gap-filling can be added to the video-presentations (Participant 7).

In the Opinion Scale, 60% of the respondents agreed that the number of words in this implementation could be increased. Similarly, Participant 12 and 18 expressed this wish in their responses, though Participant 4 suggested an addition to this:

> The amount of vocabulary can be increased, and further funny videos about those words can be added.

The other issue voiced by the respondents is to add pronunciation parts to the online materials. In fact, pronunciation practice related to the target words was carried out in the classroom, yet they seem to want this practice to be available in the online material, too.

> I'm of the opininon that pronunciation and listening is important, and pronunciation parts could have been increased (Participant 7).

3.3.1.2.5.3 Demand For More FL

The category of demand for more FL consists of two codes, such as more frequent FL ($f = 4$) and further FL in other skills ($f = 3$). In other words, the participants not only wished to be exposed to the FL activities more often during the course but also wanted to be engaged in FL activities other than vocabulary learning. Some students demanded to increase the number of hours that they were involved in FL activities, but there was not a consensus on how often it should be:

> This can be practised regularly every week, and this practice can be more effective if the related activities are increased (Participant 8).

> Rather than one day, it could be implemented for 3-4 days, and this might accelarate learning (Participant 21).

In the Opinion Scale, almost all the respondents wanted FL to be implemented in other language areas, including reading, speaking, writing, listening, and grammar, which was voiced in the open-ended questions as well. While Participant 6 wanted FL to be implemented in other courses in general, Participant 14 thought FL would be a good implementation in speaking. Though Participant 2 seemed to share similar opinions with them, she asked for a more extensive implementation:

> Apart from vocabulary learning, the implementation of FL in areas, such as speaking, grammar and listening, can be really good. Learning English can become more enjoyable and easier by combining FL with other activities such as speaking, listening, and grammar.

3.3.1.2.5.4 Optimal Length

Some responses in this part directly pertained to the length of both online materials and the videos in the materials (f =3). While Participant 7 suggested that "the length of online materials" could have been made shorter, Participant 11 recommended that "the length of videos in the presentation" should be made shorter. On the other hand, one student pointed to the consequence of what would have happened if the videos had been shorter:

> If the videos had lasted a bit shorter, I could have focused on them better (Participant 9).

3.3.1.2.6 Flipped vs. Traditional Vocabulary Teaching

One open-ended question asked the participants "which learning and teaching techniques and activities do you prefer in general and why is that?" Whereas 15 participants opted for flipped vocabulary learning, 7 students preferred a combination of both and 1 student preferred traditional vocabulary teaching. It seems that some students preferred more than one choice and stated their own reasons for doing so.

A majority of the participants opted for flipped vocabulary learning, and their reasons for doing so can be grouped under five headings, such as FL's permanent nature, its enjoyable nature, providing effective learning, facilitating learning, and offering efficient pre-class work (Table 19). To start with, Some of the responses were concerned with the permanence of vocabulary learning with FL (f =6); that is, the participants felt in general that FL and the related activities enabled them to keep the words in their memory better. In the Opinion Scale, the respondents also agreed that FL was more useful in that the words became more memorable in their minds than traditional vocabulary teaching. Some participants associated the permanence of vocabulary through FL to the use of visual materials:

> The words became memorable with pictures and videos. I learned more words (Participant 1).

> [FL's] permanence is higher because it is supported by visuals (Participant 2).

Table 19. The Reasons Why The Students Prefer FL

	Frequency	**Per cent**
1. Permanent nature	6	27
2. Enjoyable nature	6	27
3. Effective learning	4	18
4. Facilitated learning	3	14
5. Efficient pre-class work	3	14
TOTAL	22	100

As stated both in the advantages part of this section and in the Opinion Scale, one of the strengths of flipped vocabulary learning is efficient group interaction. Participant 11 underlined this case in her response to why she preferred FL:

> FL turned out to be permanent since it was assisted by the materials and fostered more interaction through group work.

Another most coded idea in this part ($f = 6$) was the enjoyable nature of FL, namely how much the participants enjoyed themselves while learning vocabulary via FL. Indeed, this was also one of the phenomena highlighted by the respondents both in the Opinion Scale and in the advantages part of this section. It might be worth remembering that when they were asked to rate the FL process concerning how enjoyable it was, the average rating was 87%, showing that they found the FL process quite enjoyable. Similarly, the enjoyable characteristic of FL seemed to play a pivotal role in their preference of FL to traditional vocabulary teaching. Additionally, Participant 14 and 15 said they preferred FL not merely because it was fun but because it was instructive as well. Moreover, Participant 14 and 15 stated that vocabulary learning became easier with the fun nature of FL.

Thirdly, the respondents remarked that they opted for FL because it brought about effective learning ($f = 4$). In the Opinion Scale, the participants rated the whole FL process as 84% in terms of its effectiveness, suggesting that they found the FL process highly effective overall. In fact, the question on the most effective

components of online materials and the question on the advantages of FL might reply why it was effective from different angles. However, one participant's response was remarkable in this sense:

> We haven't been able to improve a lot through the traditional method so far. But we are able to learn new vocabulary through FL by crossing the borders in our minds (Participant 20).

Another issue arising from the students' responses was how FL facilitated vocabulary learning (f = 3). Some respondents pointed to the fact that vocabulary learning turned out to be easier through FL, and thus this became one of the reasons why the students preferred FL to traditional vocabulary teaching.

> It is easier to learn with fun (Participant 2).

> In this way, vocabulary learning becomes easier and enjoyable (Participant 4).

> It facilitated my recall (Participant 19).

Some of the responses as to why the students opted for flipped vocabulary learning is about efficient pre-class work (f =3). According to the findings in the Opinion Scale, viewing the material beforehand prepared them for the in-class activities and participating in the lesson successfully encouraged a large majority to study. As noted in the advantages part of the open-ended questions section, effective pre-class work allowed the participants to be better prepared for the class and facilitated their learning. As a result, this became one of the reasons why they preferred FL in vocabulary learning, which was also voiced by some students:

> We come to the class by getting prepared for it, and the lesson becomes more efficient (Participant 5).

> It is more efffective to consolidate the words through the activities by having prepared for them (Participant 6).

By contrast, 7 students preferred a combination of both traditional and the FL technique and activities while learning English vocabulary. As seen in Table 20, the

cited reasons for this preference were coded as benefiting from both techniques (*f* = 2), separate areas (*f* = 2), disciplined and fun way of learning (*f* = 2), and optimal study environment (*f* = 1). Some students were of the opinion that being exposed to both FL and tradtional vocabulary learning activities was of great value to them since both techniques were rewarding on their own merits. For example, Participant 3 stated that both methods proved beneficial for her. Another student voiced a similar opinion:

> They both have their own strengths in their own right, therefore we should be benefiting from both techniques (Participant 17).

Table 20. The Reasons for Prefering a Combination of Traditional and FL Technique

	Frequency	**Per cent**
1. Benefiting from both	2	29
2. Separate areas	2	29
3. Disciplined and fun way of learning	2	29
4. Optimal study environment	1	13
TOTAL	7	100

Some other students were in favour of a combination of flipped and traditional method because, from their own standpoint, certain subject matters are more suited to FL, whereas others should be instructed traditionally. Nevertheless, the fact that vocabulary ought to be acquired though FL seems to be the common point:

> While some subjects are understood traditionally, others especially vocabulary should be learned through FL (Participant 16).

> While FL is effective in vocabuary learning, traditional method is more appropriate for lecturing a subject (Participant 12).

For some participants, traditional method seems to stand for a more disciplined way of learning, while FL symbolizes a kind of learning in which many more fun elements are inherent. Since they thought learning process should be incorporating not only discipline but also high spirits, they wanted to be subjected to a learning system combining flipped and traditional method.

> It might be more efficient and fun to implement both techniques as a whole (Participant 7).

> I would learn English vocabulary both in a disciplined way and by enjoying myself (Participant 4).

The last but not the least, one participant preferred a combination of flipped and traditional learning since this combination would bring about an optimal study environment for him.

> By studying the words both on my own and in the classroom environment, I can consolidate the words I've learned (Participant 9).

On the other hand, only Participant 4 preferred traditional English vocabulary learning activities. Her primary reasons for such a preference were that she felt more disciplined and felt obliged to learn in that way.

3.3.1.2.7 Other Comments

The last item of the open-ended part concerned "other comments, suggestions and/or questions about the experience of English vocabulary learning with FL technique and activities". Table 21 presents an overview of the codes emerging from the students' responses, which are effective and beneficial FL (f = 7), enjoyable FL (f = 1), and faster and easier learning (f = 1). As can be inferred from the coding names, the participants seemed to develop an overall positive attitude towards FL at the end of the implementation. Indeed, the Opinion Scale revealed that all the participants designated FL as a good learning experience, found FL useful and innovative, and thought that FL encouarged them to learn. These findings had also signalled a favourable attitude of the participants towards flipped vocabulary learning.

Table 21. Other Comments about Flipped Vocabulary Learning

	Frequency	**Per cent**
1. Effective and beneficial FL	7	78
2. Enjoyable FL	1	11
3. Faster and easier learning	1	11
TOTAL	9	100

In this part, the participants underscored how effective and beneficial the whole FL process was. Participant 15 also specified this process as a very nice experience for him. Participant 5 remarked that it was the first time she had tried out such a technique, and she had observed that it worked well for her. One participant shared similar thoughts too, though she seemed a little more enthusiastic:

> Congratulations. This is really a well-developed system. Though I was absent in some classes, this method contributed a lot to us (Participant 16).

Apart from the efficacy and benefit of FL, there were also some other individual comments. For instance, Participant 13 stressed the fun nature of the FL technique, and Participant 19 highlighted the facilitating and accelarating characteristic of FL:

> I could remember the words more easily, and it helped me retain the words in my memory more quickly.

3.3.2 Weekly Reflection Reports

Only filled in by the experimental group (n = 25) and lasting about 10 minutes, the weekly reflection reports were administered at the end of each FL class and included 10 items with 4-point Likert scale, 4 open-ended questions, and rating a continuum. Aiming to observe the shifts in the participants' opinions and feelings as well as their attitudes towards FL activities, these reflection reports addressed Research Question 2, namely "What are the students' opinions about the flipped approach in the learning of new vocabulary items?". With respect to the reliability of the 10-item Likert scale, the Cronbach's Alpha value is 0,72 (72%).

3.3.2.1 Questionairre Part

The decriptives in Table 22 were presented in order according to the items with the highest total percentage. As far as the efficacy of content of the uploaded material is concerned, the highest rates (92%) belong to the visual context of the FL material. In other words, the participants tended to find the videos and pictures considerably helpful and expressive to visualize the words and remember them later.

Table 22. Descriptives for Weekly Reflection Results

	Week 1	Week 2	Week 3	Week 4	TOTAL
1. The pictures were expressive, so they helped to visualize the words.	3,83 (96%)	3,70 (93%)	3,76 (94%)	3,47 (87%)	3,69 (92%)
2. The videos were helpful for me to remember the vocabulary items.	3,72 (93%)	3,80 (95%)	3,60 (90%)	3,53 (88%)	3,66 (92%)
3. The flipped vocabulary learning experience of this week was fun.	3,89 (97%)	3,60 (90%)	3,54 (89%)	3,41 (85%)	3,61 (90%)
4. The example sentences were meaningful.	3,56 (89%)	3,45 (86%)	3,28 (82%)	3,53 (88%)	3,45 (86%)
5. The paragraph/dialogue was clear, so I could get the meaning.	3,50 (88%)	3,40 (85%)	3,52 (88%)	3,29 (82%)	3,42 (86%)
6. The phrases were easy to understand.	3,33 (83%)	3,55 (89%)	3,32 (83%)	3,47 (87%)	3,41 (85%)
7. The definitions were easy to understand.	3,33 (83%)	3,35 (84%)	3,48 (87%)	3,41 (85%)	3,39 (85%)
8. The video presentation was at appropriate length.	3,33 (83%)	3,45 (86%)	3,44 (86%)	3,35 (84%)	3,39 (85%)
9. The level of the vocabulary items was difficult.	1,67 (42%)	1,95 (49%)	2,04 (51%)	1,65 (41%)	1,82 (46%)
10. I had problems with the platform where the material was uploaded.	1,28 (32%)	1,70 (43%)	1,64 (41%)	1,41 (35%)	1,50 (38%)

	Week 1	Week 2	Week 3	Week 4	TOTAL
OVERALL RATING	8,39 (84%)	8,55 (86%)	8,16 (82%)	8,71 (87%)	8,45 (85%)

On the other hand, the visual context is followed by the textual context, such as sentences, paragraphs/dialogues, phrases, and definitions by 85-86%. The participants seemed to consider them highly meaningful, clear, and easy in comprehension and inference of the targeted vocabulary items.

Another issue highly favoured by the students is the fun aspect of the materials. 90% of them in total agreed that the flipped vocabulary learning experience was fun. In addition, when they were asked about the length of the video presentation, 85% regarded it as appropriate.

When it comes to the challenges with which the students were confronted during the FL period, 46% designated the level of the vocabulary items as difficult. Moreover, 38% also seemed to have encountered some problems with the platform where the material was uploaded.

The participants were also asked to rate the overall efficacy of the video presentation of that particular week on a continuum from 1 to 10. As it was illustrated at the end of Table 23, the overall rating scores for Week 1, Week 2, Week 3, and Week 4 turned out to be 84%, 86%, 82%, and 87% respectively. The mean efficacy rate of all four weeks amounts to 85%, which is almost identical to the rate reported in the flipped learning opinion scale (84%). Given the percentages of overall weekly ratings, the participants tended to have more positive attitudes towards FL week by week.

3.3.2.2 Open-Ended Part

The second part of the reflection reports intended to elaborate in depth on the participants' opinions and attitudes towards FL implementation of that week through four open-ended questions. These questions concerned the strengths and weaknesses of that week's FL experience as well as suggestions to improve the flipped vocabulary learning experience. Out of 312 coded sentences, 232 were related to positive experiences, while 44 concerned challenges, and 29 were connected with suggestions (Figure 8).

3.3.2.2.1 Positive Experiences

Out of 312 codes in the weekly reflections, 239 (76,6%) concerned the positive experiences that the participants had during four weeks. The headings under the

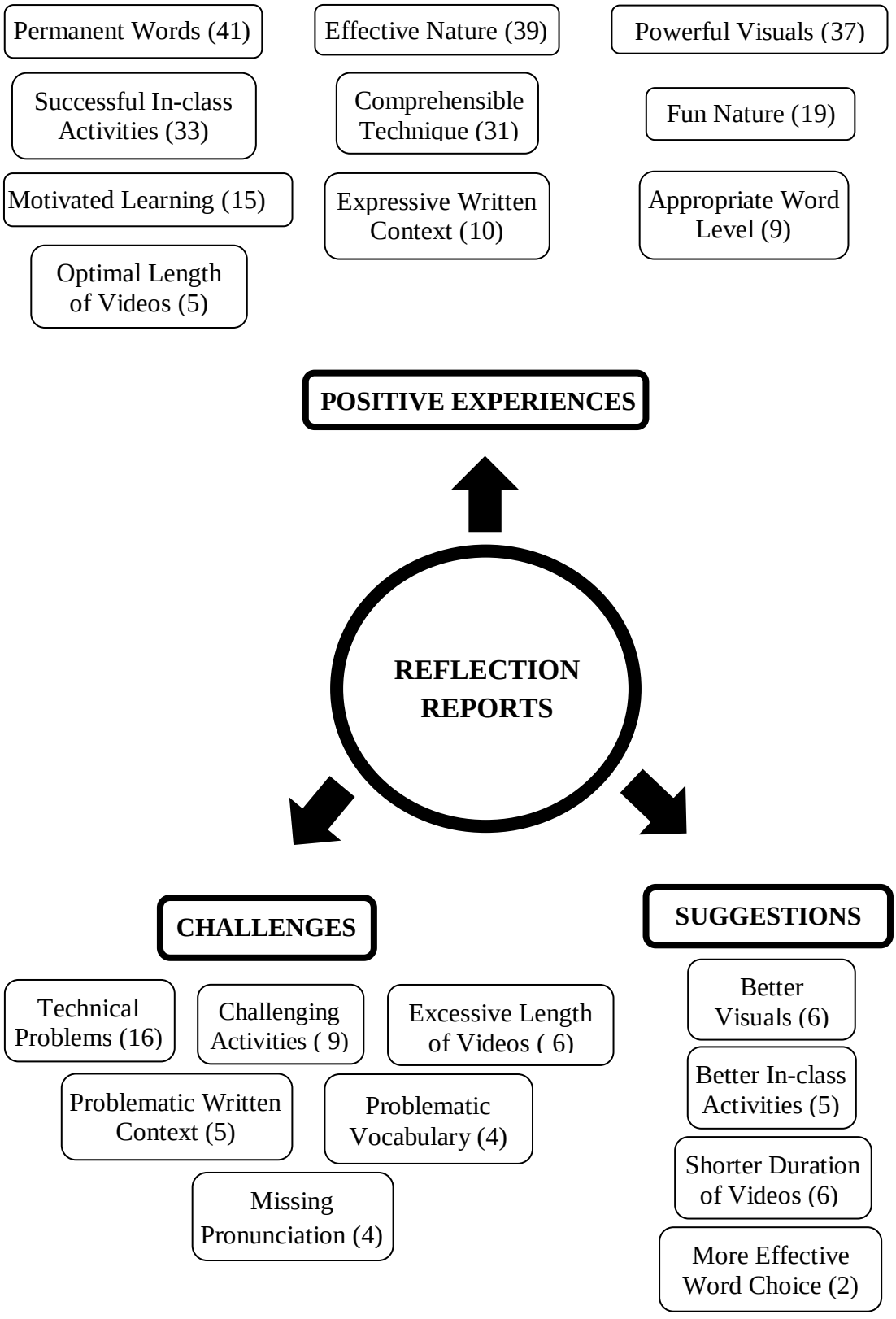


Figure 8. Positive Attitudes and Challenges along with Suggestions Emerging in the Weekly Reflection Reports

positive experiences theme can be sequentially listed as permanent words, effective nature, powerful visuals, successful in-class activities, comprehensible technique, fun nature, motivated learning, expressive written context, appropriate word level, and optimal length of videos.

3.3.2.2.1.1 Permanent Words

The permanence of the words turned out to be the most highlighted element among the positive experiences (*f* =41). As mentioned in the Opinion Scale, all the students agreed that the words became more memorable with FL, and that FL was more memorable than the traditional vocabulary teaching in the classroom. Presenting specific explanations for their claim, some students also remarked in the open-ended part of the Opinion Scale that vocabulary learning became permanent thanks to FL.

In their responses throughout the weekly reflections, words and phrases such as "memorable", "permanent", "retention", "retaining words in memory / mind better", "recalling / remembering the words", and "memorizing the words" were recurrent. For example, while Participant 23 deemed FL as a technique which ensures the permanence of vocabulary in their memory for a long time, Participant 16 thought she had already memorized all ten words easily and asked for more vocabulary. Indeed, other students shared similar ideas, too:

> I think this was a successful visual instruction. Thanks to this material, I managed to keep the words in my memory by memorizing and learning their meanings (Participant 10).

To Participant 18, providing several different ways to present vocabulary paved the way for easier and longer retention. Likewise, Participant 3 pointed out that images, videos, and role-play activities were key to learning and remembering words with less strain. Some other students set emphasis on the diverse ways to learn vocabulary by saying:

> Because there were a lot of activities in the class and because we have already learned the words, we have achieved more permanent learning (Participant 25).

3.3.2.2.1.2 Effective Nature

FL's effective nature became the second most emphasized issue in the weekly reflections (*f* = 39). As can be remembered from the Opinion Scale, all the participants agreed that they found FL useful by rating the whole FL process as 84% in terms of its effectiveness, indicating that they found the FL process highly effective as a whole. In its open-ended responses, 70% of the effectiveness of the online material came from visual parts, whereas the remaining 30% belonged to the written context. When the participants were asked why they preferred FL to traditional vocabulary teaching, they stated that it paved the way for effective learning. Finally, the participants underscored how effective and beneficial the whole FL process was in the "other comments" part.

In the weekly reflections, the participants described FL with adjectives, such as "effective", "efficient", "successful", "beneficial", "suitable", "supportive", "improving", "informative", "explanatory", "good", "nice" and "perfect". In addition to defining FL with these adjectives, they also listed several reasons for why FL boasts an effective nature. While Participant 17 referred to effective in-class activities, Participant 4 said that the effectiveness lied in the use of sentences and images in the video presentations. Participant 15 and 27 stated that they appreciated this effective technique because it substantially increased their vocabulary knowledge. Some other reasons uttered in the responses are as follows:

> I think FL is good both for studying and learning English (Participant 5).
> Actually, this technique proved quite effective for me because the words were presented to us in versatile ways (Participant 21).

Participant 3 and 13 found FL effective since it managed to teach them a considerable number of words in a short time, while others were appreciative of this technique as it helped faster recall and learning:

> I liked the material very much, and this material accelerated my learning overall (Participant 5).

The last reason why the students deemed FL as an effective technique was that the online materials and the whole process of flipped vocabulary learning proved informative, instructive, and explanatory:

> I think the parts in which we used our own sentences were particularly instructive (Participant 20).

3.3.2.2.1.3 Powerful Visuals

Powerful visuals was the third most emphasized component of the open-ended questions in the weekly reflections ($f = 37$). In fact, the results of the Likert scale in the weekly reflections (Item 1 and 2) self-evidently showed that the students regarded the videos and pictures quite helpful and expressive to visualize vocabulary and remember it. Similar findings were reported in the first open-ended question of the Opininon Scale, in which pictures and videos were considered the strongest components by the participants due to enabling permanent learning, consolidating learning, or appealing to visual memory, to name a few.

In the weekly reflections, the impact of the visuals on the participants' vocabulary acquisition was underlined, and though similar reasons in the previous paragraph were articulated for the efficacy of the visuals, others also came to the fore in this section. To start with, the most recurrent subject voiced by the participants was the facilitative nature of visuals. Participant 8 and 14 said they could visualize the words in their memory through pictures and videos, and particularly short videos facilitated her comprehension for Participant 23. And there were some other students providing specific details concerning this issue:

> The visuals were memorable. For example, when I try to remember the meaning of "look after", the scene of the video-clip in which the young lady looks after the old man comes to my mind immediately. And this helps me keep the word in my memory more easily (Participant 1).

> The strongest part of this presentation is that the images and videos were quite well-prepared to remind the words. In fact, some videos really attracted my attention and were effective in my comprehension and memorization (Participant 12).

Participant 5, 6 and 22 deemed visuals as expressive and explanatory, and Participant 4 elaborated on this issue while also referring to the their facilitating effect:

> I really liked the material of this week. The video we watched was instructive and explanatory. Because the words were introduced through short images and videos, it was easier for me to understand them.

For Participant 7 and 11, the images and videos in the online materials were good and effective in consolidating the target words. Participant 6 was appreciative of the addition of dubbing in one of the videos, while Participant 26 liked the use of the visuals and demanded a larger number of visuals. To conclude, Participant 19 stated that remembering the scenes in the videos during writing tasks helped her use the words more properly.

3.3.2.2.1.4 Successful In-class Activities

Being among the top five coded elements of all the reponses, successful in-class activities were one of the issues put under the spotlight by the participants ($f = 33$). For one thing, many participants viewed in-class activities as complementary, harmonious and associated with the online materials. To some students, the activities performed in the classroom were effective, as noted in the Opinion Scale where all the respondents agreed that they used the in-class time more effectively with FL.

The Opinion Scale also revealed that there was more interaction during the FL activities in the class in which the students had more opportunity to work in pairs and small groups. This interaction during the activities was admired by the participants, who felt that the in-class activities were quite fun. Additionally, one of the parts where there was strong interaction between the students was the role-play activities, which usually prove to be inherently enjoyable. While Participant 3, 11, 20 found the role-play activities quite effective and nice, Participant 15 considered the role-play activity and its fictionalizing effective, notably in building sentences. For some others, the role-play activities were not just nice and fun:

> Thanks to the images, videos, and role-play activity, the words turned out to be easier to remember (Participant 2).

> I liked particularly the role-play activitity because this part was really not only fun but also quite instructive (Participant 12).

Another reason why the in-class activites were found successful by the students is that they were able to consolidate what had been learnt in the online materials, thereby retaining the words in their memory better. One of the participants articulated this in her response:

> If we hadn't watched the video, we have had great difficulty with the activities done in the class. However, after watching the video first and then learning the words, engaging in the activities becomes very beneficial, and it helps us consolidate the words (Participant 4).

The participants also agreed in the Opinion Scale that practicing in class with exercises and speaking activities enabled them to consolidate the subject and make it memorable. Engaging in various in-class activities ensured permanence of the words by helping them retain the words in their memory better. Participant 24 admited and said:

> Though I couldn't watch the video presentation until the end, I was able to remember the words through in-class activities.

The final point that the participants made concerning successful in-class activities was that the teacher (also the researcher) cared and scaffolded the students during those activities. As a matter of fact, they had agreed in the Opinion Scale that the teacher wanted them to participate during the activities and provided the necessary support for their language learning process and performance.

3.3.2.2.1.5 Comprehensible Technique

Some reports analyzed in the participants' responses can be grouped under the roof of comprehensibility, which is actually among the top five component of all the codes (*f* =31). The participants described FL, its materials and the related activities as clear, easy to follow and grasp, and expressive in general. A considerable number of participants stated that they had enjoyed following the slides and had not encountered any problems following the online material as they had the opportunity

to watch it over and over. To Participant 13, the slides in the online material were presented at quite a clear and comprehensible level, and Participant 7 pointed out that the online material presented good and comprehensible information. On the whole, the participants clearly understood the video-presentation and stated that it contributed to their comprehension.

On the other hand, some students cited some specific reasons for the comprehensibility issue. Participant 1, 3 and 18 thought that the words selected for the video presentation were at a comprehensible level, while Participant 2 and 21 found the definitions particularly explanatory and comprehensible. Furthermore, Participant 7 underlined comprehensibility of the sentences, and Participant 19 and 27 reported that good pictures and videos, notably the short ones, facilitated their comprehension.

3.3.2.2.1.6 Fun Nature

Fun nature turned out to be an issue frequently articulated in the open-ended questions part of the weekly reflections ($f = 19$). In the Opinion Scale, almost all the participants agreed that following the subject on the Internet passively did not cause any boredom, and that the videos uploaded to the internet included enough fun items. Its open-ended questions also backed up this finding by highlighting "fun" as an advantage of FL. Another notable finding to remember is that the participants found the FL process quite enjoyable with 87%, which was one of the reasons why they preferred FL to traditional vocabulary teaching. Finally, when it comes to the Likert scale part of the weekly reflections, the fun aspect of the materials was highly favoured by the students with 90%. In a nutshell, the participants expressed the fun nature of this implementation both in the Likert- scale items and open-ended question parts of the opinion scale and weekly reflections.

In this part of the weekly reflections, fun element was also emphasized by the participants who designated the whole FL process as an enjoyable or, at least, not a boring experience. Although fun seemed to be an inherent ingredient of FL for the students, its effect sometimes fluctutated. For instance, Participant 17 pointed out

that Week 3's video presentation was less enjoyable than the previous week, though he admitted that he liked the material in general. In addition, some participants associated the fun element both with the online material and with the in-class activities. Participant 10 remarked that because the video presentation was interesting, they learned the target words with pleasure. Participant 25 also elaborated on the fun issue:

> I think the video presentation and activities that we performed in the classroom were enjoyable. I found especially the role play parts quite fun. Writing an advertisement as a group or sentence completion parts were also fun.

3.3.2.2.1.7 Motivated Learning

Motivated learning is among the most frequently mentioned subjects by the students (f =15). The idea of motivated learning also arose in the Opininon Scale indeed. To illusrate, the students reported that FL encouraged them to learn, helped them achieve self-discipline for stuyding, encouraged or even pushed them to study. They also recognized the role of the teacher in FL who provided the necessary support for their learning process and in-class performance. Besides, they reported that watching the videos at any time and place encouraged them to learn, and that this flexibility fit their learning preferences and language level.

When it comes to the open-ended questions of the weekly reflections, one can clearly observe the traces of motivation to learn in the participant's responses. They believed FL contributed to their comprehension as well as facilitating and accelerating their learning process. Some reported that they recalled all the words, memorized all ten words in a short time, and learned many unknown words during this process. Participant 7 stated that she had memorized the words more easily and with great pleasure. As can be remembered from the Opinion Scale, a majority of the respondents thought the number of words in this implementation could be increased. In fact, some students, such as Participant 12, were eager to master a larger amount of vocabulary:

> We have learnt 10 words per week in this implementation. I believe that if there were more words, say 20-25, I could remember them, too.

For Participant 13, if one is to learn new vocabulary, FL technique should be adopted. Participant 21 viewed FL from different lens by stating that building his own sentences made him more self-confident. To Participant 25, as the video presentation was interesting and aroused their interest to learn, they learned the words with great pleasure. More importantly, FL implementation led some students to change their attitude towards learning English by motivating them to search and learn:

> Though not enjoying the course in the previous semester, I feel having learnt English better through this method now. Moreover, I had difficulty following some parts due to my lack of vocabulary, but that helped me search and understand those parts (Participant 19).

3.3.2.2.1.8 Expressive Written Context

Expressive written context was yet another issue reported by the students in the weekly reflections (f =10). When the students were asked which parts were the most effective while studying the online materials in the Opinion Scale, 30% of the responses overall concerned the written context, including L1 definitions (10%), phrases (8%), paragraphs (4%), sentences (4%), and L2 definitions (4%). On the other hand, the participants reported much higher effectivess rates in the weekly reflections in which the written context was found successful at a rate around 86%. In conclusion, although apparently overshadowed by the impact of the visuals which seemed undeniably strong in vocabulary learning, the written context was still much appreciated by the participants, as stated in open-ended part of the weekly reflections.

Participant 6, 15, 22 and 26 argued that the definitions in the online materials were comprehensible, explanatory, and easy to understand, and only Participant 2 pointed out that the paragraphs were easy to grasp. In fact, most of the codes under this heading often centered around syntactic structures. Some participants, including Participant 5, 8 and 18, seemed to admire the use of sentences in the online materials

since they thought they were catchy, comprehensible, and simple, thus enabling them to remember the words well. Other students also touched upon this issue:

> More suitable sentences for the words supported by videos enabled us to understand them better (Participant 23).

> Though the videos of this week were not so memorable, the sample sentences became more permanent for me (Participant 14).

3.3.2.2.1.9 Appropriate Word Level

Another code related to the positive experiences that the participants had during the implementation process was appropriate word level (*f* =9). This issue was not uttered by the participants in the responses of the open-ended section in the Opinion Scale. However, Item 9 in the Likert Scale of the weekly reflections stated that the level of the vocabulary items was difficult, and the majority of the students disagreed with this statement (1,82 out of 4), suggesting that the word level did not put a strain on them in general.

Participant 1, 3 and 18 were of the opinion that the words selected for the video presentation were quite comprehensible and expressive, whereas Participant 8 considered the words easy and Participant 13 thought the words were in medium difficulty. In addition, Participant 16 believed there were nice words in the online materials, and Participant 21 acknowledged that the difficulty level of the words was good for him. The other comments in this section were as follows:

> I don't think that the words were difficult. They were presented at a level suitable for us (Participant 11).

> I liked the words in general. The words selected are the ones that I may be able to use in daily life (Participant 20).

3.3.2.2.1.10 Optimal Length of Videos

Optimal length of videos was the other factor positively affecting the students throughout the four-week treatment period (*f* =5). Such an issue was articulated by

the participants in the open-ended questions of the Opininon Scale. One participant remarked that he found some videos in the online material unnecessarily long, while three participants suggested that the length videos (online materials themselves and the videos inside them) should be kept short. By contrast, Item 8 in the Likert Scale of the weekly reflections stated that the video presentation was at appropriate length, which was agreed by a considerable majority (85%). To conclude, the participants seemed to have mixed opinions on whether the length of the videos in this implementation was appropriate or not.

Participant 17 argued that the videos were at appropriate length, just as Participant 7 said she liked their length. Besides, Participant 9 enjoyed following the slides, and Participant 5 was pleased to find that the presentation were made shorter. Participant 4 also commented on this issue:

> The video was kept short, which is a very important point. I enjoyed myself while watching it, but I might have got bored if it had lasted longer.

3.3.2.2.2 Challenges

Out of 312 codes in the weekly reflections, 44 (14,1%) were related to the challenges that the learners suffered during the four-week implementation. The six coding headings here can be sequentially listed as technical problems, challenging activities, excessive length of videos, problematic written context, problematic vocabulary, and missing pronunciation.

3.3.2.2.2.1 Technical Problems

The most coded issue in the responses of the weekly reflections related to challenges turned out to be the matter of technical problems (f=16). Indeed, some technical mishaps, such as insufficient time allocated especially for the definition parts in the slides, were reported by the participants in the open-ended part of the Opinion Scale. In contrast, when asked, in the Likert Scale of the weekly reflections, whether they had problems with the platform where the material was uploaded, a majority of the respondents disagreed with the statement.

Some technical shortcomings were voiced in the open-ended questions section of the weekly reflections, too. Some participants reported that some parts (not stated specifically) put a strain on their comprehension, though on a small scale, but they pointed out that they grasped better later on as they reviewed over and over. Moreover, a few participants complained that some slides were overlapping each other during the transition from one slide to another. Participant 6 and 19 reported that some parts of the material, particularly the slides where the written context was presented, was blurred, thus they could not view those slides clearly. Participant 15 and 26 said they could not stream the video presentation on their smart phones, whereas Participant 20 found it troublesome to follow the videos in the presentation without subtitles. Moreover, Participant 12 and 24 tended to forget what the word in the images and videos was since the words weren't featured in them. To Participant 27, the online materials lacked sound, except for the slides with videos, which caused them to be boring. Missing sound was mentioned by Participant 10, too:

> One of the weak points is that if the words were repeated out loud during the presentation, not only its pronunciation would be learned, but it would also become easier to keep it in mind.

Similar to the response reported in the Opininon Scale, some participants felt that the slides in which the written context was presented lasted too short, so they often had to pause the video.

> The slides in which the sentences were written should have been kept longer in terms of second (Participant 26).

> I couldn't catch up with the speed of the slides where sentences and paragraphs were shown, so the slides in which they were provided should have been paused a bit more (Participant 24).

3.3.2.2.2.2 Challenging Activities

Another disadvantage arising from the students' responses was the challenges that they encountered while engaging in the in-class activities (f=9). However, as can be remembered from the findings in the Opinion Scale, the respondents found the in-class activities relevant and interlinked with the online material, agreeing that in-

class practice and speaking activities helped them consolidate the words by making them memorable. Likewise, in its open-ended section, many participants viewed these activities as effective, fun, complementary, beneficial, and associated with the online materials, which all helped to consolidate the words and made them permanent.

These favourable opinions on the in-class activities, nevertheless, do not necessarily mean that no challenge was encountered during these activities for some participants. For instance, some grammatical patterns weighed on some students while dealing with the FL tasks in the classroom. Participant 16 stated that she had difficulty in some exercises, especially in those which questioned prepositions because she barely knew them. Another participant was confused over which tenses to use in which sentence:

> I had difficulty deciding which tense to use while making sentences and also building a sentence with the correct tense. I need to improve myself in this area (Participant 19).

In the open-ended part of the Opinion Scale, some participants found the role-play activities were quite instructive, nice, fun, and effective in building sentences, making the words easier to remember. Even so, more time than they expected seemed to be invested in role-play tasks and it looks as if they needed more time to get prepared for them:

> If the role-play activity had been informed at the end of the video presentation, we could have had more time to plan it (Participant 25).

Apart from the aforementioned issues, there were other individual comments concerning the demanding aspect of the in-class activities. For example, Participant 6 pointed out that she had difficulty with translation during activities but acknowledged that the reason was about herself. Participant 23 stated that a few words in the activities were not meaningfully related to the target words, while Participant 26 felt that the in-class activities of one week were more challenging than the previous ones. Additionally, Participant 8 said either not adequate or no time was

left to carry out some activities, and Participant 10 thought he needed more activities to consolidate the words.

3.3.2.2.2.3 Excessive Length of Videos

Another weakness articulated by the participants in the weekly reflections was the excessive length of the video presentations ($f = 6$); in other words, some participants found the online materials longer than they needed to be. In the open-ended part of the Opininon Scale, one student designated one of the drawbacks in the implementation as the lengthy videos. In fact, three students suggested that the videos in the presentation should be made shorter. Nevertheless, the participants reported in the Likert Scale of the weekly reflections that the video presentation was at appropriate length. In conclusion, while most students highly appreciated the duration of the videos, some others registered their discontent with it, suggesting that the participating students had mixed opinions on this matter.

In the open-ended section of the weekly reflections, six students found the length of either the video presentations or the videos in the presentations rather long. For example, while dwelling on how lengthy the online materials were, Participant 24 also mentioned a possible consequence of such a case:

> I liked the videos. However, their length was somewhat much, and that caused us to be distracted.

3.3.2.2.2.4 Problematic Written Context

Consisting of definitions, phrases, sentences, dialogues, and paragraphs, the written context in the online materials seems to have resulted in specific problems for some participants ($f = 5$). In the Opinion Scale, only 30% of the responses concerned the written context in terms of effectiveness. Paradoxically, though seemingly overshadowed by the visuals in vocabulary learning, the written context was admired by the participants in the open-ended part of the weekly reflections, where they found it successful at a rate of 86%.

On the other hand, some students reported their dissatisfaction with the verbal components presented in the materials. Whereas Participant 4 liked the materials in general but had difficulty due to the unknown words in the paragraphs, Participant 3 and 11 said understanding and remembering some sentences were challenging for them. In addition, the verbal context in the video presentation looked boring for Participant 25, while Participant 20 remarked that she needed more dialogues to learn the words better.

3.3.2.2.2.5 Problematic Vocabulary

Some of the participants cited one of the challenges in the implementation as problematic characteristics of vocabulary (*f*=4). As a matter of fact, the students did not voice this matter in the responses of the open-ended section in the Opinion Scale. Besides, the majority of the participants disagreed with the item in the Likert Scale of the weekly reflections which stated that the level of the vocabulary items was difficult. Even though the majority reported that the word level did not put a strain on them overall, some participants, including Participant 9 and 15, regarded the target words as difficult. Similarly, Participant 6 remarked that recalling some words even after watching the online materials proved demanding for her. Furthermore, Participant 20 also touched upon the non-permanence of some lexical items accompanied by a possible solution:

> Sometimes I forgot the meanings of the words of that week, therefore I tried harder to keep them in my memory in several different ways.

3.3.2.2.2.6 Missing Pronunciation

The lack of pronunciation practice in almost all the online materials was considered as one of the weak aspects of this FL implementation (*f*=4). This issue came to the fore in the suggestions part of the Opinion Scale, in which two students recommended adding pronunciation parts to the online materials. As stated earlier, pronunciation work concerning the target words was performed in the classroom, but they said they demanded this practice to be available in the online material, too.

Some students uttered in their comments in the weekly reflections that the lack of pronunciation works was a disadvantage. Participant 15 admitted that he occasionally experienced problems with the pronunciation of words, just as Participant 22 found the pronunciation of some words difficult.

3.3.2.2.3 Suggestions

Out of 312 codes in the weekly reflections, 29 (9,3%) were concerned with the suggestions that the students presented to take the current implementation one step further at the end of four weeks. The four coding headings under the suggestions theme can be sequentially listed as better visuals, better in-class activities, shorter duration of videos, and more effective word choice.

3.3.2.2.3.1 Better Visuals

The most recommeded aspect by the participants throughout the weekly reflections turned out to be better visuals, which concerned both the video presentations and the visuals inside them ($f = 16$). As can be remembered from open-ended part of the Opinion Scale, the visuals were considered the most effective component in the flipped material, which was also deemed as one of the advantages of flipped vocabulary learning by the participants. Besides, they suggested improved visual design, including better visuals, more visuals, better video arrangement, and thematic design. When it comes to the efficacy of content of the uploaded material, the highest rates (92%) belonged to the visual context in the Likert Scale of the weekly reflections. Moreover, the powerful visuals were the third most emphasized component of the open-ended questions in the weekly reflections. In a nutshell, the participants designated the visual materials as highly effective in flipped vocabulary learning while also recommending some ways to enrich them.

As far as their responses in the weekly reflections are concerned, the participants made relevant suggestions to ameliorate flipped voabulary learning. For instance, Participant 5 asked for more catchy videos, while Participant 17 wanted the number of visuals in the online materials to be increased. Interestingly, Participant 14

suggests using short visuals as she thought they facilitated her comprehension, while Participant 25 thought just the opposite:

> It would better to keep the sample images and videos following the written context very long.

On the other hand, Participant 10 was of the opininon that the slides in which the phrases, sentences, and paragraphs were featured could be shown for a longer time. Moreover, Participant 12 suggested that the words could be featured in the slides where the images and videos were shown so that they became more durable. Participant 7 demanded that videos should be shown with their subtitles, Participant 27 stated that it would be better if the videos could be dubbed. Other suggestions related to the images and videos were as such:

> Background music can be added to the slides where the images are shown (Participant 11).

> It would be more interesting if the videos were selected from more daily-like and funny situtations (Participant 25).

In addition to these above-stated suggestions, some students recommended further exercises or games at the end of the video presentation. For example, Participant 12 suggested that some activities could be done apart from videos and images:

> The presentation may consist not only of visuals and videos but also some other activities. For example, a questionairre or question-answer can be added to the end of the presentation, and we can be given some opportunities to predict the words.

Likewise, Participant 24 proposed that a test-like part could be added to the end of the presentation in an attempt to consolidate the target words:

> A matching exercise in which we can match the words with their meanings or match the sentences together can be added to the end of the video presentation. Alternatively, a small exercise, question-answer part, game or crossword puzzle can be added to the end of the online material.

3.3.2.2.3.2 Better In-class Activities

Another suggestion that the students came up with is better in-class activities; in other words, they suggested enhancing either the number or the diversity of the tasks with which they engaged in the classroom ($f = 5$). Indeed, the respondents agreed in the Opinion Scale that they used the in-class time more effectively with FL, considered the in-class activities relevant and interlinked with the online material, and found these activities helpful in consolidating the words. Similarly, in its open-ended section, many participants viewed these activities as effective, fun, complementary, beneficial, and associated with the online materials, which all helped to consolidate the words and made them permanent. In addition, the successful in-class activities which many participants had considered complementary, harmonious and associated with the online materials were among the top five coded elements in the open-ended part of the weekly reflections. Nevertheless, some reported having encountered some challenges such as difficult exercises and grammatical patterns, including prepositions and tenses, during these activities.

The participants also made relevant suggestions regarding the in-class practices. Participant 12 suggested that more tasks could be added to the activities, while some students stated that several games and exercises could be added:

> If the words to be practised in the class can be played in the form of games, they may prove more permanent (Participant 24).

Besides, one of the students reported having spent more time in role-play tasks than she had predicted, thus she seemed to need more time to get prepared for them:

> If the role-play activity had been informed at the end of the video presentation, we could have had more time to plan it (Participant 25).

Moreover, one participant proposed a creative offer for the type of task in which they can engage during the in-class time:

> If we could use all the target words in one of the acitivities we have done in the class, they would be memorable (Participant 23).

3.3.2.2.3.3 Shorter Duration of Videos

Some students proposed that the length of both the videos and the online materials ought to be kept shorter (*f* = 6). As can be remembered from the findings of both the Opinion Scale and the weekly reflections, most students liked the duration of the videos, though some registered their discontent with it, revealing that they had mixed opinions on this issue. In the open-ended part of the Opininon Scale, one student found the videos lengthy, and three students recommended that the videos in the presentation should be kept shorter. On the contrary, the students reported in the Likert Scale of the weekly reflections that the video presentation was at appropriate length, though some participants felt that the online materials lasted longer than they needed to be.

In fact, one of the suggestions of some participants in the open-ended questions was related to the fact that the the length of the videos and online materials can be reduced. Participant 8 provides a specific example over this issue:

> Indeed, some videos were unnecessarily long. For example, the video about the word 'similar', which featured similar flags of some countries from top 10 to top 1, lasted for 2 minutes and 25 seconds. However, showing only two or three similar groups would be enough.

3.3.2.2.3.4 More Effective Word Choice

Some participants, though very few in number, suggested that more effective 119ord choices should be made while designing the target words (*f*=2). That is, the words in the online materials should be arranged in a way where they can gather around a particular theme. For instance, Participant 12 and 24 remarked that the words in the video presentations were not connected semantically to one another or did not have connotations which knit them together. Therefore, provided that these lexical items were associated with or close to each other in terms of meaning, they could be remembered better.

3.3.3 Interviews

One of the primary sources from which the qualitative data was obtained was the individual interviews performed at the end of the implementation process. The participants (n = 4) selected through purposeful sampling were asked to reflect on their experience during the interview. Besides, these four participants included one slow and two moderate learners along with one high achiever to investigate if the participants with varying learning pace expressed different comments on the FL process. Lasting between 7 and 16 minutes, the interviews focused on (1) whether the participants liked the FL experience, (2) what the advantages and disadvantages of FL could be, (3) whether FL is more beneficial and enjoyable than a typical lecturing format, (4) if they can learn vocabulary better through FL than traditional learning, (5) whether they would like to learn the entire course content for every subject subject/course, and (6) if they wish to learn grammar, writing, or speaking through FL. The interviews intended to address the second research question, which is "What are the students' opinions about the flipped approach in the learning of new vocabulary items?". Figure 9 illustrates an overview of the themes, categories, and codes that emerged as a result of the interviews.

3.3.3.1 Positive Experiences

67 codes out of 116 (57,8%) in the interviews were concerned with the theme of positive experiences consisting of four categories. The category of "effective method of acquiring vocabulary" encompasses three codes, such as effective use of visual input, beneficial vocabulary learning with FL, and permanence of vocabulary. The category of "individual choices" is comprised of the codes like learner strategy, flexibility, and learning at self-pace. Moreover, the category of "high motivation to learn" includes codes, such as fun nature, novelty, benefiting shy students, enthusiastic introduction, and encouragingly reasonable number of words. Finally, the category of "efficient flow of lesson" consists of two codes, such as increasing level of readiness for class and efficient in-class practice. All the themes, categories, and codes were listed sequentially, beginning from the most coded component to the least coded ones.

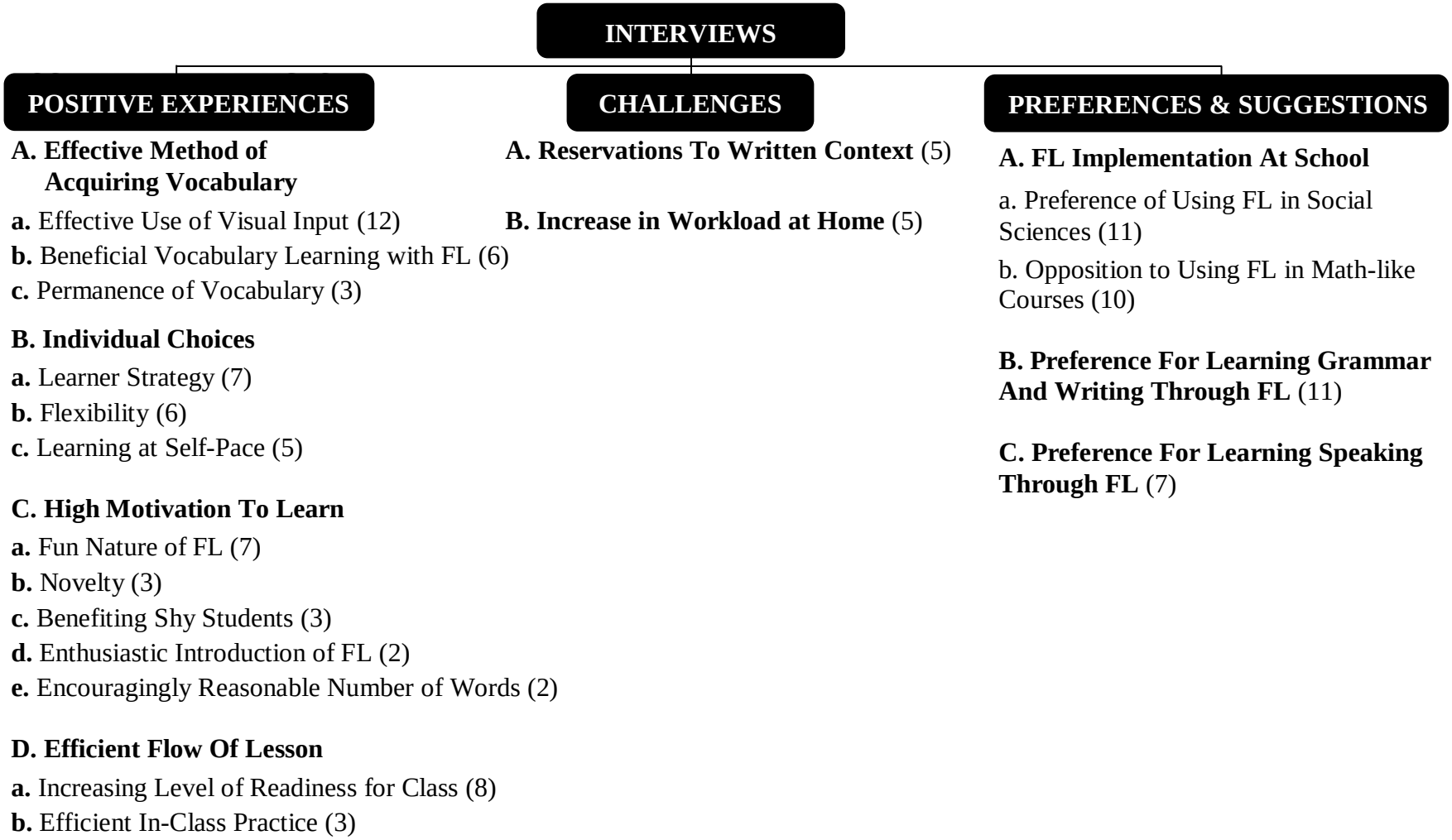


Figure 9. A General Overview of Themes, Categories, and Codes in the Interview Results

3.3.3.1.1 Effective Method of Acquiring Vocabulary

3.3.3.1.1.1 Effective Use of Visual Input

A highly cited reason for the efficacy of flipped vocabulary learning experience during the interviews turned out to be the effective use of visual input (*f* = 12). Indeed, the impact of visuals was widely highlighted by the participating students in both quantitative and qualitative data collection tools of the current study. To illustrate, the Opinion Scale revealed that the visuals, which proved the most effective component as well as being one of the advantages of flipped vocabulary learning, were also the most cited component of the "Suggestions" section. In a similar vein, the weekly reflections demonstrated that the visual context achieved the highest rates with respect to the effectiveness of the online materials and were the third most emphasized component in addition to being the most recommended aspect of the open-ended questions.

The efficacy of the visual input in FL was also underscored in the interviews conducted with the participants who mentioned specific reasons for why and how the visuals worked well with them. For example, Participant 9 considered the visuals prominent in terms of perceiving the words, while Participant 5 said she took advantage of the pictures and videos. Participant 4 differentiated between the images and videos, stating that the latter was influential:

> I think the videos are more effective than the pictures. As they give the impression that someone is talking to or telling you, the videos are more effective for me.

Furthermore, the participants not simply stated that the visuals were effective for them but also voiced why the visuals were instrumental for them to learn the target words.

> … Let me say that my visual memory is stronger, so when I watch the videos, it's better to keep things in my memory. … [FL] became more permanent because the videos impressed me and I retained them in my memory. For this reason, instead of looking at their English or Turkish meaning and

> memorizing them, I at least watched the videos and kept them for a longer time in my memory (Participant 5).

> For me, [FL's] advantage is its permanence because it is visual. For me, the visuals, pictures and videos were more effective (Participant 6).

The participants laid emphasis on the fun elements in the videos, too. For example, Participant 4 thought that the content of the videos were both beneficial and fun, and epecially shouting and practical jokes in the small videos drew her attention a lot more. Similarly, Participant 9 found the pictures and videos in the online materials humorous and added:

> …There were a few monotone narratives in the videos telling the words that didn't attract much attention. It sounded boring. But there was a word in one of the videos: "anxious". For example, I liked its narration very much. When there are some exciting words narrated in high tone, they impress me more than reading just written things.

3.3.3.1.1.2 Beneficial Vocabulary Learning with FL

Another positive experience reported in the interviews in terms of effectiveness is that FL is quite beneficial in learning new vocabulary items ($f = 6$). In the Opinion Scale, all the participants designated FL as a good learning experience and found it useful, and in the "other comments" part of the open-ended questions, the participants found the whole FL process highly effective and beneficial.

This subject was also articulated in the interviews by the participants who believed that FL was useful in learning new words and that it was more beneficial than a typical lecturing format. Participant 5 pointed out that FL was more beneficial because it was better to learn at home. Participant 4 said she liked FL because it was more beneficial for her to do such an activity before class and come to the class having learned something at home. One participant stated a different reason for why FL was beneficial for him:

> Teaching vocabulary in English through FL is certainly more beneficial. … It's really useful to watch when I feel like and when I'm ready (Participant 9).

3.3.3.1.1.3 Permanence of Vocabulary

A recurrent topic in the open-ended sections of both the Opinion Scale and Weekly Reflections was the permanence of the words, and this topic was voiced by the participants during the interviews yet again (f = 3). As mentioned in the Opinion Scale, the students agreed that the words became more memorable with FL, and that FL was more memorable than the traditional vocabulary teaching in the classroom, which was also backed up with the statements in the open-ended questions. Besides, most of the participants opted for flipped vocabulary learning rather than its traditional counterpart since they felt that FL and the related activities enabled them to keep the words in their memory better. On the other hand, the permanence of the words was the most highlighted element in the open-ended section of the weekly reflection reports.

The permanence issue was remarked in the interviews by the participants with some reasons similar to those reported in the other qualitative data collection tools. The students predominantly pointed to visual materials, namely pictures and videos, to account for the permanence of the words. However, other reasons were stated as well, including the consolidation of the words through different activities like role-plays, providing diverse ways to present vocabulary, and coming to the class having learned the words. When it comes to the interviews, the visual elements came to the fore, once again, to explain why vocabulary learning became more permanent through FL.

> It became more permanent because videos impressed me and I retained them in my memory. For this reason, instead of looking at their English or Turkish meaning and memorizing them, I at least watched the videos and kept them for a longer time in my memory (Participant 5).

> For me, its advantage is its permanence because it is visual. So are the videos (Participant 6).

Participant 6 also seemed to associate the permanence of flipped vocabulary learning with the frequency of being exposed to the material more than once:

> As I was studying at home, I retained them better in my mind because I used to do the second review here. When I got home, I used to do the third review, and it became more permanent this way. … At least, the teacher lectures once and does not repeat again in the traditional method. But he lectures twice in FL, both in the video and in the class. So I think it's more permanent.

3.3.3.1.2 Individual Choices

3.3.3.1.2.1 Learner Strategy

One issue under the category of individual choices is learner strategy (*f* = 7). As far as the interviews are concerned, not all the students seems to have undergone a fixed and one-size-fits-all learning sequence while studying the words in the video presentation or doing revision at home. One item in the Opinion Scale related to the matter of learner strategy asked the participants whether they achieved self-discipline for studying through FL, which was agreed by a large majority. Additionally, one participant highlighted the significance of autonomous learning in the open-ended questions part of the Opinion Scale by remarking that studying on his own and at any time proved quite advantageous.

In the interviews, the participants reported their personal study system while watching the presentation, particularly the order of the slides they preferred. Besides that, they shared their revision strategy after studying the target vocabulary. To illustrate, Participant 4 said she initally skipped the written ones, focused on the videos first, tried to understand the essence of the words, and then attempted to figure out the sentences. She stated clearly:

> I tried to understand the word, first from the video and then the pictures. Afterwards, I looked at their Turkish meanings and in the end I tried to understand the sentences in English by translating them by myself.

Participant 5 also employed a strategy akin to that of Participant 4; that is, the visuals preceded the verbal context in sequence while studying the presentation. However, she seems to follow a slightly different path:

> [The words] became more durable because the videos impressed me and I retained them in my memory. For this reason, instead of looking at their English or Turkish meaning and memorizing them, I at least watched the videos and kept them for a longer time in my memory.

Similar to these participants, Participant 6 highlighted the visual context in her study method as well, yet her preferences were somewhat different from the others:

> For me the visuals were more effective. Later, I used to look at the sentences because I would only be able to understand the sentences if I could remember the words. … I didn't look at the phrases much, because I could understand the words from the pictures.

Participant 6 also admitted that she had poor memory for vocabulary and couldn't learn much in the previous level, yet she felt they had done more revision with FL in the current level, together with the in-class activities. Thus, the key to the permanence of vocabulary for her was to revise after watching the presentation, and she heavily emphasized her revision strategy in the interview:

> … As I was studying at home, I retained them better in my mind because I used to do the second review here. When I got home, I used to do the third review. … This is how we learned from [our instructor in the previous semester]. I could remember the words when I reviewed three times. They also became more permanent when I wrote a sample sentence.

3.3.3.1.2.2 Flexibility

Another favourable issue that arose in the interviews related to the individual choices of the participants became flexibility, in other words, learning the course content independent of place and time limitation was favoured by the learners ($f = 6$). In the Opinion Scale, a majority of the participants agreed that a classroom with FL provided a flexible learning environment that fit both their learning preferences and their language level. Further, they watched the videos more than once, re-watched the videos as much as they liked, rewinded and re-watched the unclear parts by stopping the material at some points. They also reported that watching the videos at any place and time encouraged them to learn and that they had no time problems watching the videos and taking notes outside the classroom. In the open-ended

questions section, some participants also stated that being able to control the flow of the online materials was one advantage of flipped vocabulary learning.

Such issues also came to the fore during the interviews in which the participants registered their content with FL, which allowed the omnipresence of learning. In general, they reported that to take learning out of the classroom walls was advantegous in that they were neither pressed with time nor bounded by a limited learning environment, so they set down to study when they felt both physically and mentally ready. For example, Participant 4 emphasized that learning some amount of vocabulary during the class time is more challenging than learning it through FL and added that physical readiness as well as exemption from time restrictions is key to her vocabulary learning:

> … Suppose that ten words are being explained [in the class], I forget the first one when I listen to the 10th one because I need to learn this within two hours. And there is such a phenomenon: we are bored during the lesson. However, when I do this through a video, I can stop and do it at any time while talking to my friends on the internet and somehow bring it to a level at which I can remember. I try to write it at that moment and make relevant sentences, but it isn't possible for me to do all this in class time. … I can stop and watch it, whether at night or in the morning. I try to understand it when I don't feel tired.

Participant 9 dwelled on a similar issue during his interview, stating that FL was useful in that he was able to watch the online materials when he felt like and when he was ready. He also pointed out that he struggled in non-maths courses, investing longer time in grasping those courses. He said that the class hour was limited to 45 minutes, and the teacher had his own program to follow as well as being obliged to catch up with it. Hence, attending the class after watching the video presentation was advantageous to him as he could have streamed the videos 10–15 times at home, although he did not have that much time in class. He also mentioned the flexibility of viewing the videos at any time of the day along with some comfort issues:

> … The class starts at a certain hour when everyone comes and learns. … But this system has no fixed hour. You can watch it when you feel ready. You first get rid of tiredness of the day, then you have your coffee or your meal.

> Whenever you feel ready, either at 12 at night or when you wake up at 7 in the morning.

He continued to cite the advantages of FL in terms of flexibility, which enabled him to schedule his time to study English vocabulary in accordance with his school program:

> For example, I can watch it over and over again. I watched the video that you had sent, once in the evening, and then watching it once again before the class. … But it was enough to watch once with a relaxed mind but not when I was tired. In that case, I watched it once again before the class and learn all of them. But whether you are vigorous or feel tired, there is a class that has to move on. In such a case, you learn as much as you can.

3.3.3.1.2.3 Learning at Self-Pace

The other theme categorized under the heading of individual choices is self-paced learning, that is, some participants guided their own learning process while determining which subjects to study and how long to study them (f = 5). As a matter of fact, there were some items in the Opinion Scale questioning or implying self-paced learning. For example, all the students agreed that FL provided a flexible learning environment that fit their language level. Besides, they stated that they could intervene and stop the lesson at any point, which was much more efficient in terms of revising easily the points they had missed or had not understood. Likewise, almost all agreed that they stopped at the points they had not understood and repeated the material as much as they could by rewinding and re-watching unclear parts of the subject. This all revealed that controlling the course of the lesson while watching the presentation was advantagous, which was also agreed by all the participants.

The issue of learning at self-pace was brought up in the interviews in a way that would substantiate the findings in the Opinion Scale. For instance, according to Participant 9, especially slow learners or those who are too timid to ask questions to their instructors can learn better on their own via FL. He added that, even if some students are not shy or are slow to grasp some parts, they might feel reserved to ask questions over and over about each unclear subject. To him, there is a class in which is crowded and one cannot steal other people's time, and this was where FL helped

him. He made a rough calculation about the percentage of the unknown vocabulary used during a class by concluding that the amount could be insurmountable, but he had to move on together with the whole class:

> When our teachers speak in classes, they use a lot of words. If 100 words are used in a class time, I know 60%–70% of them exactly. 10% of them are the ones I'm confused about. … I definitely don't know 20% of the vocabulary. This amounts to a great number in a single class, 60 maybe 70 unknown words for each lesson. A few of them with which the whole class is unfamiliar are written on the board and emphasized, while a few of them are unfamiliar only to me. When you want to learn vocabulary in the lesson, how can you learn 60 words in a lesson among so many words? You can't learn and there is not a limit. As you move on with the whole class, you must adapt yourself to the class and move on together with the class.

Though the task of learning that amount of vocabulary during a lesson was demanding, he stated that FL facilitated this process for him.

> … I am better at math courses and struggle in non-maths courses. … The moment I listened to a math lesson, I grasp it immediately, but I understand non-math courses later. You don't have that much time in class. The class hour is 45-40 minutes. The teacher has a program of his own, and he has to catch up with it. But at home I can watch that video 10 times or 15 times. … I used to watch the video once in the evening and once again before the class. ... But watching once wasn't enough when I was tired. In that case, I used to watch it once again before the course and learn all of them.

3.3.3.1.3 High Motivation to Learn

3.3.3.1.3.1 Fun Nature of FL

One theme which was widely brought up in all the qualitative data collection tools was the fun nature of FL, and it is no wonder that this recurrent issue was also mentioned in the interviews (f = 7). In the Opinion Scale, the participants agreed that following the subject on the Internet passively did not cause any boredom, and that the videos uploaded to the internet included enough fun items, citing it as an as an advantage of FL in the open-ended questions. The FL process was rated as 87% in terms of fun by the students, which was one of the reasons why they preferred FL to traditional vocabulary teaching. Besides, the fun aspect of the materials was highly

favoured by the students with 90% in the weekly reflections, which was backed up with the findings in its open-ended questions part.

In their interviews, the four participants all reported that they derived great pleasure from the whole process of FL, not only while engaging in the in-class activities but also while viewing the online materials. To illustrate, Participant 6 stated that she had fun during the in-class activities, whereas Participant 4 dwelled on the pleasant time while streaming the videos:

> When it comes to fun aspect, you need to show respect for the teacher in the class, but when you watch the video at home, you can watch it by listening to music, with your friends by having fun, or while sitting in a café. FL is more fun in this sense. In addition, the content of the videos are both beneficial and fun.

To Participant 9, the reason why FL turned out to be more enjoyable than the traditional vocabulary teaching depends on the characteristics of a teacher, yet when asked whether he preferred FL or traditional method, he opted for the former by saying:

> Traditional method is also fun. ... No one expects a teacher to make bad jokes, but no one expects them to sit at a table and teach, either. Traditional education may also be fun, but now I imagine a monotonous teacher and the one using FL and those videos. I think [FL] is a lot more fun.

3.3.3.1.3.2 Novelty

Though not mentioned before in other open-ended questions sections, the novelty issue was one of the reasons why FL was admired by the students (f = 3). In the Opinion Scale, all the students regarded FL as an innovative point of view, and, for most of the students, one of the reasons why FL was quite efficient was the fact that it was practised for the first time, though others believed that novelty factor was not key to the efficiency of FL.

When asked why he was appreciative of FL, Participant 9 responded that he liked this motivating technique because it was unusual:

> … A teacher habitually comes and teaches you, you take notes and do homework, and the same thing is repeated the next day. This system is not bad, and it has worked routinely for so many years. But when a different and unusual system is tried, people regard it as good, even if it is bad. After all, it is novel.

He also added that novelty created an immense difference, which was crucial to him because it motivated him to learn better:

> [FL's] novelty increased my enthusiasm, and when my enthusiasm increased, I naturally learned better. No matter how good a method is, I watch a video loosely if I play and watch that video unwillingly…

3.3.3.1.3.3 Benefiting Shy Students

Another positive aspect motivating the participants to learn is that FL benefits shy students, which was not reported in any other data collection tools of this study (*f*=3). To some participants, students may sometimes feel reserved to answer and keep to themselves as highly eager ones or high achievers react fast and respond before the others. For example, according to Participant 9, FL was quite advantageous, particularly for shy students:

> It is not valid for me, but however hard you try, some students are timid and don't ask questions in a class. And some of them like working alone, so this system is also a big plus for them.

Participant 4 admitted that she had such a characteristic and then shared her anecdote about how this case adversely affected her performance in the classroom environment:

> … If I am to speak for myself, I'm a non-active student in the classroom and I can't be more active in the classroom. I'm a shy person, so when you ask a word in the class, one of us shoots ahead immediately and say "elma". Hence I am lagging behind, naturally. I say "Ok, I learned the first one, then the second one", but after a while I ask myself "Why can't I say this way, why does she shoot ahead more often?" Later, I begin to keep to myself and close my perception, and naturally I forget [the word].

She then reported that FL allowed her to get prepared for the class and respond as quickly as the high achievers by pointing to how FL helped her get rid of her anxieties and got her to be involved in the lesson:

> … When I learn [a word] at home by myself … in my normal life, I can recall better. … I feel great when something like this happen. At that moment I realize that I am able to learn something and I am like those people. I begin to think "She was saying [the words] in the class, and now I can say them, too." In this way, I open up my perceptions more, and I can adapt myself to the lesson better.

3.3.3.1.3.4 Enthusiastic Introduction of FL

Yet another positive experience which motivated the participants to learn better turned out to be the enthusiastic introduction of FL before the implementation was initiated (*f* = 2). It seems as though learning words through a technique totally new to them led to a sense of excitement and in return motivated them to study. For instance, Participant 9 imagined how an ordinary announcement of this implementation would end up for him:

> … If you had come to the classroom and just said something like "We will try out a project and we have a video. Come to the class having watched it", then I would have watched the video in that mood. Like "there's something to do and I'll watch and finish it.

To him, the preliminary information about the implementation was announced excitedly and enthusiastically, so he got carried away and was highly motivated by this ardent introduction:

> … I don't remember exactly how [the teacher] described it, but because he's someone who characteristically uses such dramatic and excited gestures… He said "there is a video…" I said "oh, what is it? I'll watch." I wondered whether it would be a shame not to watch it and also if it is important or not? When something arouses curiosity and enthusiasm, I watch it more carefully and of course learn better.

3.3.3.1.3.5 Encouragingly Reasonable Number of Words

The other motivating experience reported in the interviews was the encouragingly reasonable number of words, that is, the current number of the words was considered adequate, encouraging the students to learn them (*f* = 2). As can be remembered from the open-ended questions of the Opinion Scale, the students were asked how many words they could learn per week with the FL technique and activities. While 29% said they could learn up to 30 words, 19% stated that they could learn up to 20 words, followed by those who could learn up to 40 words (9%), 60 words (9%), 70 words (5%), and 100 words (5%). Given all the numbers reported above, the average number of words that can be acquired through FL is around 32. Moreover, in the "Suggestions" part of the Opinion Scale, 60% of the respondents believed that the number of words in this implementation could be increased.

In addition to these mixed opinions about the optimal number of vocabulary items to be learned in a week, Participant 9 pointed out that the limited number of words in the implementation motivated him to study and ensured much better learning for him by remarking:

> In FL, the limit was 10. I had the feeling that there are only 10 words and they can be memorized. Besides, I'll watch them once in the video presentation, and when I don't understand, I'll watch it again. Then I will cover them in the classroom once more. When there are 10 words, learning 10 out of 10 is good and advantageous.

3.3.3.1.4 Efficient Flow of Lesson

3.3.3.1.4.1 Increasing Level of Readiness for Class

One issue that arose in the interviews in terms of efficient flow of lesson was increasing level of readiness for class (*f* = 8). In other words, one reason for the efficiency of the flipped classes was that the students felt ready to engage actively in the activities during the class. The participants actually brought up the subject of readiness for class in their responses in the Opinion Scale where the participants felt that watching the material before the class prepared them for the class activities. It

should also be remembered from the Opinion Scale that effective pre-class study facilitated the students' learning as well as encouraging a large majority to study. Therefore, readiness for class both promoted their learning and enhanced their motivation by successfully engaging them in the activities during the class.

As far as the results of the interviews are concerned, readiness for class was key to both comprehension and active engagement in the class, contributing to efficient flow of lesson. For instance, Participant 5 considered readiness for class a remarkable advantage, emphazing that students could progress more efficiently in the classroom setting after learning some of the course content at home and added:

> [The class] moved faster and more efficiently. Personally speaking, I came to the class at least having done a little practice at home. This was an advantage for me.

Likewise, Participant 6 combined the readiness for class with some other factors to explain why FL proved a real success for her:

> I liked it because I couldn't memorize words, but I came to the classes having studied at home. Then once I reviewed it here again and because my visual memory is better, it was effective for me.

Participant 9 also underlined the effectiveness of having done pre-class study and pointed out that FL saved time in speaking activities and no intervals occured in vain, which was particularly key to his performance:

> As regards speaking, studying a given topic beforehand is better rather than keep thinking "what shall I say?"… I can create and design different sentences in my mind because I can't make very different sentences instantly.

Among the four participants interviewed, Participant 4 was the one who emphasized readiness for class most. She stated that she appreciated FL since engaging in a pre-class study and coming to the class by studying the course content at home was a rewarding experience for her.

> … One of the beneficial aspects of [FL] is that we close the notebook at the end of the lesson and reopen it in the next lesson. FL prevents this because after learning that the video is uploaded, I naturally open the notebook and the book, and I go online to watch the video, too.

In addition to feeling ready for the class, Participant 4 said FL enabled her to concentrate harder on the lesson and comprehend it better:

> When I try to learn something new in the class, learning becomes more difficult for me as the teacher writes something on the board which I can or can't remember later. When I practised before the lesson, it became easier to make a sentence and to understand what the teacher and my friends said.

3.3.3.1.4.2 Efficient In-Class Practice

The other issue under the category of efficient flow of lesson is the efficient in-class practice; that is, according to the participants, the target vocabulary was mastered along with several activities during class time which proved more efficient through FL (f=3). As mentioned both in the Opinion Scale and in the weekly reflections, the students used the in-class time more effectively thanks to the in-class activities interlinked with the online material and found these activities fun and helpful in consolidating the words. They also made relevant suggestions, such as adding more tasks, games, and exercises to the activities.

By the same token, this issue arose in the interviews too, and the significance of in-class practice in this implementation was highlighted. For example, Participant 6 deemed the in-class activities as beneficial and supportive:

> After all, I don't have a good memory for vocabulary and couldn't learn much until this semester. And we've done more revision, together with the activities in the class. I think we learn better because we focus more on it.

She also stated that she appreciated FL because she used to enjoy herself while getting involved in the activities in the class, which became beneficial for her. Moreover, she observed noticeable progress in her proficiency level and she partly associated it with the activities carried out in the classroom:

> … I began to attend the lessons half way through last term, and it wasn't so efficient. But we did more activities at this level. In addition, my English background began to get better.

3.3.3.2 Challenges

Out of 116 codes in the interviews, 10 (8,6%) concerned the theme of challenges which the participants went through during the treatment period. The two headings under this theme can be sequentially listed as the reservations to written context and the increase in workload at home.

3.3.3.2.1 Reservations To Written Context

One of the drawbacks reported by the participants is their reservations to written context; in other words, they found phrases, sentences, and paragraphs/dialogues in the online materials problematic (f = 5). Whereas 30% of the responses concerned the written context in terms of effectiveness in the Opinion Scale, the participants reported much higher effectivess rates in the weekly reflections with a rate of 86%. By the same token, in the open-ended questions of the weekly reflections, the students reported mixed opinions on the effect of the written context in the video presentation. While some participants designated the verbal parts as expressive and facilitating their comprehension, some other participants considered them problematic and boring. They reported their dissatisfaction with the written context by citing reasons, such as the unknown words in the paragraphs, challenging sentences, and boring context. In conclusion, some students seemed to appreciate the use of written context in vocabulary learning, yet some others were dissatisfied with their use while learning new words.

In the interviews, the participants registered their dissatisfaction with the verbal parts in the online materials. Though Participant 9 did not directly comment on the written context, he stated that the visuals attracted his attention, implying that verbal parts did not appeal to him. Other participants bluntly expressed their discontent with this type of context as well as articulating specific reasons for this feeling. For instance, Participant 4 remarked that she directly skipped the written ones and tried to figure

out the sentences only after she had first watched the videos and understood the essence of the words because:

> … when something like a description of something is written, it is more distracting.

Participant 5 explicitly voiced her dislike of the written context, particularly the use of sentences in the slides:

> … The aspect that I did not like is the sentences in the presentation. Since I do not like making sentences much, I have had a little difficulty reading the sentences.

Participant 6 also favoured the visuals rather than the written context, and the pictures and videos preceded the verbal context in the sequence of learning new words:

> [After watching the visuals], I used to look at the sentences because I could only understand the sentences if I could remember the words. … I did not look at the phrases much because I could understand the words from the pictures.

3.3.3.2.2 Increase in Workload at Home

The other weak aspect of FL emerging as a result of the interviews is the increase in workload at home (f = 5). Though FL is a reversal of the traditional flow of lesson that moves course content from the clasroom into home, it does not necessarily mean that no homework will be assigned, nor should it mean that watching videos is homework, too. Nevertheless, some students may end up feeling that their non-class time is wasted in FL. With respect to this issue, the Opinion Scale, both directly and indirectly, asked the participants whether they watched the videos and if watching the videos was seen as a burden by them. While a large majority of the students stated that they had watched the materials before the class, all of them agreed that watching the material beforehand was necessary to participate in the lesson successfully. In addition, while almost all claimed that following the subject on the Internet passively did not make learning boring, a large majority reported that they

did not have focusing problems while watching videos. Nonetheless, nearly all the participants urged that it might be a good idea to have a check that videos were being watched. As a result, it can be inferred from these findings that an overwhelming majority of the students watched the videos, which was not seen as a boring task or a burden by them.

Some participants touched upon this issue in the interviews, too and stated varying reasons for such a case. For instance, Participant 4 pointed out that she did not neglect watching the assigned videos, yet she questioned this subject deeply and hypothesized a potential situation where this could happen:

> … I think there are too many students who won't do this at home. When the video is uploaded, [our teacher] informed us and we watched it. However, only the students interested in it do this, while uninterested students will not do this. In this case, most students, I mean the interested ones, will know the content when they come to the class, while those uninterested ones won't and so fall behind the others.

She underlined the "interest" factor in watching the assigned videos, yet she also drew attention to the role of the teacher in this scenerio:

> The teacher may care or not, but he may just say "you had to do it" and move on to the lesson. In such a situation, those students can't learn anything at all, which is bad in fact. It depends on the teacher of course. He may say "Okay, you didn't watch this time. No problem. I can teach these to you too." Yet this can happen just once, twice, or three times. After a while, he gets bored, and students get bored as they already know.

She continued to elaborate on this issue and questioned what might be done to attract the attention of uninterested students, though she could not specify exactly what it was:

> … For example, videos attract my attention. I wonder what draws their attention? But, of course, it's also hard to arrange something targeted at everybody's interests. Everyone has a different character, and there are a lot of people who won't ever watch the videos. But I think that if something that catches their attention can be found, they can watch them that way, too.

On the other hand, Participant 5 admitted she sometimes had the feeling that watching the videos became a burden to her, though not a huge one which wore her down:

> … As I want to learn English for pleasure, I don't want to go home and do homework. I just want to do some practice related to English. … Because we are very bored with the courses, it sometimes becomes difficult for me to go home and do homework. From time to time, I have the feeling that I am doing homework while watching the video. … Though this isn't a big problem, it is sometimes distressful, psychologically.

3.3.3.3 Preferences and Suggestions

Out of 116 codes in the interviews, 39 (33,6%) were related to the preferences and suggestions that the students provided to improve FL. One of the three headings under the suggestions theme is the FL implementation at school, which has such subcodes as preference for using FL in social sciences and opposition to using FL in math-like courses. The remaining two headings can be listed as preference for learning grammar and writing through FL and preference for learning speaking through FL.

3.3.3.3.1 FL Implementation At School

One of the questions addressed to the participants in the interviews was whether they would like to learn the entire course content for every subject subject/course, and their answers centered around two types of courses overall: social science courses and math-like courses. In other qualitative measures, the participants' preference for social science or math-like courses was not mentioned. However, it was reported in the Opinion Scale that all the students wished other teachers would use the Flipped Learning model. This finding implies that they wanted FL to implemented in other courses, but no specific preferences for the kind of courses were voiced in the open-ended question sections, either of the Opinion Scale or of the weekly reflections.

3.3.3.3.1.1 Preference for Using FL in Social Sciences

One of the preferences reported by the participants in the interviews was the implementation of FL in social science courses at school ($f = 11$). In general, all the participants unanimously supported the use of FL in social science courses by listing diverse reasons for such a preference. For example, Participant 4 believed that FL could be practised in all the courses not dealing with formulations or problem solving, thus underscoring its relevance to verbal courses in particular.

> … [FL] can be possible in verbal lessons, such as Turkish or History, but mathematics won't be eligible. There are courses which you can learn in the class at that moment. Maybe I will have to ask the instructor some things. When I watch that course at home, I won't understand it most likely, because it is very difficult. … Just like English, [Turkish] is also verbal as there are spelling rules, lecturing, and grammar.

Participant 5 also would rather master general courses, such as maths, and social science courses through FL than learn them traditionally. She clarified that, even though maths is not a verbal course, its lecturing can be watched at home, hence the students can deal with only problem-solving activities when the instructor comes to the class. She remarked:

> … I would really like to learn courses to be learned at school still in the classroom setting. I'd like to listen to courses, especially the technical ones, from the instructor. However, I can understand the general courses like maths, and verbal courses or at least the ones that I can handle at home by myself. … If I watch at least the lecturing part of courses like maths, I get familiarity with that subject. I think I can understand the instructor better.

Like other participants, Participant 6 opted for the implementation of FL in social science courses rather than learn math-like courses via FL. She felt that watching a video related to a verbal course three times would suffice to grasp that subject matter. She elaborated on the issue and made her suggestion:

> When it comes to verbal lessons, it is like reviewing, so I come to understand better at home, or I build my own logic. … Because I may not be able to understand [the content] at that moment or understand the logic in verbal lessons. But when I study at home and form my own logic and when the

> teacher supports that, I can retain it better in my memory. … I think this method should be in verbal courses.

Agreeing with other participants in that FL is more suited to non-math courses, Participant 9 highlighted the dull aspect inherent in these courses. As an engineering student, he pointed out that social science courses are boring due to its monotonic lecture, and added:

> I would love to have this in non-math courses, I mean from my own perspective. … FL is certainly much better in verbal courses. Though it changes from teacher to teacher, a teacher lectures in the same monotonous tone… No matter how exciting it is, I think a verbal lesson is boring.

3.3.3.3.1.2 Opposition to Using FL in Math-like Courses

The other issue under the category of FL implementation at school was the participants' opposition to using FL in math-like courses (f = 10). In the previous heading, they agreed that FL was bettter suited to verbal courses, yet they unanimously believed that FL implementation would not yield good outcomes when used in math-like courses. Some participants, especially the engineering students, said that they had difficulty following courses, especially technical ones, which included a lot of formulas. In the opinion of these participants, technical and math-like courses at school should be taught through the traditional method in a classroom setting, rather than through FL.

Participant 4, who was one of the engineering students, would like to learn the entire course content traditionally in math-like courses in her department instead of learning through FL since she needs immediate feedback from her instructors to check her comprehension. She went on to comment on this issue:

> Mathematics, physics, chemistry and so on are difficult courses at university. I have too much to ask and if I cannot ask them at that moment, I may forget to ask them later, or I may not have the opportunity to see the instructor. When we enter the class, the instructor can skip them, thinking that we already studied them at home. So I don't think FL would be appropriate in the math, physics, and chemistry courses. … I think it can be practised in all the courses that don't deal with formulations.

Participant 5, also an engineering student, voiced similar thoughts, underlining that FL was not very appropriate for math-like courses.

> … I would really like to learn lessons to be learned at school still in the classroom setting. I would like to listen to especially the technical [courses] from the instructor.

Participant 6, who studied business, stated that she was good at math-like courses, yet that she did not prefer the use of FL in these types of courses, but rather in non-math courses:

> I don't think we need videos in math-like courses. Lecturing once is enough for me. I wouldn't like to learn math-like courses with this method because I can understand it when it is explained once in the class.

Finally, Participant 9, the other engineering student, was also in favour of mastering the content traditionally in math-like courses rather than through FL. He dwelled on the Internet and formulation matters to back up his claim:

> As I said, there is a belief that math-like courses are studied one by one with the teacher. It has a formula or logic. The teacher shows you the proof of where that formula comes from. It is very difficult to find this on the Internet and understand it later. For example, there are courses in the university in which you will read lots and lots of mathematical formulas. You can explain words through FL, but how can such long formulas be explained through videos? Besides, it is impossible to understand those formulas, so traditional education is better in math-like courses.

3.3.3.3.2 Preference for Learning Grammar and Writing through FL

Another issue on which the participants commented during the interviews was their wish or reservations to improve their grammatical and writing competence by means of FL (f = 11). As can be remembered from the findings of the Self-Efficacy Scale, the students believing they are competent in writing rose from 21% to 32%, but those with moderate writing skills decreased from 57% to 50%, while around 20% still felt that they were poor writing abilities in English. However, all these shifts in the percentages did not produce a significant change between the pre- and post-treatment. As far as grammar is concerned, the students with good grammar skills

increased from 36% to 47%, whereas those with moderate skills remained nearly the same at 50%, again revealing a non-significant change. On the other hand, the results of the Opinion Scale indicated that all the participants wanted FL to be implemented in language areas other than vocabulary, including writing and grammar.

When it comes to the interviews, the participants did not arrive at a consensus on whether they should improve their grammar and writing skills through FL. Interestingly, some maintained that grammar could be better learned through FL because it was based on formulations, whereas others opposed to learning grammar via FL for the same reason, that is, grammar is formulaic. Likewise, some students thought prestudy on writing rules and related vocabulary would facilitate the process of writing, though others challenged this idea for certain reasons.

According to Participant 4, not only grammar skills but also writing abilities can be improved provided that FL is practised in those areas, and she cited her reasons:

> I think grammar and writing can be learned through FL because grammar is formulaic. I can learn it in written form, just as we learned it in Turkish courses at school. I can also learn writing because I myself can handle it at home by considering the rules of writing.

Participant 5 opposed Participant 4's ideas about writing, arguing that learning writing in English directly from the instructor in a class time would make more sense:

> In writing, I wouldn't be able to understand writing from the videos because sometimes face to face is better.

Considering herself poor at grammar, she stated that FL would not meet her needs in learning grammar, hence a traditional approach, such as lecturing in the class, would suit her better:

> I am weak at grammar. Frankly, I don't think I can learn it by myself. I would prefer lecturing in learning grammar. … Even if the teacher explained the grammar topic and recorded it into the video, I wouldn't want to watch it

> because I don't like it. … I would at least listen to it in the class by necessity, which would be for my benefit.

Participant 6 agreed with Participant 4 in that FL would make more sense in learning writing and grammar, and she gave her pertaining reasons:

> … FL can work in writing and grammar. I would like to learn [them through FL] because you will at least come to the class by having learnt grammar. You'll learn better in the class, use eligible words or notice your mistakes if you make them in writing.

Finally, Participant 9 agreed with Participant 4 and 6 in that FL would be an ideal mode of learning in the field of writing.

> Actually, I would like to learn writing through FL. This is something that I can tackle, I believe. I need to work harder on writing.

However, he disagreed with Participant 4 and 6 in terms of using FL while learning grammar. Like Participant 5, he favoured a typical lecturing format in grammar classes rather than FL:

> Grammar is kind of maths. It has a verbal formula and you apply it. It has some systems that usually depend on a formula. So actually I wouldn't like to learn grammar via FL because… FL would be a waste of time in grammar. It is much better to learn grammar by asking the teacher.

3.3.3.3.3 Preference for Learning Speaking through FL

One of the questions in the interviews was whether the participants wished to learn speaking through FL (f = 7). As a matter of fact, the participants were asked to designate themselves as very good, good, moderate, and poor in six areas, namely reading, writing, speaking, listening, grammar, and vocabulary in the Self-Efficacy Scale. For example, the students with very good and good spoken skills (0% and 7% respectively) remained unchanged at the end of the implementation. However, those with poor spoken skills decreased from 63% to 43%, while the percentage for the ones with moderate speaking skills climbed from 30% to 50%. Even though these shifts were statistically non-significant, an increase in the positive direction was

observed, revealing that they thought they more or less improved themselves in this skill.

Every participant wanted FL to be implemented in other language areas, including speaking, in the Opininon Scale in addition to agreeing that practicing in class with exercises and speaking activities enabled them to consolidate the subject and make it memorable. More specifically, some participants reported in the open-ended questions part of the Opinion Scale that the implementation of FL in areas, such as speaking, might be really good and that learning English could become more enjoyable and easier by combining FL with other activities, such as speaking. Moreover, two students recommended that pronunciation parts should be added to the online materials.

On the other hand, lack of pronunciation practice in almost all the online materials was reported as a weak point of this FL implementation in the open-ended part of the weekly reflections. As stated earlier, pronunciation work concerning the target words was performed in the classroom, but they said they demanded this practice to be available in the online material, too. Some participants said they occasionally experienced problems with the pronunciation of words, while some others found the pronunciation of some words difficult.

When it comes to the interviews, some participants believed that they could improve speaking via FL whereas others opposed this idea, stating that they would rather learn speaking through the traditional method. Thus, there were mixed opinions on whether speaking should be learned through FL or the traditionally. Some opinions on pronunciation were also articulated during the interviews.

For example, Participant 4 seemed highly suspicious of improving her speaking skills through FL and found this task somewhat challenging by stating:

> … If there is a fast conversation between people who know English well, and assuming that there is no subtitle, I can't learn speaking [through FL]. … If the teacher explained speaking topics and potential words in the videos and we became prepared for the class, this might help to speak more during the

> lesson. However, I think I'll have difficulty in speaking after watching a video at home about speaking.

What was also remarkable about her beliefs in the interview was that she consistently stressed the importance of pronunciation in this issue. Highlighting the role of traditional instruction in improving pronunciation, she believed that the teacher's immediate intervention in pronunciation errors in the lesson helped her retain vocabulary better in her memory by saying:

> … When a teacher makes sentences slowly and properly, it seems to me that I can retain them more in my memory in terms of pronunciation. I believe things done traditionally are more beneficial in terms of pronunciation. … After all, pronunciation is not like grammar or writing. Pronunciation has always been more difficult for me. We mispronounce a lot of words, even when reading a text in the class. For example, our teacher corrects them, telling us how we should pronounce correctly. I believe that I recall the pronunciation of those words better.

In contrast to Participant 4, who expressed her reservations about learning speaking via FL, Participant 5 thought that, when given the topics beforehand, she might review the questions at home and get prepared for speaking activities. She said:

> … At least it makes more sense to practise for speaking at home … I would do some preparation by myself, and so both engage with it and derive some pleasure from speaking. I think I would speak more fluently when I am here.

Like Participant 4, Participant 6 also deemed learning speaking via FL as ineffective, arguing that knowing speaking topics or the pronunciation of the words in advance and then engaging in related activities in the class would not help her improve her spoken skills.

> [FL] may not be that effective in speaking. Speaking is usually improved at that moment.

Just as Participant 5 felt that reviewing the given topics at home in advance would get her ready for speaking tasks in the class, Participant 9 argued that he could have more time to think over those topics thanks to FL and would further participate in the lesson, thereby improving his speaking skills.

Actually, I would like to learn speaking through FL. It is something that I can tackle, I believe. I need to work harder on speaking. … As regards speaking, studying a given topic beforehand is better, rather than keep thinking "what shall I say?" It saves time. No intervals will occur in vain. I can create and design different sentences in my head because I can't make very different sentences instantly.

CHAPTER 5

DISCUSSION AND CONCLUSION

4.1 Presentation

This chapter will discuss the obtained findings under seven sections. In the first section, the discussion of the quantitative data will be presented by referring to the *effect of FL on enhancing learning of new vocabulary items*. Afterwards, the *overall attitutes of the students towards FL* will be discussed under the headings, such as positive and challenges, and suggestions. The preferences for flipped vs. traditional vocabulary teaching and for school subjects will be presented under this section. The next section will refer to the *opinions on FL in enhancing the learning of new English vocabulary items*, while the following section will elaborate on the *opinions on FL in enhancing overall English proficiency*. Then, the *implications for practice* section will provide scholarly advice on how this study can contribute to an EFL classroom. After the concluding remarks are given in the *conclusion* section, this chapter will be closed with the *limitation and further research* section.

4.2 The Effect of FL on Enhancing Learning of New Vocabulary Items

The quantitative data collected from the students' the pre-test and post-test scores revealed that the experimental group significantly outperformed the control group, implying that the implementation created a difference. Thus, the results of the present study positively answered the first research question, which is "Does FL enhance learning of new vocabulary items among B1 level EFL students at a private language course?" In other words, FL treatment in this study helped the learners master a significantly larger number of words than a traditional vocabulary learning.

As a matter of fact, FL is favoured over traditional vocabulary learning by the existing literature which investigates vocabulary teaching directly through FL or as

the by-product of teaching other skills via FL. When viewed from this aspect, the results of this study, directly focusing on flipped vocabulary, seem to substantiate the studies which conclude that direct flipped instruction proves significantly more effective than its traditional counterpart (Kim, 2018; Alnuhayt, 2018; Chen Hsieh et al., 2016; Xiao-Qing, 2016; Zhang et al., 2016; Kang, 2015). Moreover, this study is also consistent with the others which underscore the efficacy of FL in vocabulary as the by-product of teaching other skills (Fethi & Marshall, 2018; Han, 2018; Oh, 2017; Karmaker & Singh, 2016; Zhang, 2015; Leis et al., 2015).

Vocabulary gains can be also taken as successful learning outcomes and academic success, and in this sense some studies reveal how FL can set the stage for better academic achievement and learning outcomes. For instance, the results of this study is concurrent with those of Iyitoğlu and Erişen (2017), who report significantly better scores in flipped classroom in areas, such as reading, writing, grammar, and vocabulary. Further, the significant vocabulary gains in this study validate the findings in the study of Webb and Doman (2016), who report successful learning outcomes in grammar instruction through flipped approach. Besides, just as Ishikawa et al. (2015) underline better academic achievement, such as 150-point increase in TOEIC scores, through FL, the current study highlights better academic success and learning outcomes in terms of vocabulary.

To conclude, the quantitative results in this study evidently reveal that FL has brought about a difference in terms of vocabulary learning, helping the learners master a larger number of words. However, these numerical findings fall short of explaining why the implementation proved success in vocabulary learning, and thus the qualitative results have filled this gap by offering explanations as to why the learners have found FL successful despite some mishaps and recommending some ways to take FL implementation one step further.

4.3 Overall Attitutes of the Students Towards FL

The numerical results have already demonstrated that FL is more effective than a traditional vocabulary learning, yet another question is why and how this significant

effect was brought about. The qualitative tools, such as opinion scales, reflection reports, and interviews, were specifically designed to come up with an answer to these questions. It goes without saying that the findings obtained in this study signalled an overall positive attitude towards FL. Even so, not everything was flawless in this experience, and certain handicaps were reported by the learners while going through the FL process. Subsequently, some specific suggestions were made in order to make this FL process more effective and beneficial.

4.3.1 Positive Experiences

Given the questionairre results and the larger number of positive codes in the qualitative data, it goes without saying that FL brought about a highly positive and satisfied attitude among the learners. To begin with, the average efficectiveness rate of all four weeks amounted to 85%, nearly equal to the percentage reported in the Opinion Scale (84%). Moreover, the participants tended to have more positive attitude towards FL week by week, designated FL as a good learning experience, and found the whole FL process highly effective and beneficial. For all the students, it was the first time they had tried out such a technique, and it was observed that it worked well for them on the whole.

High satisfaction rates and overall positive attitude towards FL is frequently underscored in the literature, too. Just as Alnuhayt (2018) reports positive attitudes towards FL in an EFL vocabulary class, Başal (2012) receives positive comments about the flipped implementation in EFL classes. Sung (2015) also announces a positive approach towards FL in an EFL class where it was viewed as a good impetus to transform current ELT practices. Likewise, Karmaker and Singh (2016) and Zhang (2015) find overall high satisfaction rates in their studies. In Turkish context, Boyraz and Ocak (2014) report around 74% satisfaction level, while Çelebi et al. (2016) specify the satisfaction level in their study as over 90%. Therefore, the findings of this study seem compatible with the previous research, both on international and national scale, in that the learners develop overall positive attitudes towards FL and are highly satisfied with this experience.

4.3.1.1 The Power of Visual Input

Being one of the most cited reasons for favouring FL, the visual input such as the videos and pictures was regarded as quite helpful and expressive to visualize vocabulary and remember it. The visual context achieved the highest rates in the online materials in terms of the effectiveness in addition to being frequently emphasized and recommended by the learners. Overall, they were considered a key ingredient of flipped vocabulary learning in that they enabled permanent learning, consolidated learning, and appealed to visual memory. The related literature validates these findings, reporting that learners are more likely to make use of visual materials (Kang, 2015).

It is quite clear that the visuals were prominent and instrumental in terms of perceiving the target words. The instructive, expressive and explanatory visuals, most notably short videos, enabled the learners to visualize the words in their memory. Indeed, when the videos were dubbed by the instructor, they were appreciated more by the students. The visual context was even of first priority for some who first watched the videos rather than studying their English or Turkish meaning. Moreover, the humorous elements rather than monotone narratives, especially shouting and practical jokes in the small videos, drew more attention. As far as the students' answers are concerned, if a word is narrated in a high and exciting tone, it is likely to impress the learners far more than written context.

Hence, the visuals exert an undeniable influence on the learners as it seems to highly facilitate the learning of new vocabulary items. This can be inferred from the students' comments that they asked for more visuals and that they were able to use the words more properly during the writing tasks because they remembered the scenes in the videos. However, when the images and videos are compared, the latter seems more influential, though the percentages reported are almost tantamount to each other. The reason cited for such a comprasion is that videos give the impression that someone is talking to you or telling you something.

4.3.1.2 Permanence of Vocabulary

A recurrent topic in all the soft data collection tools turned out to be the permanence of vocabulary. The learners agreed in the Opinion Scale that the words became more memorable with FL, and that FL was more memorable than the traditional vocabulary teaching in the classroom. These beliefs were also backed up in the open-ended questions sections and interviews by the participants, most of whom preferred flipped vocabulary learning rather than its traditional counterpart since the former enabled them to keep the words in their memory better. Some stressed how permanent the words became due to FL, whereas others stated that all ten words were learnt easily and asked for more words.

While emphasizing the permanence of vocabulary, the learners made a point of presenting specific explanations for this. For example, visual materials were primarily cited to account for the permanence of the words. The students believed that they managed to keep the words in their memory for a long time thanks to the successful visual instruction material. However, there were other reasons behind the permanence of vocabulary via FL. For instance, providing several different ways to present vocabulary ensured easier and longer retention. The students thought they achieved more permanent learning as there were diverse ways to learn and consolidate the target vocabulary through a number in-class activities, such as role-plays. Similar findings are reported by the previous research on flipped vocabulary learning. For instance, Xiao-Qing (2016) explored the effectiveness of FL on vocabulary knowledge, suggesting that learners are endowed with the chance to consolidate their word building process. In addition, coming to the class having learned the words, engaging in several activities during the lesson, and revision studies at home also made the words more memorable. After all, the instructor mentions a word once or twice in a typical class, but the students in a flipped class already learn the words before the class and then use them several times during the lesson, and if they revise them once again at home, these words might be inevitably permanent.

4.3.1.3 Fun Nature

Another positive experience commonly articulated in the soft data was the enjoyable nature of FL, which provided permanence of vocabulary by integrating fun into learning. Almost all the participants agreed in the Opinion Scale that following the subject on the Internet passively did not cause any boredom, and that the videos uploaded to the internet included enough fun items. Besides, FL process was rated as 87% in terms of fun by the students in Opinion Scale, which was also one reason for their preference of FL to traditional vocabulary teaching. On top of it, the fun aspect of the materials was highly appreciated by the students with 90% in the weekly reflections. These findings and percentages also align with the previous studies. Alnuhayt (2018) found the enjoyability of FL in EFL vocabulary classes as about 92%, and Grimsley (2013) reported that a majority of the participants appreciated and enjoyed the FL process.

The whole FL process was viewed as a more enjoyable experience than its traditional counterpart. Though some students associated the fun level of a flipped and traditional class with the characteristics of a teacher, they still preferred FL to the traditional method. In addition, the students stated that they derived great pleasure from the whole process of FL while watching the video presentations and participating in the in-class activities. To illustrate, since the content of the video presentation was seen as interesting, the target words were learned with pleasure. Some learners even highlighted the pleasant time while viewing the videos at home, listening to music, socializing with friends, or sitting in a café. The other factor adding to the fun element was reported as the enjoyable in-class activities. Just as the role-play tasks in the class were found quite amusing, sentence completion parts and writing advertisements as a group were also considered fun.Nonetheless, although fun aspect of FL appeared quite inviting for the learners, its effect was reported to have fluctutated from time to time. For example, the video presentation of some weeks was found less enjoyable than that of other weeks.

4.3.1.4 Efficient In-class Activities

Efficient in-class activities were yet another point put under the spotlight by the learners, who stated that mastering the target words with several related activities during class time made vocabulary learning more efficient. In the Opinion Scale, the respondents strongly agreed that the in-class time was used more effectively with FL, and that they had ample opportunity to work in pairs and in small groups during the activities in which more interaction was achieved. They also agreed that practicing with exercises and speaking activities in class enabled them to consolidate the subject and make it memorable. Taken all together, the results indicate that the learners and the instructor maximized the class time and boosted the efficiency of in-class duration.

To begin with, many participants viewed in-class activities as effective, complementary, harmonious and associated with the online materials. Additionally, FL fostered group work among the students during the activities, thereby forming an efficient group interaction. Increased interaction along with better attendance has already been cited in the literature as one of the advantages of FL (Blair & Primus, 2015). This interaction was appreciated by some learners, who found the in-class activities quite amusing. In fact, the enjoyable and instructive role-play activities were of particular interest to the students since they were effective in building sentences and making the words easier to remember.

The efficient in-class activites, with which the online materials were interlinked, also helped the learners consolidate what had been studied in the video presentations and retain the words in their memory better. After all, previous studies suggest that good blend of pre-class study and in-class activities is key to successful FL and rests upon the synergy effect between them (Karmaker & Singh, 2016).

Furthermore, engaging in various in-class activities ensured permanence of the words because some participants admitted that they could not watch the assigned videos until the end, but they managed to learn the words through those activities. Even some students enjoyed themselves while engaging in the activities in the class, which

were also quite beneficial. Interestingly, they observed noticeable progress in their proficiency level and partly associated it with the in-class activities. Kang (2015) substantiates these findings, suggesting that flipped approach would be ideal in language classrooms to attain engagement.

The other point regarding efficient in-class activities is that the students thought the instructor cared and scaffolded them during those activities. Actually, these reports align with the finding in the Opinion Scale that the teacher wanted them to participate during the activities and provided the necessary support for their language learning process and performance. Indeed, previous research substatially reports increased interaction duration between teachers and learners in a flipped classroom, assuming that the teacher is a facilitator or guide rather than a lecturer (Karmaker & Singh, 2016; Zhang, 2015; Sarawagi, 2014)

4.3.1.5 Motivated Learning

According to the participants' views, they did not have focusing problems while watching videos and felt motivated to learn the assigned vocabulary throughout the FL process since FL encouraged them to learn and study. This implementation even helped to change some students' attitude towards learning English by motivating them to search and learn, although they did not enjoy the course in the previous term. The fact that the flipped approach noticeably boosts learner motivation is accentuated in the literature, too (Fethi & Marshall, 2018; Chen Hsieh et al., 2016; Zhang, 2015; Boyraz & Ocak, 2014).

For one thing, the interesting online materials aroused the students' interest to learn, and the words were learned with great pleasure. Besides, some participants said they recalled all the words, memorized all ten words easily in a short time, and learned many unknown words during this process. Some other students stated that FL motivated them in that they managed to comprehend the words and build better sentences, making them feel more self-confident.

Another motivating aspect is that FL benefitted shy students who felt reserved to answer the questions in the class and closed their perception because high achievers responded before the others. As FL allowed them to get ready for the class and answer as quickly as the high achievers, they could get rid of their anxieties and get involved in the lesson like the others. In this sense, the literature also validates these findings, reporting that FL can set the stage for a stress-free learning setting. Zainuddin and Attaran (2016) and Seaton et al. (2014) note that students who feel embarrassed upon making a mistake take a passive stance in the class, but these shy students become very active thanks to FL and thus feel staisfied with it. Further, Kang (2015) holds that learners tend to minimize their anxities and lower their affective filter in a flipped classroom, and Yuliani et al. (2018) argue that students take advantage of a less stressful learning environment tthrough FL.

Previous research on FL emphasizes the need to notify the students of the procedure to be followed and the potential outcomes prior to the implementation. Chen Hsieh et al. (2016) claim that when learners recognize the value of strong and beneficial outcomes, they might not be frusrated with the extra time and effort. Similar to these findings in the pertaining literature, the enthusiastic introduction of FL prior to the treatment caused a sense of excitement and in return motivated them to study. According to the students, an ordinary announcement would result in poor motivation, but since the preliminary information about the treatment was declared excitedly by arousing curiosity and enthusiasm, the learners were highly motivated to watch the online materials and concentrated harder.

The novelty issue was another reason to motivate the students. In the Opinion Scale, the students deemed FL as an innovative point of view, and one reason why FL was quite efficient for most of the students was the fact that it was practised for the first time. It seems that its novelty increased their enthusiasm, naturally leading them to learn better.

In relation to the issue of learner motivation, Webb et al. (2014) report that the students in the flipped classroom demanded more flipped resources at the end of the four-month treatment. Such requests were voiced by the participants in this study,

who wanted to be exposed to the FL activities more often and to be engaged in FL activities other than vocabulary learning. Some students also demanded to increase the number of hours that they were involved in FL activities. Furthermore, some learners wanted FL to be implemented in other courses in general, and some believed that FL should be practised in speaking, listening, and grammar.

4.3.1.6 Autonomous Learning

Previous studies note that students are likely to achieve independent learning skills and attain learner autonomy through FL since they can assume their own responsibility while learning a new language in a flipped classroom (Han, 2018; Loucky & Ware, 2016; Han, 2015). The importance of autonomous learning was highlighted in the Opinion Scale, where the participants strongly agreed that they achieved self-discipline for studying thanks to FL. In general, FL was quite advantageous, especially for slow learners and timid students to study on their own and at any time. Even if they were not shy or are slow to grasp certain points, they might hesitate to ask questions about every unclear subject. However, FL could facilitate this process by watching the course content as much as they liked and helping them learn in their own pace.

Admittedly, a fixed and one-size-fits-all sequence is not followed when learners try to grasp a new subject, and as Kang (2015) puts it, students tend to develop their own learning strategies over the course of flipped implementation. This was observed in this study where the participants shared their personal study system while watching the presentation, particularly the order of the slides they preferred. For instance, whereas some first focused on the videos and then tried to figure out the sentences, others focused only on the visuals, not on the written context unless any need arose. What was common in all these strategies was that the visuals was of top priority while studying the video presentation. The learners also reported their revision strategies after studying the target vocabulary, which was key to the permanence of vocabulary for some of them. Some could recall vocabulary better when they reviewed at least three times and wrote a sample sentence.

4.3.1.7 Flexible and Self-Paced Learning

Flexibility and self-paced learning are also key to the students' satisfacion with flipped vocabulary learning. Grimsley (2013) reports that the learners in the flipped group were appreciative of the flexibility to stream the videos at a convenient time and to pause and rewind the videos. Similar to this finding in the study at issue, the participants in the current study strongly agreed in the Opinion Scale that they watched the videos more than once, re-watched the videos as much as they liked, rewinded and re-watched the unclear parts by stopping the material at some points. Watching the videos at any place and time encouraged them to learn, and they had no time problems watching the videos and taking notes outside the classroom. In this way, they thought they managed to control the course of the lesson while watching the videos from the Internet. Therefore, omnipresent learning, that is, learning independent of space and time restrictions, was admired by the students on the grounds that they began to learn when they felt both physically and mentally ready.

In addition, learning vocabulary during the class time was reported to be more difficult than learning it with FL, as the learners can watch the videos many times at home though they are not granted that much time in class to learn vocabulary. In this sense, FL obviously offers great comfort for learning in that the students can get rid of their tiredness, enjoy the comfort of their favourite place to study, and have their meals and drinks while studying. This was also voiced by some participants who reported that FL was of great benefit as learning at home was better than learning in the classroom.

FL also paved the way for self-paced learning, and hence the learners were able to manage their own learning process while determining which subjects to study and how long to study them. The related literature reveals that learners enjoy the privilege to set their own pace for watching and studying the content videos (Sarawagi, 2014). Likewise, they agreed in the Opinion Scale that they could intervene and stop the lesson at any point, which was much more efficient in terms of revising easily the points they had missed or had not understood. In addition, they

agreed that a flipped classroom provided a flexible learning environment that fit both their learning preferences and their language level.

Another point to take heed in the light of the results of this study is that FL not only brings an edge to slow learners but also those expecting to improve faster. Some students underlined how the permanence of FL encouraged them to learn more quickly, and some enjoyed learning vocabulary without spending too much time. In this sense, it would not be wrong to argue that FL not only facilitates the process of learning new lexial items but also accelerates their learning process. In relation to the acceleration of learning process, Zhang et al. (2016) report that FL brought about a more efficient in-class time, enabling the learners to absorb more words in a shorter time and yielded better academic success within relatively less time.

4.3.1.8 Increasing Level of Readiness for Class

In the flipped approach, effective pre-class study enables students to be better prepared for the class and facilitates their learning. In fact, there is a large volume of published studies which highlight the role of pre-class study in the efficacy of a flipped implementation. For example, Leis et al. (2015) report that the students in their flipped writing classes spent significantly more time in pre-class activities and in return used a larger amount of vocabulary in their written post-test. Sarawagi (2014) states that the learners enjoyed coming to the class prepared, while Karmaker and Singh (2016) note that viewing the videos before the class enabled the students to be better involved in the lesson.

By the same token, the participants in this study strongly agreed in the Opinion Scale that they watched the assigned videos, and that watching the material before the class prepared them for the class activities. In this way, FL can help to consolidate what is learned when the students come to the class, instead of learning everything from scratch. It should also be remembered from the Opinion Scale that watching the uploaded material beforehand to participate in the lesson successfully encouraged a large majority to study. Hence, pre-class study not only facilitated learning but also enhanced the students' motivation by engaging them in the in-class activities.

Besides, FL can also save time, particularly in speaking activities where a lot of intervals occur before the learners begin to utter their sentences. Knowing about a given topic in advance is definitely favourable, rewarding, and time-saving since learners can create more complex sentences during the class.

Moreover, students usually close their notebooks at the end of the lesson and reopen it in the next lesson in a traditional classroom. However, FL can potentially hinder this habit because they will naturally open their books and notebooks after the video upload, which keeps them ready for the class, enables intense concentration, and promotes better comprehension.

4.3.1.9 Optimal Length of Videos

Another favourable point voiced in the aftermath of this implementation is the optimal length of videos. A considerable majority agreed in the questionairre of the reflection reports that the video presentation was at appropriate length. In the qualitative data, this issue was articulated by the participants who were appreciative of the managable length of the online materials. The pertaining literature suggests that students need 3 to 5 minutes to settle down and can achieve optimal focus up to 10 to 18 minutes (Khan, 2012). As a reminder, the length of the video presentations in this study was between 11 and 14 minutes, and the average length was calculated as 12.7 minutes. On this aspect, the length of the video presentations were between the suggested range in the literature, yet it is also argued in the previous studies that shorter are preferred to longer videos by learners while watching them outside the classroom (Zappe et al., 2009). Similarly, the participants in this study stated that they liked to find some videos being kept short, which was a crucial important point for them, and added that they might have got bored if the videos had lasted longer.

4.3.1.10 Comprehensible Technique

The comprehensibility issue was another positive aspect of this FL implementation frequently cited in the students' responses. They agreed unanimously in the Opinion Scale that practicing in class with exercises and speaking activities enabled them to consolidate the subject. They designated FL, its materials and activities as clear, easy

to follow and grasp, and expressive overall. They also enjoyed following the slides, and no considerable problems were encountered while following the videos as they were able to watch them again and again. According to the participants' views, the slides were presented intelligible information at a clear and comprehensible level. Additionally, some specific reasons were stated to account 161ort he comprehensibility issue. Some thought the selected words were at a comprehensible level, some others said the definitions were fairly explanatory and comprehensible. Further, some highlighted intelligibility of the sentences, whereas others pointed out that good pictures and videos, notably the short ones, facilitated their comprehension.

4.3.2 Challenges

Considering the findings in the Opinion Scale, reflection reports, and interviews, this flipped implementation has nevertheless its shortcomings, though it was mostly liked by the participants. Some of these faults were eliminated once the instructor was informed about the situation, though others could not be dealt with since they were beyond his reach. These shortcomings can be entitled as technical problems, challenging activities, excessive length of videos, increase in workload at home, and reservations to written context, most of which were actually cited in the related literature.

4.3.2.1 Increase in Workload at Home

In the light of the qualitative and quantitaive data in this study, the increase in workload at home turns out to be another shortcoming of FL. Strictly speaking, FL refers to reversing the usual flow of class that transfers course content from school into home. However, it does not necessarily mean that no homework will be assigned, nor should it mean that watching videos is an assignment. Some students might nevertheless end up feeling that their out-of-class time is wasted in FL. In fact, the matter of extra workload in non-class time seems to be the one which is designated as the most recurrent weak aspect of FL in the pertaining literature (Lo & Hew, 2017; Wang, 2016; Betihavas et al., 2016; Mehring, 2015; Schultz et al., 2014; Snyder & Besozzi 2014).

A large majority of the students reported that they had watched the materials before the class, and that they did not have focusing problems while watching videos. In addition, all agreed that watching the material beforehand was necessary to participate in the lesson successfully, that following the subject on the Internet passively did not make learning boring. Nonetheless, nearly all the participants urged that it might be a good idea to have a check that videos were being watched. Mehring (2018) also mentions this and suggests that teachers can check who is not studying online materials and take heed of their problems by organizing online discussions or a questionairre. As a result, it can be inferred from these findings that an overwhelming majority of the students watched the videos, which was not seen as a boring task or a burden by them.

In the open-ended questions sections, some participants stated that they were distracted while watching the videos and some others admitted that they sometimes did not watch the material before class. Some pointed out that if they paused videos and began to deal with something else or even worse did not watch at all, it might give rise to undesirable consequences, but acknowledged that this was in their power. Being obliged to study in the non-class time and time limitation due to the hectic schedule at school were cited as other drawbacks. In relation to this issue, Gasmi (2016) reports an anecdote of a part-time student who was busy all day long and so had to review the assigned materials while driving to school due to time constraints, which naturally increased her stress. In addition, the lack of a mentor to receive immediate feedback when they were confused was cited as a disadvantage, which is also reported in the literature (Akçayır & Akçayır, 2018; Bhagat et al., 2016; Schultz et al., 2014). Indeed, they were in fact one text away from the teacher who might guide them when needed. Many of such confusions were dealt with by the instructor, yet there might have been some students who felt reserved to distrub him or did not bother at all to text.

Some participants did watch the assigned videos but deeply questioned the likely outcomes of this case by emphasizing the “interest” factor. In their opinion, many students, most notably uninterested ones, will neglect watching videos at home and

inevitably fall behind the others because interested students who have already mastered the content will be more active in the class. On top of it, if the teacher takes initiative and encourages them to watch videos and study, this problem can be resolved. Conversely, if this situation recurs many times, both the teacher and the student will suffer burnout, and when the teacher does not care and simply leaves them to their own resources, those students will tend to lose touch with the class. Though not specified in detail, the key to draw the attention of uninterested students was thought, by the participants, to tailor materials to everybody's interests, though it seems a challenging work.

By contrast, some participants sometimes had the feeling that watching the videos were a burden causing distress, though not overwhelming. Actually, they just would like to learn English for pleasure by doing some relevant practice but did not feel like doing homework at home. Unfortunately, watching assigned videos sometimes led them to the feeling that they do homework.

4.3.2.2 Technical Problems

The most recurrent issue regarding the drawbacks of this FL implementation is the technical problems that occasionally discouraged the learners in the process. Some of these technical flaws were eliminated on time, yet others were unlikely to be tackled either due to learner-specific reasons or because of technological facilities. In the literature, technical disturbances, such as low-quality study materials, technology accessibility, low sound quality, and boring videos, are reported as potential drawbacks of a flipped classroom (Akçayır & Akçayır, 2018). In some studies, the students complained that the connectivity speed of their tools or carriers was disappointingly low (Everett et al., 2014). Therefore, technical and technological problems may inevitably frustrate learners during the FL process (Clemens et al., 2013; Tague & Baker, 2014).

To begin with, most of the respondents (62%) disagreed with the statement that they had problems with the platform where the material was uploaded, but this also means that the remaining 38% encountered some mishaps with this platform. Indeed, this

platform was selected as YouTube owing to its ease of use and popularity, yet it is clear that some material-based or user-based problems inevitably occurred. The students notified their instructor of this kind of disturbances via their WhatsApp group, and some of them could be fixed before it was too late either through the instructor's instructions or through their classmates' warnings and guidance.

Some of the technical faults were related to the flow and content of the slides in the video presentation. To illustrate, insufficient time was said to be allocated especially to the written context, and they could not catch up with the speed of these slides, thus they often had to pause the video. Indeed, the slides were timed as five seconds, except for the videos, and it was up to the learners to pause and view them as long as the could, which was probably not their preference. Moreover, some participants informed the instructor that they tended to forget what the word in the images and videos was because the words weren't featured in them. As from the second week of the treatment, this shortcoming was fixed in line with the students' warnings. Besides, some participants reported that the slides where the written context was presented was blurred, thus they could not view those slides clearly. A few participants complained that the slides overlapped each other while moving from one to another. These problems were most likely user-specific as the majority of the participants did not report such malfunctions.

Previous studies revealed the more efficacy of voice-recorded instruction than slides with no audio (Yestrebsky, 2015). Audio-related complaints were expressed by some participants in this study as well. For example, the online materials lacked sound, except for the videos, and this led to boredom among some students. They argued that if the target vocabulary in the online materials was repeated out loud, its pronunciation would be learned, and this would facilitate its permanence. In addition, it was troublesome to follow the videos in the presentation without subtitles. In the following weeks, some subtitles were placed on certain videos, but unfortunately not on all of them.

Other individually stated technological faults were that the video presentations could not be watched on their smart phones and that some parts put a strain on their

comprehension, although they grasped better later on as they reviewed them. Finally, some participants stated that the visuals in the video presentation were not related to each other.

4.3.2.3 Excessive Length of Videos

The excessive length of the online materials in this study is yet another technical drawback, which is also often cited by previous research (Schultz et al., 2014; Olson, 2014; Kettle, 2013). As a matter of fact, although a majoirty of the students highly appreciated the length of the videos, some registered their discontent with it, indicating that the participating students had mixed opinions on this matter.

To be more specific, a considerable majority (85%) found the length of the video presentations appropriate, but in the open-ended question parts, some learners deemed the lengthy videos as a disadvantage of this implementation, and others suggested that some videos in the presentation should be shortened.

In the Opinion Scale, the participants reported that some videos in the online material were unnecessarily long, and that the length of both the online materials and the videos inside them should be reduced. In the reflection reports, similarly, some participants found the online materials and the videos in these materials rather long, underlining a potential consequence of this such as distraction.

Surprisingly, this issue were not brought up in the interviews by the students, who did not speak out anything related to the excessive length of either the video presentations or the videos inside them.

This matter was taken into consideration, and the redundant segments of the videos in the materials were removed by reducing some to as short as 10.53 minutes (one presentation in previous weeks were as long as 15.57 minutes).

4.3.2.4 Challenging Activities

The challenges encountered during the in-class activities are another shortcoming voiced by the participants. Paradoxically, they agreed that that the in-class activities were relevant, interlinked with the online material, and instrumental to consolidating the words in addition to describing them as effective, fun, complementary, and beneficial. Such positive perceptions of the in-class activities, nevertheless, do not mean that participants came across no challenge in these activities.

Some of the challenges in the FL tasks concerned the specific grammatical patterns that weighed on the learners. For instance, because some of them barely knew the prepositions used before or after some words, they were confused over what to use in some exercises questioning this. Some others could not decide the correct tense in building sentences.

A number of students admired the use of the role-play activities by describing them as instructive, fun, and facilitative of sentence-building and permanence of words. However, they invested more time than they expected in these tasks and required additional time to prepare them, suggesting that they would have had more time to design the role-play acitivities if they had been informed at the end of the online materials. Nevertheless, it should be noted that, as will be discussed in the next heading, some students had already found the video presentations a bit long, and if such notifications about role-play tasks had been inserted into the online materials, then their length would have been increased further still, frustrating the students more.

Further individual comments were reported concerning the challenging aspect of the in-class activities. For example, some stated that they needed additional activities to consolidate the words, but some others interestingly complained that either not adequate or no time was left to carry out some activities. Some participants found the in-class activities of some weeks more demanding than the previous ones, whereas some pointed out a few words in the activities were not semantically related to the target words. Finally, translation matters caused difficulty during the activities

among some students who later admitted that it was something they themselves had to deal with.

4.3.2.5 Reservations To Written Context

Reservations to written context are among the reported challenges in the present study; in other words, the phrases, sentences, and paragraphs/dialogues in the online materials were viewed as problematic. Even though the effectiveness of the written ontext was reported at quite high percentages in quantitative measures, this type of context was not liked much by some learners, especially those with overriding visual intelligence. The written context in the video presentations was considered problematic and boring due to specific reasons, such as unknown vocabulary in the paragraph, challenging sentences, and boring context. Some participants openly registered their discontent with this type of context because description-like things were thought to be more distracting. They also did not favour the use of sentences in the slides because they personally did not like making sentences, thereby having difficulty reading them. Therefore, the visuals preceded the verbal context in the sequence of learning new words, and the learners automatically skipped the written context, focused on the images and videos, and then tried to figure out the sentences and paragraphs, if need be.

4.3.3 Preferences and Suggestions

4.3.3.1 Preferences

4.3.3.1.1 Flipped vs. Traditional Vocabulary Teaching

In the Opinion Scale, all the respondents strongly agreed that FL was more beneficial than a typical lecturing format. Besides, out of 23 students who commented on the question “which learning and teaching techniques and activities do you prefer in general”, 15 opted for flipped vocabulary learning, 7 preferred a combination of both and 1 student preferred traditional vocabulary teaching. Some also argued that if one is to learn new vocabulary, FL technique should be adopted.

A large body of research reports that learners prefer flipped classrooms to traditional lecture format (Alnuhayt, 2018; Oki, 2016; Karmaker & Singh, 2016; Sarawagi, 2014; Grimsley, 2013). In a similar vein, most the participants in this study preferred flipped vocabulary learning to its traditional counterpart because FL enabled them to keep the words in their memory better, helped them enjoy themselves during vocabulary learning process, brought about effective learning, facilitated vocabulary learning, and prepared them well for the class due to efficient pre-class work.

In contrast, some students preferred a combination of both traditional and the FL technique and activities while learning English vocabulary. One of the reasons for such a preference was that engaging in both FL and traditional vocabulary learning activities was of great value to them since both techniques were rewarding on their own merits. Another reason was that some subject matters are more suited to FL, while others should be instructed traditionally. Moreover, the learners wanted to be exposed to a learning system combining flipped and traditional method because they thought learning process should be incorporating not only discipline but also high spirits. The last but not the least reason was that a combination of flipped and traditional learning would bring about an optimal study environment for him.

On the other hand, only one participant preferred traditional English vocabulary learning activities because she would feel more disciplined and feel obliged to learn in that way. This preference is rarely reported in the literature, and in one of those studies Porcaro et. al (2016) report that the participants in their study do not prefer the flipped classroom. Chen Hsieh et al. (2016) also note that the learners preferred a lecture-based classroom over the flipped classroom both because they had to work harder during flipped instruction and because a traditional classroom demanded less work.

4.3.3.1.2 Preferences for FL at School

In the Opinion Scale, all the students wished that other teachers would implement FL in their classes, which implies that they wanted FL to implemented in other courses. All the same, specific preferences concerning the type of courses were not reported

in other qualitative data, except for the interviews. As far as the literature is concerned, most of the learners (66,7 %) in Iyitoğlu and Erişen's study (2017) favoured the flipping of other courses since coming to the class prepared facilitated their learning as well as making it more enjoyable. On the other hand, others hesitantly agreed on this because they wondered whether FL would work in other courses as efficiently as in English. In addition, 33,3 % of their participants stated that FL would be ideal for certain verbal courses, but that they were hesitant about science and math classes. They also stressed that FL would not make sense for all the courses.

In general, all the students unanimously supported the use of FL in social science courses by listing diverse reasons for such a preference. According to these participants, FL could be practised in all the courses not dealing with formulations or problem solving, and its relevance to verbal courses was highlighted. If they watch at least the lecturing part of verbal courses at home, they can be familiarized with that subject and can understand the instructor better. Furthermore, watching a video related to a verbal course three times would suffice for some students to grasp that subject matter. Due to these revision works, they are able to build their own logic, and they can retain the content better in their memory along with the instructors' lecturing in class. Some students, especially engineering students, also highlighted the dull aspect inherent in social science courses due to the monotonic lecture. Thus, the dry atmosphere of a verbal class would be replaced by a more active instruction through FL. Given all these opinions and perceptions on social science classes, the findings of this study align with those of Iyitoğlu and Erişen (2017), whose participants supported FL in verbal courses.

On the other hand, the students in this study unanimously agreed that FL implementation would not yield good learning outcomes in science courses. Some participants, especially the engineering students, stated that they had difficulty following courses, especially technical ones, which included a lot of formulas. Therefore, technical and math-like courses at school must be learned traditionally in a classroom setting rather than through FL. One of the reasons stated against the use of FL in science classes is that students would need immediate feedback from the

instructors to check their comprehension, and they may not always have the chance to see the instructors. Moreover, some participants pointed out that certain math-like courses include too many mathematical formulas and proofs, and that it seems impossible to explain those long formulas through videos, like the words explained through FL. In contrast, one participant, who is good at maths, stated that there is no need for FL in maths classes because she is able to master content when it is explained once in the class. These results are consistent with those in Iyitoğlu and Erişen's study (2017), in which the learners were hesitant about the implementation of FL in science and math classes.

4.3.3.2 Suggestions

4.3.3.2.1 Improved Visuals and Visual Design

The visuals, namely the images and videos, were described as the most effective component in the flipped material, which was also deemed as one of the advantages of flipped vocabulary learning by the participants. By the same token, the highest rates (92%) belonged to the visual context in terms of content efficacy of the online materials. Additionally, powerful visuals were designated as one of the most important component of non-class materials. In a nutshell, the participants found the visual materials highly effective in flipped vocabulary learning while also recommending some ways to enrich them. Based on the Opinion Scale, reflection reports, and interviews, the following suggestions related to both images and videos, only the videos, and only the images, and slide design were made.

Slides should:

- be tailored to students' educational level, gender, and status
- have a certain scenerio, subject or theme as in the TV series
- allocate space for pronunciation
- feature the phrases, sentences, and paragraphs for a longer time
- include a survey
- contain a question-answer part
- involve word prediction exercises

- have word-matching exercises
- involve sentence-matching exercises
- have gap-filling exercises
- include games
- contain crossword puzzles

Images and videos should:

- be clear, expressive, and intelligible
- be many in number
- include animations
- be short
- feature the described words in a suitable side of the slide

Videos should:

- be slow
- have subtitles
- include movie lines
- be dubbed
- be catchy
- be daily-like
- be funny

Images should:

- include background music

4.3.3.2.2 Demand For More FL

The participants wanted to be exposed to the FL activities more frequently and to be engaged in FL activities in addition to vocabulary learning. In addition, some students wished to increase the number of hours when they engaged in FL activities, but there was not a consensus on how often it should be. While some suggested that FL should be practised regularly every week, others recomended that it should be

implemented for 3 to 4 days instead of one day. As can be reclalled from the Opinion Scale, almost all the respondents wanted FL to be used in other language areas, including reading, speaking, writing, listening, and grammar, which was voiced in the open-ended questions as well. Some suggested that FL be implemented in other courses in general, and some thought FL would be a good implementation in speaking. Some others proposed that, apart from vocabulary learning, combining FL with other activities such as speaking, listening, and grammar can make learning enjoyable and easier. To sum up, the students were satisfied with the FL treatment and recommended being subject to this sort of learning more often, which is also corroborated by the literature. For example, Webb et al. (2014) note the experience of the students in a flipped classroom who asked for more flipped resources at the end of the four months.

4.3.3.2.3 Optimal Length of Videos

As can be remembered from the findings of both the Opinion Scale and the weekly reflections, a majority of the students were appreciative of the duration of the videos, while some registered their discontent with it. In the reflections reports, the video presentation was found at appropriate length, yet a number of participants suggested in the open-ended question sections that the length of both the videos and the non-class materials ought to be be reduced to avoid boredom and distraction.

In fact, the literature reports diverse opinions and suggestions in relation to what the optimal length of pre-class materials should be. For example, Khan (2012) notes that students need 3 to 5 minutes to settle down and can achieve optimal focus up to 10 to 18 minutes. Medina (2008) suggests that the attention span in an instructive PowerPoint lecture is no more than 10 minutes, and that something should be done to receive attention again at 9 minutes and 59 seconds. Note that the length of the video presentations in this study was between 10.53 and 15.57 minutes, and the average length was calculated as 12.7 minutes. On this aspect, the length of the video presentations were between the suggested range in the literature, but shorter videos are preferrable to longer videos by learners (Gehringer & Peddycord 2013; Toto & Nguyen, 2009; Zappe et al., 2009). Besides, Porcaro et. al (2016) state that optimal

length of a video depends on its delivery, context and theme along with other uncontrollable parameters in the watching space.

As the final word, although the length of non-class materials in this study was liked by most of the students, some of them still recommended reducing it. No specific suggestion about length was made, but considering what Medina (2008) proposes, the didactic videos in a flipped classroom should be kept under 10 minutes.

4.3.3.2.4 Better In-class Activities

Another suggestion that the students came up with is better in-class activities; in other words, they suggested enhancing either the number or the diversity of the tasks with which they engaged in the classroom. For example, it is recommended that further tasks as well as several games and exercises be included in the activities. In this way, learner engagement will increase, and an enjoyable atnosphere will be created, making vocabulary learning more permanent. As stated earlier, the participants enjoyed getting involved in role-play tasks, yet more time than predicted was spent in those tasks. Hence, short notes about role-play activities can be provided at the end of the videos so that the students can be given adequate time to plan and get prepared. Finally, one creative offer at issue can be to design an activity in which all the target words are used, thus making those words more memorable.

4.4 Opinions on FL in Enhancing the Learning of New English Vocabulary Items

One component of the second research question in the present study is “what are the students’ opinions about the flipped approach in enhancing the learning of new vocabulary items?”. It should be kept in mind from the beginning that all the participants in this study agreed that FL was more useful than the traditional vocabulary learning in that the words became more memorable in their minds.

Visual components consisting of images and videos were the most effective components in the flipped material for a wide array of reasons. The participants noted that the visuals contributed to a permanent learning, consolidated their

learning, and worked well since they are endowed with a good visual memory enabling them to visualize the words quickly when they hear or read. At this point, Paivio's Dual Coding Theory might explain why employing visual aids is more facilitative of learning new vocabulary than providing learners with only written materials. In brief, Paivio (1991) argues that human cognition is made up of two systems: verbal and non-verbal. While the former is associated with the words, the latter is composed of imageries; and these two systems interact with one another through referential connections. The corollary that can be drawn within the framework of the current study is that, because the images and videos which also contain the written forms of the target words appeal to both verbal and non-verbal systems of the learners, visual context can lead to better retention. Also note that visual components prove more effective because especially videos include motion, sound, and image that appeal to different senses, and the curiosity factor in the videos arouses interest.

However, there were mixed perceptions about the written components, such as L1 and L2 definitions, phrases, paragraphs, and sentences. When the students were asked which parts were the most effective while studying the online materials in the Opinion Scale, 30% of the responses overall concerned the written context, including L1 definitions (10%), phrases (8%), paragraphs (4%), sentences (4%), and L2 definitions (4%). The participants reported much higher effectivess rates in the weekly reflections in which the written context was found successful at a rate around 86%. In the open-ended reponses, the definitions were foound comprehensible, explanatory, and easy to understand, and the paragraphs were easy to grasp for some students. The use of sentences were also liked because they were catchy, comprehensible, and simple, thus bringing about easy recall. On the other hand, some participants registered their discontent with the written components in the materials. Some students had difficulty due to the unknown words in the paragraphs, found understanding and remembering some sentences challenging, and regarded them as boring. Some implied that verbal parts did not appeal to them, while some others explicitly stated their dislike of the written context, particularly sentences as they did not like building sentences much. Further, some participants used the written context as the beginning and then visuals as a means of consolidation, but

others directly skipped the verbal part and figured it out only after watching the visuals because descriptive sentences are usually distracting for them.

The number of words assigned per week in this study was 10, but the Opinion Scale revealed that 60% of the respondents was in favour of increasing the number of words per week. They were also asked how many words they could learn per week with the flipped vocabulary instruction. While 29% said they could learn up to 30 words, 19% stated that they could learn up to 20 words, followed by those who could learn up to 40 words (9%), 60 words (9%), 70 words (5%), and 100 words (5%). Given all the numbers reported above, the average number of words that can be acquired through FL is around 32. Though 100 words per week looks like a phenomenal claim, the participants were careful to set specific conditions like the number of hours and days or doing frequent revision. Moreover, some participants pointed out that the current number was adequate, encouraging them to learn the words. Even some frankly admitted that more than 10 words per week would not be a goal within reach.

The Likert Scale in the reflection reports stated that the level of the vocabulary items was difficult, and the majority of the students disagreed with this statement (1,82 out of 4), suggesting that the word level did not put a strain on them in general. The qualitative data corroborates this finding because the participants deemed the assigned words as quite nice, comprehensible, expressive, easy or in medium difficulty, at an appropriate difficulty level, and convenient to use in daily life. On the other hand, even though the majority reported that the word level did not put a strain on them overall, few participants found the target words difficult, stating that recalling some words even after watching the online materials was difficult.

The lack of pronunciation part in almost all the video presentations was seen as a shortcoming of this implementation. Some students remarked that they occasionally experienced problems with the pronunciation of words and found the pronunciation of some words difficult, recommending the addition of pronunciation parts to the study materials. As a matter of fact, pronunciation work related to the target words

was carried out in the classroom, but it seems as if they wanted this practice to be available in the online material, too.

Lastly, it was suggested that more effective word choices should be made while designing the target words. The words in the online materials should be arranged in a way where they can gather around a particular theme. Some students remarked that the target words were not connected semantically to each other, nor did they have any connotations which knit them together. Therefore, these students proposed that if the words are associated with or close to each other in terms of meaning, they can be remembered better.

4.5 Opinions on FL in Enhancing Overall English Proficiency

Another component of the second research question in this study is "what are the students' opinions about the flipped approach in enhancing overall English proficiency?". Though not designed to answer this research question, the results of the Self-Efficacy Scale may give an overall picture of what the participants thought before and after the treatment. In the Self-Efficacy Scale, the students believing they are competent in writing rose from 21% to 32%, but those with moderate writing skills decreased from 57% to 50%, while around 20% still felt that they were poor writing abilities in English. However, all these shifts in the percentages did not produce a significant change between the pre- and post-treatment. As far as grammar is concerned, the students with good grammar skills increased from 36% to 47%, whereas those with moderate skills remained nearly the same at 50%, again revealing a non-significant change. In the light of the results in the Opinion Scale, the participants wanted FL to be implemented in other language areas, including reading, speaking, writing, listening, and grammar. In the interviews, though most findings align with those in the Opinion Scale, there were nevertheless different opinions with different reasons.

The participants did not have one uniform opinion on whether they should leverage their grammar and writing skills through FL. It has been conclusively shown in the literature that writing skills can be improved through FL with significantly better

learning outcomes compared to the traditional method (Yuliani et al., 2018; Buitrago & Díaz, 2018; Abdelrahman et al., 2017; Gasmi, 2016; Ahmed, 2016; Engin 2014; Farah, 2014). Likewise, some learners in the present study felt that working on writing rules and related vocabulary might facilitate the process of writing because they can handle it at home by considering the rules of writing. Additionally, as they will come to the class by having learnt grammar, they think they will learn better in the class, use appropriate words or notice their mistakes. Another reason stated to learn writing with FL is that they need to work harder on writing, which they can tackle. On the other hand, other students opposed the idea of learning writing with FL and believed that learning writing in English directly from the instructor in a class time would make more sense.

Some claimed that grammar could be better mastered via FL because it rests on formulations. In contrast, others were against learning grammar through FL for different reasons. Those with poor grammar background did not favour FL in this area and a traditional approach, such as lecturing in the class, would suit them better, thinking that they would at listen to grammar explanations in the class by necessity. To these students, grammar is like maths in that it has some systems based on a verbal formula, thus FL would be a waste of time in grammar.

As can remembered from the Self-Efficacy Scale, the students with very good and good spoken skills remained the same at the end of the implementation. However, those with poor spoken skills decreased from 63% to 43%, while the percentage for the ones with moderate speaking skills climbed from 30% to 50%. Therefore, an increase in the positive direction, though not significant, was observed, revealing that they thought they improved themselves in speaking even if just a bit. Furthermore, every participant wanted FL to be implemented in other language areas, including speaking, in the Opininon Scale in addition to agreeing that practicing in class with exercises and speaking activities enabled them to consolidate the subject and make it memorable. More specifically, a few participants reported in the open-ended questions part of the Opinion Scale that the implementation of FL in areas, such as speaking, might be really good and that learning English could become more enjoyable and easier by combining FL with other activities, such as speaking. In fact,

the research output into the effect of FL on speaking skills is high, reporting significantly positive results (Teng, 2018; Wu et al., 2017; Mu, 2017; Obari & Lambacher, 2015; Zuo Xin-yue, 2016). In one of these studies, Chen Hsieh et al. (2016) report that flipped speaking implementation both encouraged the learners to improve their oral ability and leveraged their spoken skills.

As in grammar and writing, the students expressed conflicting opinions on whether they prefer to improve speaking via FL or traditionally. Some seemed highly suspicious of improving her speaking skills through FL and found this task somewhat challenging, fearing that a fast conversation between people with good English that does not include subtitle would be unintelligible for them. The importance of pronunciation in speaking was also stressed by highlighting the teacher's immediate feedback in pronunciation errors. On the other hand, other participants' views were consistent with the results of previous studies, According to these students, studying the topics and reviewing the questions at home would get them prepared for speaking activities. by both speaking more fluently in class and and deriving pleasure from speaking. Moreover, they think they would have more time to think over those topics and so will be able to create different sentences.

4.6 Implications for Practice

In accordance with the results of the current study, it can be concluded that the students develop overall positive attitutes towards FL. Both the quantitative and and qualitative data obtained pointed to the acceptance of FL by the learners in English vocabulary learning, suggesting its use in this language area. When designed painstakingly and implemented wisely, FL has a great potential to yield satisfactory learning outcomes and academic success in terms of vocabulary. Indeed, learning vocabulary for its own sake hardly makes sense since people do not communicate by using detached vocabulary but rather using them as a whole while reading, writing, speaking, and listening. Furthermore, given that vocabulary is the building block of a language, leveraging these skills primarily rests on its mastery. Therefore, flipped vocabulary learning can and should be employed in improving basic four language skills.

Instructors can make use of flipped vocabulary learning in writing courses while teaching how to write paragraphs, essays, compositions, academic papers. Professionals may also draw on FL in speaking classes by presenting the topics to be discussed and the related vocabulary in online materials. In this way, the class will run more smoothly, and more creative as well as linguistically accurate sentences will be uttered, satisfying teachers and learners alike in this process. Besides, the potentially difficult vocabulary can be flipped for listening classes where learner will enjoy the confidence of comprehending utterances in a new language. More importantly, reading classes are ideal to make use of FL because what makes passages challenging, admittedly, is not grammar but unknown vocabulary. Therefore, these handicaps can be tackled through FL by flipping difficult or unknown vocabulary and enabling learner to come to class prepared.

Please note that flipped vocabulary instruction is not a haphazard implementation but a subtle practice for which some precations need to be taken. For example, using a lot of short, clear, expressive, and intelligible visuals, including funny, daily-like, catchy, dubbed, and subtitled videos as well as preparing slides tailored to students' needs and interests and having diverse exercises is key to the success of FL. However, FL does not simply refer to preparing beautiful PowerPoint slides and uploading them onto an online platform. Instructors should find the means to check that the videos are watched so that learners are ready for the class. Teachers should design meaningful and instructive activities connected with the vocabulary presented in the non-class materials. As a result of a succesful implementation, the taught vocabulary is likely to be permanent, and thus students feel more motivated to learn and enjoy a flexible and self-paced learning environment by also developing independent learning skills in the process.

A vital point that needs to be underlined is that there will not always be a bed of roses during a flipped implentation, and some mishaps may emerge when it is practised deficiently. The videos should not be too long, include more information than students can handle in a given time, and contain many visuals rather than too much written context. Teachers should be also prepared to tackle unexpected technical and technological problems.

One last word is for the expectations from FL. Though the literature overwhelmingly cites positive results on FL, it may not be the whole answer to the deficiencies in the current educational practices. In relation to this, Valerie Strauss, a journalist in *Washington Post*, shares a letter received from an American teacher:

> …To assume that all students are self-motivated and will do the lecture portion at home is fallacious. This idea, like the open classroom, has a kernel of truth but is not a *panacea*. It may, at times, be a useful strategy for teachers to utilize. Successful educators utilize an eclectic approach to teaching because each student has his/her own best way to learn. There are no magic bullets in education only a thoughtful analysis of the strengths and weaknesses of each student and delivering educational program to meet those needs.

4.7 Conclusion

The present study with sequential explanatory mixed-methods design included 55 B1-level participants who attended a private language institution in Denizli, Turkey. The age range of the participants was between 15 and 29,and the mean age was calculated as 21,1. The intervention process took four weeks and implemented in two different semesters. Considering that the participants were going to hear, write, read and speak the newly-learned vocabulary, the number of the targeted words per week was specified as 10. The total vocabulary items targeted were ultimately 40, which was selected from their coursebook (Oxford English File Pre-intermediate).

The quantitative data of the present research was collected through an existing self-efficacy scale, an adopted/ready-made flipped learning attitude scale, a pre- and post-test designed by the researcher. The quantitative results from both pre-test and post-test address the first research question of this study, which is "to what extent does FL enhance the learning of new vocabulary items?". On the other hand, the qualitative data was obtained from two primary sources: individual interviews performed at the end of the implementation process and the students' reflection papers conducted at the end of each week. These measures tried to adddress the second research question, which is "what are the students' opinions about the flipped approach in enhancing their overall English proficiency and in enhancing the learning of new English vocabulary items?". While SPSS Statistics 22 software package programme was used

to analyze the quantitative data, the qualitative data was analysed by using MAXQDA software program.

First, ICT levels of the participants were gauged to make sure that they were capable enough to follow the flow of a flipped classroom. Then pre-tests were carried out on both experimental and control group. The instructor, who was also the researcher of the current study, recorded the course-related material and then uploaded it on YouTube. During the in-class time, the students were engaged in a wide variety of practical activities related to the vocabulary presented in the videos following some pronunciation exercises. The participants in the control group followed a traditional flow of lessons in which the students communicated, answered the questions, and did the content-related exercises. After the 4th week, both groups took the post-test to find out the learning outcomes. At the end of the treatment process, an adopted flipped learning attitude scale was provided to the participants in the experimental group to gain an insight into their feelings about the flipping model. Based on certain criteria, four participants were selected to take part in the semi-structured interviews.

The output of the Wilcoxon Signed-ranks analysis indicated that the post-test scores were significantly higher than the pre-test scores ($p < .001$) in favour of the experimental group, who significantly outperformed the control group. Besides, the findings obtained in this study signalled an overall positive attitude towards FL, substantiating previous studies. Most the participants in this study preferred flipped vocabulary learning to its traditional counterpart because FL enabled them to keep the words in their memory better, helped them enjoy themselves during vocabulary learning process, brought about effective learning, facilitated vocabulary learning, and prepared them well for the class due to efficient pre-class work. However, some drawbacks were reported such as technical problems, challenging activities, excessive length of videos, increase in workload at home, and reservations to written context, most of which align with the literature. Subsequently, some specific suggestions related to the design of videos, written context, and length of the videos were made in order to make this FL process more effective and beneficial. Moreover, the students unanimously supported the use of FL in social science courses by listing diverse reasons for such a preference, whereas they agreed that FL implementation

would not yield good learning outcomes in science courses. In relation the second research question “what are the students’ opinions about the flipped approach in enhancing their overall English proficiency and in enhancing the learning of new English vocabulary items?”, the participants approved the flipped vocabulary instruction in the learning of new words. For the second part of this research question, the participants reported mixed opinions on whether they should improve their grammar, writing, and speaking skills through FL.

4.8 Limitation and Further Research

This study offers valuable insights into the nature of flipped vocabulary learning, though the generalisability of its results is subject to certain limitations. For one thing, the current study had to work with a small population due to the limited class size in the research setting, which is basically the main reason why the data was collected in two different semesters.

Another limitation can be cited as the short implementation period, which was four weeks. Since the course period was restricted to around three months and the students took mid-term and final exams, the treatment period was inevitably no more than four weeks.

Another issue that was not addressed in this study was whether age, gender, proficiency level, and educational status have a significant effect on flipped vocabulary learning.

Since the effectiveness of pedogo-technological treatments yield more fruitful results in the long run, longtitutional studies could assess the long-term effects of flipped vocabulary learning. Further research with a larger population in this field would be of great help in undestanding FL phenomenon better. More research using rich data collection instruments should be undertaken to explore how age, gender, proficiency level, and educational status affect flipped vocabulary learning.

It should be noted that this study was conducted in a private language school where the attendees already had certain language aims and felt ready and motivated to learn English. The effect of FL implementation in another institution or a regular school environment and with another instructor should also be investigated by future research.

The last but not the least, the novelty effect might have played a role in the students' acceptance of this new learning practice. Since this was a new approach for the participants and it was implemented for four weeks, future studies lasting for a longer period of time may explain whether the efficacy of FL is short-lived or long-lasting. This longer treatment period might also help to form an idea about whether FL can bring about retention of words in the long run.

REFERENCES

Abdelrahman, L. A. M., DeWitt, D., Alias, N., & Rahman, M. N. A. (2017). Flipped Learning for ESL writing in a Sudanese school. *Turkish Online Journal of Educational Technology*, *16*(3), 60.

Aghlara, L., & Tamjid, N. H. (2011). The effect of digital games on Iranian children's vocabulary retention in foreign language acquisition. *Procedia-Social and Behavioral Sciences*, *29*, 552-560.

Ahmad, S. Z. (2016). The flipped classroom model to develop Egyptian EFL students' listening comprehension. *English Language Teaching*, *9*(9), 166.

Ahmed, M. A. E. A. S. (2016). The effect of a flipping classroom on writing skill in English as a foreign language and students' attitude towards flipping. *US-China Foreign Language*, 14(2), 98-114.

Akçayır, G., & Akçayır, M. (2018). The flipped classroom: A review of its advantages and challenges. *Computers & Education*, *126*, 334-345.

Al-Seghayer, K. (2001). The effect of multimedia annotation modes on L2 vocabulary acquisition: A comparative study. *Language Learning and Technology*, 5(1): 202–232.

Al-Zahrani, A. M. (2015). From passive to active: The impact of the flipped classroom through social learning platforms on higher education students' creative thinking. *British Journal of Educational Technology*, 46(6), 1133-1148.

Alghamdi, E. A. (2018). Effects of using multimodal glosses in video games to enhance incidental vocabulary learning and retention. In *Handbook of research on integrating technology into contemporary language learning and teaching* (pp. 427-448). Hershey PA: IGI Global.

Ali Mohsen, M. (2016). The use of computer-based simulation to aid comprehension and incidental vocabulary learning. *Journal of Educational Computing Research*, 54(6), 863-884.

Alnuhayt, S. S. (2018). Investigating the use of the flipped classroom method in an EFL vocabulary course. *Journal of Language Teaching and Research, 9*(2), 236-242.

Alsowat, H. (2016). An EFL flipped classroom teaching model: Effects on English language higher-order thinking skills, student engagement and satisfaction. *Journal of Education and Practice, 7*(9), 108-121.

Anderson, N. (1999). *Exploring Second Language Reading. Issues and Strategies*. Boston: Heinle & Heinle Publishers.

Arndt, Henriette. (2016). Modality effects in incidental vocabulary learning: A comparison of learning through reading blog posts and watching YouTube video blogs. *British Association* for Applied Linguistics, (1), 120-138.

Baepler, P., Walker, J. D., & Driessen, M. (2014). It's not about seat time: Blending, flipping, and efficiency in active learning classrooms. *Computers & Education*, *78*(2014), 227-236.

Baker, R. L. (1984). Foreign language software: the state of the art or pick a card, any (flash) card. CALICO Journal, 2 (1), 6 – 27.

Bane, J. (2014). *Flipped By Design: Flipping the Classroom Through Instructional Design*. Ohio: The Ohio State University.

Başal, Ahmet. (2012). The Use of Flipped Classroom in Language Teaching. *The 3rd Black Sea ELT Conference "Technology, A Bridge to Language Learning".*

Beatty, K. (2003). *Teaching & researching computer-assisted language learning* (pp. 18). London: Longman.

Bergmann, J., & Sams, A. (2012). Flip your classroom: Reach every student in every class every day. Eugene, OR: *International Society for Technology in Education*, (1-11).

Berrett, D. (2012). How "flipping" the classroom can improve the traditional lecture. *The Chronicle of Higher Education*, 58 (25), 16-18.

Betihavas, V., Bridgman, H., Kornhaber, R., & Cross, M. (2016). The evidence for 'flipping out': a systematic review of the flipped classroom in nursing education. Nurse Education Today, 38, 15–21.

Bhagat, K. K., Chang, C. N., & Chang, C. Y. (2016). The impact of the flipped classroom on mathematics concept learning in high school. *Educational Technology & Society,* 19(3), 134–142.

Blair, E., Maharaj, C., & Primus, S. (2016). Performance and perception in the flipped classroom. *Education and Information Technologies, 21*(6), 1465-1482.

Bormann, J. (2014). *Affordances of Flipped Learning and its effects on Student Engagement and Achievement*. Master thesis. University of Northern Iowa.

Boyraz, S., & OCAK, G. (2014). İngilizce öğretiminde tersine eğitim uygulamasinin değerlendirilmesi. *Unpublished master dissertation, Afyon Kocatepe University*.

Brookhart, S. (2010). *How to Assess Higher-order Thinking Skills in Your Classroom*. Alexandria, VA: ASCD.

Brown C.J. (2018). Flipping the ESL/EFL academic reading classroom: a group leader discussion activity. In: Mehring J., Leis A. (eds) *Innovations in Flipping the Language Classroom*. Springer, Singapore.

Brown, E. A., Thomas, N. J., & Thomas, L. Y. (2014). Students' willingness to use response and engagement technology in the classroom. *Journal of Hospitality, Leisure, Sport and Tourism Education, 15*(2014), 80-85.

Buitrago, C. R., & Díaz, J. (2018). Flipping Your Writing Lessons: Optimizing Time in Your EFL Writing Classroom. In *Innovations in Flipping the Language Classroom* (pp. 69-91). Springer, Singapore.

Burns, A. & Richards, J. (2012). *The Cambridge Guide to Pedagogy and Practice in Second Language Teaching*. Cambridge: Cambridge University Press.

Butler-Pascoe, M. E. and K. M. Wiburg. (2003). *Technology and Teaching English Language Learners*. Pearson Education, Inc. (pp. 114-137).

Bytheway, J. (2014). In-game culture affects learners' use of vocabulary learning strategies in Massively Multiplayer Online Role-Playing Games. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT), 4*(4), 1-13.

Carter, R., & McCarthy, M. (2014). *Vocabulary and language teaching*. New York, NY: Routledge.

Celce-Murcia, M. (2001). *Teaching English as a Second or Foreign Language*. USA: Heinle and Heinle.

Chanier, T. and T. Selva (1998). The ALEXIA System: The Use of Visual Representations to Enhance Vocabulary Learning. *Computer Assisted Language Learning,* 11(5), (pp. 489-521).

Chen, C. & Chung, C. (2008). Personalized mobile English vocabulary learning system based on item response theory and learning memory cycle. *Computers & Education*, 51(2): 624–645.

Chen, H. C., & Graves, M. F. (1995). Effects of previewing and providing background knowledge on Taiwanese college students' comprehension of American short stories. *Tesol Quarterly*, *29*(4), 663-686.

Chen, N. S., Hsie, S. W. & Kinshuk (2008). Effects of short-term memory and content representation type on mobile language learning. *Language Learning and Technology*. 12 (3), 93 – 113.

Chen Hsieh, J. S., Wu, W. C. V., & Marek, M. W. (2016). Using the flipped classroom to enhance EFL learning. *Computer Assisted Language Learning*, *30*(1-2), 1-21.

Christensen, E., Merril, P., & Yanchar, S. (2007). Second language vocabulary acquisition using a diglot reader or a computer-based drill and practice program. *Language Learning and Technology*, 20 (1), 67 – 77.

Chun, D. M. and Plass, J. L. (1996a). Effects of multimedia annotations on vocabulary acquisition. *Modern Language Journal*, 80(2): 183–198.

Clemens, B. M., Nivargi, C., Jan, A., Lu, Y., Schneider, E., & Manning, J. (2013). Adventures with a flipped classroom and a materials science and engineering MOOC: "fools go where angels fear to tread." In *Proceedings of Materials Research Society Symposium* Vol. 1583. Boston, MA.

Coady, J. (1993). Research on ESL/EFL vocabulary acquisition: putting it in context. In Huckin, T., Haynes, M., and Coady, J. (Eds.) *Second Language Reading and Vocabulary Learning* (pp. 3-23). Norwood, NJ: Ablex.

Conklin, W. (2012). *Higher-Order Thinking Skills to Develop 21st Century Learners*. Huntington Beach: Shell Education.

Constantinescu, A. I. (2007). Using technology to assist in vocabulary acquisition and reading comprehension. *The Internet TESL Journal*, *13*(2), 122-133.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. 2nd ed. Thousand Oaks, CA: Sage.

Creswell, J. W., V. L. Plano Clark, M. Gutmann, and W. Hanson. (2003). Advanced mixed methods research designs. In *Handbook on mixed methods in the behavioral and social sciences*, ed. A. Tashakkori and C. Teddlie (pp. 209–40). Thousand Oaks, CA: Sage.

Crow, J. T., & Quigley, J. R. (1985). A semantic field approach to passive vocabulary acquisition for reading comprehension. *Tesol Quarterly*, *19*(3), 497-513.

Çakmak, F., & Erçetin, G. (2018). Effects of gloss type on text recall and incidental vocabulary learning in mobile-assisted L2 listening. *ReCALL, 30*(1), 24-47.

Çavuş, N. and İbrahim, D. (2009). m-Learning: An experiment in using SMS to support learning new English language words. *British Journal of Educational Technology*, 40(1): 78–91.

Çelebi, H., Karaaslan, H., & Demir-Vegter, S. (2016). Corpus Use in Enhancing Lexico-Grammatical Awareness through Flipped Applications. *Journal of Language and Linguistic Studies*, 12(2), 152-165.

Davis, C. (2013). Flipped or inverted learning: Strategies for course design. In E.G. Smyth & J.X. Volker (Eds.), *Enhancing instruction with visual media: Utilizing video and lecture capture* (pp. 241-265). Hershey, PA: IGI Global.

DeCaricco, J. (2001). Vocabulary learning and teaching. In M. Celce- Murcia, (Ed), *Teaching English as a second or foreign language* (pp.285-299), Boston, MA: Heinle & Heinle.

Dodigovic, M. (2013). Vocabulary learning with electronic flashcards: Teacher design vs. student design. *Voices in Asia Journal*, 1(1), 15-33.

Duman, G., Orhon, G., & Gedik, N. (2015). Research trends in mobile assisted language learning from 2000 to 2012. *ReCALL*, *27*(2), 197-216.

Dupuy, B. C. (2000). Content-Based Instruction: Can it Help Ease the Transition from Beginning to Advanced Foreign Language Classes?. *Foreign language annals*, *33*(2), 205-223.

Engin, M. (2014). Extending the flipped classroom model: Developing second language writing skills through student-created digital videos. *Journal of the Scholarship of Teaching and Learning*, 14(5), 12-26.

Everett, J. W., Morgan, J. K., Stanzione, J. F., & Mallouk, K. E. (2014). A hybrid flipped first-year engineering course. Paper presented at Proceedings of 121st ASEE Annual Conference & Exposition, Indianapolis, IN.

Farah, M. (2014). T*he Impact of Using a Flipped Classroom Instruction on the Writing Performance of Twelfth Grade Female Emirati Students in the Applied Technology High School (ATHS)*. Master thesis. The British University, Dubai.

Fethi, K., & Marshall, H. W. (2018). Flipping movies for dynamic engagement. In *Innovations in Flipping the Language Classroom* (pp. 185-202). Springer, Singapore.

Gasmi, Afef Ahmed, (2016). An Exploratory Study of Students' Lived Experiences in a Blended-Flipped Writing Class. *Arab World English Journal (AWEJ) Special Issue on CALL*. 7(3), 210–226.

Gehringer, E. F., & Peddycord III, B. W. (2013, March). The inverted-lecture model: a case study in computer architecture. In *Proceeding of the 44th ACM technical symposium on Computer science education* (pp. 489-494). ACM.

Gettys, S., Imhof, L. A., & Kautz, J. D. (2001). Computer-assisted reading: The effect of glossing format on comprehension and vocabulary retention. *Foreign Language Annals*, 34(2), 91–106.

Ghanbaran, S., & Ketabi, S. (2014). Multimedia games and vocabulary learning. *Theory and practice in Language studies*, *4*(3), 489.

Gilboy, M. B., Heinerichs, S., & Pazzaglia, G. (2015). Enhancing student engagement using the flipped classroom. *Journal of nutrition education and behavior*, 47(1), 109–114.

Gilner, L. (2011). A primer on the General Service List. *Reading in a Foreign Language*, *23*(1), 65.

Grabe, W., & Stoller, F. L. (1997). Content-based instruction: Research foundations. *The content-based classroom: Perspectives on integrating language and content*, (pp. (5-21).

Green, J. C., & V. J. Caracelli, eds. (1997). Advances in mixed-method evaluation: The challenges and benefits of integrating diverse paradigms. In *New directions for evaluation*, ed. American Evaluation Association. San Francisco: Jossey-Bass.

Grimsely, C. (2013). New media and the inverted classroom: Investigating their impact on women in first- year composition. Unpublished Doctoral Dissertation. Texas Women's University: Denton.

Groot, P. (2000) Computer Assisted Second Language Vocabulary Acquisition. *Language Learning & Technology*, 4 (1), pp. 60-81.

Gross, A. (2014). The flipped classroom: Shakespeare in the English classroom. Unpublished Doctoral Dissertation. North Dakota State University: Fargo.

Gross, B., Marinari, M., Hoffman, M., DeSimone, K. & Burke, P. (2015). Flipped @ SBU: Student Satisfaction and the College Classroom. *Educational Research Quarterly, 39(2)*, 36-52.

Hadley, A.O. (2003). Teaching Language in Context. USA: Heinle & Heinle.

Han, Y. J. (2015). Successfully flipping the ESL classroom for learner autonomy. *NYS TESOL Journal, 2*(1), 98-109.

Han, Y. J. (2018). Flipping Tech-Enhanced, Content-Based EAP Courses with Online Content. In *Innovations in Flipping the Language Classroom* (pp. 203-220). Springer, Singapore.

Han, J. H., & Finkelstein, A. (2013). Understanding the effects of professor's pedagogical development with clicker assessment and feedback technologies and the impact on students' engagement and learning in higher education. *Computers & Education, 65*(2013), 64-76.

Hanson, W. E., J. W. Creswell, V. L. Plano Clark, K. P. Petska, and J. D. Creswell. (2005). Mixed methods research designs in counseling psychology. *Journal of Counseling Psychology* 52 (2): 224–35.

Helgeson, John. (2015). Flipping the English Classroom, Kappa Delta Pi Record, 51:2, 64-68.

Horst, M., Cobb T., & Meara, P. (1998). Beyond A Clockwork Orange: Acquiring second language vocabulary through reading. *Reading in a Foreign Language, 11*(2), 207–223.

Hsiu-Ting, H. (2015). Flipping the classroom for English language learners to foster active learning, Computer Assisted Language Learning, 28:1, 81-96.

Hu, M., & Nation, I. S. P. (2000). Vocabulary density and reading comprehension. *Reading in a Foreign Language, 23*(1), 403–430.

Huang, B. G., & Yang, J. C. (2012). A multiplayer online role-playing game for incidental vocabulary learning. In *Proc. of the 20th International Conference on Computers in Education*.

Huang, Y. N., & Hong, Z. R. (2016). The effects of a flipped English classroom intervention on students' information and communication technology and English reading comprehension. *Educational Technology Research and Development*, *64*(2), 175-193.

Huang, Y. C. (2003). The effects of vocabulary glosses and example sentences on junior high school EFL students' reading comprehension and vocabulary learning. Unpublished master's thesis, National Cheng-Kung University, Taiwan.

Hulstijn, J. H. (1992). Retention of inferred and given word meanings: Experiments in incidental vocabulary learning. In *Vocabulary and applied linguistics* (pp. 113-125). Palgrave Macmillan, London.

Hwang, G. J., & Tsai, C. C. (2011). Research trends in mobile and ubiquitous learning: A review of publications in selected journals from 2001 to 2010. *British Journal of Educational Technology*, *42*(4).

Ishikawa, Y., Akahane-Yamada, R., Smith, C., Kondo, M., Tsubota, Y., & Dantsuji, M. (2015, August). An EFL flipped learning course design: utilizing students' mobile online devices. In *Critical CALL–Proceedings of the 2015 EUROCALL Conference, Padova, Italy* (p. 261). Research-publishing.net.

Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field methods*, *18*(1), 3-20.

Iyitoğlu, O., & Erişen, Y. (2017). Delving Into Flipping EFL Classroom: A Mixed Method Study. *European Journal of English Language Teaching*. 3(1), 120–152.

Kabooha, R., & Elyas, T. (2018). The Effects of YouTube in Multimedia Instruction for Vocabulary Learning: Perceptions of EFL Students and Teachers. *English Language Teaching*, *11*(2), 72.

Kang, N. (2015). The comparison between regular and flipped classrooms for EFL Korean adult learners. Multimedia-Assisted Language Learning, 18(3), 41-72.

Karmaker, Protiva Rani & Singh, Irom Gambhir. (2016). The flipped classroom in South Korea at the undergraduate level: An investigation. The EDRC Journal of Learning and Teaching, 1(2), 92–98.

Ketabi, S., & Shahraki, S. H. (2011). Vocabulary in the approaches to language teaching: From the twentieth century to the twenty-first. *Journal of Language Teaching and Research*, 2(3), 726-731.

Kettle, M. (2013). Flipped physics. *Physics Education*, 48(5), 593–596.

Khan, S. (2012). Why we need to get rid of class lectures. Retrieved February 16, 2016, from http://ideas.time.com/2012/10/02/why-lectures-are-ineffective/

Kim, W. Y. (2018). Effects of flipped learning on the learning of English vocabulary. *영어학*, 18(4), 470-485.

Ko, M. H. (2012). Glossing and second language vocabulary learning. *Tesol Quarterly*, *46*(1), 56-79.

Krashen, S. (1989). We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. *The modern language journal*, *73*(4), 440-464.

Kuo, F. R., Hsu, C. C., Fang, W. C., & Chen, N. S. (2014). The effects of Embodiment-based TPR approach on student English vocabulary learning achievement, retention and acceptance. *Journal of King Saud University-Computer and Information Sciences*, *26*(1), 63-70.

Lage, M.J., & Platt, G. (2000). The Internet and the inverted classroom. *The Journal of Economic Education*, 31(1), 11-11.

Larsen-Freeman, D. (2000). Techniques and principles in language teaching (2nd ed.). Oxford, England: Oxford University Press.

Laufer, B. (1986). Possible changes in attitude towards vocabulary acquisition research. *IRAL: International Review of Applied Linguistics in Language Teaching*, *24*(1), 69.

Laufer, B. and Sim, D. D. (1985). Taking the easy way out: non-use and misuse of clues in EFL reading. *English Teaching Forum*, 23(2), 7–10.

Leis, A., Cooke, S., & Tohei, A. (2015). The effects of flipped classrooms on English composition writing in an EFL environment. *International Journal of Computer Assisted Language Learning and Teaching*, *5*(4), 37–51.

Levy, M. (1997). *Computer-assisted language learning: Context and conceptualization*. Oxford: Oxford University Press.

Lewis, M. (1993). *The Lexical Approach: The State of ELT and way forward*. Hove, England: Language Teaching Publications.

Lewis, M., & Gough, C. (1997*)*. Implementing the lexical approach: Putting theory into practice. Hove: *Language Teaching Publications*, 3(1), 223-232.

Lo, C. K., & Hew, K. F. (2017). A critical review of flipped classroom challenges in K-12 education: Possible solutions and recommendations for future research. *Research and Practice in Technology Enhanced Learning*, 12(1), 4.

Lock, J. V. (2015). Designing learning to engage students in the global classroom. *Technology, Pedagogy and Education, 24*(2), 137-153.

Loucky, J. P., & Ware, J. L. (Eds.). (2016). *Flipped Instruction Methods and Digital Technologies in the Language Learning Classroom*. IGI Global. (p.4) (p.5)

Lu, M. (2008). Effectiveness of vocabulary learning via mobile phone. *Journal of Computer Assisted Learning*, 24(6): 515–525.

Mahdi, H. S. (2018). Effectiveness of mobile devices on vocabulary learning: A meta-analysis. *Journal of Educational Computing Research, 56*(1), 134-154.

Mason, G., Shuman, T., & Cook, K. (2013). Comparing the effectiveness of an inverted classroom to a traditional classroom in an upper-division engineering course. *IEEE Transactions on Education*, 56(4), 430–435.

McInerney, D. M. (2005). Educational psychology–Theory, research, and teaching: A 25-year retrospective. *Educational Psychology*, *25*(6), 585-599.

McLaughlin, J. E., Roth, M. T., Glatt, D. M., Gharkholonarehe, N., Davidson, C. A., Griffin, L. M., ... & Mumper, R. J. (2014). The flipped classroom: a course redesign to foster learning and engagement in a health professions school. *Academic Medicine*, *89*(2), 236-243.

Medina, J.J. (2008). *Brain Rules*. Seattle, WA: Pear Press.

Mehring, J. G. (2015). An exploratory study of the lived experiences of Japanese undergraduate EFL students in the flipped classroom. (Doctoral dissertation, Pepperdine University).

Mehring, J. G. (2016). Present Research on the Flipped Classroom and Potential Tools for the EFL Classroom. *Computers in the Schools*, 33:1, 1-10.

Mehring, J. (2018). The flipped classroom. In *Innovations in Flipping the Language Classroom* (pp. 1-9). Springer, Singapore.

Missildine, K., Fountain, R., Summers, L., & Gosselin, K. (2013). Flipping the classroom to improve student performance and satisfaction. *Journal of Nursing Education*, 52(10), 597–599.

Mohan, D. (2018). *Flipped classroom, flipped teaching and flipped learning in the foreign/second language post–secondary classroom*. Nouvelle Revue Synergies Canada, (11).

Mondria, J. A. (1993). The effects of different types of context and different types of learning activity on the retention of foreign language words. Paper presented at the 1993 AILA World Congress.

Monsell, S. (1985). Repetition and the lexicon. In A. W. Ellis (Ed.), *Progress in the psychology of language*, Volume 2. London: Lawrence Erlbaum Associates.

Moran, C. (2014). *Changing Paradigms: A Mixed Methods Study of Flipping the English Language Arts Classroom*. Doctoral Dissertation, North Carolina State University.

Moravec, M., Williams, A., Aguitar-Roca, N., & O'Dowd, K. (2010). Learn before lecture: A strategy that improves learning outcomes in a large introductory biology class. *CBE-Life Sciences Education, 9*(4), 473-481.

Morgan, D. (1998). Practical strategies for combining qualitative and quantitative methods: Applications to health research. *Qualitative Health Research* 8:362–76.

Mu, Z. (2017). Affordance-based mobile Learning in a flipped classroom to enhance CFL learners' oral proficiency: A comparative study. *DEStech Transactions on Social Science, Education and Human Science*, (EEMT).

Myong, H. K. (2005). Glosses, comprehension, and strategy use. *Reading in a Foreign Language*, 17(2), 125–143.

Nagy, W. E., Herman, P.A., & Anderson, R. C. (1985). Learning words from context. *Reading Research Quarterly, 20* (2), 233-253.

Nakata, T. (2008). English vocabulary learning with word lists, word cards and computers: implications for cognitive psychology research for optimal spaced learning. *ReCALL*. 20 (1), 3 – 20.

Nassaji, H. (2004). The relationship between depth of vocabulary knowledge and L2 learners' lexical inferencing strategy use and success. *The Canadian Modern Language Review*, 61(1), 107-134.

Nation, I. S. P. (1997). Bring today's vocabulary research into tomorrow's classrooms. In Jacobs, G. M. (Ed.) *Language Classrooms of Tomorrow: Issues and Responses*, pp. 170-182. Singapore: SEAMEO Regional Language Centre.

Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.

Nation, I. S. P., & Coady, J. (1988). Vocabulary and reading. In R. Carter & M. McCarthy, (eds.), *Vocabulary and Language Teaching* (pp.97 – 110). London: Longman.

Nation, I. S. P., & Webb, S. (2011). Content-based instruction and vocabulary learning. *Handbook of research in second language teaching and learning*, *2*, 631-644.

Novak, G.M. (2011). Just-in-time teaching. *New Directions for Teaching and Learning*, 2011(128), 63-73.

Nunes, L.D., & Karpicke, J.D. (2015). Retrieval-based learning: Research at the interface between cognitive science and education. R. Scott and S. Kosslyn (Eds.), *Emerging trends in the social and behavioral sciences,* (1-15). John Wiley & Sons, Inc.

Obari, H., & Lambacher, S. (2015, August). Successful EFL teaching using mobile technologies in a flipped classroom. In *Critical CALL–Proceedings of the 2015 EUROCALL Conference, Padova, Italy* (pp. 433-438).

Oki, Y. (2016). Flipping a content-based ESL course: An action research report. *Hawaii Pacific University TESOL Working Paper Series*, *14*, 62-75.

Olson, R. (2014). Flipping engineering probability and statistics—Lessons learned for faculty considering the switch. Paper presented at Proceedings of the 121st ASEE An-nual Conference & Exposition, Indianapolis, IN.

Orhan, A. (2019). The Effect of Flipped Learning on Students' Academic Achievement: A Meta-Analysis Study. *Cukurova University Faculty of Education Journal*, *48*(1).

Paivio, A. (1991). Dual coding theory: retrospect and current status. *Canadian Journal of Psychology*, 45(3), 255-287.

Paribakht, T, & Wesche, M. (1993). The relationship between reading comprehension – based ESL program. *TESL Canada Journal*,11 (1), 9 –29. In J.Coady & T. Huckin (1997).

Pitts, M., White, H., & Krashen, S. (1989). Language acquirers'. *Reading in a Foreign Language*, *5*(2), 271.

Plass, J. L. and Jones, L. C. (2005). Multimedia learning in second language acquisition. In: Mayer, R. E. (ed.), *The Cambridge handbook of multimedia learning*. New York: Cambridge University Press, 467–488.

Prefume, Y. (2015). *Exploring a Flipped Classroom Approach in a Japanese Language Classroom: a Mixed Methods Study*. Doctoral Dissertation, Department of Curriculum and Instruction.

Prince, P. (1996). Second language vocabulary learning: The role of context versus translations as a function of proficiency. *The Modern Language Journal, 80*(4), 478-493.

Porcaro, P. A., Jackson, D. E., McLaughlin, P. M., & O'Malley, C. J. (2016). Curriculum design of a flipped classroom to enhance haematology learning. *Journal of Science Education and Technology*, 25(3), 345–357.

Qian, D. D. (1996). ESL vocabulary acquisition: contextualization and decontextualization. *The Canadian Modern Language Review* 53: 120–142

Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching*. Cambridge university press.

Rivers, M. W. (1981). *Teaching foreign language skills*. Chicago, IL: The University of Chicago Press.

Roehl, A., Reddy, S. L., & Shannon, G. J. (2013). The flipped classroom: an opportunity to engage millennial students through active learning strategies. *Journal of Family and Consumer Sciences*, 105, 44–49.

Roschelle, J. (2003). Keynote paper: Unlocking the learning value of wireless mobile devices. *Journal of Computer Assisted Learning*, *19*(3), 260-272.

Rosman, F., Alias, N., Siraj, S., Kenayathullah, H. B., Zakaria, A. R., & Darusalam, G. (2013). Potential of video games in learning Bahasa Melayu vocabulary among international university students in Malaysia: A meta analysis of selected journals. *TOJET: The Turkish Online Journal of Educational Technology*, *12*(4).

Rosszell, R. (2003). Combining extensive reading and intensive vocabulary study. Paper presented at AAAL conference. Arlington.

Roth, C., & Suppasetseree, S. (2016). Flipped classroom: can it enhance English listening comprehension for pre-university students in Cambodia. *Proceedings of Classic: Learning in and beyond the Classroom: Ubiquity in Foreign Language Education.*

Rott, S., Williams, J., & Cameron, R. (2002). The effect of multiple-choice L1 glosses and input-output cycles on lexical acquisition and retention. *Language Teaching Research*, 6(3), 183–222.

Saitta, E., Morrison, B., Waldrop, J. & Bowdon, M. (2016). Introduction: Joining the Flipped Classroom Conversation. In J. Waldrop & M. Bowdon (Eds.), *Best Practices for Flipping the College Classroom (1-16)*. New York: Routledge.

Saragi, T., Nation, P., & Meister, G. (1978). Vocabulary learning and reading. *System, 6*, 72-80.

Sarawagi, N. (2014). A flipped CS0 classroom: Applying Bloom's taxonomy to algorithmic thinking. *Journal of Computing Sciences in Colleges*, 29(6), 21—28.

Schleicher, A. (2012). *Preparing teachers and developing school leaders for the 21st century: Lessons from around the world*. OECD Publishing. 2, rue Andre Pascal, F-75775 Paris Cedex 16, France.

Schlingensiepen, J. (2014). Innovation in distance, e- and blended learning in educational mass production using inverted classroom model (ICM). *Procedia- Social and Behavioral Sciences, 141*(2014), 393-398.

Schultz, D., Duffield, S., Rasmussen, S. C., & Wageman, J. (2014). Effects of the flipped classroom model on student performance for advanced placement high school chemistry students. *Journal of Chemical Education*, 91(9), 1334–1339.

Schmidt, N. (2000). *Vocabulary in second language teaching*, Cambridge: Cambridge University Press.

Schmitt, N. (2008). Instructed second language vocabulary learning. *Language Teaching Research*, 12(3): 329–363.

Schmitt, N., & Schmitt, D. (2014). A reassessment of frequency and vocabulary size in L2 vocabulary teaching. *Language Teaching, 47*(4), 484-503.

Schmidt, R. (2001). Attention. In: Robinson, P. (ed.), *Cognition and second language instruction*. Cambridge: Cambridge University Press, 3–32.

Schultz, D., Duffield, S., Rasmussen, S. C., & Wageman, J. (2014). Effects of the flipped classroom model on student performance for advanced placement high school chemistry students. *Journal of Chemical Education*, 91(9), 1334–1339.

Seaton, K. A., King, D. M., & Sandison, C. E. (2014). Flipping the maths tutorial: A tale of n departments. *Australian Mathematical Society Gazette,* 41, 99–113.

Skehan, P., Willis, E. J., & Willis, D. (1996). Second language acquisition research and task-based instruction. *Readings in Methodology, 13*.

Shintaku, K. (2016). The Interplay of Game Design and Pedagogical Mediation in Game-Mediated Japanese Learning. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT), 6*(4), 36-55.

Snyder, C., Paska, L. M., & Besozzi, D. (2014). Cast from the past: using screencasting in the social studies classroom. *The Social Studies*, 105(6), 310–314.

Sökmen, A. J. (1997). Current trends in teaching second language vocabulary. *Readings in Methodology, 152*.

Stern, H. H. (1983). *Fundamental concepts of language teaching*. Oxford: Oxford University Press.

Sternberg, R. J. (1987). Most vocabulary is learned from context. *The nature of vocabulary acquisition*, 89-105.

Stockwell, G. (2007). Vocabulary on the move: Investigating an intelligent mobile phone-based vocabulary tutor. *Computer Assisted Language Learning*, 20(4): 365–383.

Sung, K. (2015). A case study on a flipped classroom in an EFL content course. *Multimedia-Assisted Language Learning*, *18*(2), 159-187.

Sung, Y.-T., Chang, K.-E. & Liu, T.-C. (2016). The effects of integrating mobile devices with teaching and learning on students' learning performance: A meta-analysis and research synthesis. *Computers & Education*, 94: 252–275.

Swain, M. (1988). Manipulating and complementing content teaching to maximize second language learning. *TESL Canada Journal*, 6(1), 68 – 83.

Tague, J., & Baker, R. G. (2014). Flipping the classroom to address cognitive obstacles. Paper presented at Proceedings of the 121st ASEE Annual Conference, Indianapolis, IN.

Tashakkori, A., and C. Teddlie. (1998). Mixed methodology: Combining qualitative and quantitative approaches. *Applied Social Research Methods Series*, vol. 46. Thousand Oaks, CA: Sage.

Teng, M. F. (2018). Flip Your Classroom to Improve EFL Students' Speaking Skills. In *Innovations in Flipping the Language Classroom* (pp. 113-122). Springer, Singapore.

Thornton, P., & Houser, C. (2005). Using mobile phones in English education in Japan. *Journal of computer assisted learning*, *21*(3), 217-228.

Torsani, S. (2016). *CALL teacher education: Language teachers and technology integration*. Springer. p. 8

Toto, R., & Nguyen, H. (2009, October). Flipping the work design in an industrial engineering course. In *2009 39th IEEE Frontiers in Education Conference* (pp. 1-4). IEEE.

Tozcu, A. and J. Coady. (2004). Successful Learning of Frequent Vocabulary through CALL also Benefits Reading Comprehension and Speed. *Computer Assisted Language Learning*, 17 (5), pp. 473-495.

Traxler, J. (2005). Mobile Learning: It's here, but what is it? *Interactions*, 9(1), 1–12.

van den Broek, G.S.E., Takashima, A. , Segers, E., & Verhoeven, L. (2018). Contextual richness and word learning: Context enhances comprehension but retrieval enhances retention. *Language Learning, 68* (2), 546-585.

Wang, J. (2012). The use of e-dictionary to read e-text by intermediate and advanced learners of Chinese. *Computer Assisted Language Learning*, *25*(5), 475-487.

Wang, Y. H. (2016). Could a mobile-assisted learning system support flipped classrooms for classical Chinese learning? *Journal of Computer Assisted Learning*, 32, 391–415.

Waring, R. and Takaki, M. (2003). At what rate do learners learn and retain new vocabulary from reading a graded reader? *Reading in a Foreign Language*, *15*, 130–163.

Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31, 57–71.

Webb, M., & Doman, E. (2016). Does the flipped classroom lead to increased gains on learning outcomes in ESL/EFL contexts?. *CATESOL Journal*, 28(1), 39-67.

Webb, M., Doman, E., & Pusey, K. (2014). Flipping a Chinese university EFL course: What students and teachers think of the model. *The Journal of Asia TEFL*, *11*(4), 53-87.

Wilkins, D. (1972). *Linguistics in language teaching*. London, UK: Arnold.

Wu, W. C. V., Hsieh, J. S. C., & Yang, J. C. (2017). Creating an online learning community in a flipped classroom to enhance EFL learners' oral proficiency. *Journal of Educational Technology & Society*, *20*(2), 142-157.

Xiao-Qing, S. U. N. (2016). Construction of Flipped Classroom Model for Vocabulary Teaching and Its Effectiveness. *2nd Annual International Conference on Social Science and Contemporary Humanity Development* (SSCHD 2016).

Yang, C. T. Y., & Chen, H. H. J. (2012). Learners' perceptions of a commercial adventure video game for learning English as a second/foreign language. In *20th International Conference on Computers in Education, ICCE 2012*. National Institute of Education, Nanyang Technological University.

Yanguas, I. (2009). Multimedia glosses and their effect on L2 text comprehension and vocabulary learning. *Language Learning and Technology*, 13(2): 48–67.

Yestrebsky, C. L. (2015). Flipping the classroom in a large chemistry class-research University environment. *Procedia - Social and Behavioral Sciences*, 191, 1113–1118.

Yuliani, K. A., Made Hery Santosa, S. P., & Saputra, I. N. P. H. (2018). The Effect of Project-Based Flipped Learning on Writing Competence of The Eleventh-Grade Students of SMA N 4 Singaraja in Academic Year 2017/2018. *Jurnal Pendidikan Bahasa Inggris undiksha*, *4*(2).

Zainuddin, Z., & Attaran, M. (2016). Malaysian students' perceptions of flipped classroom: a case study. *Innovations in Education and Teaching International*, 53(6), 660-670.

Zappe, S. E., Leicht, R. M., Messner, J., Litzinger, T., & Lee, H. W. (2009). "flipping" the classroom to explore active learning in a large undergraduate course. *ASEE Annual Conference and Exposition, Conference Proceedings*.

Zhang, H., Song, W. and Burston, J. (2011). Reexamining the effectiveness of vocabulary learning via mobile phones. *Turkish Online Journal on Educational Technology*, 10(3): 203–214.

Zhang, L. (2015). Teaching Model design of Business English based on flipped classroom case study (pp. 176-181). In *International Conference on Education, Management and Computing Technology (ICEMCT-15)*. Atlantis Press: Hong Kong

Zhang, Hongwei & Li, Jie & Jiao, Liping & Ma, Weilian & Guan, Chen. (2016). The Adjustment and Effects of Vocabulary Teaching Strategies in Flipped Classroom. *Creative Education*. 7(14), 1966-1973.

Zimmerman, C. B. (1997). Historical trends in second language vocabulary instruction, In J. Coady & T. Huckin (eds.) *Second language vocabulary acquisition*, Cambridge: Cambridge University Press.

Definition of Flipped Learning (2014, March 12). Retrieved from http://flippedlearning.org/wp-content/uploads/2016/06/Definition-of-Flipped-Learning.png

Strauss, V. (2012, June 7). 'Flipping' classrooms: Does it make sense? Retrieved from https://www.washingtonpost.com/blogs/answer-sheet/post/flipping classrooms-does-it-make-sense/2012/06/06/gJQAk50vJV_blog.html?utm_ term=.86cf1eb0004b

APPENDICES

APPENDIX A: INFORMED CONSENT FORM (ENGLISH)

MIDDLE EAST TECHNICAL UNIVERSITY

INSTITUTE OF SOCIAL SCIENCES

DEPARTMENT OF FOREIGN LANGUAGE EDUCATION

This questionnaire was designed to investigate whether flipped learning contributes to English vocabulary learning. For this reason, it is important that the information you will provide should be accurate in order to provide reliable results.

Participation in the questionnaire is voluntary. Your personal information and answers to the questionnaire will only be used for this scientific research. For any reason, you can leave the questionnaire at any time without filling it out. If you want to get information about the research, you can reach the researcher from the contact information. Thank you in advance for your participation. Please sign in if you agree to the following conditions.

I voluntarily participate in this research. I know I can quit at any time without completing the questionnaire. I agree that the information I provide in the survey can be used in scientific research. The information I provide is complete and accurate.

Contact information:

Ceyhun ÖZKAL
ceyhun.ozkal@metu.edu.tr
0 258 212 95 11

APPENDIX B: GÖNÜLLÜ KATILIM FORMU (TURKISH)

ORTA DOĞU TEKNİK ÜNİVERSİTESİ

SOSYAL BİLİMLER ENSTİTÜSÜ

İNGİLİZ DİLİ EĞİTİMİ

Bu anket ters-yüz edilmiş eğitimin İngilizce kelime öğrenimine bir katkısı olup olmadığını araştırmak için hazırlanmıştır. Bu sebeple, vereceğiniz bilgilerin doğru olması, araştırmanın güvenilir sonuçlar ortaya koyması açısından önem taşımaktadır.

Ankete katılım gönüllülük esasına dayalıdır. Kişisel bilgileriniz ve ankete vereceğiniz cevaplar sadece bu bilimsel araştırma için kullanılacaktır. Anketi herhangi bir nedenle, istediğiniz an doldurmadan bırakabilirsiniz. Araştırma hakkında bilgi almak isterseniz iletişim bilgilerinden araştırmacıya ulaşabilirsiniz. Katılımınız için şimdiden teşekkür ederiz. Aşağıdaki koşulları kabul ediyorsanız lütfen kutucuğa imza atınız.

'Bu araştırmaya gönüllü olarak katılıyorum. Anketi tamamlamadan istediğim zaman bırakabileceğimi biliyorum. Ankette verdiğim bilgilerin bilimsel araştırmada kullanılabileceğini kabul ediyorum. Verdiğim bilgiler eksiksiz ve doğrudur.'

İletişim bilgileri:
Ceyhun ÖZKAL
ceyhun.ozkal@metu.edu.tr
0 258 212 95 11

APPENDIX C: PARENT CONSENT FORM (ENGLISH)

Dear Mother / Father,

This study is carried out by Ceyhun ÖZKAL, an M.A. student of Middle East Technical University.

What is the purpose of this study? The aim of the study was to investigate whether the flipped learning contributes to English vocabulary learning.

What do we ask your child to do as a participant?: First of all, we will determine whether your child has the technological background to watch videos by filingl out our Self-Efficacy Scale. Then we will carry out a pre-test to see what his/her initial state is. Afterwards, the treatment process will begin and we will ask your child to come to the class watching a 10-15-minute-long video once a week for 4 weeks. Based on these videos, there will be activities related to the subject in the classroom. After each week's activities, we will ask your child to fill out the Weekly Reflection Form. After the treatment period, we will see how much progress he/she has made by conducting the post-test. Subsequently, we will learn about his/her feelings and thoughts about this treatment by conducting a Post Flipped Opinion Scale. Finally, an interview will be conducted on the flipped learning if needed. To this end, we will ask your child to do them and collect his/her answers (as voice recorded and written). Just as we ask you for permission so that your child becomes a participant, your child's consent will definitely be obtained orally before he / she starts to work, too.

For what purpose and how will the information received from your child be used ?: The answers we receive from your child will be kept completely confidential and will only be evaluated by the researchers. The information to be obtained will be used for scientific purposes only (master thesis, publication and / or conference paper) and your child's or your name and identity information will not be shared with anyone.

What should you do if your child or you want to quit the study ?: If your child indicates that he/she feels uncomfortable due to the questions asked during participation or any other reason related to any implementation, or if the researcher foresees that your child is uncomfortable though he/she does not voice, the study will be terminated before the questions are completed.

If you would like more information about this study: After his/her participation in the study, your questions about this study will be answered in writing. For more information about the study, please contact Ceyhun ÖZKAL (e-mail: ceyhun.ozkal@metu.edu.tr), an M.A. student in the Department of Foreign Language Education. Thank you in advance for your participation in this study.

I have read the above information and agree to my child's participation in this study (please tick one of the two options below).

Yes I agree ___ ***No, I do not agree ___***

Father's/Mother's name and surname: _____

Date of Today: _____

Child's name and date of birth: _____

(After filling out and signing the form, deliver it to the researcher).

APPENDIX D: VELİ ONAY FORMU (TURKISH)

Sevgili Anne / Baba,

Bu çalışma, Orta Doğu Teknik Üniversitesi yüksek lisans öğrencisi Ceyhun ÖZKAL tarafından yürütülmektedir.

Bu çalışmanın amacı nedir? Çalışmanın amacı, ters-yüz edilmiş eğitimin İngilizce kelime öğrenimine bir katkısı olup olmadığını araştırmaktır.

Çocuğunuzun katılımcı olarak ne yapmasını istiyoruz?: Öncelikle, Teknoloji Yeterlik Anketimizi doldurarak çocuğunuzun videoları takip edecek teknolojik birikime sahip olup olmadığınızı belirleyeceğiz. Sonrasında ise ön-test yaparak başlangıçtaki durumunun ne olduğunu göreceğiz. Daha sonra, uygulama süreci başlayacak ve 4 hafta boyunca çocuğunuzdan haftada bir kere 10-15 dakikalık bir video izleyerek sınıfa gelmesini rica edeceğiz. Bu izlediğimiz videolara dayanaraktan sınıf içinde konuyla ilgili aktiviteler yapılacaktır. Her hafta bu sınıf içindeki aktivitelerden sonra ise çocuğunuzdan Haftalık Düşünce Formu'nu doldurmasını isteyeceğiz. Uygulama sonrasında son-testi yaparak ne kadar ilerleme kat ettiğini göreceğiz. Akabinde, bir adet Tersyüz Edilmiş Eğitim Anketi yaparak bu uygulama konusundaki duygu ve düşüncelerini öğreneceğiz. Son olarak, ihtiyaç duyulursa tersyüz edilmiş eğitimle ilgili sözlü mülakat yapılacaktır. Bu amaç doğrultusunda, çocuğunuzdan bunları yapmasını isteyeceğiz ve cevaplarını (ses kaydı ve yazılı) biçiminde toplayacağız. Sizden çocuğunuzun katılımcı olmasıyla ilgili izin istediğimiz gibi, çalışmaya başlamadan çocuğunuzdan da sözlü olarak katılımıyla ilgili rızası mutlaka alınacak.

Çocuğunuz ya da siz çalışmayı yarıda kesmek isterseniz ne yapmalısınız?: Katılım sırasında sorulan sorulardan ya da herhangi bir uygulama ile ilgili başka bir nedenden ötürü çocuğunuz kendisini rahatsız hissettiğini belirtirse, ya da kendi

belirtmese de araştırmacı çocuğun rahatsız olduğunu öngörürse, çalışmaya sorular tamamlanmadan ve derhal son verilecektir.

Bu çalışmayla ilgili daha fazla bilgi almak isterseniz: Çalışmaya katılımınızın sonrasında, bu çalışmayla ilgili sorularınız yazılı biçimde cevaplandırılacaktır. Çalışma hakkında daha fazla bilgi almak için İngiliz Dili Eğitimi Bölümü yüksek lisans öğrencilerinden Ceyhun ÖZKAL ile (e-posta: ceyhun.ozkal@metu.edu.tr) ile iletişim kurabilirsiniz. Bu çalışmaya katılımınız için şimdiden teşekkür ederiz.

Yukarıdaki bilgileri okudum ve çocuğumun bu çalışmada yer almasını onaylıyorum (Lütfen alttaki iki seçenekten birini işaretleyiniz.

Evet onaylıyorum___ ***Hayır, onaylamıyorum___***

Annenin adı-soyadı: _____ Bugünün

Tarihi:_____

Çocuğun adı soyadı ve doğum tarihi:_____

(Formu doldurup imzaladıktan sonra araştırmacıya ulaştırınız).

APPENDIX E: INTERVIEW QUESTIONS (ENGLISH)

1. In general, did you like the flipped vocabulary learning model?

2. What do you think are the advantages of this model?

3. What do you think are the potential weaknesses of this model?

4. Would you like to learn grammar, writing, or speaking with flipped learning? Can you explain why?

5. Do you think you learned vocabulary better in this way? Why do you think so?

6. Would you like to learn all the content for each lesson in your school with this approach?

7. Do you think this method is more useful and enjoyable than a typical lecture format?

APPENDIX F: INTERVIEW QUESTIONS (TURKISH)

1. Genel olarak tersyüz edilmiş kelime öğrenme modelini beğendiniz mi?

2. Size göre bu modelin avantajları ne olabilir?

3. Sizce bu modelin potansiyel zayıf noktaları nelerdir?

4. Tersyüz edilmiş eğitimle, dilbilgisi, yazma veya konuşmayı öğrenmek ister miydiniz? Neden olduğunu açıklayabilir misiniz?

5. Bu sayede kelimeleri daha iyi öğrenebildiğinizi düşünüyor musunuz? Neden böyle düşünüyorsunuz?

6. Okulunuzdaki her ders için tüm içeriği bu yaklaşımla öğrenmeye ne derdiniz?

7. Sizce bu yöntem, tipik bir ders anlatma formatından daha faydalı ve eğlenceli mi?

APPENDIX G: PRE-TEST AND POST-TEST

PART I

Choose the best answer.

1. Murphy's Law says that if you are in a check-in ---- at an airport, the other one (not yours) will move more quickly.

A) skill **B)** queue
C) amount **D)** distance

2. Those twin brothers have ---- faces.

A) chic **B)** similar
C) exclusive **D)** common

3. The poor mother had to ---- her baby, so she started to get a job immediately.

A) hurt **B)** prevent
C) find out **D)** look after

4. My children were definitely ---- of dogs when they were little.

A) frightened **B)** annoying
C) similar **D)** talented

5. The baby was sleeping on her mother's chest quite ----.

A) immediately **B)** accidentally
C) suddenly **D)** peacefully

6. Frank is a writer of detective books and has 10 best-sellers. He will ---- his new book next month.

A) hurt **B)** contain
C) publish **D)** prevent

7. Sarah thinks she needs a ---- dress for school party.

A) chic **B)** talented
C) passionate **D)** common

8. Scientists couldn't find a solution to some ----, such as AIDS, cancer, and Hepatitis.

A) nightmares **B)** diseases
C) surgeries **D)** distances

9. As a child, my parents told me not to open the door for ----.

A) queues **B)** averages
C) gadgets **D)** strangers

10. With four billion people, Asia is the most crowded ----, but Antarctica is the least crowded one because it is too cold.

A) invention **B)** distance
C) continent **D)** prediction

PART II

Fill the gaps with the correct words.

Anxious Diagnose Nightmare Prediction Suddenly

1. In 2001, 21,200 Canadians were _____ with lung cancer, and 18,000 people died from the disease.

2. As the police were following the criminal, he _____ changed direction of his car and entered the wrong way.

3. I felt really _____ at the beginning of the test, but when I realized that the questions weren't difficult, I was relaxed.

4. A meteorologist usually makes a/an _____ of the daily weather after analyzing maps and weather conditions.

5. I don't want my son to watch horror movies again because he gets a/an _____ while sleeping and then wakes up in fear.

PART III

Match the words with their definitions.

Exclusive *Invention*
Passionate *Skill*
Surgery

1. _____ is the design or creation of something that has never existed before.

2. _____ refers to having very strong feelings or emotions.

3. _____ is a medical operation by cutting open the body of a person or animal.

4. _____ means expensive and only for people who are rich or of a high social class.

5. _____ means an ability to do an activity or a job well.

PART IV

Match the following words with the pictures.

Chic *Fireplace* *Hurt*
Sew *Traditional*

1. _____

2. _____

3. _____

4. _____

5. _____

PART V

*Choose **5 words** and use them in a sentence.*

Amount *Common* *Gadget*
Annoying *Find out* *Prevent*
Average

1. _____
_____

2. _____
_____

3. _____

_____

4. _____

_____

5._____

_____

PART VI

Complete the sentences in your own words.

1. I saw the car accident and immediately _____

_____

2. The new football player isn't very talented, so _____

_____

3. The abbreviation of Federal Bureau of Investigation is _____

_____

4. You have an important exam tomorrow. Don't waste your time watching TV. Instead, _____

_____

5. If your flight is delayed, _____

_____

PART VII

Complete the dialogue in your own words.

1.

Sue: Do you have a special skill, Tim?

Tim: _____

Sue: Wow, here is our new Picasso!

2.

Joe: Why are you rolling your eyes when I say "clean your room"?

Nelly: _____

3.

Cally: The criminal says that he killed the woman accidentally.

Sam: _____

4.

Tommy: What does a student's bag contain?

Mary: _____

5.

Helen: What is the distance from your house to your school?

Mark: _____

APPENDIX H: WEEKLY REFLECTION REPORT FORM (ENGLISH)

Name – Surname: **Date:**
Week:

A. Please fill in the questionnaire by circling the number that is true for you:

4 – Strongly Agree 3 – Agree 2 - Disagree 1 – Strongly Disagree

1. The overall flipped vocabulary learning experience of this week was informative.	**4**	**3**	**2**	**1**
2. The flipped vocabulary learning experience of this week was fun.	**4**	**3**	**2**	**1**
3. The level of the vocabulary items was appropriate.	**4**	**3**	**2**	**1**
3. The definitions were easy to understand.	**4**	**3**	**2**	**1**
5. The phrases were easy to understand.	**4**	**3**	**2**	**1**
6. The example sentences were meaningful.	**4**	**3**	**2**	**1**
7. The paragraph/dialogue was clear, so I could get the meaning.	**4**	**3**	**2**	**1**
8. The pictures were expressive, so they helped me to visualize the vocabulary items.	**4**	**3**	**2**	**1**
9. The videos were helpful for me to remember the vocabulary items.	**4**	**3**	**2**	**1**
10. The video presentation was at appropriate length.	**4**	**3**	**2**	**1**

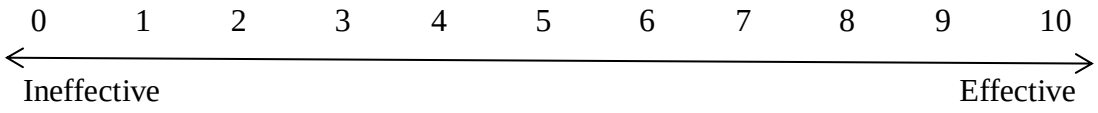
B. Please answer the following questions based on your experience in this week:

1. In your opinion what were the strengths of this week's flipped-learning vocabulary activity?

2. In your opinion what were the weaknesses of this week's flipped-learning vocabulary experience?

3. What are your suggestions to improve the flipped vocabulary learning experience?

4. What is your overall rating about the effectiveness of this weeks' material? Please, circle one number.



5. Any other comments?

APPENDIX I: HAFTALIK DEGERLENDIRME FORMU (TURKISH)

Adı – Soyadı: **Tarih:**

Hafta:

HAFTALIK DEGERLENDIRME FORMU

A. Lütfen, sizin için geçerli olan rakamı yuvarlak içerisine alarak anketi doldurunuz:

4 – Kesinlikle katılıyorum 3 – Katılıyorum 2 - Katılmıyorum 1 – Kesinlikle katılmıyorum

1. Bu haftaki ters-yüz edilmiş kelime öğrenme deneyimi genel olarak bilgilendiriciydi.	**4**	**3**	**2**	**1**
2. Bu haftaki ters-yüz edilmiş kelime öğrenme deneyimi eğlenceliydi.	**4**	**3**	**2**	**1**
3. Bu haftaki kelimelerin seviyesi uygundu.	**4**	**3**	**2**	**1**
4. Tanımları anlamak kolaydı.	**4**	**3**	**2**	**1**
5. Kalıplar anlamak kolaydı.	**4**	**3**	**2**	**1**
6. Örnek cümleler anlamlıydı.	**4**	**3**	**2**	**1**
7. Paragraf/diyalog netti ve dolayısıyla anlamı yakalayabildim.	**4**	**3**	**2**	**1**
8. Resimler açıklayıcıydı, dolayısıyla kelimeleri kafamda görselleştirmemi sağladı.	**4**	**3**	**2**	**1**
9. Videolar kelimeleri hatırlamamda yardımcı oldu.	**4**	**3**	**2**	**1**
10. Videodaki sunumun uzunluğu uygun boyuttaydı.	**4**	**3**	**2**	**1**

B. Bu haftaki deneyiminize bakarak, lütfen aşağıdaki soruları cevaplayınız:

1. Sizce bu haftaki ter-yüz edilmiş kelime aktivitesinin güçlü yanları nelerdir?

2. Sizce bu haftaki ter-yüz edilmiş kelime aktivitesinin zayıf yanları nelerdir?

3. Ter-yüz edilmiş kelime öğrenimi deneyimini daha da geliştirmek için önerileriniz nelerdir?

4. Bu haftaki materyalin ne kadar etkili olduğuyla ilgili genel düşünceniz nedir? Lütfen bir rakamı yuvarlak içine alınız.

0 1 2 3 4 5 6 7 8 9 10

Etkisiz **Etkili**

5. Varsa diğer yorumlarınız.

APPENDIX J: POST FLIPPED OPINION SCALE (ENGLISH)

A. In general, how **effective** was the FL method in your English vocabulary learning? Please circle a number.

0 1 2 3 4 5 6 7 8 9 10

Ineffective **Effective**

B. In general, how **enjoyable** was the FL method in your English vocabulary learning? Please circle a number.

0 1 2 3 4 5 6 7 8 9 10

Not Enjoyable **Enjoyable**

C. Fill out the following questionnaire according to your own opinion. Place the check mark **(✓)** in the box that is correct for you.

	Strongly Agree (%)	**Agree (%)**	**Disagree (%)**	**Strongly Disagree (%)**
1. Watching the material before the class prepared me for the class activities.				
2. I did not watch the materials before the class, although I had to.				
3. Watching the material beforehand was necessary for me to participate in the lesson successfully.				
4. The material uploaded on the Internet and in-class activities were interlinked.				
5. Flipped Learning was a good learning experience for me.				
6. The teacher wanted the student to participate in the in-class activities.				
7. Flipped Learning encouraged me to learn.				
8. There was more interaction in classroom activities.				

	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
9. We found the opportunity to work more in pairs in the in-class activities with Flipped Learning.				
10. We had more chance to work in small groups in-class activities with Flipped Learning.				
11. I wish other teachers would use the Flipped Learning model.				
12. We used the in-class time more effectively with Flipped Learning.				
13. I realized that, with Flipped Learning, I achieved self-discipline for stuyding.				
14. Watching the videos wherever and whenever I wanted encouraged me to learn.				
15. A classroom with Flipped Learning provides a flexible learning environment that fits my learning preferences.				
16. A classroom with Flipped Learning provides a flexible learning environment that fits my language level.				
17. Practicing in class with exercises and speaking activities enabled me to consolidate the subject and make it memorable.				
18. I find Flipped Learning useful.				
19. I watched the videos more than once.				
20. I re-watched the videos as much as I wanted.				
21. With Flipped Learning, the words became more memorable.				
22. With Flipped Learning, I could intervene and stop the lesson at any point, and it was much more efficient in terms of revising easily the points I missed or did not understand.				
23. I regard Flipped Learning as an innovative point of view.				

	Strongly Agree (%)	**Agree (%)**	**Disagree (%)**	**Strongly Disagree (%)**
24. The teacher provided the necessary support for my language learning process and performance in a classroom with Flipped Learning.				
25. I want the Flipped Learning to be implemented in English grammar.				
26. I want the Flipped Learning to be implemented in English reading activities.				
27. I want the Flipped Learning to be implemented in English speaking activities.				
28. I want the Flipped Learning to be implemented in English writing activities.				
29. I want the Flipped Learning to be implemented in English listening activities.				
30. With Flipped Learning, I stopped at the points I didn't understand and repeated the material as much as I could.				
31. What enabled Flipped Learning to be efficient was that it was practised for the first time.				
32. It might be a good idea to have a check that videos are being watched.				
33. Flipped Learning is a system that encourages or even pushes the student to study.				
34. Flipped Learning is more useful and memorable than the traditional vocabulary teaching in the classroom.				
35. Following the subject on the Internet passively might make learning boring.				
36. I had focusing problems while watching videos.				
37. Flipped Learning is a way of rewinding and re-watching unclear parts of the subject.				

	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
38. The videos uploaded to the internet included enough fun items.				
39. I had no time problems watching the videos outside the classroom and could take notes.				
40. It is an advantage to control the course of the lesson while watching videos from the Internet.				
41. The number of words in this implementation could be increased.				

D. Answer the following open-ended questions in your own opinion.

1. Which part(s) was the most effective for you when studying out-of-class materials (Turkish definition, English definition, phrases, sentences, paragraphs, pictures or videos)? What exactly was the reason for this?

2. How many words per week do you think you can learn using the flipped learning technique?

3. What are the **advantages** of learning English vocabulary with the flipped learning technique?

4. What are the **disadvantages** of learning English vocabulary with the flipped learning technique?

5. What are your **suggestions** to further improve the experience of learning English vocabulary with the flipped learning technique?

6. What learning and teaching techniques and activities do you generally prefer? Why is that? Please circle one of the following options and explain the reason:

a. I prefer to learn English words with the flipped learning technique because

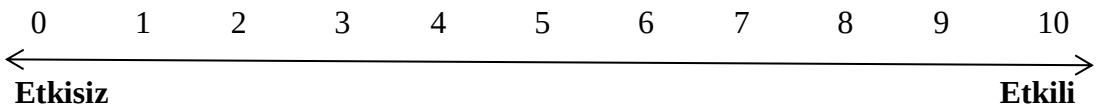
b. I prefer traditional English vocabulary learning / teaching activities because

c. I prefer the combination of both traditional and flipped learning / teaching techniques and activities in English vocabulary teaching because

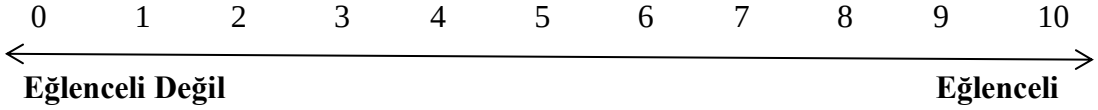
7. Any other opinions, suggestions and / or questions about the experience of learning English vocabulary using the flipped learning technique?

APPENDIX K: TERS-YÜZ EDİLMİŞ EĞİTİMLE İLGİLİ ÖĞRENCİ ALGISI ANKETİ (TURKISH)

A. Genel olarak flipped learning (ters-yüz edilmiş) öğrenme yöntemi ile İngilizce kelime öğrenimiz sizin için **ne kadar etkili** oldu? Lütfen bir rakamı yuvarlak içine alınız.



B. Genel olarak flipped learning (ters-yüz edilmiş) öğrenme yöntemi ile İngilizce kelime öğrenimiz sizin için **ne kadar eğlenceli idi**? Lütfen bir rakamı yuvarlak içine alınız.



C. Aşağıdaki anketi kendi düşüncelerinize göre doldurunuz. Size göre doğru olan kutucuğa **(✓)** işareti koyunuz.

	Kesinlikle katılıyorum (4)	**Katılıyorum (3)**	**Katılmıyorum (2)**	**Kesinlikle katılmıyorum (1)**
1. Dersten önce materyali izlemek beni sınıftaki etkinliklere hazırlamış oldu.				
2. Yapmam gerektiği halde materyalleri dersten önce izlemedim.				
3. Önceden hazırlanmış olan materyali izlemek derse başarılı bir şekilde katılabil-mem için gerekliydi.				
4. İnternete yüklenen mater- yal ile sınıf-içi aktiviteleri birbiri ile bağlantılıydı.				

	Kesinlikle katılıyorum (4)	**Katılıyorum (3)**	**Katılmıyorum (2)**	**Kesinlikle katılmıyorum (1)**
5. Ters yüz edilmiş öğrenim benim için iyi bir öğrenme deneyimi oldu.				
6. Öğretmen, sınıf-içi aktivitelerde öğrencinin katılımını istiyordu.				
7. Ters yüz edilmiş öğrenim beni öğrenmeye teşvik ediyordu.				
8. Sınıf-içi aktivitelerde daha fazla etkileşim oldu.				
9. Ters yüz edilmiş öğrenim ile sınıf-içi aktivitelerde daha fazla eşli/ikili çalışma fırsatı bulduk.				
10. Ters yüz edilmiş öğrenim ile sınıf-içi aktivitelerde küçük gruplarla daha fazla çalışma şansımız oldu.				
11. Keşke başka öğretmenler de ters yüz edilmiş öğrenim modeli kullansalar.				
12. Ters yüz edilmiş öğrenim ile sınıf içeresindeki vakti daha etkili kullandık.				
13. Ters yüz edilmiş öğrenim ile kendimi çalışma disiplinimi sağladığımı fark ettim.				
14. Videoları istediğim yerde ve zamanda izleyebilmek beni öğrenmeye teşvik etti.				

	Kesinlikle katılıyorum (4)	**Katılıyorum (3)**	**Katılmıyorum (2)**	**Kesinlikle katılmıyorum (1)**
15. Ters yüz edilmiş öğrenimin uygulandığı bir sınıf, öğrenme tercihlerime uyan esnek bir öğrenme ortamı sağlıyor.				
16. Ters yüz edilmiş öğrenimin uygulandığı bir sınıf, dil seviyeme uyan esnek bir öğrenme ortamı sağlıyor.				
17. Sınıfta alıştırmalar ve konuşma aktiviteleriyle pratik yapılması, konuyu pekiştirmemi sağladı ve kalıcı hale getirdi.				
18. Ters yüz edilmiş eğitimi faydalı buluyorum.				
19. Videoları bir kereden daha fazla izledim.				
20. Videoları dilediğim kadar tekrar edebildim.				
21. Ters yüz edilmiş eğitim ile kelimeler daha akılda kalıcı oldu.				
22. Öğretmen, Ters yüz edilmiş eğitimli bir sınıfta dil öğrenme sürecim ve performansım için gerekli desteği sağladı.				

	Kesinlikle katılıyorum (4)	**Katılıyorum (3)**	**Katılmıyorum (2)**	**Kesinlikle katılmıyorum (1)**
23. Ters yüz edilmiş eğitim ile, istediğim noktada derse müdahale edip durdurabilmem, kaçırdığımı düşündüğüm noktalara rahatlıkla geri dönüş yapabilmem açısından çok daha verimli oldu.				
24. Ters yüz edilmiş eğitimi yenilikçi bir bakış açısı olarak görüyorum.				
25. Ters yüz edilmiş eğitimin, İngilizce dilbilgisi anlatımında da uygulanmasını isterim.				
26. Ters yüz edilmiş eğitimin, İngilizce okuma alanında da uygulanmasını isterim.				
27. Ters yüz edilmiş eğitimin, İngilizce konuşma aktivitelerinde de uygulanmasını isterim.				
28. Ters yüz edilmiş eğitimin, İngilizce yazma öğretiminde de uygulanmasını isterim.				
29. Ters yüz edilmiş eğitimin, İngilizce dinleme öğretiminde de uygulanmasını isterim.				
30. FL, anlamadığım noktaları durdurup materyali tekrar edebildim.				

	Kesinlikle katılıyorum (4)	**Katılıyorum (3)**	**Katılmıyorum (2)**	**Kesinlikle katılmıyorum (1)**
31. FL'nin verimli olmasını sağlayan, ilk kez uygulanıyor olmasıydı.				
32. Videoların izlenildiğinin denetimin olması güzel fikir olabilir.				
33. FL, öğrenciyi çalışmaya teşvik eden, hatta zorlayan bir sistem diyebiliriz.				
34. FL, sınıftaki geleneksel kelime öğretiminden daha faydalı ve kalıcıdır.				
35. İnternetin başında olup, pasif halde konuyu takip etmek, öğrenmeyi sıkıcı hale getirebiliyor.				
36. Videoları izlerken odaklanma sorunu yaşadım.				
37. FL, konunun anlaşılmayan kısımlarının tekrar dinlenmesine olanak sağlanmasıdır.				
38.İnternete yüklenen videolarda yeterince eğlenceli öğeler vardı.				
39. Videoları sınıf dışında izlerken zaman probleminin olmuyor ve not alabiliyorum.				
40. Videoları internetten izlerken, dersin gidişatının elimde olması bir avantajdır.				
41. Bu uygulamadaki haftalık kelime sayısı artırabilirdi.				

D. Aşağıdaki açık uçlu soruları, kendi düşüncenize göre yanıtlayınız.

1. Sınıf dışında materyalleri çalışırken hangi kısım(lar) sizin için en etkili oldu (Türkçe anlamı, İngilizce tanımı, kalıplar, cümleler, paragraflar, resimler veya videolar)? Tam olarak bunun nedeni neydi?

2. Ters-yüz edilmiş öğrenme tekniğiyle haftada kaç kelime öğrenebileceğinizi düşünüyorsunuz?

3. Ters-yüz edilmiş öğrenme tekniğiyle İngilizce kelime öğrenmenin **avantajları** nelerdir?

4. Ters-yüz edilmiş öğrenme tekniğiyle İngilizce kelime öğrenmenin **dezavantajları** nelerdir?

5. Ters-yüz edilmiş öğrenme tekniğiyle İngilizce kelime öğrenmenin deneyimini daha da geliştirmek için **önerileriniz** nelerdir?

6. Genel olarak hangi öğrenme ve öğretme tekniği ve aktivitelerini tercih edersiniz? Neden? Lütfen aşağıdakilerden birini yuvarlak içine alıp seçiniz ve sebebini açıklayınız:

a. Ters-yüz edilmiş öğrenme tekniğiyle İngilizce kelime öğrenmeyi tercih ederim çünkü

b. Geleneksel İngilizce kelime öğrenme/öğretme aktivitelerini tercih ederim çünkü

c. Hem geleneksel hem ters-yüz edilmiş öğrenme/öğretme tekniği ve aktiviteleri ile İngilizce kelime öğretiminin bir arada uygulanmasını tercih ederim çünkü

7. Ters-yüz edilmiş öğrenme tekniğiyle İngilizce kelime öğrenmenin deneyimi ile ilgili diğer görüş, öneri ve/veya sorularınız?

APPENDIX L: SELF-EFFICACY SCALE (ENGLISH)

A. PERSONAL INFORMATION

1. Age:

2. Gender: ☐ Male ☐ Female

3. Educational Status? ☐ High School ☐ Associate Degree
☐ Undergraduate ☐ Graduate

4. If you study at university, what class are you studying?
☐ Prep. ☐ 1 ☐ 2 ☐ 3 ☐ 4

5. What is the department you are studying or graduated from? _____

6. Do you work? ☐ Yes ☐ No

If yes, state which institution: _____

If yes, state which position you work for: _____

B. USE OF TECHNOLOGY

1. Do you have your own computer? ☐ Yes ☐ No

2. How do you identify yourself as a ☐ Very Good ☐ Good ☐ Medium ☐ Bad computer user?

3. Do you have your own mobile? ☐ Yes ☐ No

4. How do you identify yourself as a ☐ Very Good ☐ Good ☐ Moderate ☐ Bad computer user?

5. Where do you access the Internet? ☐ Mobile ☐ School ☐ Dorm ☐ Home
☐ Internet Cafe ☐ Other _____

6. On average, how many hours a day do you use your computer? ☐ 0-1 ☐ 2-3 ☐ 4-5 ☐ 6-7 ☐ 7^{+}

7. How many hours a day do you use mobile phone for internet access? ☐ 0-1 ☐ 2-3 ☐ 4-5 ☐ 6-7 ☐ 7^{+}

8. How many hours a day do you use the Internet? ☐ 0-1 ☐ 2-3 ☐ 4-5 ☐ 6-7 ☐ 7^{+}

9. How many hours a day do you watch videos in Turkish or English over the Internet? ☐ 0-1 ☐ 2-3 ☐ 4-5 ☐ 6-7 ☐ 7^{+}

10. Do you watch educational videos over the Internet in Turkish? ☐ Yes ☐ No

11. How often do you watch educational videos over the Internet in Turkish? ☐ 1-2 hours a day ☐ 1-2 hours a week ☐ 1-2 hours a month ☐ 1-2 hours a year

12. Do you watch educational videos over the Internet in English? ☐ Yes ☐ No

13. How often do you watch educational videos over the Internet in English? ☐ 1-2 hours a day ☐ 1-2 hours a week ☐ 1-2 hours a month ☐ 1-2 hours a year

14. Do you watch English teaching videos over the Internet for vocabulary? ☐ Yes ☐ No

15. Do you watch English teaching videos over the Internet for grammar? ☐ Yes ☐ No

16. Do you watch English teaching videos over the Internet for listening? ☐ Yes ☐ No

17. Do you watch English teaching videos over the Internet for speaking? ☐ Yes ☐ No

18. Do you watch English teaching videos over the Internet for reading? ☐ Yes ☐ No

19. Do you watch English teaching videos over the Internet for writing? ☐ Yes ☐ No

20. How do you regard yourself as watching videos over the Internet? ☐ Very Good ☐ Good ☐ Medium ☐ Bad

21. Which medium do you use to watch videos? ☐ Mobile ☐ Computer ☐ Other If "Other", write: _____

22. Which applications or websites do you watch videos from?

_____

C. EDUCATION AND LANGUAGE LEARNING

1. Have you used computer-assisted education in your school subjects? ☐ Yes ☐ No

* If "yes", please write:

_____

_____

_____

2. Have you had any experience with Flipped Learning? ☐ Yes ☐ No

* If "yes", please write:

_____

_____

_____

3. Have you used computer-assisted education in your English classes? ☐ Yes ☐ No

* If "yes", please write:

_____

_____

_____

4. How long have you been learning English? ☐ Less than 1 year ☐ 1-3 years ☐ 4-6 years ☐ 7-9 years ☐ More than 10 years

5. Do you use websites to learn English? ☐ Yes ☐ No

* If "yes", write which website(s)

_____

_____

_____

6. In English, how good do you think you are in …?

Reading	☐ Very Good	☐ Good	☐ Medium	☐ Bad
Writing	☐ Very Good	☐ Good	☐ Medium	☐ Bad
Listening	☐ Very Good	☐ Good	☐ Medium	☐ Bad
Speaking	☐ Very Good	☐ Good	☐ Medium	☐ Bad
Grammar	☐ Very Good	☐ Good	☐ Medium	☐ Bad
Vocabulary	☐ Very Good	☐ Good	☐ Medium	☐ Bad

APPENDIX M: TEKNOLOJİK YETERLİLİK ANKETİ (TURKISH)

A. KİŞİSEL BİLGİLER

1. Yaşınız:

2. Cinsiyetiniz: ☐ Erkek ☐ Kadın

3. Eğitim Durumuz? ☐ Lise ☐ Ön Lisans ☐ Lisans ☐ Lisansüstü

4. Üniversitede okuyorsanız kaçıncı sınıfsınız?
☐ Hazırlık ☐ 1 ☐ 2 ☐ 3 ☐ 4

5. Üniversitede okumakta olduğunuz ya da mezun olduğunuz bölüm nedir? _____

6. Çalışıyor musunuz? ☐ Evet ☐ Hayır

Evetse hangi kurumda olduğunu belirtiniz: _____

Evetse hangi pozisyonda çalıştığınızı belirtiniz: _____

B. TEKNOLOJİ KULLANIMI

1. Kendi bilgisayarınız var mı? ☐ Evet ☐ Hayır

2. Kendinizi nasıl bir bilgisayar kullanıcısı olarak tanımlarsınız? ☐ Çok iyi ☐ İyi ☐ Orta ☐ Kötü

3. Kendi cep telefonunuz var mı? ☐ Evet ☐ Hayır

4. Kendinizi nasıl bir cep telefonu kullanıcısı olarak tanımlarsınız? ☐ Çok iyi ☐ İyi ☐ Orta ☐ Kötü

5. İnternete nereden erişim sağlıyorsunuz? ☐ İnternet Kafe ☐ Okul ☐ Yurt ☐ Ev ☐ Cep Telefonu ☐ Diğer _____

6. Günde ortalama kaç saat bilgisayar kullanıyorsunuz? ☐ 0-1 ☐ 2-3 ☐ 4-5 ☐ 6-7 ☐ 7^{+}

7. İnternet erişimi için günde ortalama kaç saat cep telefonu kullanıyorsunuz? ☐ 0-1 ☐ 2-3 ☐ 4-5 ☐ 6-7 ☐ 7^{+}

8. Günde ortalama kaç saat internet kullanıyorsunuz? ☐ 0-1 ☐ 2-3 ☐ 4-5 ☐ 6-7 ☐ 7^{+}

9. Günde ortalama kaç saat internetten Türkçe veya İngilizce video izliyorsunuz? ☐ 0-1 ☐ 2-3 ☐ 4-5 ☐ 6-7 ☐ 7^{+}

10. İnternetten eğitim videolarını Türkçe dilinde izliyor musunuz? ☐ Evet ☐ Hayır

11. İnternetten eğitim videolarını Türkçe dilinde ne sıklıkta izliyorsunuz? ☐ Günde en az 1-2 saat ☐ Haftada en az 1-2 saat ☐ Ayda en az 1-2 saat ☐ Yılda en az 1-2 saat

12. İnternetten İngilizce öğretimi videoları izliyor musunuz? ☐ Evet ☐ Hayır

13. İnternetten İngilizce öğretimi videolarını ne sıklıkta izliyorsunuz? ☐ Günde en az 1-2 saat ☐ Haftada en az 1-2 saat ☐ Ayda en az 1-2 saat ☐ Yılda en az 1-2 saat

14. İnternetten İngilizce öğretimi videolarını kelime öğretimi için izliyor musunuz? ☐ Evet ☐ Hayır

15. İnternetten İngilizce öğretimi videolarını dilbilgisi öğretimi için izliyor musunuz? ☐ Evet ☐ Hayır

16. İnternetten İngilizce öğretimi videolarını dinleme öğretimi için izliyor musunuz? ☐ Evet ☐ Hayır

17. İnternetten İngilizce öğretimi videolarını konuşma öğretimi için izliyor musunuz? ☐ Evet ☐ Hayır

18. İnternetten İngilizce öğretimi videolarını okuma öğretimi için izliyor musunuz? ☐ Evet ☐ Hayır

19. İnternetten İngilizce öğretimi videolarını yazma öğretimi için izliyor musunuz? ☐ Evet ☐ Hayır

20. Kendinizi internetten video izleme konusunda nasıl görüyorsunuz? ☐ Çok iyi ☐ İyi ☐ Orta ☐ Kötü

21. Hangi araçlardan video izliyorsunuz? ☐ Cep telefonu ☐ Bilgisayar ☐ Diğer
"Diğer" ise belirtiniz: _____

22. Hangi uygulamalardan veya internet sitelerinden video izliyorsunuz? _____

C. EĞİTİM VE DİL ÖĞRENİMİ

1. Okuldaki derslerinizde bilgisayar destekli eğitimi kullandınız mı? ☐ Evet ☐ Hayır

* Cevabınız "evet" ise lütfen açıklayınız.

_____

_____

_____

2. Ters-yüz edilmiş eğitimle ilgili herhangi bir tecrübeniz oldu mu? ☐ Evet ☐ Hayır

* Cevabınız "evet" ise lütfen açıklayınız.

_____

_____

_____

3. İngilizce derslerinizde bilgisayar destekli eğitimi kullandınız mı? ☐ Evet ☐ Hayır

* Cevabınız "evet" ise lütfen açıklayınız.

_____

_____

_____

4. Ne kadar süredir İngilizce öğreniyorsunuz? ☐ 1 yıldan az ☐ 1-3 yıl ☐ 4-6 yıl ☐ 7-9 yıl ☐ 10 yıldan fazla

5. İngilizce öğrenmek için web sitelerini kullanıyor musunuz? ☐ Evet ☐ Hayır

* Cevabınız "evet" ise hangi site(ler) olduğunu yazınız.

_____

_____

_____

6. Kendinizi İngilizce'de ne kadar yeterli görüyorsunuz?

Okuma	☐ Çok iyi	☐ İyi	☐ Orta	☐ Kötü
Yazma	☐ Çok iyi	☐ İyi	☐ Orta	☐ Kötü
Dinleme	☐ Çok iyi	☐ İyi	☐ Orta	☐ Kötü
Konuşma	☐ Çok iyi	☐ İyi	☐ Orta	☐ Kötü
Dilbilgisi	☐ Çok iyi	☐ İyi	☐ Orta	☐ Kötü
Kelime	☐ Çok iyi	☐ İyi	☐ Orta	☐ Kötü

APPENDIX N: SAMPLE IN-CLASS ACTIVITY SHEET

ACTIVITY SHEET FOR WEEK 1

A. Match the pair words.

1. breathe	_____	an old person
2. successful	_____	cards
3. entrance	_____	deeply
4. hope	_____	experiment
5. look	_____	fee
6. look after	_____	rules
7. magical	_____	of a bus
8. safety	_____	sale
9. 50% winter	_____	similar
10. wheel	_____	to pass an exam

B. Choose the best answer.

1. Those twin brothers have ---- faces.

A) magical **B)** similar **C)** rule **D)** sale

2. You must learn the traffic ---- before the driving test.

A) rules **B)** experiments
C) fees **D)** wheels

3. Humans can't ---- under the water.

A) look after **B)** hope
C) experiment **D)** breathe

4. I ---- my football team will win the match.

A) look after **B)** hope
C) breathe **D)** rule

5. My father taught me how to change the ---- of my bicycle.

A) fee **B)** rule
C) wheel **D)** sale

C. Match the definitions.

1. experiment	_____	a test which people do learn if something is true
2. fee	_____	having or using supernatural powers
3. look after	_____	looking nearly the same
4. magical	_____	take care of some-body
5. similar	_____	the money which we pay for a work or service

D. Complete the dialogues and the paragraph with a suitable word.

1. Father: What did you do at school today?

Daughter: We did an _____ on how to make sulfuric acid.

Father: So, did you enjoy it?

Daughter: Yes, but I was a little nervous, but then I liked, and learned a lot.

2. Doctor: Do you feel OK?

Luke: Yes yes. I am fine.

Doctor: _____ in and out deeply.

Luke: I can't! It hurts. What happened to me?
Doctor: You had a small car accident, but don't worry.
3. Tom and Kelly wanted to go on holiday for a week, but there was a problem. They had a cat called Molly and couldn't take it with them for holiday. Luckily, their neighbour helped them and _____ Molly. So Martin and Sue had a great holiday.

E. Complete the sentences in your own words.

1. Jason and Steven look quite similar to each other because _____.

2. I heard your grandmother is ill. I hope _____.

3. The fee of that sports club is high.
_____
_____.

4. The wheel of my car is really old.
_____
_____.

5. Emel: This shop is having a spring sale of sixty per cent.
Alice: _____.

F. Use the following words in a sentence.

1. Rule:
_____
_____
_____.

2. Look after:
_____
_____
_____.

3. Hope:
_____
_____
_____.

G. Ask and answer the following questions to your partner.

1. Do you go shopping when there is a sale in the shops? When is the typical sale period in your country?

2. What is the bus fee for student in Denizli? What is the average gym fee for one month?

3. When do people breathe fast? When do people breathe slowly?

4. Tell a library rule / a school rule / a traffic rule.

5. In your family, who looks similar to who?

H. You have a shop and want to sell more products. You plan to make a sale on them. Write an advertisement for a local radio about your sale.

I. Role-Play.

The wheel of your car has a problem, and your car stopped in the middle of the night. There is a car passing by, and you want to stop it and ask for help.

APPENDIX O: HUMAN SUBJECTS ETHICS COMMITTEE APPROVAL

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02 OCAK 2018

Konu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Doç.Dr. Perihan SAVAŞ;

Danışmanlığını yaptığınız yüksek lisans öğrencisi Ceyhun ÖZKAL'ın **"Flipped Vocabulary Learning among Turkish Learners of English as a Foreign Language: An Explanatory Mixed Method Study"** başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek gerekli onay **2017-EGT-229** protokol numarası ile **15.01.2018-28.11.2018** tarihleri arasında geçerli olmak üzere verilmiştir.

Bilgilerinize saygılarımla sunarım.

Prof. Dr. Ş. Halil TURAN
Başkan V

Prof. Dr. Ayhan SOL
Üye

Prof. Dr. Ayhan Gürbüz DEMİR
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Doç. Dr. Yaşar KONDAKÇI
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Üye

APPENDIX P: SAMPLE CODINGS BY THE RESEARCHER

Raw Data	Code	Theme/Category
Interview Q2: What could be the advantages of this model for you? **Participant 5:** … Let me say that my visual memory is stronger, so when I watch the videos, it's better to keep things in my memory. … [FL] became more permanent because the videos impressed me and I retained them in my memory. Instead of looking at their English or Turkish meaning, I at least watched the videos.	Effective Use of Visual Input	Positive Experiences/ Effective Method of Acquiring Vocabulary
Interview Q6: What about learning the entire course content in your own school though this approach? **Participant 4:** Mathematics, physics and chemistry are difficult courses at university. I have too much to ask and if I cannot ask them at that moment, I may forget to ask them later, When we enter the class, the instructor can skip them, thinking that we already studied them at home. So I don't think FL would be appropriate in the math, physics, and chemistry courses. I think it can be practised in all the courses that don't deal with formulations.	Opposition to Using FL in Math-like Courses	Preferences and Suggestions / Implementation At School
Reflection report Q2: What were the weaknesses of this week's flipped-learning vocabulary experience? **Participant 24:** I couldn't catch up with the speed of the slides where sentences and paragraphs were shown, so these slides should have been paused a bit more.	Technical Problems	Challenges

APPENDIX Q: TURKISH SUMMARY / TÜRKÇE ÖZET

YABANCI DİL OLARAK İNGİLİZCE ÖĞRENEN TÜRK ÖĞRENCİLER ARASINDA TERSYÜZ EDİLMİŞ KELİME ÖĞRENİMİ: AÇIKLAYICI KARMA YÖNTEM

Tüm dünyadaki ülkeler çoğunlukla, 21. yüzyılın taleplerine cevap veremeyen verimsiz eğitim sistemlerinden şikayet etmektedir (Schleicher, 2012). Ancak, hümanist, yapılandırmacı ve davranışçı düşünce okullarının ana akım eğitim zihniyeti üzerinde büyük bir etkisinin olduğu geçen yüzyılın ortasından bu yana çığır açan bir eğitim teorisi yoktur (McInerney, 2005). Teknolojinin ortaya çıkışıyla, yaşamın hemen hemen tüm kesiminde dünya ciddi bir dönüşüm geçirmiş ve eğitim alanı da bundan etkilenmiştir. Son yıllarda, pedagoji camiası teknolojiyi yeni bir soluk olarak görmüş ve daha iyi akademik sonuçlar almak ve bireyleri geleceğe daha iyi hazırlamak umuduyla teknolojiyi sınıflarıyla bütünleştirmek istemişlerdir.

Bu yenilikçi kavramlar arasında, temelde geleneksel ders akışını tersine çeviren "tersyüz edilmiş (TE) öğrenme" gelmektedir: ödev ve diğer eğitim uygulamaları sınıf içinde yapılırken ders içeriğinin sınıf dışında taşınması. 2007'de, ABD'nin Colorado eyaletindeki Woodland Park Lisesi'nde çalışan iki kimya öğretmeni olan Jonathan Bergmann ve Aaron Sams, bazı öğrencilerin spor etkinlikleri nedeniyle derslerini kaçırmak zorunda olduğunu görünce derste olmadıkları zamanı telafi edebilsinler diye öğrencilerin, evde izlemeleri ve tekrar yapmaları için ders içeriklerini videoya kaydetmeye karar verdiler. Ardından, bu yeni fikir önce yakındaki okullara, ardından tüm ABD'ye ve sonunda bütün dünyaya yayıldı (Bergmann ve Sams, 2012).

Berrett (2012), TE öğrenmenin, tamamen orijinal olmasa da, eğitimde yeni bir kavram olduğunu belirtmiştir. 2000'den itibaren bu yeni yaklaşımı tanımlamak amacıyla, ters çevrilmiş sınıf (Lage & Platt, 2000), tam zamanlı öğretim (Novak, 2011), tersyüz edilmiş sınıf (Bergmann ve Sams, 2012) ve tersine çevrilmiş öğrenme (Davis, 2013) gibi çeşitli isimler öne sürülmüştür.

TE öğrenme, öğrencilerin ders içeriğini önceden kaydedilmiş dersler aracılığıyla kendi hızlarında öğrenmelerini gerektirdiğinden ve sınıf içi sorgulamaya dayalı etkinlikler, sunumlar, deneyler, işbirlikçi faaliyetler ve diğer uğraşı sağlayan deneyimler için daha fazla zaman ve fırsat ayırdığı için, son zamanlarda üniversiteler arasında popüler hale gelmiştir (Saitta ve ark., 2016). Hsiu-Ting Hung (2015), özellikle ders anlatımına dayanan STEM disiplinlerinin (bilim, teknoloji, mühendislik ve matematik) bu yaklaşımı denemede daha istekli olduğunu ileri sürmüştür. Öte yandan, TE yaklaşımın beşeri bilimler disiplinlerinden nispeten daha az ilgi çekmesinin nedeni, bu disiplinlerin, öğrencilerin bilgiyi özümsemesine ve yapılandırmasını sağlamaları için zaten tümevarımsal bir öğretim yaklaşımı benimsemeleri olabilir.

Mevcut alanyazın bahsettiği TE öğrenmenin çeşitli yararları arasında, akademik başarıyı teşvik etmek (Missildine ve ark., 2013), uğraşı sağlamak (McLaughlin, 2014), öğrenci memnuniyeti sağlamak (Mason ve ark., 2013), üst düzey bilişsel becerilere hitap etmek (Gilboy ve ark., 2015) ve sınıf içi etkinliklere daha fazla zaman ayırmak (Leis ve ark., 2015) gelmektedir. TE modelde ders içeriğini öğrenme sınıftan dışarıya taşındığı için, ders içi zaman herhangi bir uygulama temelli çalışmalara tahsis edilebilir. Daha fazla sınıf-içi zaman verilen öğrencilere, katılmaları için daha fazla etkinlik sunulurken öğretmenlere de öğrencilerini bireysel olarak destekleme imkanı verilir. Sonuçta, öğrenciler bu uzun süre zarfında daha yüksek düzeyde düşünme seviyelerinin olduğu gerçek hayat etkinlikleriyle uğraşmaktan memnun kalabilirler.

Bununla birlikte, dünya genelindeki EFL araştırmacıları ve pedologları, TE'yi yoğun bir şekilde inceleyerek onun doğasını ve işleyişini anlama konusunda büyük ilgi duydular. TE'nin yazma (Yuliani ve ark., 2018), konuşma (Wu ve ark., 2017), dinleme (Roth ve Suppasetseree, 2016) ve okuma (Brown, 2018) üzerindeki etkisinin araştırılmasının yanı sıra, EFL araştırmacıları TE'nin motivasyon, uğraşı ve memnuniyet (Ahmed, 2016; Prefume, 2015; Leis ve ark., 2015), öğrenim kazanımları (Webb ve Doman, 2016) ve bilişsel beceriler üzerindeki etkisini de araştırmıştır (Alsowat, 2016).

Peki, EFL çevrelerinin bu yakın ilgisi Türkiye bağlamına uyuyor mu? Halen dil öğretmenleri ve araştırmacıları arasında TE'ye olan ilginin artmasına rağmen, Türk öğrencileri arasında TE'nin ne kadar işe yaradığı konusunda bu yakın ilgi resmin tamamını göstermeye pek de yeterli gelmemektedir. Çok yakın tarihli bir literatür taramasında Orhan'ın (2019), Türkiye bağlamında 2015'ten bu yana yürütülen 13 TE çalışması arasında ELT ile ilgili sadece iki çalışmayı dahil edebilmesi bunu doğrulamaktadır.

Türkiye EFL bağlamında TE kelime öğretimi konusundaki araştırmalar şöyle dursun, TE ile ilgili kelime araştırmaları küresel ölçekte de oldukça azdır ve mevcut araştırmalar sonuç verici karşılaştırmalar yapmak için yeterli değildir. Bunun nedeni TE öğrenme kavramının nispeten yakın bir geçmişinin olması ya da kelime öğrenimini bu şekilde araştırma konusunda akademik ilginin olmaması olarak gösterilebilir. Buna rağmen, TE üzerine bazı EFL çalışmaları kelime dağarcığına odaklanıp onu iki şekilde araştırmaya çalışmıştır: TE öğrenimle açık kelime öğretimi ve TE öğretim yoluyla diğer becerileri öğretmenin bir yan ürünü olarak kelime öğrenimi. Diğer bir deyişle, bazı çalışmalar doğrudan TE öğrenme kullanarak kelime öğretimi üzerine yoğunlaşırken (Kim, 2018; Alnuhayt, 2018; Chen Hsieh ve ark., 2016; Xiao-Qing, 2016; Zhang ve ark., 2016; Kang, 2015), diğerleri çalışmalarında, aslında dinleme, konuşma veya yazma gibi diğer becerileri keşfetmeye odaklanırken kelime hazinesi kazanımlarını bildirmiştir (Fethi ve Marshall, 2018; Han, 2018; Oh, 2017; Karmaker ve Singh, 2016; Zhang, 2015; Leis ve ark., 2015).

Yukarıdaki tüm bu bilgiler ışığında, ilgili alanyazındaki araştırma boşluğunu doldurmaya çalışıp TE kelime öğrenimi için olası zorlukları, faydalı önerileri ve konuyla ilgili sonuçları sunmayı amaçlayan bu çalışmada, aşağıdaki araştırma sorularına cevap aranmıştır:

1. TE, özel bir dil kursunda 28 B1 seviyesindeki EFL öğrencileri arasında yeni kelimelerin öğrenilmesini ne ölçüde arttırıyor?
2. Öğrencilerin TE yaklaşım hakkındaki:
   a. Genel İngilizce yeterliliklerini arttırması görüşleri nelerdir?
   b. Yeni İngilizce kelimelerin öğrenilmesinin arttırılmasına dair görüşleri nelerdir?

Bu çalışma hem nicel hem de nitel evreleri içeren karma desenli bir çalışmadır. Creswell'e (2003) göre, böyle bir çalışmada nicel verilerin toplanması ve analizi, nitel verilerinkinden önce geliyorsa, sıralı bir açıklayıcı karma desenli çalışma olarak tanımlanabilir. Bu çalışma, sıralı açıklayıcı karma desene uymaktadır çünkü ilk olarak TE'nin öğrencilerin kelime bilgisi üzerinde önemli bir etkiye sahip olup olmadığını aydınlatması için sayısal veriler toplanıp analiz edildi ve ardından TE'nin neden etkili olduğunu ve öğrencilerin kelime bilgilerini geliştirmelerine nasıl yardımcı olduğunu açıklamak için metin verileri ve analizleri kullanıldı.

Bu çalışma, Türkiye'nin Denizli ilindeki özel bir dil kursuna devam eden 55 katılımcıdan oluşmaktadır. Bu çalışmaya, 2017 yılının bahar ve güz dönemlerinde, kursa başlamadan önce yeterlilik seviyesi testine katılan sadece B1 seviyesindeki kursiyerler dahil edilmiştir. Katılımcıların yaş aralığı 15 ile 29 arasındaydı ($\overline{x}$ = 21,1) ve çoğu üniversite ya da lise öğrencileriydi, ancak bir yüksek lisans öğrencisi ve bir çalışan birey de vardı. Cinsiyet açısından, 30 kadın ve 25 erkek öğrenci bu çalışmaya katılmayı kabul etmiştir.

Bu çalışmadaki haftalık 10 toplamda 40 kelime rastgele seçilmeyip, bu hedef kelimeleri seçmede bazı kriterler takip edilmiştir. Sadece tek kelimeden oluşan birimler, kolayca görşelleştirilebilen fiiller, somut isimler değil öbek fiiller, çok kelimeli birimler ve soyut kavramlar da araştırma kapsamına dahil edilmiştir. Her videonun uzunluğu 11 ila 14 dakika arasındaydı (ortalama 12.7). Çalışma kapsamındaki 12 sıfat, 13 isim, 6 fiil, 4 zarf ve 5 çok kelimeli birim, öğrencilerin ders kitabından seçilmiştir.

Mevcut araştırmanın nicel verileri, bir öz yeterlik ölçeği, TE öğrenme tutum ölçeği ve araştırmacı tarafından tasarlanan bir ön test ve son test ile toplanmıştır. Hem ön test hem de son testten elde edilen nicel sonuçlar, bu çalışmanın ilk araştırma sorusunu ele almaktadır (TE öğrenme, yeni sözcüklerin öğrenilmesini ne ölçüde arttırmaktadır?). Öte yandan, nitel veriler iki ana kaynaktan elde edilmiştir: uygulama sürecinin sonunda yapılan bireysel mülakatlar ve öğrencilerin her hafta doldurdukları düşünce raporları. Uygulama bitince, amaçlı örnekleme yoluyla mülakatlara 4 katılımcı seçildi. 7-16 dakika arası süren bu mülakatlar ve her hafta

doldurulan düşünce raporları, ikinci araştırma sorusuna cevaben tasarlandı (yeni kelimelerin öğrenilmesinde öğrencilerin TE yaklaşım hakkındaki görüşleri nelerdir?).

Etik kurul onayı alındıktan sonra, katılımcılardan bilgilendirilmiş onam formu ve ebeveyn rıza formu gibi bazı yazılı belgeler alınmıştır. Katılımcılara teknolojik uygunluklarını tespit etmeleri için özyeterlik ölçeği verildikten sonra ön test uygulandı. Aynı zamanda bu çalışmanın araştırmacısı olan eğitmen, dersle ilişkili materyali videoya kaydetti ve ardından YouTube'a yükledi. Ayrıca öğrenciler, videoları izledi ve gerekli bilgileri yukarıda belirtilen web platformu üzerinden kendi hızında öğrenmeye çalıştı. Bu arada, video kayıtları bu web sitesine derslerden dört gün önce konuldu. İçerikteki belirli noktaları kavramada zorluk yaşadıklarında, eğitmen, WhatsApp veya sınıf içinde içeriğe ilişkin bazı açıklamalar yaptı. Sınıf içinde geçen sürede, bazı telaffuz alıştırmaları yapıldıktan sonra, öğrenciler Bloom'un taksonomisinde daha düşük ve daha yüksek düşünme becerilerinin sorgulandığı videolarda verilen kelimelerle ilgili çeşitli uygulamaya dönük etkinliklerle uğraştılar. Tüm bu etkinlikler boyunca öğrenciler, bilgilerini birlikte oluşturabilmeleri için akranlarıyla ikili ya da küçük grup çalışmaları şeklinde yardımlaşmaya teşvik edildi. Öğrencilerin izniyle, sınıf içi etkinlikler TE etkinlikleri sırasında öğrenci-öğrenci etkileşimini daha sonra araştırmak üzere kaydedildi. Her hafta uygulama sonrasında, öğrencilerden o haftadaki uygulama hakkında ne düşündüklerini anlatan ve genellikle 5-15 dakika süren düşünce raporları topladı. Uygulama süresi tamamen sona erdiğinde ve hem kontrol hem de deney grubuna son testler verildikten sonra, deney grubundaki öğrenciler tutum ölçeğini doldurup 4 kişi mülakatta TE öğrenme deneyimleri hakkında konuştu. Diğer yandan, kontrol grubundaki katılımcılar, iletişim kurup soruları cevapladıkları ve içerikle ilgili alıştırmaları bireysel olarak, çiftler ve grup halinde yaptıkları geleneksel bir ders akışını takip ettiler. Bu grubdaki öğrenciler, haftalık düşünce raporları yazmamış, teknolojik yeterlilik anketi veya tutum ölçeğini doldurmamış veya mülakatlara katılmamışlardır.

Nicel verilerin analizinde SPSS Statistics 22 paket programı kullanılmıştır. Ön test ve son test puanlarını analiz etmek için iki bağımsız değişken (deney ve kontrol

grubu) ve iki bağımlı değişken (ön test ve son test puanları) olduğundan ve ön test sonuçları normal dağılım göstermeyip ($p<0,05$) son test sonuçları normal bir dağılım gösterdiği için ($p>0,05$), ön test verileri için Mann-Whitney U parametrik olmayan test uygulanırken, son test verileri için Wilcoxon İşaretli Sıralar testi kullanılmıştır. Önceki araştırmaların ışığında, anlamlılık düzeyi 0,05 olarak belirlenmiştir.

Ayrıca, nitel veriler, akademik amaçlar için nitel veri analizi yapmak üzere geliştirilen MAXQDA yazılım programı kullanılarak analiz edilmiştir. Görüşmelerden toplanan veriler, öğrencilerin öğrenme tutum ölçeği ve haftalık haftalık yansımaları, tematik kodlama yoluyla analiz edilmiş (Strauss ve Corbin, 1990) ve tematik kodlama stilleri arasında ise açık kodlama uygulası tercih edilmiştir.

Çalışmanın elde ettiği bulgulara bakıldığında, öncelikle Teknolojik Öz Yeterlilik Anketi normal dağılım gösterdiğinden ($p>.05$) Eşleştirilmiş Örnekler T testi ile analiz edilip teknoloji ve dil yeterlilik algısı bakımından kimi anlamlı değişikliklere rastlanmıştır. Teknoloji yeterliliği açısından anlamlı değişimler sadece, katılımcıların İnternet üzerinden video izlemedeki yetkinlik yüzdesinde ($p <.05$) ve İngilizce'deki kelime hazinelerini geliştirmek için video izleyen katılımcıların sayısında meydana geldi. Dil yeterliliği açısından ise sadece okuma ve kelime bilgisi alanında anlamlı faklılıklar bulunmuştur ($p<0.05$); dinleme, yazma, konuşma veya dilbilgisi alanlarında anlamlı değişimlere rastlanmamıştır ($p>0.05$).

Hem deney hem de kontrol grupları, çalışmanın başında eşit seviyelerde olup olmadıklarını bulmak için ön teste tabi tutuldu. Tablo 11, deney grubunun ön test puanları için tanımlayıcı istatistiklerin $N = 28$, $\bar{x} = 16,80$, $SD = 9,13$ olduğunu ve kontrol grubu için $N = 27$, $\bar{x} = 17, 57$, $SD = 8,67$ olduğunu göstermektedir. Kolmogorov-Smirnov testi sonuçlarına göre, her iki grubun ön test puanları normal dağılım göstermedi ($p <0,05$), bu nedenle Mann-Whitney U parametrik olmayan test yapıldı. Bu testin sonuçları, başlangıçtaki deney grubu ile kontrol grubu arasında anlamlı bir fark olmadığını göstermiş ($U = 351.5$, $p = .66$) ve bu durum, grupların başlangıçta eşit seviyelerde olduğunu ortaya koymuştur. Son test sonuçlarına gelindiğinde ise, deney grubunun tanımlayıcı istatistikleri $N = 28$, $\bar{x} = 30,64$, $SD =$

7,30 iken kontrol grubu için N = 27, $\bar{x}$ = 24,48, SD = 7,91 olmuştur. Son test istatistiklerine genel bir bakış, deney grubu lehine farklılık olduğunu göstermiştir, ancak bu farklılıkların anlamlılık düzeylerini hesaplamak için bir analiz daha yapılmıştır. Normal dağılım gösteren son test puanlarının aksine ($p > 0,05$), ön test puanları normal dağılım göstermediğinden ($p < 0,05$), ortalamaları karşılaştırmak için Wilcoxon İşaretli Sıralar Testi uygulandı. Analiz sonuçları, son test puanların, ön test puanlarından anlamlı derecede daha yüksek olduğunu göstermiştir ($Z = -6.37$, $p < .001$). Bu, deney grubunun kontrol grubundan önemli ölçüde üstün olduğunu ve uygulamanın bir fark yarattığını göstermiş ve birinci araştırma sorusu olan "TE, özel bir dil kursunda 28 B1 seviyesindeki EFL öğrencileri arasında yeni kelimelerin öğrenilmesini ne ölçüde arttırıyor?" sorusunu olumlu olarak yanıtlamıştır.

Tersyüz Edilmiş Öğrenim Ölçeği'nde, katılımcılardan etkinliği açısından tüm FL sürecini derecelendirmeleri istendiğinde, ortalama derecelendirme, FL sürecini genel olarak oldukça etkili bulduklarını söyleyerek 10 üzerinden 8,4 (% 84) oldu. Aynı şekilde, FL sürecini genel olarak ne kadar eğlenceli olduğu konusunda genel olarak derecelendirmeleri istendiğinde, ortalama derecelendirme 10 üzerinden 8,7 idi (% 87) ve bu da FL sürecininin genel olarak oldukça eğlenceli bulunduğunu göstermiştir. Ayrıca, sınıf dışı materyallerde görsellerin (videolar ve resimler) yazılı öğelerden kelime öğretiminde daha etkili olduğu saptanmış ve haftalık ezberleyebilecekleri ortalama kelime sayısı 32 olarak belirtilmiştir. TE ile birlikte kelimelerin daha kalıcı olması, güçlü görsellerle pekiştirilmesi, etkili sınıf öncesi çalışma yapılması, zevkli öğrenim süreci olması, daha iyi cümle kurulması, verimli grup etkileşimi olması, daha hızlı kelime öğrenilmesi, içerik akışını kontrol edebilmesi ve verimli otonom öğrenme olması katılımcılar tarafından bu yöntemin avantajları olarak sıralanmıştır. Bunun aksine, dikkat dağılması, slaytlar için yetersiz zaman olması, takıldıkları yerlerde uzman bir kişinin anında cevap verememesi, sınıf dışı materyalleri izleyememek, tematik olmayan görseller, ders çalışmak zorunda kalmak, videoların sürece oldukça uzun olması ve sınırlı zaman verilmesi gibi konular ise bu yöntemin eksileri olarak değerlendirilmiştir. Katılımcılar tarafından, görsel tasarımın geliştirilmesi, daha fazla eklemeler yapılması, daha fazla TE materyallerine erişim sağlanması ve optimal uzunlukta malzemeler hazırlanması tavsiye edilmiştir. Geçirilen sürece baktıklarında, katılımcıların çoğunluğu,

geleneksel kelime çalışmalarından daha çok TE ile kelime öğrenmeyi tercih etmişlerdir.

Haftalık Düşünce Raporları'na gelindiğinde ise, içeriğinin etkinliği ile ilgili olarak, en yüksek oranlar (% 92) TE malzemesinin görsel içeriğine aittir. Başka bir deyişle, katılımcılar kelimeleri görselleştirmede ve daha sonra hatırlamada videoları ve resimleri oldukça yararlı ve etkili buldular. Öte yandan, görsel içeriği % 85-86 oranında cümleler, paragraflar / diyaloglar, ifadeler ve tanımlar gibi metinsel içerikler izlemektedir. Öğrencilerin % 90'ı TE kelime öğrenme deneyiminin eğlenceli olduğunu kabul edip, video sunumlarının uzunluğunu % 85 oranında uygun gördü. Diğer yandan, öğrencilerin TE döneminde karşı karşıya kaldıkları zorluklar söz konusu olduğunda, % 46 kelimelerin seviyesinin zor olduğunu belirtirken, % 38'i materyallerin yüklendiği platformla ilgili bazı sorunlarla karşılaşmış olduğunu belirttiler. Katılımcılardan ayrıca, söz konusu haftanın video sunumunun genel etkinliğini 1 ila 10 arasında bir süreklilikte değerlendirmeleri istendi ve 4 haftanın tamamının ortalama etkinlik oranı % 85 olmuştur. Bu, Tersyüz Edilmiş Öğrenim Ölçeği'nde bildirilen oranla (% 84) neredeyse aynıdır. Genel haftalık derecelendirme yüzdelerine bakıldığında, katılımcılar TE'ye karşı haftadan haftaya daha olumlu tutum sergileme eğilimindeydi. Bu bölümdeki açık uçlu sorulara bakıldığında, kelimelerin kalıcı olması, başarılı sınıf içi etkinlikler, güdülenmiş öğrenme, optimal video uzunluğu, TE'nin etkili olması, anlaşılır bir teknik olması, yazılı bağlamın etkili olması, güçlü görseller, TE'nin eğlenceli doğası, uygun kelime seviyesi gibi konular katılımcılar tarafından TE ile kelime öğrenmenin artıları olarak sıralanmıştır. Buna karşın, teknik problemlerle karşılaşılması, zorlayıcı faaliyetler, videoların aşırı uzunluğu, sıkıntı yaratan yazılı bağlam, sorunlu kelime seçimi ve materyalde telaffuz kısmının olmaması gibi meseleler de TE ile kelime öğrenmenin dezavantajları olarak belirtilmiştir. Bunlara ek olarak, daha iyi görsellerin yerleştirilmesi, daha iyi sınıf içi aktivitelerin yapılması, videoların daha kısa sürmesi ve daha etkili kelime seçimi konular ise katılımcların TE ile kelime öğrenmeyi daha da iyi hale getimek için verdikleri tavsiyeler olmuştur.

Mülakatlarda ise benzer temalar ortaya çıkmış ve öğrencilerin düşünceleri, TE'nin avantaj, dezavantaj ve öneriler şeklinde gruplandırılmıştır. Olumlu deneyimler

temasıyla ilgili dört kategoriden biri olan, TE ile etkili kelime öğrenme kategorisi, görsel girdilerin kelime öğreniminde etkin kullanıldığını, TE'nin yararlı bir kelime öğrenme yolu olduğunu ve kelimelerin bu sayede daha kalıcı olduğunu ortaya koymuştur. Bireysel seçimler kategorisi ise öğrenencilerin kullandığı stratejileri, esnek öğrenme fırsatlarını ve kendi kendine öğrenme gibi konuları ortaya çıkarmıştır. Ayrıca, öğrenmeye yönelik yüksek motivasyon kategorisi, TE'nin eğlenceli doğası, yenilikçi tarzı, utangaç öğrenciler için faydaları, coşkulu tanıtımının getirileri ve makul sayıda kelime sunulması gibi artılarını ortaya koymuştur. Son olarak, verimli ders akışı kategorisi, TE'nin sınıfa hazırlık düzeyini arttırdığını ve sınıf içindeki etkin uygulaların ne kadar faydalı olduğunu göstermiştir. Diğer yandan, olumsuz deneyimler temasınında ise yazılı içeriğe karşı çekince ve evdeki iş yükündeki artış konuları dikkat çekmiştir. Öğrencilerin TE'yi iyileştirmek için yaptıkları tercihler ve öneriler teması ile ilgili üç başlık ise sosyal bilimler ve matematik derslerinde TE kullanımı, TE aracılığıyla dilbilgisi ve yazmayı öğrenme konusundaki tercihler ve TE ile konuşmayı öğrenme tercihleri olarak sıralanabilir.

TE ile doğrudan kelime öğretimini ya da TE aracılığıyla diğer becerilerin öğretilmesinin yan ürünü olarak inceleyen mevcut literatür, TE'nin geleneksel kelime öğrenimine göre daha etkili olduğunu göstermiştir. Bu açıdan bakıldığında, TE ile doğrudan kelime öğretimine odaklanan bu çalışmanın sonuçları, doğrudan TE ile kelime öğretiminin, geleneksel kelime öğretiminden anlamlı ölçüde daha etkili olduğunu ortaya koyan çalışmaları doğrulamaktadır (Kim, 2018; Alnuhayt, 2018; Chen Hsieh ve ark., 2016; Xiao-Qing, 2016; Zhang ve ark., 2016; Kang, 2015). Ayrıca, bu çalışma diğer becerilerin öğretilmesinin bir ürünü olarak TE'nin kelime hazinesindeki etkinliğini gösteren diğer çalışmalarla da tutarlıdır (Fethi ve Marshall, 2018; Han, 2018; Oh, 2017; Karmaker ve Singh, 2016; Zhang, 2015; Leis ve ark., 2015). Kelime bilgisi kazanımları başarılı öğrenme çıktıları ve akademik başarılar olarak da alınabilir ve bu anlamda bazı çalışmalar TE'nin daha iyi akademik başarı ve öğrenim kazanımları için zemin hazırlayabildiğini ortaya koymaktadır (İyitoğlu ve Erişen, 2017; Webb ve Doman, 2016).

Anket sonuçları ve nitel verilerdeki sayıca fazla olan pozitif kodlar göz önüne alındığında, öğrencilerin TE'ye karşı oldukça olumlu ve tatmin edici bir tutum

sergilediği açıkça görülmektedir. Öncelikle, dört haftanın tamamının ortalama etkililik oranı, Görüş Ölçeğinde (% 84) bildirilen yüzdeye neredeyse eşitti (% 85). Literatürde de yüksek memnuniyet oranları ve TE'ye karşı genel olumlu tutum sıklıkla vurgulanmaktadır. Tıpkı Alnuhayt'in (2018) bir EFL kelime sınıfında FL'a karşı olumlu tutumlar bildirmesi gibi, Karmaker ve Singh (2016) ve Zhang (2015) çalışmalarında genel olarak yüksek memnuniyet oranları bulmaktadır. Türkiye bağlamında, Boyraz ve Ocak (2014) yaklaşık% 74 memnuniyet seviyesini bildirirken, Çelebi ve ark. (2016) çalışmalarında memnuniyet düzeyini% 90'ın üzerinde belirtmiştir. Bu nedenle, bu araştırmanın bulguları, öğrencilerin FL'a karşı genel olarak olumlu tutum geliştirmeleri ve bu deneyimlerden oldukça memnun olmaları bakımından, öğrencilerin uluslararası ve ulusal ölçekte önceki araştırmalarla uyumlu olduğu görülmektedir.

TE ile ilgili yapılan diğer araştımalara paralel olarak bu çalışmada da görsel girdilerin önemi (Kang, 2015), kelimelerin kalıcılığı (Xiao-Qing, 2016), eğlenceli dil öğrenme süreci (Grimsley, 2013), verimli geçen sınıf içi faaliyetler (Karmaker ve Singh, 2016), güdülenmiş öğrenme (Chen Hsieh ve ark., 2016), otonom öğrenim (Han, 2018), esnek ve kendi hızında öğrenme, (Grimsley, 2013), derse hazırlıklı gelmenin faydaları (Leis ve ark., 2015), videoların optimum uzunluğu (Khan, 2012) ve TE'nin anlaşılabilir bir teknik olması gibi konular ortaya konmuştur.

TE'de karşılaşılan olumsuz deneyimlere bakıldığında, evdeki iş yükünde artış (Lo ve Hew, 2017; Wang, 2016; Betihavas ve ark., 2016; Mehring, 2015; Schultz ve ark., 2014; Snyder ve Besozzi 2014), teknik ve teknolojik problemler (Clemens ve ark., 2013; Tague ve Baker, 2014), videoların aşırı uzunluğu (Schultz ve ark., 2014; Olson, 2014; Kettle, 2013), sınıf içi etkinliklerdeki zorlayıcı bölümler ve yazılı bağlama yönelik çekinceler gibi konular gündeme gelmiştir.

Önceki araştırmlarda da sık geçtiği gibi, bu çalışmada öğrencilerin, TE sınıfları geleneksel ders formatına tercih ettiği görülmüştür (Alnuhayt, 2018; Oki, 2016; Karmaker ve Singh, 2016; Sarawagi, 2014; Grimsley, 2013). İyitoğlu ve Erişen'in (2017) çalışmasındaki öğrencilerin çoğu (% 66,7), öğrenmelerini daha eğlenceli hale getirmesinin yanında bunu daha da kolaylaştırdığı için, diğer derslerin TE formatında

olmasını desteklemiştir ve bu çalışmanın sonuçlarıyla bu bulgu doğrulanmıştır. Tıpkı bu çalışmada olduğu gibi, İyitoğlu ve Erişen'in çalışmasında (2017), sosyal bilimler derslerinde TE desteklenmiş, sayısal derslerde TE uygulanması konusunda tereddütler ortaya konmuştur.

Öğrencilerin TE'yi daha iyi hale getirmek için verdiği öneriler göz önüne alındığında slaytlar, öğrencilerin eğitim seviyelerine, cinsiyetlerine ve durumlarına göre uyarlanmalı; TV dizilerinde olduğu gibi belirli bir senaryoya, konuya veya temaya sahip olmalı; telaffuza yer ayrılmalı; kalıplar, cümleler ve paragraflar için daha uzun süre kullanılmalı ve ayrıca anket, soru-cevap bölümü, kelime tahmini alıştırmaları, kelime eşleştirme alıştırmaları, cümle eşleştirme alıştırmaları, boşluk doldurma alıştırmaları, oyunlar ve bulmacalar içermelidir. Diğer yandan, resimler ve videolar net, etkileyici ve anlaşılır olmalı, sayıca fazla olmalı, animasyon içermeli, kısa olmalı ve hedef kelimeleri slaytın uygun bir yerinde göstermelidir. Ayrıca, videolar yavaş, altyazılı, dublajlı, akılda kalıcı, günlük hayata yakın ve eğlenceli olmalı ve film satırları içermeli. Son olarak, resimlere fon müziği dahil edilmelidir. Webb ve ark. (2014) belirttiği gibi öğretmenler öğrencilerine daha fazla TE kaynakları sağlayabilir, sıkılma ve dikkat dağınıklığı gibi durumdan kaçınmak için videoların ve sınıf dışı materyallerin uzunluğu azaltılmalı ve öğrencilerin sınıfta yaptıkları etinliklerin sayısı veya çeşitliliğini artırılmalıdır.

Resimlerden ve videolardan oluşan görseller, çeşitli nedenlerden ötürü TE materyallerdeki en etkili bileşenlerdir. Ancak, L1 ve L2 tanımları, kalıplar, paragraflar ve cümleler gibi yazılı bileşenlerle ilgili karma düşünceler vardı. Düşünce Ölçeğinde çevrimiçi materyalleri çalışırken hangi bölümlerin en etkili olduğu sorulduğunda, cevapların % 30'u L1 tanımları (% 10), ifadeler (% 8), paragraflar (% 4), cümleler (% 4) ve L2 tanımları (% 4) dahil olmak üzere yazılı bağlamla ilgilidir. Haftalık düşünce raporlarında ise katılımcılar, yazılı bağlamın %86 civarında başarılı olduğunu belirtmişlerdir. Buna ek olarak, bu çalışmada haftalık verilen kelime sayısı 10'du, ancak Görüş Ölçeği katılımcıların% 60'ının haftalık kelime sayısını artırılmasını istediğini gösterdi. Ayrıca, TE kelime öğretimi ile haftada kaç kelime öğrenebilecekleri sorulduğunda, ortalama kelime sayısı 32 olarak bulunmuştur. Kelimelerin düzeyi genel olarak öğrencileri çok zorlamasa da hemen hemen tüm

video sunumlarında telaffuz kısmının olmaması, bu uygulamanın bir eksikliği olarak görülmüştür. Son olarak, hedef kelimeleri tasarlarken daha etkili kelime seçimlerinin yapılması önerildi.

Katılımcılar, dilbilgisi ve yazma becerilerini TE öğrenim aracılığıyla arttırmaları gerekip gerekmediği konusunda ortak bir görüşe sahip değildi. Literatürde, yazma becerilerinin, geleneksel yöntemle karşılaştırıldığında TE yoluyla anlamlı ölçüde daha iyi geliştirilebileceği gösterilmiştir (Yuliani ve ark., 2018; Buitrago ve Díaz, 2018; Abdelrahman ve ark., 2017; Gasmi, 2016; Ahmed, 2016; Engin 2014; Farah, 2014). Aynı şekilde, bu çalışmada yer alan bazı öğrenciler, yazma kuralları ve hedef kelimeler üzerinde çalışmanın, yazma kurallarını göz önünde bulundurarak evde anlayabilecekleri için yazma sürecini kolaylaştırabileceğini düşünmüşlerdir. Ayrıca, dilbilgisi öğrenerek sınıfa gelecekleri için sınıfta daha iyi öğreneceklerini, uygun kelimeleri kullanacaklarını veya hatalarını fark edeceklerini düşünmüşlerdir. Öte yandan, diğer öğrenciler TE ile yazma fikrine karşı çıktılar ve İngilizce'de yazmayı ders zamanında doğrudan öğretmenden öğrenmenin daha mantıklı olacağını düşünmüşlerdir. Bazıları ise formüllere dayalı olduğu için dilbilgisinin TE öğrenim ile daha iyi öğrenilebileceğini iddia etti. Buna karşılık, diğerleri farklı nedenlerle TE öğrenimle dilbilgisi öğrenmeye karşıydı. Zayıf dilbilgisi altyapısına sahip olanlar, bu alanda TE'yi tercih etmediler ve sınıfta ders dinlemek gibi geleneksel bir yaklaşımın, sınıftaki dilbilgisi açıklamalarını zorunlu olarak dinleyebileceklerini düşünerek, kendileri için daha uygun olacağını düşündüler. Bu öğrencilere göre dilbilgisi, sözel formüle dayalı bazı sistemlere sahip olması bakımından matematik gibidir, dolayısıyla TE öğrenim, dilbilgisinde zaman kaybı olur. Dilbilgisi ve yazımında olduğu gibi, öğrenciler TE öğrenimle mi yoksa geleneksel olarak mı konuşmayı geliştirmeyi tercih ettikleri konusunda çelişkili görüşler dile getirdiler. Bazıları TE aracılığıyla konuşma becerilerini geliştirmek konusunda oldukça şüpheliyken ve iyi İngilizce bilen insanlar arasında altyazı içermeyen hızlı bir konuşmanın onlar için anlaşılmaz olacağı endişesiyle bu görevi zor bulmuştur. Öğretmenin telaffuz hatalarında anlık geri bildiriminin altı çizilerek konuşmada telaffuzun önemi vurgulanmıştır. Öte yandan, diğer katılımcıların görüşleri önceki çalışmaların sonuçlarıyla uyumluydu. Bu öğrencilere göre, konulara çalışmak ve soruları evde gözden geçirmek konuşma etkinliklerine hazırlanmasını sağlayabilir. Ayrıca, bu

konular üzerinde düşünmek için daha fazla zamanları olacağını ve farklı cümleler oluşturabileceklerini düşünmüşlerdir.

Bu çalışmanın sonuçlarına göre öğrencilerin TE'ye karşı genel olarak olumlu bir tutum geliştirdikleri sonucuna varılabilir. Elde edilen nicel ve nitel veriler, İngilizce kelime öğreniminde öğrencilerin TE'yi benimsediğine işaret edederek bu alanda kullanılması tavsiye edilmektedir. Özenle tasarlanıp akıllıca uygulandığında TE, kelime hazinesi açısından tatmin edici öğrenme sonuçları ve akademik başarı sağlama konusunda büyük bir potansiyele sahiptir. Aslında, sırf yeni kelimeler öğrenmek için kelime öğrenmek anlamsızdır çünkü insanlar kelimeleri tek başına kullanarak değil, okuma, yazma, konuşma ve dinleme sırasında bunları bir bütün olarak kullanarak iletişim kurarlar. Ayrıca, kelimenin bir dilin yapı taşı olduğu düşünüldüğünde, bu becerilerin geliştirilmesi, öncelikle kelime öğrenimine dayanır. Bu nedenle, TE kelime öğrenimi, dört temel dil becerisini geliştirmek için kullanılabilir ve kullanılmalıdır.

APPENDIX R: THESIS PERMISSION FORM / TEZ İZİN FORMU

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TEZİN ADI / TITLE OF THE THESIS (**İngilizce** / English): Flipped Vocabulary Learning Among Turkish Learners of English as a Foreign Language: A Sequential Explanatory Mixed Method Study

TEZİN TÜRÜ / DEGREE: **Yüksek Lisans** / Master ■ **Doktora** / PhD ☐

1. **Tezin tamamı dünya çapında erişime açılacaktır. /** Release the entire work immediately for access worldwide. ■
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A copy of the decision of the Institute Administrative Committee will be delivered to the library together with the printed thesis.

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