

**THE EFFECTS OF FLIPPED LEARNING ON VOCABULARY GAIN AND
PERCEIVED AUTONOMY LEVEL OF EFL STUDENTS**

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**THE EFFECTS OF FLIPPED LEARNING ON VOCABULARY GAIN AND
PERCEIVED AUTONOMY LEVEL OF EFL STUDENTS**

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ABSTRACT

THE EFFECTS OF FLIPPED LEARNING ON VOCABULARY GAIN AND PERCEIVED AUTONOMY LEVEL OF EFL STUDENTS

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This study aimed at exploring the effects of flipped learning on vocabulary gain of upper-intermediate EFL students enrolled in a preparatory program at a foundation (non-profit, private) university in Istanbul. The study also attempted to find out if flipped learning had any impact on their perceived autonomy level. Finally, this study sought to explore the perceptions of the participating students and their instructor about flipped learning in an EFL classroom. This experimental study, which included 34 participants ranging from 17 to 22 years old, adopted a pre-test, post-test research design. The quantitative data from pre-and, post-test results, student surveys, and the qualitative data from semi-structured interviews and teacher's reflective journals were collected in this mixed method research study. Being divided into two groups, the participants were presented the same content during seven weeks of the course. While the ones in the control group were provided with non-flipped instruction, the students in the experimental group experienced a flipped model of teaching. At the end of the study, it was revealed that there was no statistically significant difference between control and experimental groups in terms of their vocabulary gain and perception of learner autonomy. Nevertheless, based on the findings of quantitative and qualitative data, the participants' overall attitude towards flipped learning was positive. The gathered results of this study provide researchers with new insights into the

implementation of the flipped classroom and its effects on vocabulary learning and perceived autonomy level of students in an EFL classroom.

Key words: Flipped Learning, Students' Perceptions, Perceived Autonomy Level, Vocabulary Gain of EFL Learners, Preparatory Program



ÖZ

TERS YÜZ EDİLMİŞ ÖĞRENME MODELİNİN YABANCI DİL OLARAK İNGİLİZCE ÖĞRENEN ÖĞRENCİLERİN KELİME BAŞARISI VE ÖĞRENME ÖZERKLİĞİ ALGISINA OLAN ETKİSİ

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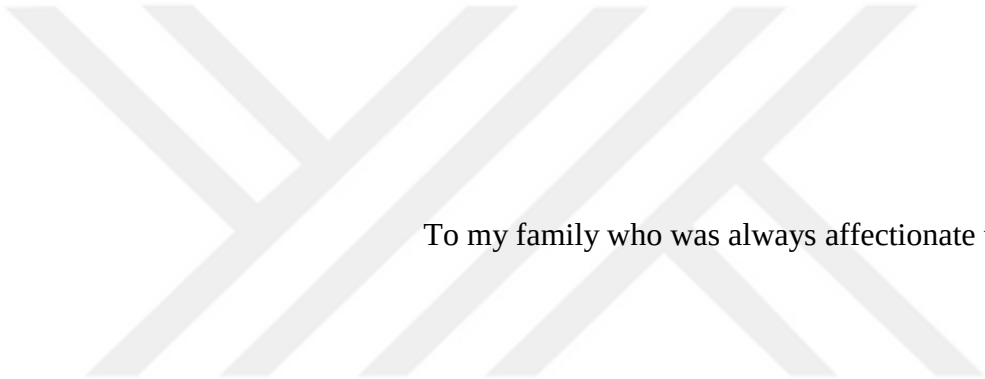
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Bu çalışma Ters Yüz Edilmiş Öğretim Modeli'nin İstanbul'daki bir vakıf üniversitesinin hazırlık bölümünde okuyan öğrencilerin kelime başarısı ve öğrenme özerkliği algıları üzerindeki etkisini araştırmayı hedeflemiştir. Bunun yanı sıra öğrencilerin ve öğretmenlerinin bu öğrenme modeliyle ilgili algıları da araştırmanın bir parçası olmuştur. 17 ve 22 yaş aralığındaki 34 katılımcıdan oluşan bu deneysel çalışmada, ön-test, son-test araştırma deseni benimsenmiştir. Bu karma desenli araştırmada, nicel veri ön-test, son-test sonuçlarından, anketlerden elde edilirken nitel veri öğrencilerle yapılan yarı yapılandırılmış görüşmelerden ve öğretmen günlüğünden toplanmıştır. İki gruba ayrılan öğrenciler 7 hafta boyunca aynı konuları işlemişlerdir. Ancak deney grubu Ters Yüz Edilmiş Öğrenme Modeli ile öğrenim görürken, kontrol grubunda bu öğretim modeli uygulanmamıştır. Çalışmanın sonucunda iki grup arasında kelime öğrenimi ve öğrenme özerkliği algıları açısından istatistiksel bir fark olmadığı görülmüştür. Buna rağmen katılımcıların bu öğrenme modeli ile ilgili görüşleri olumludur. Bu çalışmadan elde edilen bulgular araştırmacılara Ters Yüz Edilmiş Öğrenme Modeli'nin uygulanmasının yanı sıra bu

yöntemin öğrencilerin kelime başarıları ve öğrenme özerkliği algıları üzerindeki etkisine dair yeni bakış açıları kazandıracaktır.

Anahtar Kelimeler: Ters Yüz Edilmiş Öğrenme Modeli, Öğrencilerin Görüşleri, Öğrenme Özerkliği Algısı, Öğrencilerin Kelime Başarıları, Üniversite Hazırlık Bölümü





To my family who was always affectionate towards me

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LIST OF ABBREVIATIONS

FL	Flipped Learning
ELF	English as a Foreign Language
LAQ	Learner Autonomy Questionnaire



Chapter 1

Introduction

This chapter includes a general description of the study conducted to investigate the effects of flipped learning (hereinafter FL) on EFL learners' vocabulary gain and perceived autonomy level at a foundation (non-profit, private) university in Istanbul, Turkey. First, the theoretical framework of FL is presented. Then, the statement of the problem highlights the reasons for implementing FL by referring to the existing literature. Next, the purpose of the study and research questions are introduced. Finally, the significance of the study explains how this study can contribute to the literature and help educators to gain insights into its implementation at tertiary level.

1.1 Theoretical Overview

Özkal (2019) points out that the advancements in technology have given rise to alterations in every aspect of life including education and along with these changes the pedagogy of education is being adapted continuously. In this respect, the significance of technology-based learning has been highlighted in all fields of education.

The advent of digital technology at the end of the 20th century has had a profound effect upon the characteristics of our students. Our current educational policy fails to address the needs of these 21st century learners who are called 'digital natives'. Today's learners, who have become familiar with technological tools since they were born, are defined as digital natives and they have different characteristics compared to 'digital immigrants' who started to use these tools after they grew up (Prensky, 2001, p.2). In an attempt to satisfy the needs of these students, pedagogical approaches such as FL have been adopted by educational circles in recent decades.

In a flipped classroom, students are exposed to lecture content through short videos assigned to them in advance and they are provided with more communicative activities in the classroom. In addition, the roles of instructors and students adopt in these classrooms change. While students are supposed to watch the videos and ask questions, the instructors act as a feedback provider. Rather than transferring information, the instructor assists students by offering guidance and students try to

figure out the subject matter actively under the supervision of the instructor (Bergman & Sams, 2012).

Different methods are preferred by teachers while flipping a classroom. Hung (2015) suggests that they may transform traditional lectures into PowerPoint videos in which they narrate the subject matter, or they can use educational videos prepared by other educators so that students can study the lecture content in advance. In addition to these video lectures, pre-tasks such as quizzes or worksheets which will promote student participation can be embedded in course design.

While online videos play a significant role in helping students prepare for in-class activities, the key to a successful flipped classroom is creating a learning environment in which students are actively engaged in interactive tasks (Bergman & Sams, 2012). To keep students engaged in pre-class and in-class activities, a variety of materials such as “pre-recorded lectures in the form of podcasts, screencasts, annotated notes and captured videos, team-based discussions, panel discussions, expert-led discussions, role-plays and student presentations, discussions and debates” could be utilized in the classroom (O’Flaherty & Phillips, 2015, p. 87).

Suranakkharin (2017) puts forward that receiving the language input via video lectures prior to the lesson, students can be provided with better instructional scaffolding while they are interacting with their peers in a flipped classroom. Also, more in-class time can be allocated to engaging activities including pair and group work, which are the essential components of a student-centered education.

The existing literature on FL is extensive but there are few studies which can be distinguished from the others with the helpful insights they offered. One of these studies, which was a source of inspiration for this current research, was carried out by Hsieh, Wu and Marek (2017). In this study, the effects of FL to foster EFL learners’ competence in using English idioms in spoken and written language were examined. Having been provided with language input through videos and reading texts, students were asked to produce a short story using the target vocabulary. Then, they gave feedback to each other’s work and had group discussion activities. The data were collected from pre-and post-tests on idioms, questionnaires, classroom observations, and focus-group interviews. Results indicated that flipped instruction contributed to the motivation and participation level of the students as well as their idiom knowledge.

In brief, FL is believed to promote student interaction, engagement and participation if it can be integrated into a course design which includes carefully planned activities encouraging student-centered learning. Students' being involved in these activities actively results in better learning outcomes in the end.

1.1.1. Flipped learning studies in language education. Most of the studies in the literature reported positive outcomes regarding the academic achievement and perceptions of students receiving FL instruction (Alpat, 2019; Hung, 2015; Jaramillo, 2019; Tulay, 2019; Zou & Xie, 2019).

In one of these studies Jaramillo (2019) investigated the experiences of students and teachers with FL in a Spanish course. The purpose of the study was to enrich the lesson content with more interactive tasks so as to create possibilities for meaningful communication. Data were collected through student surveys and instructor interviews. The results revealed that students were able to enhance their oral proficiency in Spanish since the classroom space was used to promote interaction. It was also found out that students developed positive attitudes towards FL.

In another study, Zou and Xie (2019) explored the effects of two student-centered approaches, "just-in-time teaching, and peer instruction" on EFL learners' writing skills in a flipped classroom. The participants were separated into two groups, one of which experienced student-centered approaches, the other one experienced conventional FL instruction. An online learning tool named Edpuzzle was employed in the study to design interactive online videos. The data were collected via pre-and post-tests, questionnaires, and interviews. Data analysis revealed that the experimental group performed better than the control group in terms of writing, motivation and critical thinking skills.

Similarly, Hung (2015) examined students' academic achievement, attitude, and participation level in a FL course by implementing Webquest, a learning model based on inquiry. The participants were Taiwanese university students and data collection tools included vocabulary quizzes, presentations, writing tasks, questionnaires, and semi-structured interviews. Having been divided into three groups, students received structured, semi-structured and non-flipped lessons. At the end of the data analysis, the students experiencing FL models outperformed the ones in the non-flipped

classroom and they were found more active in their learning process compared to the students in the non-flipped group.

In a recent study carried out by Alpat (2019), critical thinking and writing performance of EFL students who were exposed to FL were examined. Also, the other aim of the study was to explore participants' perceptions towards flipped instruction. The participants, divided into control and experimental groups, were upper-intermediate EFL students enrolled in an English language preparatory program in Turkey. Data collection tools included critical thinking survey, flipped classroom questionnaire, student essays, and focus group interviews. Data analysis revealed that experimental group students' critical thinking skills and writing performance enhanced at the end of the treatment. In addition, they adopted positive attitudes towards flipped instruction.

A recent research by Tulay (2019), highlighted positive aspects of FL as well. In this study, the effectiveness of flipped classrooms on EFL students' grammatical competence besides their engagement and interaction level was explored. Data were collected via questionnaires, achievement tests, semi-structured interviews and teacher journals. The results indicated that FL contributed to students' performance in grammar. In addition, their engagement and interaction levels were promoted. They also became more competent in information and communication technologies.

In line with the studies above, it is obvious that FL makes a significant contribution to the development of students' language ability by triggering their motivation, class participation, and learner autonomy. Hence, this current study aims to explore whether this pedagogical approach yields positive outcomes in a preparatory classroom of a foundation (non-profit, private) university in Turkey.

1.2 Statement of the Problem

Students learning English as a foreign language are exposed to target language in the school but they have limited opportunities to integrate it into their daily lives (Lee & Wallace, 2018). In addition to not having enough exposure to the language, other factors such as intensive course curriculum, time constraints, lack of learner autonomy, and paucity of interactive in-class activities hinder students' proficiency in foreign language during the process of learning.

Facilitating the communicative competence of students should be a priority in all language courses; however, as stressed by Hsieh et al., (2017) students are less likely to improve their communication skills due to insufficient interaction among instructors and students, teacher-centered classrooms, and exam-oriented instruction. Therefore, students experience difficulties while communicating in the target language and they do not seem eager to communicate in the target language.

Besides, most of the instructors acknowledge that providing feedback to each and every student during class time seems impossible. In order to address the individual needs of the students, to provide them with effective feedback, and to deal with the difficulties that are likely to arise in English classes, instructors can integrate different approaches such as FL into their courses (Lee & Wallace, 2018).

A considerable amount of research suggest that FL could be successfully employed in language education to address the concerns touched upon above (Alpat, 2019; Hsieh et al., 2017; Hung, 2015; Jaramillo, 2019; Tulay, 2019; Zou & Xie, 2019). Since the integration of FL minimizes the time spent in lecturing inside the classroom, class time can be allocated for activities based on communication and cooperation among peers. Despite the time and effort teachers need to devote while preparing lecture videos, encouraging students to take active roles in their learning process stimulates their critical thinking, self-regulation, and learner autonomy, which are essential qualities 21st-century learners need to acquire (Adnan, 2017).

Based on these overviews, there seem to be reasonable grounds to implement flipped instruction in language classes. Considering the challenges learners and teachers have been facing and the needs of the students, the purpose of the current study is to investigate the effect of FL on students' vocabulary gain and perceived autonomy level. In addition, this study seeks to explore the perceptions of the students and their instructor about this learning model.

1.3 Purpose of the Study

This study aims at exploring and comparing the effects of FL on vocabulary gain of upper-intermediate EFL students in flipped and non-flipped classrooms at a foundation (non-profit, private) university in Istanbul. In addition, the present study attempts to find out if FL has any impact on their perceived autonomy level. Furthermore, this study seeks to find out the perceptions of the participating students

and their instructor about FL in EFL classrooms. Finally, the current study attempts to contribute to the existing literature by highlighting the implications of a FL model to foster students' vocabulary development and autonomy in EFL classes.

1.4 Research Questions

In the light of the above discussion, the research questions addressed in this study are as follows:

1. Is there any difference between the vocabulary gain of upper-intermediate EFL students studying in flipped and non-flipped classrooms?
2. Is there any difference between the perceived autonomy level of Turkish upper-intermediate EFL students studying in flipped and non-flipped classrooms?
3. What are the perceptions of the students about learning English in a flipped classroom?
4. What are the perceptions of the instructor about teaching English in a flipped classroom?

1.5 Significance of the Study

FL has become increasingly popular across the world recently; however, as it is emphasized by Hung (2015) even though flipped teaching can be applied to any other subjects or levels, it is mainly investigated in K-12 education, which justifies the need to carry out more research on its implementation in higher education apart from STEM (science, technology, engineering, mathematics) classes.

Despite the fact that the available research in this field focuses mainly on K-12 education in other subjects, there is limited information about the implementation of FL in language classrooms particularly at graduate level. Besides, the studies carried out so far (Alpat, 2019; Hsieh et al., 2017; Hung, 2015; Jaramillo, 2019; Lee & Wallace, 2018; O'Flaherty & Phillips, 2015; Tulay, 2019; Zou & Xie, 2019) investigated students' perceptions or overall academic performance in a FL model.

Regarding the vocabulary proficiency of students, there exists only one study designed in a Turkish educational context, which was conducted by Özkal (2019) at a private language school. In this respect, this current research aims at bridging the gap in the existing literature by exploring and comparing the effects of FL on vocabulary gain and perceived autonomy level of upper-intermediate EFL students enrolled in a

preparatory program at a foundation (non-profit, private) university. Besides, this research offers insights into the perceptions of students and instructors experiencing this approach. As the whole study was carried out in an online class, to the researcher's knowledge, it was the first to explore the effect of online vocabulary teaching through the FL model. Finally, this research is believed to shed light on the implementation of flipped classroom in vocabulary instruction within Turkish context.



1.6 Definitions

Digital natives: Individuals who are “native speakers of the digital language of computers, video games and the internet” (Prensky, 2001, p.2).

English as a foreign language (EFL): “The teaching and learning of English in communities where it is not widely used for communication” (Nunan, 1999, p. 306).

Flipped learning: “A pedagogical approach in 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” (Flipped Learning Network, FLN, 2014).

Learner autonomy: “To have, and to hold the responsibility for all the decisions concerning all aspects of this learning, i.e. determining the objectives; defining the contents and progressions; selecting methods and techniques to be used; monitoring the procedures of acquisition properly speaking (rhythm, time, place, etc.); evaluating what has been acquired” (Holec, 1981, p.3)

Chapter 2

Literature Review

2.1 Introduction

This chapter is divided into three main parts. In the first part, the definition and brief history of FL are provided. Then, the four pillars of FL, potential benefits and ways of implementing FL are presented. Additionally, the characteristics of flipped and non-flipped classrooms are explained. Finally, literature on FL research implemented in language classrooms are reviewed. In the second part, the history of vocabulary instruction is summarized. Next, the importance of vocabulary for second language learners and dimensions of vocabulary knowledge are highlighted. Lastly, the aspects of knowing vocabulary and strategies for learning vocabulary are mentioned. In the third part, the definition and ways of promoting learner autonomy are briefly explained.

2.2 The Definition and Brief History of FL

Recent research puts forward their idea on the definition of FL. Although various opinions have been proposed, an overall framework of this term could be provided (Baker, 2000; Bergman & Sams, 2012; Bishop & Verleger, 2013; Ekmekçi, 2017; Herreid & Schiller, 2013; Lage, Platt, & Treglia, 2000; Overmyer, 2015; Strayer, 2012; Suranakkharin, 2017). According to Bishop and Verleger (2013), it should embody two components, one of which is in-class activities based on interaction among students, the other one is computer assisted learning which can be accessed by students after class. This definition of FL is limited to teaching models that include video assignments. Some researchers suggest that giving reading assignments and having interactive activities such as group discussion in the classroom could also be considered as FL; however, this idea is refused by others (Bishop & Verleger, 2013). Herreid and Schiller (2013) define FL as a pedagogical approach in which homework done individually at home is replaced by cooperative activities carried out under the supervision of the instructor in the classroom. Rather than doing their homework individually at home, students work with their classmates on different tasks during class hours. (p.62) Figure 1 below illustrates the difference between flipped and non-flipped classrooms.

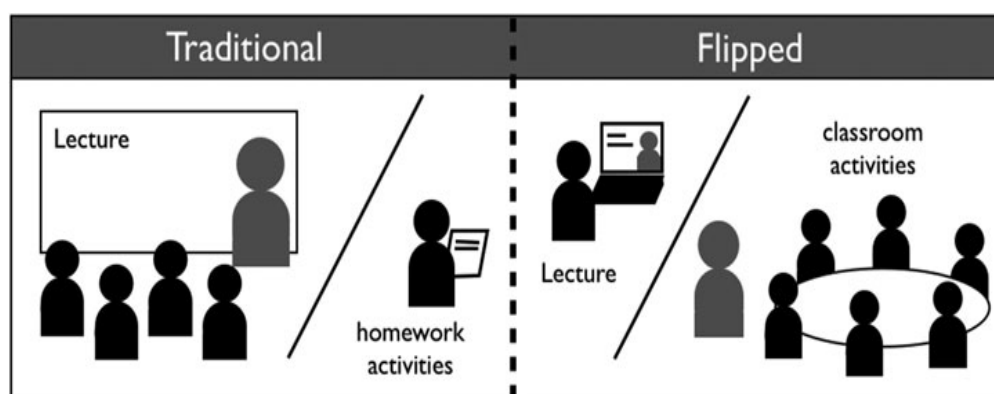


Figure 1. Traditional vs flipped classroom (Jungić, Kaur, Mulholland & Xin, 2015).

FL aims at integrating technology into education to foster the communication between teachers and students by making alterations in the mode of course delivery (Baker, 2000). FL embodies video lectures prepared by the instructor or adapted from online resources for the purpose that students can reach them whenever they want. Having been assigned the video lectures in advance, students are provided with the subject matter at home, which creates an opportunity to have meaning-focused activities in the lesson (Baker, 2000; Bergman & Sams, 2012; Lage, Platt, & Treglia, 2000). In a flipped classroom, student-centered activities requiring group discussion, problem solving, and collaboration are prioritized to create a learning environment in which most of the students are engaged. Rather than presenting the lecture in the classroom, students are assigned video homework prior to class in an attempt to free up class time. This allows the teacher to devote more time for communicative activities which enhance students' interaction skills. The video assignments can be recorded by the teacher or ready-made videos from online platforms can be preferred (Suranakkharin, 2017).

As emphasized by Ekmekçi (2017), lessons can be recorded as a podcast, audio or video, but FL is characterized by online videos that are possible to have access whenever and wherever needed, which is the evidence of FL being prevalent. Bergman and Sams (2012) note that the heart of FL is not videos recorded by the teacher, but the activities carried out in the classroom. In other words, effective use of class time matters more than the video lectures. Motivating students to be active learners and making sure that they are fully engaged in their learning process are the principles lying behind the flipped classroom. Similarly, Overmyer (2015) and Strayer (2012) assert that designing classroom activities which help students to spend quality time in

the lesson is regarded as more important than preparing online flipped classroom materials.

Concerning the history of FL, the systematic implementation of FL was initiated when two chemistry teachers Jonathon Bergmann and Aaron Sams (2012) recorded their lessons for the students missing classes due to extra-curricular events such as competitions. Having prepared videos for their chemistry classes, they shared these materials with students in an online platform. The students watched the videos and wrote down the questions in their mind before the lesson. The teachers noticed that flipping the classroom impacted the quality of interaction between students positively since the class time was used much more effectively and the design of the lesson became more flexible. They also realized that the time they could allocate to students increased significantly and they could give real time feedback more efficiently compared to the past.

To summarize, based on the points stressed above, supplying students with the lecture content mainly through videos prior to the lesson, and keeping them engaged in the classroom with meaningful activities tailored to their learning needs are the most essential components of FL approach. Although there are various opinions on the definition of FL, it can be understood that the major purpose of flipped classrooms is to create more possibilities for better learning opportunities. In that sense, the design and implementation of classroom activities are crucial to maximize the benefit of flipped instruction.

2.3 The Four Pillars of the Flipped Classroom

As mentioned above, researchers came up with different opinions on the characteristics of the flipped classroom; hence, we may discover diverse implementations of it. To obtain a better understanding of this pedagogical approach, it is important to clarify its fundamental principles. To this end, Flipped Learning Network (2014) draws a clear distinction between flipped classroom and flipped teaching. Flipping a class may not result in flipped learning in some cases. There might exist many teachers who flip their classrooms through assignments such as reading, video lectures or problem-solving exercises; however, to ensure that FL occurs its four pillars need to be understood (Flipped Learning Network, 2014).

2.3.1 Flexible environment. Teachers should be prepared to adjust the physical organization of their classrooms for group work or individual study as a result of flipped learning. They must also be adaptable in their learning settings, allowing students to choose when and where they learn. Next, they should not limit students' learning time and should be patient while analyzing their learning outcomes (Flipped Learning Network, 2014).

2.3.2 Learning culture. In a non-flipped classroom, teachers are the source of information, which hinders active student participation. In a flipped classroom, on the other hand, students are encouraged to be responsible for their own learning so that they can become active participants who are required to construct knowledge during their learning process. Hence, challenging and engaging activities should be provided to them to facilitate their learning (Flipped Learning Network, 2014).

2.3.3 Intentional content. Teachers should design their own content in FL through an analysis of what should be taught along with the materials students should study independently. Planning the lecture content is essential because class time should be allocated to language activities that assist learners in using higher-level cognitive skills via their active participation (Flipped Learning Network, 2014).

2.3.4 Professional educator. Teachers in flipped classrooms need to adopt more demanding roles compared to non-flipped classrooms in that they are expected to observe students closely, provide timely feedback to them based on their observation, and evaluate their progress. They should also be ready to question their teaching methods on a regular basis, be willing to accept criticism, collaborate with colleagues, and tolerate chaotic classrooms. They appear to be inactive in the classroom but they have an important role in students' learning process (Flipped Learning Network, 2014).

2.4 Potential Benefits and Implementation of FL

FL has been widely used in all fields of education and a great deal of researchers report its benefits (Adnan, 2017; Beesley & Apthorp, 2010; Egbert, Herman & Lee, 2015; Goodwin & Miller, 2013; Jaramillo, 2019; Krouss & Lesseig, 2020; Lee & Wallace, 2018; Margolis & McCabe, 2006; Moranski & Kim, 2016; Smallhorn, 2017; William, 2007). Moranski and Kim (2016) highlight that implementing flipped

instruction in language classes can yield good results thanks to the activities which guide students to gain learner autonomy and higher-level thinking skills.

To exemplify, in a flipped classroom, students are provided with teacher and peer guidance whenever they need, and it encourages cooperation between them. These cooperative learning opportunities enriched with instructor support can result in positive learning outcomes since students are engaged in meaningful tasks with their peers (Margolis & McCabe, 2006). When students are involved with meaningful activities in the lesson, they are able to comprehend the subject matter much more easily. Also, students can receive immediate peer or teacher feedback while they are working on challenging tasks in groups, which is something they are deprived of when dealing with homework on their own (Smallhorn, 2017). Beesley and Apthorp (2010) argue that real time teacher feedback plays a significant role in facilitating students' progress along with purposeful in-class tasks. Providing students with these opportunities is more effective than assigning complex homework to them, where they are less likely to be guided by the teacher as they are working.

Similarly, the benefits of FL reported by Adnan (2017) accord with the findings of the literature. One of these benefits is that FL offers students flexible learning conditions by allowing them to learn at their own pace. Besides, students are supported by their instructor in the classroom through cooperative activities. They can also use the classroom time more effectively and have access to the course materials whenever they need. In addition, it enables them to acquire self-regulation skills.

Furthermore, the video lectures and other homework assigned as pre-tasks result in activities which promote higher order thinking skills and allow teachers to diagnose individual needs of the students much more effectively. Since students are expected to be active learners, they are able to do a variety of activities by being provided with teacher assistance in the classroom. This opportunity qualifies students to deal with the difficulty they would encounter while studying individually and comprehension of the next video assignment becomes easier for them (Krouss & Lesseig, 2020).

Moreover, flipped instruction enables the teacher to integrate group discussion activities and communicative tasks which require students to demonstrate what they learnt (William, 2007). The flipped classroom offers an opportunity for teachers to deliver all or some of the lesson content via online platforms, making it possible for students to move at their own pace according to their level of readiness. Hence,

watching online video lectures at their own convenience, students are likely to set the speed of their learning in conjunction with their necessities (Goodwin & Miller, 2013).

Egbert et al., (2015) argue that students who receive flipped instruction can arrange the amount of time they need to grasp the lecture by replaying or revising the material until it becomes clear to them. Giving this responsibility to students may contribute to their learning performance since the time spent in the classroom can be allocated for more communicative activities addressing their needs. As stated by Jaramillo (2019) flipped instruction both encourages students to use the language actively enhancing their communication skills and provides them with language practice. Hence, it stimulates student-centered teaching only if it is carefully planned and matched with the objectives of the course.

Once they are applied elaborately and meticulously, with detailed planning, flipped classrooms can facilitate student progress by fostering their learning. In addition to inverting the lesson, they can invert the whole mindset in education in that teachers who adopt traditional ways of teaching are replaced by teachers who are inclined to adopt new roles in flipped learning method. Rather than being the source of all knowledge, teachers in flipped classrooms try to be facilitators, guides and they encourage learners to identify their strengths and weaknesses (Goodwin & Miller, 2013).

The instructors who are eager to flip their classes, particularly teaching in STEM (science, technology, engineering, and math) classes, rearrange their course by prioritizing hands-on activities triggering students' active learning attempts rather than having teacher-centered education. As meaning-focused activities have been successfully used in foreign language instruction, educators appreciate FL as it allows to replace didactic teacher-led approach with student-centered teaching (Moranski & Kim, 2016). In brief, it seems obvious that flexible learning conditions, immediate teacher and peer feedback, and communicative learning opportunities in the classroom are among the most significant advantages offered by FL. In addition to these profits, it creates an opportunity for teachers take on a variety of roles such as facilitators or guides rather than being the transmitters of the knowledge.

With regard to the implementation of flipped classroom, there seem to be several models since it is not a one size fits all approach. Thus, it may not be possible to find

one structured way of flipping a classroom but researchers stress some fundamental aspects of it (Bull, Ferster and Kjellstrom, 2012; Hunley, 2016; Suranakkharin, 2017).

Bull et al., (2012) maintain that the flipped classroom is currently being employed in prestigious universities such as Stanford, MIT, and Harvard. Also, they state that the ways of taking the most advantage of this approach should be questioned. The main principle of this pedagogical model is to free up class time to offer interactive activities to students. It can be realized in a number of ways in conjunction with the requirements of the course. While some courses can be totally flipped, some of them can be partially flipped. Its effect varies according to the classroom, which means that it is not possible to suggest one fixed model for flipped classroom. The design and planning of it are up to the teacher. Bull et al., (2012) also emphasize that the length of the videos prepared for flipped classrooms should be 5-10 minute, which makes it easier for students to watch them in discrete units instead as a whole.

The rationale behind the flipped classroom is to create a learning environment in which students get ready for the lesson by watching video lectures, doing comprehension exercises, or other related assignments so that they can actively participate in group discussion activities promoting their cooperation skills. This method gives instructors an opportunity to cater to the needs of individual or small group students rather than teaching as a whole class (Hunley, 2016).

One of the roles of instructors in flipped classrooms includes preparing materials such as video presentations which can be assigned to students before class. Students are supposed to watch these online materials, take short quizzes, and complete other activities which will prepare them for the lesson. To promote students' learning in the flipped classroom, activities which require critical thinking, creativity or collaboration should be incorporated into the lesson. The main objective of these activities should be providing students with hands-on learning. In addition to these practices, the learning outcomes need to be assessed in the end to reflect on the effectiveness of flipped instruction (Suranakkharin, 2017).

To sum up, FL requires teachers to carefully plan each and every stage of their lesson. During this planning period, they should tailor their way of instruction by prioritizing the specific needs of their students. In that sense, their main goal should be to create opportunities for students in the classroom so that they can be engaged in activities promoting their higher-level thinking skills.

2.5 Characteristics of Flipped and Non-Flipped Classrooms

Flipped classrooms differ from non-flipped classrooms in various ways. In a non-flipped classroom, students are less likely to have an idea about the content of the lesson prior to class. They may not know the follow up activities they are supposed to do after the lesson as well. The teacher presents the input and students practice it through simple tasks. Then, students are expected to reinforce what has been taught individually at home. The homework is usually done with little effort, or it may not be completed based on the skill of the student. This way of instruction which requires teachers to be transmitters of knowledge and students to be passive recipients is considered as a waste of classroom time (Krouss & Lesseig, 2020).

In a non-flipped classroom many teachers have difficulty in adjusting the pacing of their lessons. Whereas some students may find the flow of the lesson so slow, some may find it too quick to follow since they do not have the background information about the content. The necessity of keeping the balance between both ends of the spectrum is difficult to achieve. With the aim of handling these differences, students are given homework, which may cause them to be more confused (Goodwin & Miller, 2013).

Students should pass through two phases in the process of learning. First, they should acquire knowledge of the subject. Second, they should internalize it through in-class activities. Activities in a non-flipped classroom mainly foster students' skills in the first stage and they are expected to assimilate the knowledge of the subject alone via homework. Therefore, students should know how to associate their previous learning experiences with the new ones to show their understanding. Nevertheless, the order of these two phases is upside down in a flipped classroom. That is, the acquisition of information happens before the class, and the second step, which is internalizing knowledge, is carried out in the classroom with teacher and peer assistance. Assigning pre-class tasks to students makes them familiar with the topic, helping them to improve the second stage skills in the classroom much more easily (Jungic et al., 2015).

Having experienced FL in their classrooms, Bergman and Sams (2012) note that flipping the lesson supports low achievers because the teacher adopts the role of a facilitator by helping students having difficulty. In a non-flipped classroom, yet the cleverest students dominate most of the activities and teachers mainly interact with

them. In that case, the weaker students are neglected, and they are unlikely to strengthen their weaknesses without being guided by the instructors. Yet, FL allows teachers to address the needs of every student, especially the struggling ones by filling the gap between low and high achievers. It does not mean that successful students are ignored but most of the attention is not focused on them.

To wrap up, being provided with information about the content of the lesson at home, students in flipped classrooms are able to master the topic under the guidance of the teacher. In that case, the difficulties students encounter in non-flipped classrooms are likely to diminish as students can progress at their own pace rather than keeping up with their classmates.

2.6 Research on the Effect of Flipped Instruction on Students' Overall English and Vocabulary Achievement

In this part, the studies in the literature focusing on EFL students' or pre-service English teacher's academic achievement will be presented. First, studies highlighting the effects of flipped instruction on students' overall academic performance will be provided. Next, the effects of flipped instruction on vocabulary achievement of EFL students will be reviewed.

2.6.1 Research on students' overall performance in English language. In addition to being employed in other classes such as STEM (science, technology, engineering, mathematics), FL has been applied in language learning and teaching all around the world. Its impacts on EFL students or pre-service English teachers have been investigated by various researchers (Aydemir, 2019; Hung, 2018; Lee & Wallace, 2018; Solimani, Golestan, & Lotfi, 2019; Soltanpour & Valizadeh, 2018; Yaşar, 2020).

To begin with, Solimani et al., (2019) investigated whether two non-conventional teaching approaches, Flipped Classroom Model (FCM) and Unplugged Classroom Model (UCM) were effective on Iranian EFL learners' oral proficiency. The study included 90 upper-intermediate learners. In order to assess learners' oral ability, a pre-test and post-test were administered, and the Community of Inquiry (CoI) Questionnaire was employed to identify learners' attitudes towards Flipped Classroom and Unplugged Classroom approaches. The observations of instructors were also included. After a four-week treatment, it was revealed that both of these models, FCM, and UCM contributed to the speaking ability of students. Nonetheless, students in the

flipped classroom were more positive towards flipped classroom than their peers in the unplugged classroom.

In another study, Soltanpour and Valizadeh (2018) aimed at exploring the effect of flipped instruction on Iranian EFL learners' writing skills. It was a quantitative study and adopted a pre-test, post-test, and delayed post-test design. At the end of a 5-week treatment, students were given a post-test, and after two weeks they took a delayed post-test. Data analysis indicated that students in the flipped classroom outperformed the ones in the non-flipped classroom based on their post-test and delayed post-test scores.

In a similar study carried out by Lee and Wallace (2018), the effects of FL on students' overall success in an English course at a South Korean university were examined. There were 79 participants in the study and while half of them learned English with communicative language teaching approach, the other half received flipped instruction. Data collection tools consisted of three achievement tests, three surveys, and the observational field notes of the instructor. It was observed that students studied in the flipped classroom performed better than their peers receiving communicative language teaching. Lastly, students were satisfied with their FL experience, and they were more involved in the lesson than their counterparts.

In a recent study, Yaşar (2020) investigated the effect of flipped classroom on pre-service English language teachers' academic success as well as their perceptions. Based on the data analysis obtained from the results of pre- and post-test, an attitude questionnaire and two open-response questionnaires, it was seen that FL did not affect students' academic performance significantly but the participants reported a high level of satisfaction with this learning method. Nevertheless, some of them were not pleased with the heavy workload and the extra tasks assigned to them in the flipped classroom.

Hung (2018) examined the impacts of two different flipped classroom models on students' speaking anxiety and motivation level by merging flipped and game-based learning through technology-enhanced board games (TEBGs). Quick Response (QR) codes were used to prepare these board games. 48 Taiwanese university students participated in this study to enhance their speaking ability in English. Having been divided into two groups, students in one group experienced gamified FL, whereas the other group experienced non-gamified FL. Both groups watched videos prior to class

and were provided with game-based learning whereas the experimental group received gamified flipped instruction by using QR codes and the control group used worksheets. Data collection tools, which were two questionnaires, and interviews, indicated that gamified FL instruction helped students to feel less anxious in speaking and it was also effective in increasing their motivation level.

In a mixed-method study, Aydemir (2019) investigated whether flipped instruction had an effect on pre-service English teachers' reading and writing performance at an advanced level. The impact of this teaching model on students' self-regulated learning and classroom interaction was also studied as well as the instructor's opinions about employing flipped instruction in foreign language classroom. Data collection tools were learning experience questionnaire, pre-and post-tests, self-regulated learning scale, focus group interviews, instructor reflective journals, and observation field notes. According to the findings, flipped instruction had a positive effect on the writing success of the participants but it did not have any significant effect on their reading skill and self-regulated learning. It was also reported that this instruction method facilitated students' engagement and interaction. In spite of it, students coming to class without sufficient preparation were regarded as a drawback of FL by the instructor.

In the light of the above studies it can be concluded that FL made a contribution to EFL students and pre-service English teachers' speaking and writing skills. It also facilitated their engagement level. Besides, it made students feel less anxious and more motivated but it didn't have a positive effect on pre-service English teachers' self-regulation skills. Lastly, the students in these studies reported that they adopted positive feelings towards the treatment.

2.6.2 Research on EFL students' vocabulary achievement in English language. Apart from the studies investigating the effect of FL on students' academic performance in reading, speaking, or writing skills, several studies have attempted to explain the relationship between the vocabulary performance of students and flipped instruction (Al Qasmi, Al Barwani & Al Seyabi, 2022; Kang, 2015; Karmaker & Singh, 2016; Oh, 2017; Özkal, 2019; Soltanabadi, Izadpanah, & Namaziandost, 2021; Suranakkarin, 2017; Zarrinfard, Rahimi, & Mohseni, 2021).

Kang (2015) investigated the EFL university students' academic achievement in grammar and vocabulary along with their views on FL. While the quantitative data

were collected from pre- and post-tests, qualitative data were obtained from a survey, student logs, and interviews. The qualitative data aimed to identify the effectiveness of pre-class materials and in-class activities. The findings indicated that students exposed to flipped teaching outperformed the others in the non-flipped group in terms of grammar and vocabulary achievement. Also, students in the FC reported high level of satisfaction regarding the activities they were provided with in the lesson and the role of the instructor. They also found the flexible nature of FL advantageous as they were able to access the course materials without the constraints of time and space, but they stated that some students' coming to class without doing the pre-class homework was demotivating for the rest of the class.

Similarly, Zarrinfard et al., (2021) examined the effects of flipped classrooms on Iranian EFL learners' success rate in a general English course. The study consisted of 50 students who were majoring in engineering. The learning gain of participants in grammar and vocabulary was assessed by means of an achievement test, the results of which revealed that experimental group showed a significant difference in terms of grammar and vocabulary performance. In addition to its contribution to students' learning outcome, students' being prepared for the lesson, effective use of class time, increased interaction opportunities were noted as the benefits of this learning method.

In a mixed-methods study carried out by Karmaker and Singh (2016), the vocabulary development and satisfaction level of students at a South Korea were explored. The research lasted for 8 weeks with 17 undergraduate students and the data were obtained from pre-test, post-test, questionnaire and focus group interviews with students. The results indicated that students in the FC performed better than the other group and they were more satisfied with the course as well. It was also found that thanks to flipped instruction classroom time was used much more effectively, making it possible for students to communicate with their classmates more in contrast to non-flipped classrooms. However, some of the students did not complete their responsibilities and participate in these lessons.

In a recent quasi-experimental study, the effect of flipped classroom on Iranian EFL learners' vocabulary recall and retention was evaluated by Soltanabadi et al., (2021). English language placement test, vocabulary pre-test, immediate post-test, and delayed test were among the data collection tools. The participants were taught 28 target vocabulary and data analysis of immediate and delayed post-tests showed that

the flipped classroom affected the vocabulary recall and retention of the experimental group significantly.

Oh (2017) investigated whether peer teaching had an impact on student engagement and vocabulary learning of college students in a flipped classroom. The study consisted of 61 participants with low English proficiency. Both experimental and control groups received flipped and non-flipped instruction for five weeks. Data analysis revealed that the student engagement and success rate were not significantly different in two groups. Nonetheless, it was found that the achievement of students depended on their engagement level in the flipped classroom.

In a parallel study, Suranakkarin (2017) looked at the impact of FL on Thai learners' collocation competence along with their perceptions towards FL. Students' vocabulary performance was assessed via achievement tests, and their attitudes were examined via a questionnaire and an interview. The data analysis indicated that the implementation in the flipped classroom improved students' collocation competence and their perceptions about FL were positive. Nevertheless, the achievement test scores of students in both groups were not statistically different.

In another study, Özkal (2019) examined the impacts of FL on students' vocabulary knowledge and their perceptions regarding this model. The participants included 55 Turkish EFL students enrolled in a language course. The data collection tools included a self-efficacy and attitude survey, pre- and post-tests, interviews, and reflection reports. According to data analysis, students in the flipped classroom were more successful than the ones in the non-flipped classroom. Additionally, the perceptions of students towards FL were positive. Whereas the visual materials such as videos and pictures were found highly effective, the requirements of the flipped instruction were a little demanding for the students.

Finally, Al Qasbi et al., (2022) looked into the effect of flipped instruction on Omani students' vocabulary learning and motivation towards learning English. Additionally, the difficulties encountered by the students over the course of the treatment were another aim of this quasi-experimental study. The participants in the experimental group were exposed to the vocabulary input by means of video lectures and group discussions that took place on WhatsApp before the lesson. An achievement test, a motivation questionnaire and semi-structured interviews were employed as data collection instruments. According to the results, the experimental group performed

better than the control group in terms of vocabulary learning. It was also reported that flipped instruction improved experimental group students' motivation level. However, problems related to the technical issues, lack of time and group cooperation as well as the increased workload were mentioned as challenges faced by the students.

To sum up, it can be inferred that the findings of most of these studies are in line with the previous research in the literature and the implementation of flipped instruction can result in many positive outcomes in different areas of language instruction. Considering the profile of the students and the requirements of this century, teachers who fail to blend new pedagogical approaches with the existing ones may not be able to serve the needs of the learners. Although there is a wide range of studies investigating the effects of FL on students' writing, speaking, grammar, and reading achievement, some of them explored the relationship between FL and vocabulary competence of university students. Intending to fill this gap, this present study examined the effect of FL on upper-intermediate EFL students' vocabulary competence at a foundation (non-profit, private) university. Additionally, it aimed at exploring the impact of FL on their perceived autonomy level. Finally, these students and their instructors' perceptions about the implementation of FL in an EFL classroom were investigated. It is believed that this study will help classroom practitioners and researchers to gain insight into the implementation of FL in a Turkish EFL context.

2.7 Teaching and Learning Vocabulary in an EFL Classroom

2.7.1 The history of vocabulary instruction. The history of the Grammar-Translation Method can be traced back to studies of classical Latin which was a widely studied subject in the language classrooms between sixteenth and nineteenth centuries (Richards & Rodgers, 2001). During this time period, learning the grammatical structure of Latin was the primary focus of language instruction. Students had to work on grammar and make translations from their mother tongue to the target language or vice versa (Kelly, 1969). Over time, Latin lost its popularity and the need for learning other languages such as English, French, Italian arose in Europe and the United States in the eighteenth century. While teaching these modern languages, the same methods used to teach Latin were adopted by language teachers by giving rise to the emergence

of the Grammar-Translation Method at the beginning of the nineteenth century (Richards & Rodgers, 2001). Although proponents of this method aimed to teach new languages easily, the method turned out to be a daunting experience for students trying to translate sentences and analyzing grammatical structures. The main areas of focus were reading and writing, and the words integrated to the syllabus were selected because of being suitable for the grammar objectives (Zimmerman, 1997).

Due to the frustration caused by the Grammar-Translation Method, the Direct Method came into existence at the end of the nineteenth century. The main objective of this method was to encourage the use of target language. Its proponents believed that the analysis of grammar rules does not facilitate the communicative skills and students should be able to communicate in the target language directly. That's why there was no room for translation in this method and it was based on the idea that languages can be learnt naturally if the meaning is made clear to students (Richards & Rodgers, 2001). Although vocabulary instruction was limited to daily language, it was studied in context (Larsen-Freeman, 2000). Demonstration, action, pictures, objects were preferred to teach concrete words. Abstract words, on the other hand, were thought of by creating associations in the learners' mind (Zimmerman, 1997).

In the middle of the twentieth century, in order to compete against other countries, particularly Russia, which showed significant improvement in scientific research, foreign language instruction gained importance in the U.S.A. The government encouraged the attempts of language teachers working on new pedagogical teaching approaches. These efforts led to the existence of the Audiolingual Method which adopted the philosophy of the behaviorist psychology (Richards & Rodgers, 2001). Acquiring communication skills was considered as the principal goal of language education and students had to practice dialogues by memorizing them so that they could use them unconsciously as they did when forming new habits (Larsen-Freeman, 2000). Dialogues were used to introduce the grammar and vocabulary items. Grammar and phonology were emphasized more than vocabulary (Zimmerman, 1997) and the introduction of lexical items was limited in order not to inhibit the learning of grammatical structures (Thornbury, 2012).

In the late of 1960s, applied linguists in Britain started to criticize the previous approaches for their overemphasis on language structures, ignoring the communicative aspects of language (Richards & Rodgers, 2001). Also, with Noam Chomsky's heavy

criticisms on the theoretical background of Audiolingualism, a need for a new language teaching approach addressing the communicative needs of learners arose (Schmitt, 2010). On the basis of these requirements, Communicative Language Teaching, prioritizing the importance of using language to communicate meaningfully, emerged in the 1970s (Richards & Rodgers, 2001). Similar to the other approaches, its aim was to facilitate communication in the target language. However, different from the earlier approaches, negotiation of meaning and fluency were emphasized over accuracy. The vocabulary instruction was integrated into the study of functional language such as making a request, asking for permission or making a prediction (Schmitt, 2010).

When the communicative approach was welcomed around 1970s, vocabulary teaching gained importance since people, especially tourists, needed lexical units to be able to convey their meaning across. Since this meaning is carried by words rather than the grammatical structures, vocabulary training has been regarded as essential as the other language areas. Hence, vocabulary activities have become an indispensable part of the course books designed for language teaching (Thornbury, 2012).

To sum up, when the brief history of language education has been taken into consideration, it can be understood that vocabulary instruction has not been a requirement until the last decades of the 20th century. When the previous approaches like the Direct Method or Audiolingualism fell out of favor, Communicative Language Teaching came out to address the gap in language education. After its emergence, vocabulary instruction was given priority to help learners convey their ideas in the target language.

2.7.2 The importance of vocabulary for second language learners. Being competent in grammar has always been a crucial skill in language learning. It has been considered that to be proficient in the target language, learners must have grammatical knowledge (Richards & Rodgers, 2001). Nevertheless, as stated by Wilkins (1972), without grammatical competence there is a possibility to convey the meaning accurately, yet without lexical competence there is often little possibility to get the meaning across (p.111). Similarly, Laufer and Goldstein (2004) suggest that even though learners are not aware of the grammatical features of a word like singularity/plurality, they can communicate with each other without being misunderstood despite some grammatical inaccuracies. However, when they mix the

meaning of a word and use it wrongly, communication breakdowns are likely to occur between them even if the word they utter is grammatically accurate.

Additionally, being another researcher who emphasizes the significance of vocabulary, Schmitt (2010) argues that what has been acknowledged by all parties included in the process of language learning, namely learners, teachers, materials developers, and research specialists is one must learn vocabulary to gain proficiency in a second language. It can be supported by the fact that language learners refer to their dictionaries rather than grammar books when they need to express themselves.

This phenomenon about the significance of the vocabulary and its relation to language proficiency was illustrated by research as well (Laufer, 1989; Laufer & Goldstein, 2004). To examine the effect of lexis knowledge on L2 students' reading comprehension, Laufer (1989) carried out a study with 100 freshmen students learning academic English, whose native languages were Hebrew and Arabic. These students were provided with two reading tests including multiple choice and open-ended questions. In the first phase of the study, students both answered these questions and underlined the unfamiliar words in the texts. In the second phase, the students were assigned another task in which they read the same texts and restated or translated the pre-selected 40 words inside these texts. The sentences they translated were gathered and analyzed. The data analysis revealed that there was a strong correlation between lexis knowledge and reading comprehension. If readers' capability of understanding lexis was 95% or above, the possibility of their reading comprehension increased significantly. Although some of the readers with low lexical knowledge were able to comprehend the text by using top-down, bottom-up processing, it was not the case for most of them and being familiar with less than 95% of the lexis inhibited their comprehension. In other study conducted by Laufer and Goldstein (2004), the relation between passive recognition, active recognition, passive recall and active recall of vocabulary and language proficiency was examined. 435 high school and university students learning English as a second language participated in this study. The results revealed that passive recall of vocabulary and language proficiency correlated significantly. In conclusion, as argued by Laufer and Goldstein, (2004) while making grammar mistakes does not inhibit communication between speakers, lacking the correct vocabulary may result in communication breakdowns. Considering the findings of the above studies, it seems clear that vocabulary knowledge plays an

essential role in the comprehension of the language; therefore, it should not be undervalued by language teachers and learners. To be able to communicate in the target language, vocabulary competency should precede grammatical competency.

2.7.3 Dimensions of vocabulary knowledge.

2.7.3.1 Receptive (passive) vs productive (active) vocabulary. Scholars draw a distinction between receptive (passive) and productive (active) vocabulary (Laufer & Goldstein, 2004; Read, 2000; Schmitt, 1999; Schmitt, 2010; Takala, 1984; Thornbury, 2012). Laufer and Goldstein (2004) define receptive vocabulary as the comprehension of listening and reading input, which requires recognition of the word's form and retrieval of its meaning. They define productive vocabulary, on the other hand, as the retrieval of the right word in spoken and written language to get the message across. In spite of this clear definition, Schmitt (2010) points out that distinguishing between receptive and productive vocabulary may not be as straightforward as it seems because they cannot be easily measured. According to Read (2000), what is associated with receptive vocabulary knowledge in some studies can be associated with productive vocabulary knowledge in other studies by different people. Schmitt (1999) stresses that asking students to make translations from L2 to L1 should be perceived as productive knowledge since it enables them to show their understanding by applying what they learnt. On the other hand, different researchers can categorize the same task as receptive knowledge (Takala, 1984). Finally, Thornbury (2012) suggests that learners' productive vocabulary is limited compared to their receptive vocabulary, which means that they may comprehend the meaning of the words although they may not produce them, and receptive vocabulary is usually followed by productive vocabulary.

To summarize, receptive vocabulary refers to comprehending the words embedded in reading or listening texts. Productive vocabulary, however, refers to getting back the word stored in memory during speaking and writing. While some researchers differentiate receptive vocabulary from productive vocabulary, others may not acknowledge this difference (Laufer & Goldstein, 2004; Read, 2000; Schmitt, 1999; Schmitt, 2010; Takala, 1984).

2.7.3.2 Breadth and depth of vocabulary. Breadth (size) of vocabulary, as its name suggests, is characterized by the amount of vocabulary the learner knows in relation to his/her language level. (Nation, 2000). On the other hand, *quality or depth* of vocabulary can be defined as having an awareness about the lexical features of the word. Two of them are equally important for the acquisition of vocabulary. (Schmitt, 2010). Learners should recognize a wide range of words at the same time they should also know many aspects of these words to be able to use them in an accurate way. In other words, what matters is not only the amount of vocabulary but also the *depth of vocabulary* they have (Nation, 2000).

Even if language learners know the contextual meaning of a word, they need to learn its other dimensions such as pronunciation, spelling, register, frequency, syntax, and morphology (Nassaji, 2004; Read, 2000). These aspects are not independent from each other, and they all contribute to the learners' depth of vocabulary, enabling them to comprehend the text they read (Ahmadi, 2016). However, it is also believed that being familiar with the *form and meaning* of the word is the only requirement to learn it. In addition to establishing the connection between *form and meaning*, learners also need to learn the features of these words to use them in written and spoken language accurately (Nation, 2000).

Read (2004) suggests that various researchers have put forward different ideas on the aspects of depth of vocabulary and it has turned out to be a confusing term. What researchers need to do is that they should provide more elaborate explanations on the meaning of 'depth', which requires them to go beyond the basic distinction between the two terms. With this aim in mind, Read (2004) offers three areas of development regarding depth in acquiring L2 vocabulary. The first one is *precision of meaning*, which is about the distinction between having a more restricted, unclear knowledge of vocabulary and having a more detailed and clear idea of its meaning. Second one is called *comprehensive word knowledge*, which entails the knowledge of orthography, phonology, morphology, syntax, collocation, pragmatics in addition to semantics. The last one is *network knowledge*, which requires learners to create networks with other words and to notice the similarities and differences among them (p. 211-212).

In a study carried out by Qian (1999), the connection between depth and breadth of vocabulary knowledge and reading comprehension of learners in an English as a

second language (ESL) course was examined. The participants consisted of 74 Chinese and Korean university students, all of whom were familiar with at least 3000-word families in their second language so that they could complete the reading comprehension task. Data collection instruments included vocabulary size, reading comprehension, depth-of-vocabulary-knowledge, and morphological knowledge tests. According to the results, the learners' depth and breadth of vocabulary knowledge highly correlated with their comprehension in the reading test. It was also found out that students with a high level of vocabulary size performed better in the depth of vocabulary test, indicating the relation between the two dimensions of vocabulary knowledge. In brief, it can be inferred that breadth and depth of vocabulary are two aspects of vocabulary knowledge which complement each other. As well as the amount of vocabulary learners need to know, they need to be aware of the other aspects of vocabulary, which are pronunciation, spelling, register, frequency, syntax, and morphology.

2.7.3.3 Explicit (intentional) vs implicit (incidental) vocabulary learning. Two primary ways of learning vocabulary have been offered so far, one of which is explicit learning by studying the words intentionally, the other is incidental learning by being exposed to language and using it for communicative purposes (Schmitt, 2010). The number of words one knows differs between first and second language learners to a great extent. While native speakers who receive a high standard of education are supposed to become familiar with 20,000 words and their derivatives, second language learners must study English for several years to be exposed to 25% of the vocabulary acquired by native speakers (Thornbury, 2012).

As noted by Hill and Laufer (2003), in order to learn 2000 new words incidentally, more than 8 million words or approximately 420 novels must be read by the learner. Additionally, since their exposure to a second language is limited compared to native speakers, second language learners acquire the vocabulary much more slowly. It has been estimated that the amount of vocabulary learnt during eighteen years in a classroom setting is equivalent to the quantity of vocabulary acquired in a year in real life conditions where a second language is spoken as a way of communication (Thornbury, 2012).

In this respect, Schmitt (2010) asserts that vocabulary can be learnt through reading in an implicit way, but language learners cannot be expected to acquire a great

deal of lexis only by being exposed to the language incidentally. Also, it seems unlikely that it will facilitate the productive use of vocabulary. Due to the demanding nature of incidental vocabulary learning, rather than depending solely on it to increase vocabulary size, intentional vocabulary learning should be blended with incidental vocabulary learning. At the same time, when these two methods complement each other, learners are given an opportunity to consolidate the vocabulary they have already encountered through explicit instruction.

The rationale behind combining both forms of vocabulary instruction was also supported by empirical research (Ahmadi, 2006; Al-Darayseh, 2014). Ahmadi (2006) examined the effect of incidental and intentional vocabulary learning on learners' L2 vocabulary knowledge. The participants consisted of second-year undergraduate students, majoring in English language teaching and translation. Being divided into three groups, first and second group students were exposed to incidental vocabulary training through extensive reading while the third group students were exposed to intentional vocabulary training through intensive reading. Both vocabulary training strategies were found effective at the end of the data analysis. It was also found that the students receiving incidental vocabulary training in an extensive reading program showed better performance in terms of depth and breadth of their vocabulary compared to the other group receiving intentional vocabulary training in an intensive reading program. In another study, Al-Darayseh (2014) examined the effect of implicit and explicit forms of vocabulary instruction on the vocabulary range and reading fluency of EFL learners. The participants were sophomores at a Saudi Arabian university studying economics. The instruments used to collect data were pre-and post-test that assessed their reading and vocabulary performance. There were two groups in this study, one receiving the traditional instruction, and the other receiving the combination of implicit and explicit vocabulary training. The findings of the study indicated that the latter group performed better than the former.

To conclude, it seems obvious that the amount of vocabulary known by a native speaker outnumbers the amount of vocabulary learned by students in a classroom setting; thus, rather than relying solely on one of the two ways, it seems more logical to take advantage of both intentional and incidental vocabulary learning to increase learners' chance of exposure to the target vocabulary.

2.7.4 What does it mean to know a word? Read (2004) contends that vocabulary knowledge involves more than knowing the synonym or L1 meaning of the word. In addition to being familiar with the word at the level of semantics, it also entails a variety of linguistic aspects, which are orthography, phonology, morphology, syntax, and pragmatics. Another requirement of vocabulary knowledge is being able to form the association between similar words.

In terms of *receptive knowledge and use*, knowing a word depends on some key points. First, learners should understand the spoken and written form of the word when it is encountered in listening and reading. Second, learners should recognize the affixes of the word and create the link between these affixes and meaning of the word. Next, they need to know the specific meanings of the word in the context in which it is used. Also, they should understand whether the word has been used accurately or not and know the collocations of the word. Finally, they need to know whether the word has been used frequently or not. In terms of *productive knowledge and use*, knowing a word means that learners can pronounce the word properly and they do not make any spelling mistakes in writing. They are also supposed to use the affixes of the word correctly in a variety of contexts. Besides, they are able to use the synonyms and antonyms of the word accurately in a sentence. Lastly, they are expected to use the word naturally with its collocations (Nation, 2000, p.40). In Table 1, the different aspects of vocabulary knowledge are shown in a detail:

Table 1

The Aspects of Vocabulary Knowledge

Form	Spoken	What does the word sound like?
	Written	How is the word pronounced?
		What does the word look like?
		How is the word written and spelled?
Meaning	Form and meaning	What parts are recognizable in this word?
		What word parts are needed to express this meaning?
		What meaning does this word form signal?
		What word form can be used to express this meaning?

Use	Concept and referents	What is included in the concept?
		What items can the concept refer to?
	Associations	What other words does this make us think of?
		What other words could we use instead of this one?
	Grammatical functions	In what patterns does the word occur?
		In what patterns must we use this word?
	Collocations	What words or types of words occur with this one?
		What words or types of words must we

Table 1 (continued)

		use with this one?
	Constraints on use (register, frequency...)	Where, when, and how often would we expect meet this word?
		Where, when, and how often can we use this word?

(Nation, 2000, p. 40).

To summarize, knowing a word is much more than being familiar with its equivalent in the first language. It requires learners to pronounce and spell the words accurately, to know and use its derivatives as well as forming the link between them and meaning of the word. They should also understand the meaning of the same word in different contexts and be aware of its frequency in spoken and written language. For this reason, an effective way of vocabulary instruction should raise learners' awareness about these various aspects of vocabulary.

2.7.5 A strategy for learning vocabulary - guessing meaning from context.

Whether L2 students should be encouraged to make inferences by paying attention to context clues or they should be provided with direct explanation or translation in L1 of an unknown word has been a widely discussed topic among researchers (Hulstijn,

1992). The ones who are in favor of using this strategy claim that trying to deduce the meaning of an unknown word activates students' thinking process; thus, the more they figure out to understand the meaning of a word, the more likely it is stored in their long-term memory (Craik & Tulving, 1975; Jacoby, 1978). On the other hand, the other researchers oppose this idea by highlighting that context does not always provide sufficient details to make inferences correctly. Next, it can inhibit learning when students are unable to make the right guesses. Besides, it may not be suitable for some students having trouble in analytical thinking (Bensoussan & Laufer, 1984; Carnine, Kameenui & Coyle, 1984).

In addition to the high amount of vocabulary students need to acquire in the target language, the low frequency of some words makes the retrieval of them difficult (Nation, 1990). Burling (1982) mentions another difficulty L2 learners could experience while learning content words. Although the difference among content words and function words can be differentiated easily, the difference between some content words may not be simply noticed. Contrary to function words, which are small in number and mostly repeated in every discourse type, abstract words including some nouns, verbs, adjectives, and adverbs, which cannot be associated with a mental image, are difficult to store in the memory. They are necessary to comprehend the meaning of discourse but being hardly encountered, abstract words are more likely to be forgotten than concrete words. Hence, it might be reasonable to provide students with helpful strategies which will be useful in coping with them such as guessing meaning from context and working on word morphology (Nation, 1990). Similarly, Nattinger (1988) emphasizes that students should be encouraged to use strategies for guessing the meaning of unknown words from context first rather than referring to their dictionaries for every word they encounter. They should be recommended to look up their dictionary to check whether their guess is right or wrong.

Additionally, Nation (1990) lists three reasons justifying the necessity of using strategies such as guessing meaning from context instead of teaching the low-frequency words. First, considering that there are several hundred thousand low-frequency words, their number is far beyond the high-frequency words. Next, there is a low probability of encountering them more than twice in the entire discourse. Last, they could occur frequently in very specific contexts, which indicates these words have

limited range. For these reasons, investing time in teaching strategies such as guessing meaning might be more timesaving than teaching the meaning of the words.

To guess the meaning of unknown words, learners can resort to some strategies, one of which is using context clues. For instance, by looking at the title of a reading text, one can understand the topic. Also, using the other words in the text might have an important role in guessing meaning. All the words in written or spoken language can be helpful to make the meaning of unknown words clear. In addition to this, it is possible to find grammar, punctuation and intonation clues in written or spoken discourse (Nattinger, 1988). Apart from using the linguistic clues embedded in a text, different ways could be employed to infer meaning, which are using one's own knowledge about the unknown word, and the content of the text. It should be considered that even though some students are able to use them intrinsically, others may still need training (Nation, 1990).

Furthermore, Clarke and Nation (1980) offer a systematic approach with five steps to teach the strategy of guessing meaning. First, learners are asked to notice the unknown word and its form like noun, verb, adjective or adverb. Next, they notice the words around the unknown word and their relations with each other. Third, they analyze the connection of the sentence containing the unknown word with other sentences, clauses, and they are asked to identify the nature of this connection such as *cause-effect*, *time*, *contrast* or *exemplification*. Fourth, relying on the clues they found in previous steps, they make their guesses. And finally, they look at the definition of the word to see if they are right or wrong.

To examine the effects of guessing meaning on students' vocabulary acquisition, Hulstijn (1992) carried out an elaborate study with two goals. The first one was to investigate whether words can be remembered better when they are inferred. The second goal was to research if it is possible to diminish the drawbacks of guessing meaning by presenting options for the unknown words such as L1 translations or L2 synonyms. In this study, students completed a reading task with twelve low-frequency target words embedded in them. Some of them included the meaning of the target words in the margins, in some of them students chose the meaning of the words from the multiple-choice questions. In other readings, students were not provided with any information about the unknown words. In the end, it was found

out that students who were not given any clue for the target words learned them better because of working on these words by themselves. It was also revealed that if some clues were not available, the students could not infer the meaning of the unknown words correctly.

To sum up, considering what has been stated so far, adopting a systematic approach for vocabulary teaching seems essential to promote students' overall language performance since their competence in vocabulary directly correlates with their ability in that language (Al-Darayseh, 2014; Ahmadi, 2016). In that sense, teachers who are aware of the dimensions of vocabulary learning as well as the strategies to teach them are more likely to assist their students in their language learning process.

2.8 Learner Autonomy

2.8.1 The definition of learner autonomy. The term of learner autonomy dates back to the early 1970s, which was first developed at the Centre de Recherches et d'Applications Pédagogiques en Langues (CRAPEL), University of Nancy, France. According to Holec (1981, p.3) its former director, learner autonomy means 'the ability to take charge of one's learning ... to have, and to hold, the responsibility for all the decisions concerning all aspects of this learning'. He believes that one can identify his/her learning objectives, content, determine the methods and techniques, control the process of acquisition, and self-evaluate his or her learning. Learner autonomy is not inherited through birth, and it must be acquired either naturally or formally through education. Considering these points highlighted by Holec (1981), the role of teachers in enhancing learner autonomy becomes much more important.

In addition to Holec's definition, Esch (1998, p. 3-6) defines what is not learner autonomy. He states that it is not self-learning, it does not mean that teachers should not intervene in the process, it is not a behavior which is shown only once, and it is not something which remains the same throughout all life. Najeeb (2013) asserts that Holec's definition of learner autonomy is two-fold. It not only includes foreign language learning but also learning how to learn. Being autonomous means transferring what is learnt in the classroom to the outside. That is to say, autonomous learning is not restricted to the classroom and goes beyond it. As learners become more aware of their learning, it evolves throughout the whole life (p.1238). In brief, since it

is a skill which can be learned through training, teachers need to understand its boundaries well to be able to foster their students' autonomous learning skills. Finally, it should be noted that the term learner autonomy is not only associated with language learning, it can also be applicable to many contexts in life.

2.8.2 Ways to promote learner autonomy. A number of suggestions have been proposed by the researchers to enhance students' autonomy level (Barfield & Brown, 2007; Camilleri, 1999; Joshi, 2011; Najeeb, 2013; Nunan, 1997; Wichayathian & Reinders, 2018). In that sense, Nunan (1997) emphasizes that learner autonomy could be encouraged in five steps. First, learners' awareness needs to be raised. That is, they should be aware of the learning objectives and content of the materials in their course. Next, learners should be engaged in the selection of their own goals. Third, they should have the responsibility for changing the objectives and content of the course. Fourth, they should determine their goals and objectives. Fifth, they should make associations between what they learned in the classroom and the world outside by going beyond the classroom.

To promote autonomy and learner independence learners should be provided with tools for success. This requires guiding learners so that they can realize their goals, and it also involves equipping them with the necessary skills they may need to find the information they seek. Students should be encouraged to be aware of their own learning styles, and to get benefit from them. When they increase their confidence, they will be more likely to follow the progress of their own learning, which will result in more confidence and success (Najeeb, 2013).

It is clear that there is a close relation between learner autonomy and language achievement. Barfield and Brown (2007) put forward that the success in language teaching is based on three factors. First, learners should take an active role in their learning process by deciding on the key aspects of it. Second, they should be trained on self-reflection so that they can think about their learning. Third, they should be given opportunities to use the target language meaningfully in order to acquire autonomy in language use.

Since it is a broad term including the process of life-long learning, learner autonomy is not restricted to the classroom. Joshi (2011) suggests that learner autonomy is not only achieved outside the classroom but also inside the classroom. To put it broadly, it entails all the decisions learners make for their own learning. It means

that all the activities, plans, and actions of the learner play a role in its development. In the classroom, it may include managing the learning, mental processes, and the content. It can be achieved in different ways through group work or cooperative learning and learners can be provided with chances to learn the content easily. Hence, students can practice learner autonomy in the classroom by learning to learn.

One of the most important aspects of having autonomous students is to make students realize the areas they are good or bad at. Hence, the language programs which stimulate the autonomy of their learners should guide the learners to identify their strengths and weaknesses so that they can take control of their language improvement (Wichayathian & Reinders, 2018).

To promote learner autonomy, the roles adopted by teachers are likely to have a significant effect on the acquisition of it. Hence, they need to be aware of the importance of their roles. Camilleri (1999) mentions three roles of teachers, which are manager, resource person, and counsellor. The first role of the teacher requires planning the learning paths a student can follow and the results of these possible paths. His/her role entails managing the activities, rather than acting as a source of information. The second role, which is being a resource person, requires enhancing the conditions of learning and making learners aware of the different strategies like helping them to identify their learning styles. Finally, the role of the counsellor involves adopting a proactive approach by identifying the problems of learners before they arise and by helping them to deal with these problems.

In conclusion, teachers should be aware of the roles they play to promote learner autonomy by organizing every stage of the learning process inside or outside the classroom. Rather than being the transmitter of the knowledge, they should design activities that can foster their students' sense of responsibility. They should also keep in mind that their roles include raising the consciousness of the students about their way of learning.

2.8.3 Research on FL and learner autonomy. As it requires students to take responsibility for their learning process, there might be a relationship between FL and learner autonomy (Han, 2015). To gain an understanding on this issue, research undertaken by some scholars need to be scrutinized (Han, 2015; Huang, 2020; Lin, 2019; Tsai, 2021). In a study conducted by Lin (2019), the writing performance of Taiwanese college students who received flipped instruction combined with mind

mapping and peer assessment tools was investigated. The other aim of the study was to explore the effect of this instruction model on students' autonomous learning skills. A learning management system was designed by the course instructor. While experimental group students were encouraged to promote their writing skill by using online mind mapping tools and by assessing their peers' writing tasks through this platform, control group students had the same learning experience in a traditional way without using the learning management system. The results revealed that the writing skills of both groups did not differ significantly but the performance of experimental group students in learner autonomy was better than the control group.

In a recent study, Huang (2020) analyzed the impact of a flipped reading course on EFL students' learner autonomy. Thirty-eight freshman students were asked to prepare for the topic of the day through reading and video tasks. The participants completed post-reading activities in the classroom. Data analysis revealed that flipped reading course designed for the students contributed to their learner autonomy. The course also improved their decision-making skill, and they were able to engage in activities outside the classroom more.

Another recent research on FL and learner autonomy was carried out by Tsai (2021). This study aimed at investigating the effect of flipped classroom on EFL students' learner autonomy. The participants were English major university students studying linguistics. The students in the experimental group studied the lesson content via video lectures prepared by the course instructor. As out-of-class activities, they were supposed to complete online quizzes and e-journals which allowed them to make reflections about their learning experience. The students in the control group, however, experienced a non-flipped model of teaching. Although they used the same materials, they were not assigned outside classwork. At the end of the data analysis, there was a statistically significant difference between two groups regarding their learner autonomy. It was found out that FL promoted experimental group students' learner independence, they also felt more confident. In addition, their cooperation and interaction skills enhanced as a result of the activities done in the classroom. Finally, they improved their skills in taking more responsibility for their own learning.

In a parallel study, Han (2015) examined whether flipped classrooms had an effect on the learner autonomy of advanced level adult learners studying at an intensive

English course in the USA. It included 14 participants, and the researcher aimed at equipping them with language learning strategies they could use independently for their further studies. To achieve this purpose, students were required to make comments on the topic of the assigned lesson by recording them on Google Voice. During contact hours, they participated in cooperative activities, and at the end of the course they shared their recommendations on how second language learners can learn English effectively through a presentation. The results indicated that their learner autonomy was fostered when students completed the course. Despite that, it was highlighted that whether students could maintain the autonomous learning skills they gained in this course remains uncertain. Lastly, it was noted that even though FL increased learner autonomy of the students, designing the whole course was demanding and it put an extra burden on the shoulders of the researcher.

To sum up what has been reported so far, it seems clear that FL plays an important role in fostering learner autonomy but it also requires a carefully-planned course design enriched with strategies that could help students to identify and develop their strengths and weaknesses and to adopt study habits addressing their needs. It should also be remembered that this empirical research may be insufficient to explain whether students can keep their autonomous learning habits in the long run or its effects diminish over time.

Chapter 3

Methodology

In this chapter, the methodology and the design of the current research are presented. In addition, setting, participants, data collection procedures and data collection instruments are described in detail. Finally, procedures of data analysis, reliability, validity issues and limitations of the study are provided.

3.1 Research Design

A mixed methods research design, including both quantitative and qualitative data collection tools, was adopted in this study. In this type of research design “words, pictures, and narrative can be used to add meaning to numbers” allowing the researcher to combine various data sources in a single study (Johnson & Onwuegbuzie, 2004, p.21). Rather than using one of the data collection tools combining both makes it easier to understand the research problem. In addition, mixed method requires more than gathering two types of data. It includes “merging, integrating, linking, or embedding” the qualitative and quantitative data (Creswell, 2012, p.535). Gay, Mills, and Airasian (2012, p. 484- 486) define three kinds of mixed methods research design, one of which is called exploratory mixed methods design. In this model, the collection of qualitative data precedes quantitative data, and the qualitative data are given much more priority. The second model is called explanatory mixed methods design in which the collection of quantitative data precedes qualitative data. In this research design, having formulated a hypothesis at the beginning of the study, the researcher starts the process of quantitative data collection and analyses the data. The results collected through

quantitative methods help the researcher to interpret the findings of qualitative results. In the third model, which is triangulation mixed methods design, quantitative and qualitative data collection happen simultaneously and both of them are given equal importance. This model offers benefits in that the strengths and weaknesses of quantitative and qualitative data compensate for each other. (Gay, Mills, & Airasian, 2012, p. 484-486).

Considering these definitions, this study adopted explanatory mixed methods research design since the numeric data were collected and analyzed before the qualitative data, and the findings of the quantitative data analysis were utilized for the interpretation of the text data.

Additionally, mixed methods research design is preferred by the majority of researchers because it is known as the best approach for triangulation (Greene, Caracelli, & Graham, 1989). Triangulation is defined as “collecting or converging different kinds of data” to explore a research question (Creswell, 2012, p.536). Thus, to take the advantages of both approaches, and to obtain reliable results mixed methods research design was employed in this study. In that sense, the data were collected through a quasi-experimental pre-test, post-test design with control and experimental groups. The independent variable was flipped instruction, and the dependent variables were the pre- and post-test scores of the participants.

Quasi-experimental research designs are known as field research, in which the research is carried out “with an intact group in the field” instead of lab conditions (Edmonds & Kennedy, 2017, p.32). In this research design, the assignment of the participants is not random; thus, the groups are not equivalent. Since the participants are not randomly assigned to groups, quasi-experimental research designs can meet the needs of researchers in the field of education (Edmonds & Kennedy, 2017). As expressed by Creswell (2012, p.310-311) quasi-experimental design provides advantages to educational researchers since it enables them to work with participants who are available. However, it also negatively influences the *internal validity* of the research. Due to the fact that the participants are not randomly assigned to groups, there may be “potential threats of maturation, selection, mortality, and the interaction of selection with other threats” (p.310- 311). There may also be differences in the way of intervention between control and experimental groups. Finally, “additional threats of history, testing, instrumentation, and regression” may happen in the pre-test, post-test design (p. 310-311).

To investigate the effects of FL on EFL learners' vocabulary gain, perceived autonomy level and to find out the perceptions of the participating students and their instructor about FL, the experimental group received flipped instruction, while the control group received non-flipped instruction. Data collection tools included pre- and post-tests, perception of FL experience questionnaire adapted from Hsieh et al., (2017), learner autonomy questionnaire (hereinafter LAQ) adapted from Joshi (2011), semi- structured interviews, and reflective journal kept by the researcher in the middle and at the end of the treatment. At the beginning of the study, a pre-test prepared by the researcher was administered in the control and experimental groups to see the homogeneity level between students. In addition to the pre-test, they were given LAQ at the beginning and end of the study to analyze the effect of FL on their perceived autonomy level. To explore the perceptions of students in the experimental group FL experience questionnaire was administered at the end of the study. Finally, all of the students took the post-test prepared by the researcher as well as the LAQ to explore whether flipped instruction had an impact on their vocabulary development and perceived autonomy level. The questions in the pre-and post-tests were the same, and both tests were assessed out of 50 points.

Concerning the qualitative phase of the study, semi-structured interviews and reflective journal kept by the researcher were employed to ensure the triangulation of the research findings and to shed light on the quantitative data collected via flipped learning experience and LAQs along with pre-and post-tests. Since the interviews were semi-structured, students talked about their perceptions towards FL based on the questions prepared by the researcher. The design of the study is summarized in Figure 2 below:

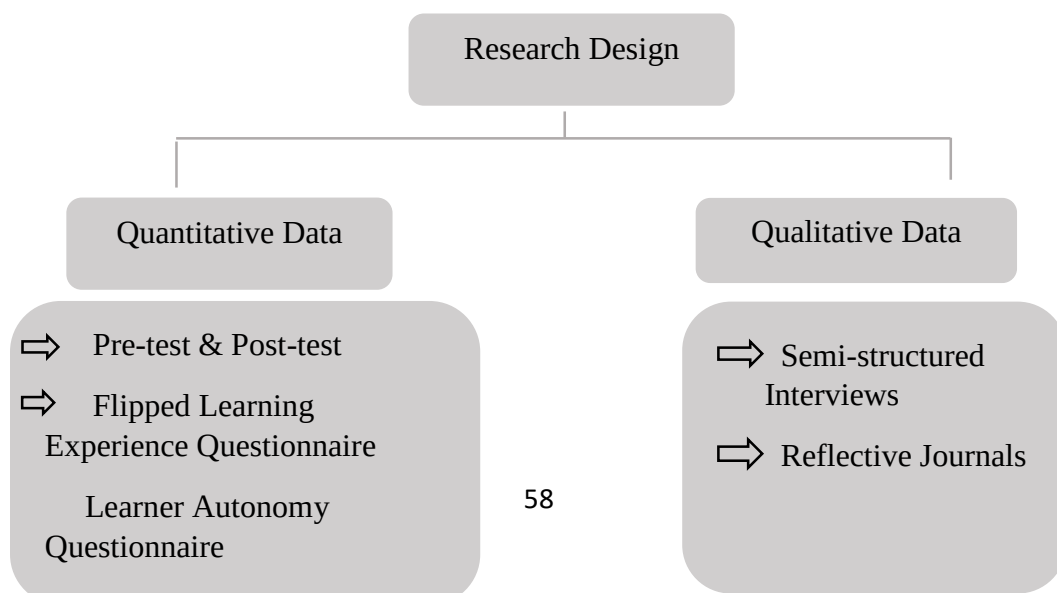




Figure 2. The design of the study

3.2 Setting and Participants

This study was carried out in a Preparatory English Program at a foundation (non-profit, private) university in Istanbul, Turkey. The courses in the Preparatory English Program are offered in School of Languages. In addition to this program, English courses for undergraduate students and modern languages like Spanish, Italian, Chinese are delivered in this School of Languages. The present study was carried out with English Preparatory Program students in the spring term of 2020-2021 academic year.

The Preparatory English Program, established in 2008, consists of three levels which are elementary (A2), intermediate (B1), and upper-intermediate (B2) according to Common European Framework (CEF). In these three levels, general and academic English courses are provided. Whereas in A2 level students are taught general English, in B1 level they slowly move from general English to academic English and in B2 level, they receive academic English instruction. At the end of the program, students are expected to have an upper- intermediate level (B2) level competence aligned with the Common European Framework (CEF). Being the most crowded group in the university, this program has around 1000 students and 100 instructors. Before being entitled to study for their degree, undergraduate students need to have a certain level of English proficiency determined by the university. Unless they are able to prove their language proficiency with an official foreign language exam result like TOEFL or Pearson PTE, they must sit for the placement test prepared by the School of Languages. Having taken this placement test, they are assigned to one of the levels if their language level is below upper-intermediate (B2). After they have successfully completed upper-intermediate level, they need to pass a proficiency test prepared by the School of Languages. In order to be admitted to their departments, students must get 65 out of 100 in the proficiency exam and the passing grade for A2, B1, and B2 levels is also 65 out of 100.

Each course in the Preparatory English Program is delivered between 14 to 16 weeks in two academic semesters, Fall and Spring, but the course in the summer term lasts for 8 weeks and the course structure in the summer term is more intensive than the other two semesters. The program aims at providing its students with a high-quality instruction in academic English as well as equipping them with digital literacy skills so that they can deal with the demands of the world of technology. It also strives to develop the professional development of instructors by designing continuous teacher training sessions. Another objective of the program is to enhance the quality of English Language Teaching (ELT) not only around the country but also in the world.

The preparatory students' progress is evaluated by formative and summative assessments and the assessment system consists of mid-term and end-of-term exams, course participation grade as well as student portfolios. Although the percentages of these components vary according to the level, mid-term and end-of-term exams affect more than 60% of the total course score. Among formative assessment components, student portfolios affect more than 15% of the total score while the percentage of course participation grade is 5%. Student portfolios include writing, speaking, listening, reading, grammar and vocabulary tasks. Except for writing and speaking, they are basically prepared in short quiz format which students take at regular intervals. Regarding writing tasks, students are expected to develop their writing skill with the help of process and product writing approaches. In process writing, they are asked to write multiple drafts by passing through some steps like brainstorming, revising and editing. In product writing, they are asked to write only one draft by imitating a sample text. When it comes to speaking tasks, students are expected to describe pictures, talk about given prompts, make short presentations or discuss a problem in small groups in conjunction with their level. In addition to completing all these tasks successfully, students have to attend 90% of the lessons to be eligible to take the end-of-term exam and accomplish the course.

Because students are supposed to show a great deal of commitment to meet the requirements of the preparatory school, they are always supported with extra-curricular activities like study center, and writing center sessions, clubs, task-based projects and training programs offered by the instructors at preparatory program. The participation in these activities is purely voluntary. Students can get help from the study center in any area they need by working individually with the instructors. They can also get support from the writing center to improve their academic writing skills,

to get feedback for their research papers, projects. Moreover, they are guided while writing their job or school application forms by the instructors in the writing center. Each term students are provided with different club activities designed by their instructors like creative writing club or art club. In addition, in each level students are given an opportunity to attend project classes in which they practice and enhance their English with project-based learning approach. Although the participation in these projects is not compulsory, students who successfully complete them are awarded with 3 bonus points at the end of the term. Finally, student development and autonomy are encouraged through some workshops in which they are trained how to learn English effectively, how to be autonomous learners or how to study vocabulary. The topics of these workshops are shaped based on the needs and weaknesses of the students.

Communicative Language Teaching (CLT) approach is adopted in the Preparatory English Program and instructors are provided with a syllabus where each course objective is described in detail. However, instructors are encouraged to make their own decisions and design their course to cater for the requirements of their classes on the condition that they cover the objectives stated in the syllabus. In other words, they are given the opportunity of flexibility while delivering their lessons. The four language skills are not separated from each other, and they are taught by one core and one support instructor following the weekly plan. Almost all of the instructors have one main and one support class, and they have 20 contact hours every week.

The number of the students in each classroom was around 14 and in order to collect data from a variety of participants, the current study was conducted in five different classrooms, two of which were experimental and three of which were control groups. Since a quasi-experimental research design was adopted in this study, the participants were not randomly assigned to groups, that is they were already available (Creswell, 2012). Whereas the experimental group students were taught by the researcher, the control group students, who volunteered to participate in this study, were taught by three different instructors at the preparatory school.

Due to the outbreak of the Covid19 pandemic in March 2020, the courses offered in the preparatory program were fully online, and they were carried out through video conference platform Zoom. While the students in the experimental group received flipped instruction, the students in the control group received non-flipped instruction for seven weeks. The researcher had 16 contact hours with one experimental group and 4 contact hours with the other experimental group. The control group were taught

by other instructors, and they were sent the necessary materials and weekly plan each week by the researcher.

Specifically, this study was carried out with upper-intermediate level students which were the largest group in the program with 36 classes. In total, there were 34 participants, aged between 17 and 22, from five different sections. The number of students in the experimental group was 14, and the number of students in the control group was 20. Except one of the students, all of them were Turkish and 47 % of them had been studying English for more than 10 years. Students' demographic data can be seen in Table 2. The class size was small with around 12 and 14 students in each section. Convenience sampling was employed to select the participants as they were available. Creswell (2012) states that in *convenience sampling* the researcher chooses participants because of their willingness and availability. Since they are not purposefully selected, they may not be able to represent the whole population, but they may be helpful while answering research questions and hypotheses (Creswell, 2012). According to Dörnyei (2007) *convenience* or *opportunity* sampling is mostly preferred when the participants are accessible to the researcher. In the first week of the treatment, the students were informed about the study and the researcher shared the online version of the informed consent form with them.

Table 2
Students' Demographic Data

	N	%
Gender		
Male	15	44.1
Female	19	55.9
Age		
17- 19	27	79.5
20- 22	7	20.5
Major		
Gastronomy and Culinary Arts	2	5.8
Aviation	2	5.8
Electrical & Electronics Engineering	1	2.9
Computer Science	2	5.8

Industrial Engineering	6	17.6
Mechanical Engineering	2	5.8
Table 2 (continued)		
Psychology	2	5.8
Industrial Design	1	2.9
Architecture	2	5.8
Business Administration	2	5.8
Hotel Management	1	2.9
Law	1	2.9
International Finance	1	2.9
International Trade and Business	5	14.7
Entrepreneurship	2	5.8
Interior Architecture	2	5.8
Length of English Studies		
Less than 1 year	2	5.8
1-3 years	5	14.7
4-6 years	11	32.3
More than 10 years	16	47

3.3 Data Collection

In this part, the procedure of data collection and data analysis employed in the study will be explained in detail first. Then, the issues of reliability and validity, and limitations of the study will be mentioned.

3.3.1 Data collection tools. In this study, data were collected with both quantitative and qualitative data collection tools. The quantitative tools used in the study were pre- and post-tests, FL experience questionnaire, LAQ adapted from Joshi (2011). On the other hand, the qualitative tools included semi- structured interviews, and reflective journal kept by the researcher in the middle and end of the treatment. The details of these instruments are explained in detail in the following section.

3.3.1.1 Pre-and post-test. The tests prepared by the researcher were administered to both control and experimental group students at the beginning and end of the study

to answer the research question whether there is a difference between the vocabulary development of upper-intermediate EFL students studying in flipped and non-flipped English classrooms. Due to reliability concerns, the questions in the pre- and post-tests were the same. The questions were converted into a quiz format which students answered by using their learning management system and they weren't provided with the answer key after finishing the pre-test. The maximum score of both was assessed out of 50. The questions were prepared by considering the target vocabulary introduced in the treatment. As the mode of education offered to students was fully online due to the Covid19 pandemic, both tests, which were in quiz format, were transferred to the learning management system of the university on the same day of the administration. After the students completed the tests, they were made unavailable by their instructor. Students were expected to complete each test in 50 minutes during a synchronous meeting held on Zoom and submit their test to the same learning management system. The pre- and post-tests consisted of six parts, namely word formation, fill-in-the blank, error correction, paraphrasing, guessing meaning and creative writing. They were in line with the activities carried out during the treatment. (See Appendix A)

3.3.1.2 Questionnaires. The quantitative data were collected through two questionnaires, one of which was LAQ (Appendix B), adapted from Joshi (2011). It was administered at the beginning and end of the treatment in the control and experimental groups to answer the research question whether there is any difference between the perceived autonomy level of intermediate EFL students studying in flipped and non-flipped English classrooms. At the beginning of the questionnaire, there was a section to gather students' personal information like their age, gender, major at university, and length of English studies. The questionnaire was a 5-point Likert scale and the first part, ranged from 'Never' (A), 'Rarely' (B), 'Sometimes' (C), 'Often' (D), 'Always' (E), aimed at discovering students' autonomous learning activities and plans while learning English. On the other hand, the second part of the questionnaire, ranged from 'Strongly disagree' (1), Disagree (2), 'Undecided' (3), 'Agree' (4), 'Strongly agree' (5), intended to explore students' perceptions about the role of the teacher and students while learning English. It was made up of 31 items in total.

The other data collection tool was FL experience questionnaire, adapted from Hsieh et al., (2017), and it included 14 items (Appendix C). It was administered at the

end of the treatment to understand the perceptions of upper-intermediate EFL students about learning English in a flipped classroom. It was a 5-point Likert scale ranging from 'Strongly disagree' (1) to 'Strongly agree' (5).

As argued by Dörnyei (2007), the main objective of the questionnaires is to understand the features of a group of people with the help of a sample of this population. Questionnaires are considered as one of the best tools among researchers in social sciences because they enable participants to answer the research questions they seek for in a systematic way.

3.3.1.3 Semi-structured interviews. Whereas the answers given by the interviewee determine the direction of the unstructured interview, it is different in a semi-structured interview where the interviewer identifies some key points that will be focused on in the meeting. Rather than relying on the questions determined in advance, the researchers highlight some main ideas, and they are free to employ any type of interviews. Since they are considered as being flexible, semi-structured interviews are among popular data collection instruments (Nunan, 1992). For this reason, in order to collect qualitative data, the researcher carried out semi-structured interviews with 10 students from the experimental group via an online meeting held on Zoom (Appendix D). These students were selected through purposeful sampling based on their task completion and class participation. The students participated in the interview were the ones who regularly took part in flipped classroom activities. At the same time, there were some students who completed some of the flipped classroom activities. The rationale behind this selection was to get feedback from different participants with different engagement level. The objective of these interviews was to answer the question of the perceptions of upper-intermediate EFL students about learning English in a flipped classroom. Although the questions in the interviews were asked in English, the Turkish students preferred to answer them in their mother tongue since they felt more comfortable while expressing their ideas in the target language. All the interviewees were Turkish except for one of them. Each interview took around 15 minutes, they were recorded, transcribed, translated from Turkish to English, and analyzed via content analysis. A written informed consent form was shared with the interviewees before the interview as well (Appendix E).

3.3.1.4 Teacher's reflective journal. Keeping journals is a technique used in introspective method which requires people to observe and reflect on their ideas and actions to find out the underlying reasons for their behavior. This method, which dates

to *cognitive psychology*, is considered important while carrying out research on language learning since it creates an opportunity to consider every stage of the lesson (Nunan, 1992). Thus, being the researcher, I decided to keep a journal to reflect on my teaching practices in the middle and end of the treatment. The areas in this reflection document included the observations about the strengths and weaknesses of the implementation, the engagement level of the students and the challenges encountered while carrying out this research under extreme conditions caused by the Covid19 pandemic. The journal attempted to answer the research question, which is what the perceptions of the EFL instructor about teaching English in a flipped classroom are and it was analyzed through content analysis by identifying the common themes and categories. The details about the data collection tools are presented in Figure 3 below:

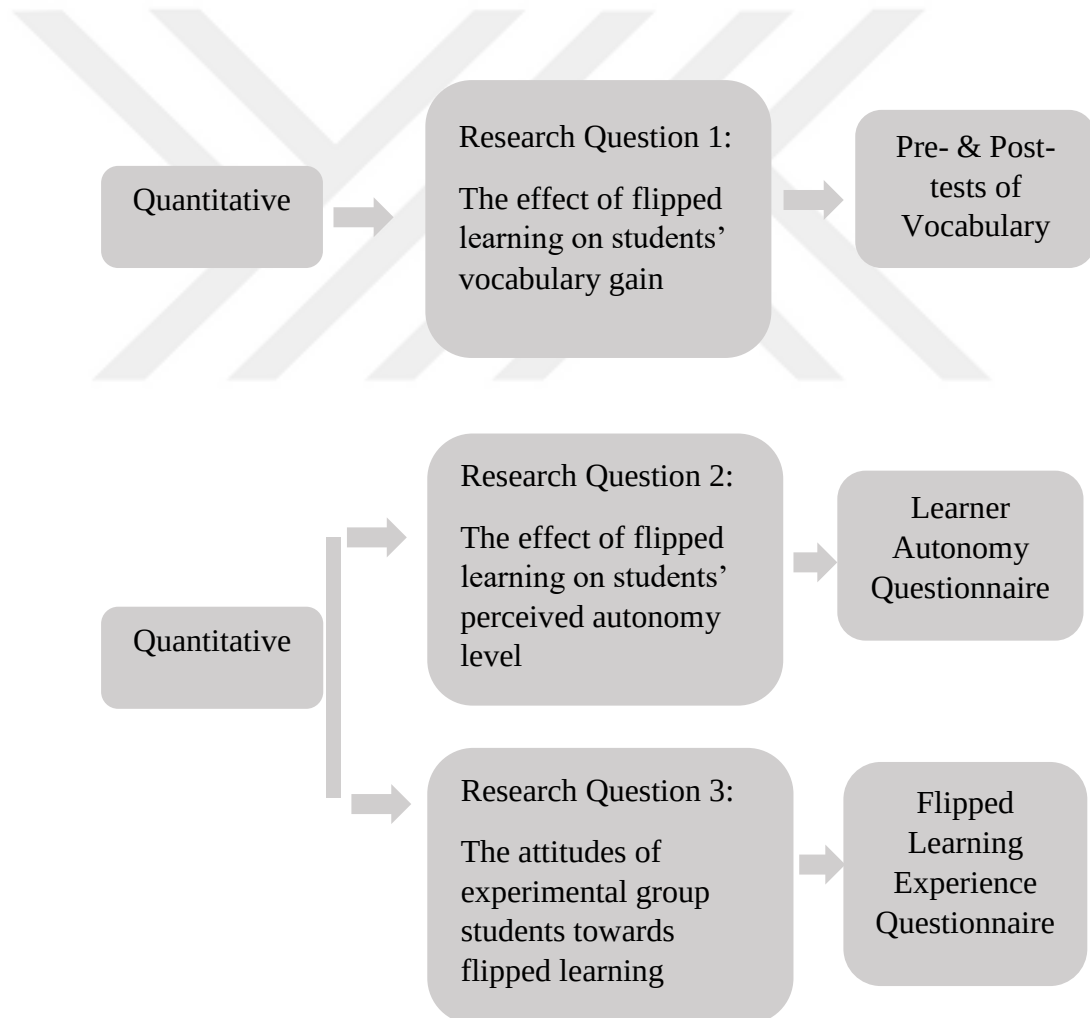


Figure 3. Data collection tools

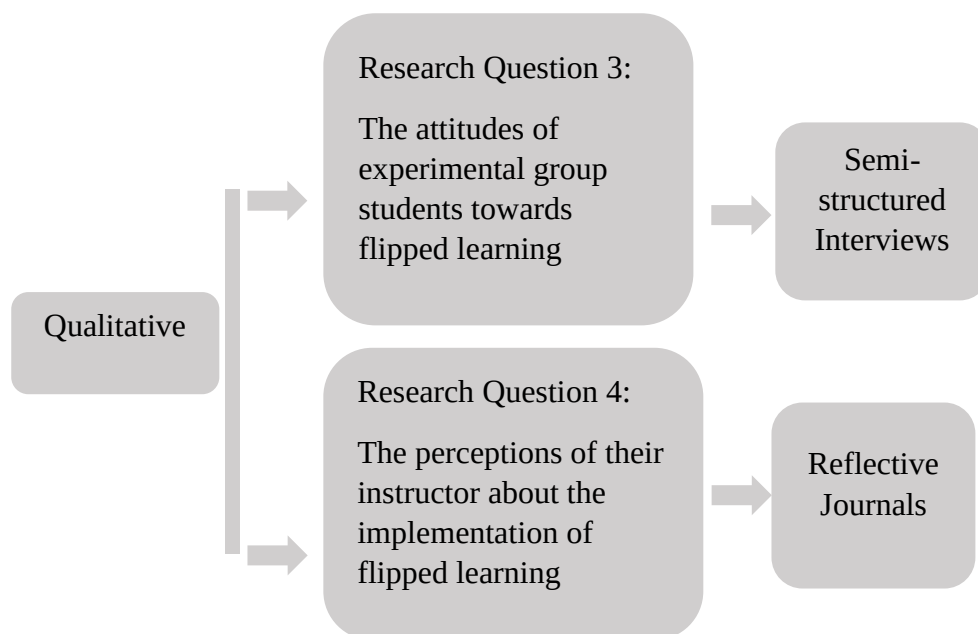


Figure 3. Data collection tools (continued)

3.3.2 Data collection procedures. The process of data collection started with the permission granted by the principal of preparatory school and with the ethics committee approval taken from the human research ethics board of the university. Then, the intervention process started on the 18th of March 2021, and it lasted for 7 weeks in total. The quantitative and qualitative data were collected until the first week of May 2021. In regard to ethical aspect of the research, a participation consent form in Microsoft Word format was prepared by the researcher and shared with the students at the beginning of the study. Students were informed about the details of the project and their consent was taken. They were also assured that the data collected from them would be kept confidential. Apart from it, they were reminded that their participation in the study would be voluntary, and they had the right of withdrawal from the study any time they wished.

3.3.2.1 The data collection procedure in the experimental and control groups. Before starting the treatment, the target vocabulary used in the study was selected by the researcher. While selecting these words, the target vocabulary of that week included in the weekly plan were taken into consideration. Each week students were expected to learn the words covered in the reading and listening lessons. The reading book used in upper-intermediate was Pathways Reading and Writing Level 3, and the listening book was Contemporary Topics 3 4th edition. Since the students had difficulty in learning the words with derivatives, these words were mainly included in the list of

target vocabulary. In addition, the words considered challenging for the students were added to the list. The number of the words studied each week was between 12 and 15 depending on the weekly plan. The reason for keeping the number of the vocabulary limited was the fact that students were expected to know all aspects of the words such as form, meaning, usage, collocation and to use them in written and spoken language.

That's why a limited number of words were considered suitable for this course. While introducing the words, an inductive approach was employed. That is, students were asked to guess the target words with the help of example sentences, definitions and visuals related to them. Then, the collocation and other forms of the word were presented. A screenshot showing the presentation of the target vocabulary can be seen below (Figure 4).

Life has been around for a long time and scientists have been wondering how life **sustains** itself.



to provide enough of what somebody/something needs in order to live or exist.

What are the other forms of 'sustain'?

Sustainable (adj)

Sustainability (n)

Unsustainable (adj)

What is the synonym of 'sustain'?

maintain

This is an opportunity to enhance **the reputation** of the company.



to increase or further improve the good quality, value or status of somebody/something.

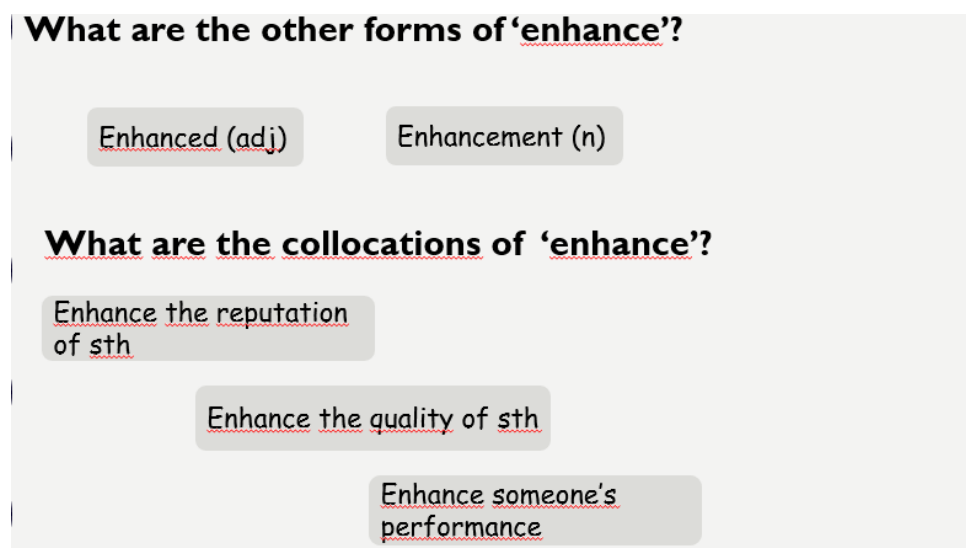


Figure 4. The screenshots of the target vocabulary presentation

To create video lessons, the researcher first prepared PowerPoint presentations about the target vocabulary of the week. Then, these presentations were recorded by using a tool called screencastify. It is a practical webtool which allows users to record, edit, and share videos free of charge. The length of the videos was approximately 10 minutes, and they were divided into two parts so that the students could watch them easily. Having recorded the videos on screencastify, they were transferred to Edpuzzle which is another user-friendly webtool to create interactive videos (Appendix F). While presenting input, it allows users to embed questions easily to check students' comprehension which can be seen in Figure 5 below. In addition to this feature, it also enables the teachers to keep track of student progress by creating online classrooms. For this reason, two online classrooms for the experimental groups were formed by the researcher on Edpuzzle and students in the experimental group were asked to join them. The students in the two experimental groups were taught by the researcher of the study. The videos were uploaded on Edpuzzle every week on Sunday and experimental group students were notified via email and whatsapp message. They were also assigned homework about the vocabulary of the week to help them get ready for the lesson. Although there were some students who joined the lesson without getting prepared, most of the students in the experimental group watched the videos and

completed the homework before the class. A screenshot of the gradebook on Edpuzzle can be seen in both Figure 6 below and Appendix G.

On the other hand, the students in the control group were provided with non-flipped instruction. There were three control groups, which were taught by three different instructors. Before the data collection process, all of the instructors teaching the same level were informed about the study via email and three of them volunteered to take part in it. In order to guide them during the implementation process, each stage was explained to them in detail, and they were sent the materials every week on Monday. These materials included the PowerPoint of the target vocabulary and the vocabulary activities assigned to experimental group students before the lesson. The control and experimental group students were exposed to the same content; however, the former group was presented the vocabulary in the lesson while the latter watched the video lesson of this vocabulary before the class. In addition, the vocabulary activities assigned to experimental group students prior to the lesson were given to control group students during the lesson. At the end of the 7-week-treatment, all of the students took the post-test to see whether there is a difference between the vocabulary development of upper-intermediate EFL students studying in flipped and non-flipped English classrooms.

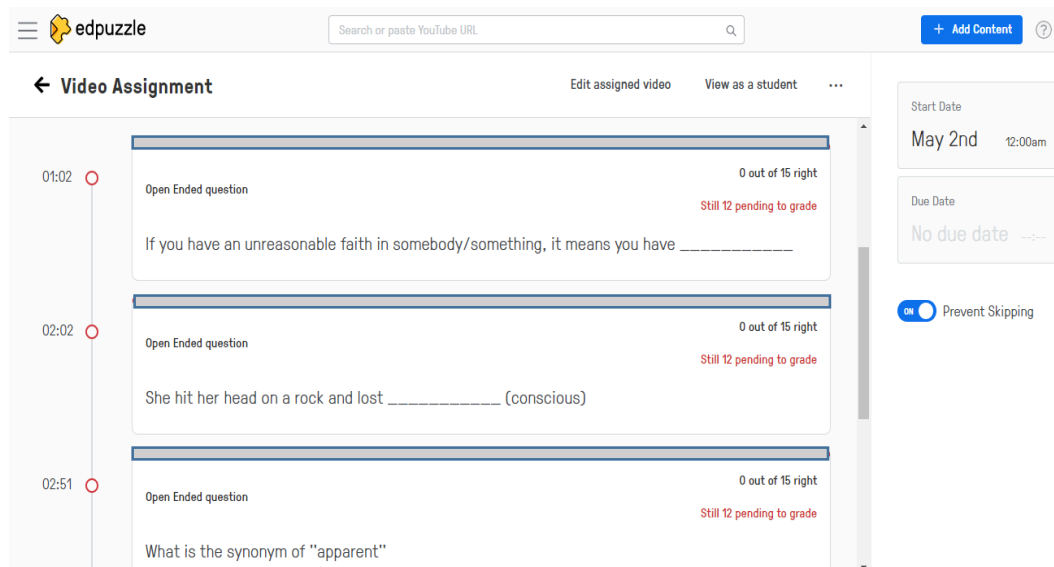


Figure 5. The screenshot of the questions embedded in Edpuzzle videos

The name of the student	The video has been watched or not	The time it was watched	The time when the student turned in	
		Never	Not turned in	...
		Never	Not turned in	...
		May 2nd	May 2nd - 8:18pm	...
		May 3rd	May 3rd - 1:54am	...
		May 3rd	May 3rd - 6:57am	...
		May 3rd	May 3rd - 9:18am	...
		May 2nd	May 2nd - 9:30pm	...
		May 3rd	May 3rd - 11:07am	...
		May 3rd	May 3rd - 9:48am	...
		May 3rd	May 3rd - 12:43am	...
		May 3rd	May 3rd - 9:43am	...
		May 3rd	May 3rd - 9:47am	...
		May 3rd	May 3rd - 1:07am	...
		May 3rd	May 3rd - 9:27am	...

Figure 6. The screenshot of the Edpuzzle gradebook

In this study, the activities assigned to control and experimental groups were designed based on the revised version of Bloom’s Taxonomy, in which the objectives are classified under certain categories. These are remembering, understanding, applying, analyzing, evaluating, and creating. The categories follow a hierarchical order “from simple (remembering) to complex (creating) and from concrete to abstract”. To gain a better understanding of the objectives in Bloom’s Taxonomy, further clarification needs to be provided. The first objective at the bottom of the scale, which is remembering, refers to the retrieval and recognition of the right information. The second objective, understanding, refers to the comprehension of “the meaning of instructional messages” by means of interpretation, exemplification, classification and comparison. The third one, applying, requires using one’s knowledge in specific situations. The fourth objective, analyzing, means building relationships between the parts and the whole. The fifth one, evaluating, involves forming an opinion about something according to certain principles. The last objective, creating, embodies generating and producing something different and interesting. (Krathwohl, 2002, p. 212-215) While higher-level skills are assessed through more complex tasks including presentation, discussion as well as writing, lower-level skills can be assessed through multiple-choice questions (Tabrizi & Rideout, 2017).

Referring to the Bloom’s Taxonomy mentioned above, in the flipped classroom, the activities requiring lower-level thinking skills were carried out prior to the lesson.

To exemplify, students were presented the meaning and forms of the target vocabulary via video lectures. In addition, they were assigned pre-tasks including exercises such as matching the words with their definition or filling in the blanks with suitable words. In the lesson, they were supposed to perform tasks which stimulate their higher-level thinking skills entailing paraphrasing, finding and correcting the mistake, guessing meaning from context, preparing word formation quizzes, or writing short paragraphs by using the target vocabulary. On the other hand, the design and implementation of the activities were reversed in the control group. They were taught the target vocabulary via PowerPoint presentations during class hours. Then, they worked on activities focusing on the lower-level thinking skills in Bloom's Taxonomy. For instance, they completed matching, fill-in-the-blank or word-formation activities after being presented the input material. Due to lack of time, they were able to do some of the complex activities like creative writing or guessing meaning from context in the classroom and they did the rest of them as homework.

3.3.2.2 Data collection and treatment process in detail. In this section, the details of the treatment in the control and experimental groups will be presented on a weekly basis. As the aim of the study was to explore the effects of flipped instruction on students' vocabulary development, the intervention was mainly carried out in the experimental group. While explaining the details of the treatment, the activities carried out in the experimental group will be presented first.

3.3.2.2.1 Week 1. As it was the first week of the study, two separate days were allocated for the treatment. First, students in the experimental group were informed about the purpose and procedures of the project. They were introduced with the web-based tool, Edpuzzle, they will use during the treatment. In order to watch the videos prepared by the researcher they had to join the online classroom on this platform. For the first week, they were assigned the video of the target vocabulary of the week along with the vocabulary exercise related to it. After informing the students about these details, the researcher shared the links of the LAQ prepared in google forms and students were given around 15 minutes to fill them in. Then, they took the pre-test in 50 minutes in a synchronous meeting held on zoom.

At the end of the first week, the students joined the first flipped classroom. Most of them were prepared for the lesson, and they shared their reflections about the videos

and homework. The instructor asked them the words they learnt to check their comprehension. The answers of the vocabulary exercise they were assigned were also checked as a whole class. Then, they were provided with another vocabulary exercise focusing on word formation and guessing meaning from context. They were asked to work in small groups in breakout rooms and were monitored by the instructor while doing these exercises. At the end of the class, they were given whole-class feedback and were reminded next week's assignments.

On the other hand, the students in three control groups were presented the same content in a different way. Initially, they were informed by their instructors about the details of the study and were asked to complete the same LAQ and the pre-test in the first hour of the lesson. In the next hour, they were provided with the vocabulary input through a PowerPoint presentation prepared by the researcher. It was the same input material assigned to experimental group students prior to the lesson. Then, they completed the word formation and fill-in-the-blank exercises in small groups to consolidate this vocabulary. Being given feedback about their answers, they were assigned the rest of the exercises as homework.

3.3.2.2.2 Week 2. In the second week of the study, after checking this week's homework, students were asked the words they learnt this week. They tested each other's comprehension by asking the meaning of the words they remembered. Since it was a warm-up activity, it took around 5 minutes. Then, they were asked to work in small groups and create 6 fill-in-the-blank questions about that week's target vocabulary. They wrote their questions on google docs shared by the instructor. All of the groups used the same document and were able to see and edit each other's question all at once. After they completed their questions, they tested the other groups' knowledge by asking these questions and giving feedback to their answers. This question-answer part was done as a whole class activity and monitored by the instructor. In the second part of the class, groups were shuffled, and they were given another task in which they had to write a short paragraph by using the words given to them. The topic was about the benefits of ecotourism and each group created one coherent paragraph as a group. Then, they presented their work to the whole class and again gave feedback to each other by focusing on word choice, collocation usage or text-cohesion. The lesson was ended with the same reminders about next week's homework.

The students in the control groups followed similar procedures as in the first week. In the first part of the class, the answers of the last week's vocabulary homework were checked by their instructor, then they were provided with the second-week input material. In the second part, they wrote their fill-in-the-blank questions in small groups and checked each other's knowledge by asking their questions and giving feedback about them. The same writing activity was assigned as homework to control group students due to time constraints.

3.3.2.2.3 Week 3. At the beginning of the lesson in order to check students' knowledge they were given five minutes and were asked to come up with as many collocations as possible about the target vocabulary of the week. They shared their list with the whole class and discussed their answers. Then, their homework was checked, and they worked on error correction and paraphrasing exercises in small groups. The error correction questions aimed at testing their collocation knowledge. The paraphrasing questions, on the other hand, checked their ability to use different forms and synonyms of the words. A sample of this activity along with the other ones can be seen in Appendix H. After each group completed the exercises, they checked the answers of the students in other groups by comparing them with their work. At the end of this peer-feedback session, they were given whole class feedback by the instructor.

On the other hand, the students in the control group were exposed to the same vocabulary input through a presentation made by their instructor. Then, they were given a vocabulary exercise in which they matched the definition of the words with the right term. In addition to this activity, they did fill-in-the-blank and error correction activities. They were given whole class feedback by their instructor and were assigned the paraphrasing activity as homework (Appendix H).

3.3.2.2.4 Week 4. After checking fourth week's homework, students were given a list of words and their definition selected from the target vocabulary of the week. Some of these words did not match with their definition and students tried to find the wrong match as well as providing the right definition. The purpose of this activity was to see how well they learnt the words in the video lecture. Next, they worked on activities like guessing meaning from context and creative writing in small groups by using the break-out rooms on zoom. They were provided with whole class feedback for the first activity, which was guessing meaning from context. For the writing

activity, to make the process of peer feedback easier, they were asked to write their short paragraphs cooperatively in small groups. At the end of the lesson, they analyzed their sentences and corrected their mistakes under the supervision of the instructor.

The students in the control group were given the vocabulary input after their homework was checked by their instructors. The input material was in the same format with the first three weeks. They were asked to guess the meaning of the words by reading the example sentences and looking at the pictures. They were also provided with the forms and common collocations of the words. After this activity, they were divided into small groups and worked on creative writing like experimental group students. When they completed their task, each group shared their paragraphs and gave feedback to each other. However, they were given guessing meaning from context exercises as homework as well as the other tasks assigned to experimental group before the lesson in week 4.

3.3.2.2.5 *Week 5.* After checking their homework, the instructor shared a table including the list of the words covered in the video lecture and asked students to fill in this table with other forms of these words. Some of the students had difficulty in spelling the words and they were encouraged to refer to their vocabulary journal to correct their mistakes. Having remembered these forms, students were assigned to break-out rooms so that they could complete word formation activities prepared by the instructor. They were also asked to create a short quiz with 6 word-formation questions by writing their questions on google docs. In the last part of the lesson, they completed this short quiz, but could not check their answers because of time constraints. The answers were collected from each group by one of the students, proofread by the instructor and shared via their whatsapp group.

The process in the control group was like the previous weeks. Their homework was checked by their instructors, and they were introduced with the vocabulary input. Then, they completed the word formation chart along with word formation questions in groups and checked their answers. As homework, they were expected to create their own word formation questions individually and to share it with the class next week.

3.3.2.2.6 *Week 6.* In the 6th week of the treatment, students were asked to come up with the forms of the words they learnt this week. Then, they were divided into small groups and were given the list of target vocabulary. Each group focused on a

specific part of speech like noun, verb, adjective, adverb. They found example sentences with these words and shared it with the whole class. Then, they worked on paraphrasing and guessing meaning from context exercises in breakout rooms. They discussed the strategies they use while guessing the meaning of unknown words. After checking their answers in groups, they were given whole class feedback by the instructor.

On the other hand, control group students were exposed to the same input material at the beginning of the lesson. Next, they worked in small groups and found example sentences with the target vocabulary. After sharing their sentences on google docs, they focused on guessing meaning from context and were given whole class feedback by their instructors. Due to lack of time, they were assigned paraphrasing exercises as homework.

3.3.2.2.7 Week 7. As it was the last week of the treatment, the target vocabulary covered so far was revised. Students were assigned a word formation activity including the words in the video lectures and were sent to break-out rooms. This activity was chosen because most of the students reported that they had difficulty with word formation. Each of the room was monitored by the instructor and students were encouraged to work cooperatively. At the end of the activity, they discussed their answers and whole-class feedback was given. In the second hour, students in the experimental group took the post-test in a synchronous meeting on zoom in 50 minutes. It was transferred to their learning management system in quiz format, and they were familiar with the question types as they were similar to the ones they completed in the classroom during the treatment. After the post-test, they completed the same LAQ via google forms. They also shared their reflections about this experience by taking the FL experience questionnaire on google forms.

Control group students completed the same vocabulary activity in groups and they were provided with feedback by their instructors. In the second hour, they followed the same procedures while taking the post-test and LAQ. They were not given FL experience questionnaire, however.

3.3.3 Data analysis procedures. The process of data analysis started with the quantitative data gathered through pre- and post-tests. Statistical Package for the Social Sciences (SPSS) v. 27 was employed to analyze the pre- and post-test results. The

study was carried out with two independent and categorical variables, which were control and experimental groups and a dependent variable, which was test scores. Before deciding to carry out parametric or non-parametric tests, outliers were explored, and one extreme value was detected and removed from the dataset. To detect the outlier boxplot chart was used, which can be seen in Figure 7.

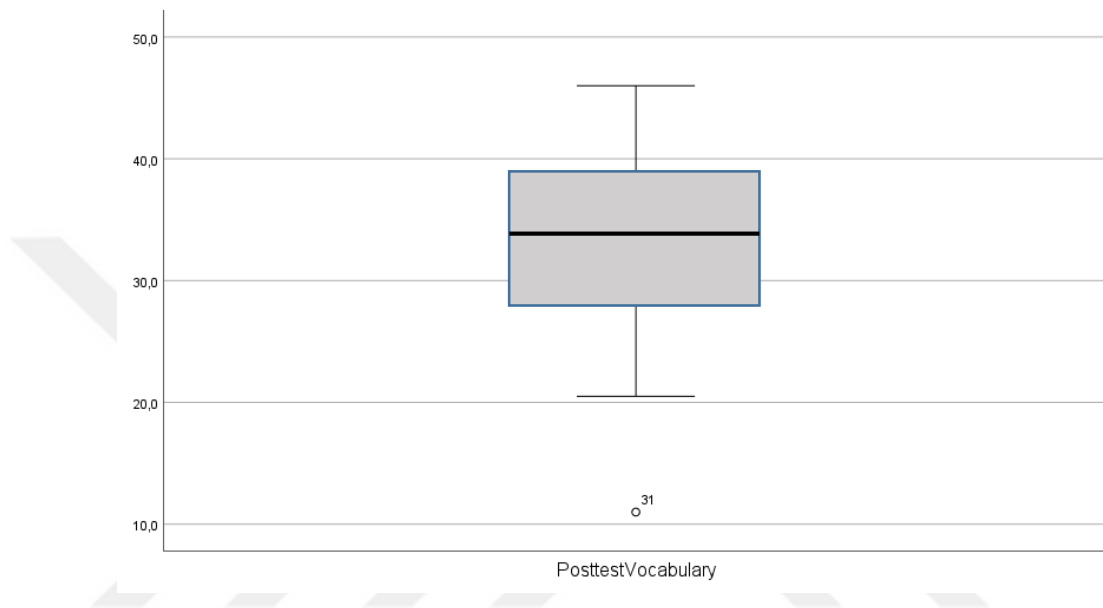


Figure 7. The outlier detected in the dataset of vocabulary post-test

After transferring the results of pre- and post-tests to SPSS, Kolmogorov - Simirnov and Shapiro – Wilk tests were conducted to see if the data were normally distributed or not. Kolmogorov - Simirnov test is used in studies where there are more than 50 participants, and Shapiro - Wilk test is preferred in studies where there are less than 50 participants. The number of participants in the current study was below 50; thus, the significance value in Shapiro - Wilk test was taken into account (Shapiro & Wilk, 1965). The significance value of Shapiro - Wilk test was found to be .059 for the pre-test, and .609 for the post-test, which revealed that the data were normally distributed ($p > .05$). Because there was a normal distribution of data in both tests, independent sample t-test was conducted to see whether there was a significant statistical difference between two groups.

The second data collection tool LAQ was analyzed by using SPSS Statistics 27 software package program as well. While analyzing the results of LAQ, independent sample t-test was run to compare the difference between control and experimental

groups in terms of their perceived autonomy level. Before this parametric test was carried out, tests of normality and homogeneity were performed to ensure that the variances in the data set were normally distributed. The significance value of each test was checked using Shapiro Wilk test again (Shapiro & Wilk, 1965). These values were .259 for the pre-course questionnaire, and .847 for the post-course questionnaire. Because they were above .05, ($p = .259 p > .05$), ($p = .847 p > .05$), it was concluded that the data were normally distributed. Also, the data were tested for homogeneity using Levene's test. The significance value was .377 for the pre-course questionnaire and .862 for the post-course questionnaire. These values were greater than .05 ($p = .377 p > .05$), ($p = .862 p > .05$), indicating that there was homogeneity of variances (Dörnyei, 2007). The tables revealing these figures are provided in the next chapter.

The next data collection tool, FL experience questionnaire, was also analyzed via SPSS 27. After coding the answers given to Likert- scale question types, the means and standard deviations of them were calculated and frequency analysis was performed to examine participants' perceptions on flipped instruction. An elaborate analysis of this questionnaire is presented in the next chapter.

On the other hand, in respect of the third and fourth research questions, the qualitative data, obtained from semi-structured interviews and teacher's journal, were analyzed with content analysis. First, semi-structured interviews transcribed and translated from Turkish to English and the journal kept by the researcher were read by the researcher and notes were taken. Then, rough ideas about the connection between these notes were shaped and they were categorized through coding and thematic analysis under certain categories (Maxwell, 2012). The categories emerged from the interviews and teacher's journal are provided in the next chapter.

3.3.4 Validity and reliability. Validity and reliability are the most essential requirements for any type of research. To put it simply, the term validity is closely associated with the accuracy of the results whereas reliability is mainly concerned with their consistency. In other words, the validity of a data collection tool depends on the degree to which it can test what it intends to test. The reliability, on the other hand, refers to having consistent results when the same instrument is applied in different settings by different parties (Huck, 2012).

In quantitative studies, calculating Cronbach's alpha value of the instrument is one way to measure its reliability. One of the questionnaires employed in this study was LAQ, adapted from Joshi (2011). Having coded the responses of the participants to SPSS, the reliability analysis was performed. It should be mentioned that out of 31 items 8 of them were excluded from the analysis of the pre-test after realizing that the reliability score would have been higher if they had been removed from the data set. At this point, the Cronbach's alpha reliability score of the pre-test for LAQ was found to be .870 (87%). The same steps were followed for the reliability analysis of the post-test and 6 of the items were excluded from the analysis because their removal from the data set increased the reliability score. Regarding the post-test of LAQ, the Cronbach alpha score was found to be .830 (83%), indicating that both of the tests were reliable.

The other quantitative data collection instrument was FL experience questionnaire, which was adapted from Hsieh et al., (2017). In total, it included 14 items and 13th item was not taken into consideration while measuring the reliability score of this instrument because when it was removed, the reliability score increased (See Table 3). It was administered at the end of the study and the Cronbach's alpha reliability score of this questionnaire was found to be .941 (94%), illustrating that it was highly reliable.

Table 3

Item Total Statistics of the FL Experience Questionnaire

	Scale Mean If Item Deleted	Scale Variance If Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha If Item Deleted
q1	52.5714	41.648	.768	.904
q2	52.5714	42.264	.680	.907

Table 3 (continued)

q3	52.7143	41.451	.610	.909
q4	53.0000	40.923	.705	.905
q5	53.1429	42.440	.591	.909
q6	52.6429	40.401	.687	.906
q7	52.4286	40.418	.857	.901

q8	52.3571	42.863	.525	.912
q9	52.8571	39.209	.754	.903
q10	52.6429	40.709	.777	.903
q11	52.5000	40.885	.827	.902
q12	52.5000	40.269	.751	.903
q13	54.0000	44.154	.136	.941
q14	52.2857	42.220	.776	.905

Due to the fact that qualitative research does not rely on statistical facts, the notion of validity is a complex phenomenon in this kind of inquiry. The potential risks of validity and reliability cannot be thoroughly eliminated in any research; however, the impacts of those risks might be lessened and the way of dealing with validity and reliability differs in qualitative research because of its nature (Cohen, Manion & Morrison, 2007). Winter (2000) contends that in qualitative research validity is mostly concerned with the degree to which the data are trustworthy and elaborate. It also requires employing triangulation techniques and having an unbiased attitude towards the interpretation of the data. Another criterion (Becker, 2009) with regard to validity is to gather abundant data before presenting the qualitative results. For instance, providing a broad framework of the interviews by transcribing them word for word is one of the techniques to accomplish this goal. Regarding the points mentioned by Winter (2000) and Becker (2009), the researcher of the current study aimed to obtain valid results by collecting the data through a variety of instruments like questionnaires, interviews and teacher's reflective journal gathered from different parties for the purpose of triangulation. In addition to that, the semi-structured interviews were recorded and transcribed by the researcher verbatim in order not to miss any points raised by the participants.

As argued by Maxwell (2012), validity in qualitative research is a term which is open to question. While some researchers avoid using this term, some others suggest that it can be applicable to qualitative research if its meaning is reconsidered (Guba & Lincoln, 1989; Lather, 1991; Richardson, 1996). Maxwell (2012) notes that to ensure validity in qualitative research the data should be entirely comprehended and the researchers need the ability to make inferences while interpreting the findings. While

doing so, getting constant feedback from the participants to clarify what they meant during the data collection process diminishes the risk of misinterpretation in addition to raising the researcher's awareness about being biased. Researchers are also supposed to bear in mind that the findings should be disclosed accurately and objectively. Besides, they should be applicable to a wider group or context. Finally, instead of being explained or described, the results should be evaluated in a critical way. As regards the criteria highlighted above, the researcher attempted to increase validity of this study by drawing conclusions from the semi-structured interviews and teacher's reflective journal. The interpretation process was carried out with utmost care to meet the requirements of accuracy and objectivity. The transcripts of the interviews were shared with the participants before data analysis started to prevent probable misunderstandings. During these interviews, the participants were requested to provide clarifications for their responses. To help them clarify their ideas they were allowed to answer the questions in their mother tongue. Moreover, the instruments used in the study, the process of data collection and analysis were explained elaborately to create an opportunity for the replication of the study by other researchers. In conclusion, although it is impossible to remove the potential threats of validity and reliability entirely in any kind of research, the purpose of the researcher was to diminish them as much as possible by presenting the data accurately and consistently.

3.3.5. Limitations. One of the purposes of this study is to explore the effects of FL on vocabulary gain and perceived autonomy level of upper-intermediate EFL students in a preparatory program. It also offers insights into the perceptions of students and their instructor experiencing this approach. Despite its contribution to the existing literature, this study is not without limitations. First, it was carried out with a small number of participants ($N = 34$) and the size of the experimental group ($n = 14$) was less than the size of the control group ($n = 20$). However, broader and more comprehensive studies might be more useful to increase the validity and reliability of the findings. Also, the study was implemented with three different instructors in three different control groups. Thus, the presentation and practice of the same materials might have varied between three groups. Moreover, although the number of the control groups was higher, the participation level was lower than expected. The number of the participants could have been more but most of the students were absent in the flipped

lessons as the attendance was not compulsory during the period of the pandemic. Next, owing to this Covid19 pandemic, the whole process was conducted under online education conditions, which was challenging both for the researcher and students. Compared to face-to-face lessons they used to have before the pandemic, students seemed to be less motivated and eager in online lessons. This lack of motivation and eagerness affected their performance in flipped classes and the unavailability of a physical classroom setting caused interaction problems among students. The only platform they could use for interaction during contact hours was the break-out rooms on Zoom. Although they worked cooperatively in small groups to complete the tasks assigned to them, they could not interact as effectively and naturally as they did in face-to-face lessons. In addition, keeping track of the students' progress under extreme conditions of the pandemic, preparing the video-lectures and the flipped classroom materials were much more demanding and time-consuming, which put an extra burden on the shoulders of the researcher. To put it shortly, dealing with these difficulties and conducting the study simultaneously might have affected the reliability and validity of the research.

Chapter 4

Findings

In this chapter, both the quantitative and qualitative results of the study are presented in detail. In the first part, the quantitative findings, which are divided into three sub-sections, namely pre- and post-tests, learner autonomy and FL experience questionnaires, are analyzed via SPSS Statistics 27. In the second part, the qualitative results obtained from the semi-structured interviews and teacher's journal are reported using content analysis.

4.1 Quantitative Data Analysis

In this part, the first three research questions are answered respectively. First, the findings of the quantitative data gathered from pre- and post-tests of vocabulary are reported with respect to the first research question. Regarding the second question, which is about the effect of FL on students' autonomous learning skills, the results of the LAQ are provided. Finally, to answer the third research question, the findings of the experimental group students' perceptions about the treatment are presented via descriptive statistics in SPSS based on their answers to the FL experience questionnaire.

4.1.1 Findings about the difference between the vocabulary gain of students in both groups. The first research question aimed at answering whether there was any difference between the vocabulary gain of upper-intermediate EFL students studying in flipped and non-flipped classrooms. To address this question, the participants' pre- and post-tests of vocabulary scores were coded into SPSS to create a dataset.

Then, test of normality was carried out to check whether the scores of pre- and post-tests were normally distributed. Since the number of participants was below 50, the significance value in Shapiro- Wilk test was taken into consideration (Shapiro & Wilk, 1965). As it can be seen in Table 4, the significance values of Shapiro Wilk for the pre- and post-tests of vocabulary were greater than .05, indicating that the data were normally distributed ($p > .05$).

Table 4

Results of Normality Tests for Pre- and Post-Tests of Vocabulary

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.165	33	.022	.938	33	.059
Posttest	.110	33	.200*	.974	33	.609

In addition to the significance values in Shapiro-Wilk test, the skewness and kurtosis values of the same dataset were also checked. If these values are close to zero, it means that there is a normal distribution of data (Field, 2009). Based on the skewness and kurtosis values in Table 5, it was understood that the data for pre-and post-tests were normally distributed as they were not further from zero. The distribution of pre- and post-test scores of the participants can also be observed in the histogram charts below (Figures 8 and 9).

Table 5

Skewness and Kurtosis Values for Pre- and Post- Tests of Vocabulary

	Statistic	Std. Error
Pretest		
Skewness	.547	.409
Kurtosis	-.685	.798
Posttest		
Skewness	-.197	.409
Kurtosis	-.557	.798

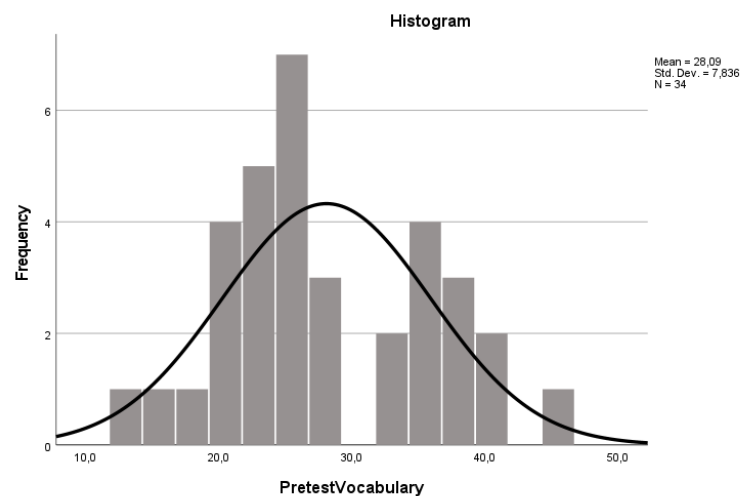


Figure 8. The distribution of pre-test scores of the participants

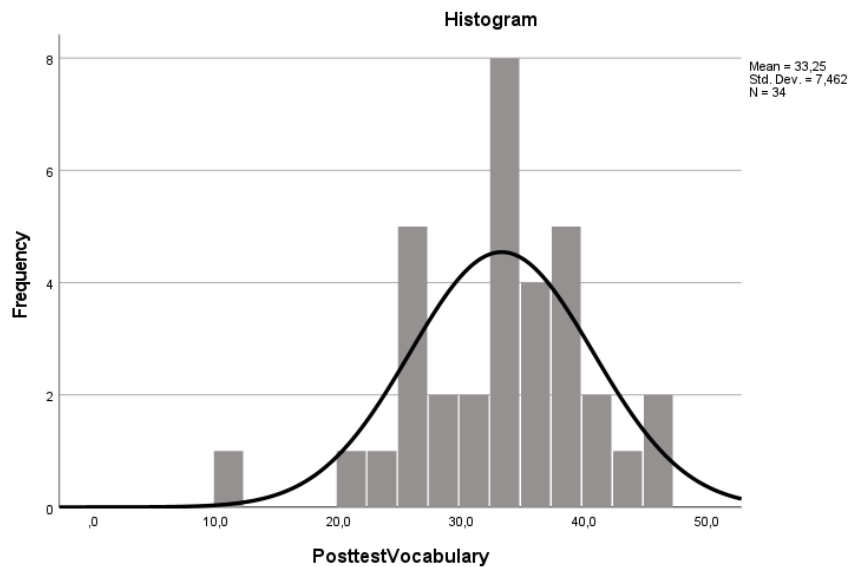


Figure 9. The distribution of post-test scores of the participants

Another analysis that was performed before carrying out parametric tests was the test of homogeneity (See Table 6). To make sure that the variances were equally distributed among control and experimental groups, Levene's test was used (Levene, 1960). According to Field (2009), "if Levene's test is non-significant at $p > .05$, then the variances are roughly equal" (p. 150). With this in mind, it was clearly seen that the significance values for the mean scores of the pre-test ($F(1,31) = .007$, $p > .05$) and post-test ($F(1,31) = 1.10$, $p > .05$) were greater than .05, which meant that there was homogeneity between two groups in both of the tests.

Table 6

Test of Homogeneity Between Control and Experimental Groups Based on Their Scores of Pre- and Post-Tests

		Levene Statistic	df1	df2	Sig.
Pretest	Based on Mean	.007	1	31	.935

	Based on Median	.093	1	31	.762
	Based on Median and				
	with adjusted df	.093	1	27.212	.763
Posttest	Based on trimmed mean	.001	1	31	.978
	Based on Mean	1.094	1	31	.304
	Based on Median	1.089	1	31	.305
	Based on Median and				
	with adjusted df	1.089	1	30.324	.305
	Based on trimmed mean	1.082	1	31	.306

Having performed tests of normality and homogeneity, it was revealed that the data for both tests were normally distributed. Because of the fact that the quantitative data met all the assumptions for a parametric test, independent-samples t-test was performed to compare the pre- and post-tests scores of the participants in the control and experimental groups. Another reason for preferring a parametric test was the fact that it provides more reliable results than the non-parametric test (Gay et al., 2012).

According to Dörnyei (2007), independent- samples t-tests are suitable for “research designs where we are comparing the results of groups that are independent of each other” (p. 215).

Table 7

Comparison of the Vocabulary Pre-test Scores of Control and Experimental Groups with Independent Samples T-Test

Levene's	
Test for	
Equality of	
Variances	t-test for Equality of Means
	95% Confidence
	Interval of the
	Difference

	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	.007	.935	-.192	31	.849	-.5132	2.6761	-5.9712	4.9449
Equal variances not assumed			-.193	28.771	.848	-.5132	2.6600	-5.9553	4.9289

First, to compare the pre-test scores of the participants in the control and experimental groups an independent-samples t-test was run. As it can be seen in Table 7 above, the significance value of Levene test was greater than .05, indicating that equal variances between the two groups were assumed (Dörnyei, 2007). Thus, the results in the first line were reported. Independent-samples t-tests results for the pre-test illustrated that there was no statistically significant difference between experimental ($N= 14$, $M= 28.25$, $SD= 7.42$) and control groups at the beginning of the treatment ($N= 19$, $M= 28.76$, $SD= 7.71$), $t(31) = -.192$, $p > .05$.

After comparing the pre-test results of students in both groups, another independent-samples t-test was applied to compare the post-test scores of the participants in two groups. Table 8 below reveals the independent-samples t-test results of the post-test. As it is seen in the table, the significance value of Levene test was greater than .05, which meant that the variances were equal. Based on the values in the first line of the table, there was no statistically significant difference between experimental ($N= 14$, $M= 33$, $SD= 7.36$) and control groups at the end of the treatment. ($N= 19$, $M= 34.58$, $SD= 5.80$), $t(31) = -.674$, $p > .05$.

Table 8

Comparison of the Vocabulary Post-test Scores of Control and Experimental Groups with Independent Samples T-Test

Levene's
Test for

Equality of

Variances

t-test for Equality of Means

								95% Confidence Interval of the Difference	
	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	1.094	.304	-.674	31	.505	-1.5432	2.2882	-6.2101	3.1236
Equal variances not assumed			-.650	23.95	.522	-1.5432	2.3743	-6.4439	3.3575

In addition, after running independent-samples t-tests, the mean scores of the two groups were compared to find out the difference between their performances. The mean scores of the students in pre- and post- tests of vocabulary can be seen in Figure 10 below.



Figure 10. Pre- and post-test mean scores of experimental and control groups

As it can be seen above, the mean scores of the experimental group ($M=28.25$, $M=33.04$) were very close to the mean scores of the control group ($M=28.76$, $M=34.58$) in the pre- and post-tests, indicating that the success rate of the participants in both groups did not differ from each other significantly. As a result, to answer the first research question, which was about the effect of the FL on students' vocabulary gain, t-test results and the mean scores of pre- and post-tests were explored. At the end of the data analysis, it was revealed that there was no statistically significant difference between control and experimental groups in their scores of pre- and post-tests.

4.1.2 Findings about the difference between the perceived autonomy level of students in both groups. The second research question aimed at investigating the effect of FL on students' perceived autonomy level. At the beginning of the statistical analysis stage, the dataset was prepared in SPSS and items 20, 22, 24, 25, 28, 29 were reverse coded. In order to gather data, the results of the LAQ, administered at the beginning and end of the treatment in the control and experimental groups, were analyzed via independent-samples t-test as it provided more reliable results than a non-parametric test (Gay, et al., 2012). However, before carrying out this test, performing tests of normality and homogeneity was required to see that the data can meet all the assumptions for a parametric test. First of all, the outliers were checked via descriptive statistics and no outlier was identified but the outlier detected in the vocabulary post-test data analysis was removed from the dataset. Next, the skewness and kurtosis values for the pre- and post-course questionnaires were explored. For the pre-course questionnaire, these values were found as $-.319$, and $-.612$ respectively. For the post-course questionnaire, the skewness value was $-.141$, and the kurtosis value was $-.460$. Then, the significance value of each test was checked by using Shapiro Wilk test as the number of participants was below 50 (Shapiro & Wilk, 1965). These values were $.259$ for the pre-course questionnaire, and $.847$ for the post-course questionnaire. As they were greater than $.05$ ($p = .259$ $p > .05$), ($p = .847$ $p > .05$), it was clearly seen that the data were normally distributed.

After conducting these tests of normality, the data were analyzed for homogeneity by using Levene's test. The significance value was $.377$ for the pre-course questionnaire and $.862$ for the post-course questionnaire. Since they were greater than $.05$ ($p = .377$ $p > .05$), ($p = .862$ $p > .05$), it was evident that there was homogeneity of variances (Dörnyei, 2007).

Having ensured that the dataset met the requirements for a parametric test, an independent-samples t-test was run to see whether there was a significant difference between two groups in terms of their perceived autonomy level. As seen in Table 9 below, there was no statistically significant difference between experimental ($N= 14$, $M= 102.14$, $SD= 8.69$) and control group students ($N= 19$, $M= 99.37$, $SD= 11.26$), $t(31) = .767$, $p = .449$ $p > .05$. in terms of pre-course LAQ results.

Table 9

Comparison of the LAQ Results of Control and Experimental Groups with Independent Samples T-Test (Pre-test Results)

Levene's									
Test for									
Equality of									
Variances									
t-test for Equality of Means									
95% Confidence									
Interval of the									
Difference									
Table 9 (continued)									
	F	Sig	t	df	Sig. (2-	Mean	Std. Error		
					tailed)	Difference	Difference	Lower	Upper
Equal	.802	.377	.767	31	.449	2.774	3.616	-4.601	10.150
variances									
assumed									
(Pre-test									
LAQ)									
Equal									
variances									
not assumed			798	30.901	.431	2.774	3.616	-4.601	10.150

Table 10

Comparison of the LAQ Results of Control and Experimental Groups with Independent Samples T-Test (Post-test Results)

Levene's

Test for									
Equality of									
Variances									
t-test for Equality of Means									
95% Confidence									
Interval of the									
Difference									
					Sig. (2-	Mean	Std. Error		
	F	Sig	t	df	tailed)	Difference	Difference	Lower	Upper
Equal	031	.862	.579	31	.567	1.887	3.259	-4.759	8.533
variances									
assumed									
(Post-test LAQ)									
Equal									
variances									
not assumed			588	29.554	.561	1.887	3.211	-4.674	8.448

Similarly, as it can be seen above, there was no statistically significant difference between experimental ($N= 14$, $M= 105.57$, $SD= 8.73$) and control group students ($N= 19$, $M= 103.68$, $SD= 9.60$), $t(31) = .579$, $p = .567$ $p > .05$. in terms of post-course LAQ results (See Table 10). In the light of these findings, with regard to the 2nd research question: “Is there any difference between the perceived autonomy level of Turkish upper-intermediate EFL students studying in flipped and non-flipped classrooms?”, it was revealed that as a result of the FL treatment, there was no statistically significant difference in the autonomous learning skills of students in the control and experimental groups.

4.1.3 Findings about the perceptions of the students on FL. The third research question of the current study aimed at exploring the perceptions of the students about learning English in a flipped classroom. To identify experimental group students’ perception on flipped instruction, FL experience questionnaire was employed at the end of the treatment. It consisted of 14 items with 3 constructs, which were satisfaction, motivation and engagement. The Cronbach’s alpha reliability score of this

instrument was .941 (94%). First, the means and standard deviations of each construct were analyzed using descriptive statistics which can be seen in Table 11 below:

Table 11

Descriptive Statistics of FL Experience Questionnaire Based on the Three Constructs

Construct	M	SD	N of Items
Satisfaction	4.32	.60	6
Motivation	3.83	.68	4
Engagement	3.85	.54	4

As illustrated in the table above, the three constructs have high mean scores. The mean score for satisfaction is the highest (M=4.32), the mean scores for motivation (M=3.83) and engagement (M=3.85) are close to each other. In accordance with these values, it can be suggested that most of the students in the experimental group were satisfied with their FL experience. However, their motivation and engagement levels were not as high as their satisfaction level.

Having analyzed each of the constructs with descriptive statistics, students' perceptions towards FL were explored for each item in the questionnaire separately. It should be noted that item 13 was excluded from the analysis while measuring Cronbach's alpha reliability score. It was noticed that the reliability score would have been higher if item 13 had been removed. The results of these items can be observed in the following table (Table 12).

Table 12

Percentages of Students' Perceptions Towards FL

Statements	SD	D	N	A	SA	TA	TD
1. Flipped classroom							
is a better way of learning.	-	-	7.1	64.3	28.6	92.9	-
2. I enjoyed flipped classroom approach	-	-	7.1	64.3	28.6	92.9	-

more.

3. I think flipped

classroom is a more

effective and efficient way to learn.	-	-	21.4	50.0	28.6	78.6	-
---------------------------------------	---	---	------	------	------	------	---

4. I feel more motivated

in a flipped classroom.	-	-	35.7	50.0	14.3	64.3	-
-------------------------	---	---	------	------	------	------	---

5. I participated and

engaged myself

more in learning

in the flipped classroom.	-	-	42.9	50.0	7.1	57.1	-
---------------------------	---	---	------	------	-----	------	---

Note. SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA=Strongly

Agree, TA= Total Agreement, TD= Total Disagreement

Table 12 (continued)

Statements	SD	D	N	A	SA	TA	TD
6. I became a more active learner in the flipped classroom.	-	-	21.4	42.9	35.7	78.6	-
7. I thought the time and effort I spent in the flipped classroom was worthwhile.	-	-	7.1	50.0	42.9	92.9	-
8. I learned more and better in the flipped classroom.	-	-	7.1	42.9	50.0	92.9	-
9. I prefer flipped classroom to a	-	-	35.7	35.7	28.6	64.3	-

lecture-based
classroom.

10. I think flipped
classroom learning

guided me toward better understanding of the course topics.	-	-	14.3	57.1	28.6	85.7	-
---	---	---	------	------	------	------	---

11. I experienced

pleasure in the flipped classroom.	-	-	7.1	57.1	35.7	92.8	-
---------------------------------------	---	---	-----	------	------	------	---

Note. SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA=Strongly Agree, TA= Total Agreement, TD= Total Disagreement

Table 12 (continued)

Statements	SD	D	N	A	SA	TA	TD
------------	----	---	---	---	----	----	----

12. I devoted myself

more to the instructional/ class activities in the flipped classroom.	-	-	14.3	42.9	42.9	85.8	-
---	---	---	------	------	------	------	---

13. I spent more
time and effort

than usual on my flipped classroom learning activities.	21.4	7.1	50.0	14.3	7.1	21.4	28.5
---	------	-----	------	------	-----	------	------

14. Generally, I am happy

and satisfied with this	-	-	-	50.0	50.0	100	-
-------------------------	---	---	---	------	------	-----	---

flipped learning experience.

Note. SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA=Strongly Agree, TA= Total Agreement, TD= Total Disagreement

In accordance with the results revealed above in Table 11, all of the participants in the experimental group ($n = 14$) adopted a positive attitude towards FL at the end of the treatment. When each item is analyzed in detail, it can be seen that 92.9% of the students stated that FL is a better way of learning. Similarly, 92.9% of them enjoyed flipped classroom approach more. 78.6% of them expressed that flipped classroom is a more effective and efficient way to learn. For the 4th item, 64.3% felt more motivated in a flipped classroom. Regarding the 5th item, 57.1% reported that they participated and engaged themselves more in learning in the flipped classroom. In item 6, students' active participation in their learning process was emphasized. 42.9% of the participants agreed and 35.7% of them strongly agreed that they became a more active learner in the flipped classroom. For the 7th item, 50% of the learners agreed and 42.9% of them strongly agreed that the time and effort they spent in the flipped classroom was worthwhile.

Considering the 8th item, 92.9% of the students expressed that they learned more and better in the flipped classroom. In item 9, 35.7% of the participants agreed and 28.6% of them strongly agreed that they preferred flipped classroom to a lecture-based classroom. In item 10, 85.7% of the learners thought that flipped classroom learning guided them toward better understanding of the course topics. According to the 11th item, 57.1% of them agreed and 35.7% of the students strongly agreed that they experienced pleasure in the flipped classroom. 85.8% of the students reported that they devoted themselves more to the instructional/class activities in the flipped classroom regarding the 12th item. However, according to the results of the 13th item, only 21.4% of the students spent more time and effort than usual on their flipped classroom learning activities and 21.5 % of them strongly disagreed and 7.1% of them disagreed with this item. For the last item, all of the students felt themselves happy and satisfied with FL experience.

After analyzing the percentages of the items in the questionnaire, further analysis was needed. To this end, students' perceptions towards FL were explored for each item through descriptive statistics, which can be observed in Table 13 below.

Table 13

Descriptive Statistics of Students' Perceptions Towards FL

Questionnaire Items	M	SD
1. Flipped classroom is a better way of learning.	4.21	.57
2. I enjoyed flipped classroom teaching approach more.	4.21	.57
3. I think flipped classroom is a more effective and efficient way to learn.	4.07	.73
4. I feel more motivated in a flipped classroom.	3.79	.69
5. I participated and engaged myself more in learning in the flipped classroom.	3.64	.63

Table 13 (continued)

Questionnaire Items	M	SD
6. I became a more active learner in the flipped classroom.	4.14	.77
7. I thought the time and effort I spent in the flipped classroom was worthwhile.	4.36	.63
8. I learned more and better in the flipped classroom.	4.43	.64
9. I prefer flipped classroom to a lecture-based classroom.	3.93	.82
10. I think flipped classroom learning guided me toward better understanding of the course topics.	4.14	.66
11. I experienced pleasure in the flipped classroom.	4.29	.61
12. I devoted myself more to the instructional/class activities in the flipped classroom.	4.29	.72
13. I spent more time and effort than usual on my flipped classroom learning activities.	2.79	1.18
14. Generally, I am happy and satisfied with this		

As indicated in Table 13 above, the last item about the general happiness and satisfaction with FL experience had the highest mean and the lowest standard deviation scores ($M = 4.50$, $SD = .51$), which reveals the positive attitude of the participants concerning the treatment. In contrast, item 13, excluded from the reliability analysis, had the lowest mean and highest standard deviation scores ($M = 2.79$, $SD = 1.18$). The reason behind this could be explored in depth by means of qualitative instruments. The results also revealed that the 4th item which was “I feel more motivated in a flipped classroom” ($M = 3.79$, $SD = .69$) and the 5th item which was “I participated and engaged myself more in learning in the flipped classroom” ($M = 3.64$, $SD = .63$) got the lowest score of all the items. It seems that in spite of their satisfaction, participants were less motivated and engaged in their FL process. On the other hand, item 2 “I enjoyed flipped classroom teaching approach more” ($M = 4.21$, $SD = .57$) and item 11 “I experienced pleasure in the flipped classroom” ($M = 4.29$, $SD = .61$) demonstrated that participants regarded FL approach enjoyable despite their relatively low motivation and engagement.

In brief, the findings of the FL experience questionnaire, employed to obtain data on the 3rd research question: “What are the perceptions of the students about learning English in a flipped classroom?”, indicated that students’ overall attitude towards FL approach was positive but to gain deeper insight into this research question further qualitative data analysis seemed necessary.

4.2 Qualitative Data Analysis

Creswell (2012) suggests that conducting qualitative research enables researchers “to develop a detailed understanding of a central phenomenon” (p.16). In addition, it allows us to discover opinions of a small number of participants. With this aim, the results of semi-structured interviews and teacher’s reflective journal are elaborated in this part to address the third and fourth research questions. After providing the results of the quantitative data on the third research question, the qualitative data gathered from the semi-structured interviews are presented to further explore the perceptions of the students about FL. Next, the common themes in teacher’s reflective journal are identified by means of content analysis to answer the

fourth research question, which is about the perceptions of the researcher about teaching English in a flipped classroom.

4.2.1 Semi-structured interview results about the perceptions of the students on FL. Having gathered data on the perceptions of students about learning English in a flipped classroom by means of FL experience questionnaire, further analysis to obtain in depth data on their attitudes regarding the same research question was essential. To this end, semi-structured interviews were conducted with 10 participants from the flipped classroom. They were selected through purposive sampling because as pointed out by Gay et al., (2012), the main reason for this type of selection was to obtain the most useful data from the participants. To be able to gain insights into the research phenomenon from a variety of perspectives, both high and low achievers were invited to the interview. Except one of them, the other participants were Turkish, and they preferred to express their opinion in their native language. That's they provided their comments in Turkish, and after being recorded, they were transcribed and translated into English by the researcher. During these interviews, which took between 10-20 minutes, students were asked (1) how FL experience affected their vocabulary competence in English, (2) what effects flipped classroom had on their motivation, effectiveness, and engagement, (3) whether they found FL as an effective learning method, (4) how they considered their role as a student in a FL classroom, (5) how their interaction between their classmates and instructor was in the flipped classroom, (6) how their participation was in the flipped classroom, (7) what the benefits of FL classrooms were, (8) whether they experienced any difficulties in FL, (9) what their suggestion would be to have a more successful flipped classroom model. Their responses were in line with the findings of the FL experience questionnaire.

To analyze the qualitative data, the transcripts were read by the researcher several times. Then, the codes were identified, and they were classified under certain categories. The categories emerged from the interviews were as follows: *effective video lectures, engaging course content, promoting student-centered learning, facilitating student interaction and cooperation, learning at self-pace, easily accessible course content, flexibility, increasing student engagement, facilitating learning, being prepared for the class, learning grammar through FL*. These

categories, which will be analyzed in detail, are displayed in the figure below (Figure 11).

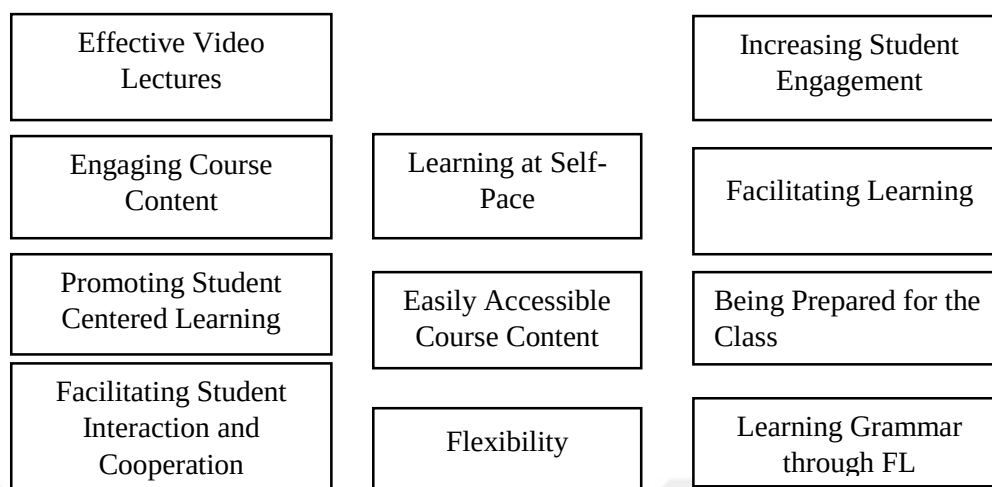


Figure 11. Categories emerged from the semi-structured interviews

4.2.1.1 Effective video lectures. Being asked about the effectiveness of FL, most of the participants mentioned the advantages of learning through video lectures prepared by the researcher. They emphasized that the input material was appealing for them as it served the needs of visual and auditory learners simultaneously. They also favored these video lectures owing to the fact that they could learn many other features of the words like form meaning relationship, collocations, word parts, spoken and written forms of these words. Some of the respondents' comments in accordance with the effectiveness of these learning materials are provided below:

[...] The videos provide us with better learning opportunities than our vocabulary journal as they present visual and auditory input simultaneously. While working on our own, almost none of us search for the pronunciation of a word and we rarely look for an example sentence. Therefore, studying with video lectures was better than studying alone. (S2, Interview Data, 07.05.2021)

[...] The educational videos provide a rich learning experience because the collocations, different forms and explanations of the unknown vocabulary given by the instructor allow us to learn the target vocabulary in an efficient way. This is more effective than working individually. (S4, Interview Data, 07.05.2021)

[...] As I am a visual learner, I can understand better when I see visual materials. However, other students may not like this kind of learning and prefer working individually. Auditory and visual aspects of the videos appeal to me as they are more suitable for my learning style. (S8, Interview Data, 07.05.2021)

4.2.1.2 Engaging course content. The participants compared their learning experience with non-flipped classrooms, and they reported feeling engaged while learning vocabulary by means of technological tools such as videos. They added that they would prefer being exposed to similar input materials to have an engaging learning environment. Besides, they emphasized that the questions embedded in the videos were another factor facilitating their concentration. Two of the students conveyed their opinion as follows:

[...] Learning was more effective than it was in a traditional classroom. Videos were engaging, I watched them carefully in order to answer the embedded questions. I would prefer being provided with similar input materials for vocabulary instead of conventional materials because I am a visual learner. I would watch more videos as well. It didn't sound like homework, and it wasn't difficult to complete. (S3, Interview Data, 07.05.2021)

[...] I think it was an effective learning experience. Especially, when we take notes while watching the videos, we do not forget the words. I would prefer being presented the input material through videos. If they were presented in the classroom, I would get bored, but I didn't feel like I am listening to a lecture while watching the videos. (S5, Interview Data, 07.05.2021)

4.2.1.3 Promoting student-centered learning. Another category emerged from the interviews was the contribution FL made to enhance student centeredness. Some of the participants reported that they were able to adopt a more active role in flipped classroom while showing their understanding to answer the embedded questions in the videos. Another student highlighted the importance of working in break out rooms in small groups and added that it was a motivating factor to be an active participant. These ideas are clearly understood from their comments below:

[...] Students have a more active role in the flipped classroom. For example, while watching the videos, everybody has to answer the embedded questions and

comprehend the content to complete the video. However, it is not the case when the content material is delivered by the instructor in the classroom. In that case, some students may prefer to have a passive role. They may be unwilling to participate in the activities. (S9, Interview Data, 07.05.2021)

[...] In FL, students take more responsibility for their own learning. Teacher assigns the video, and students are required to watch it at their own pace. This learning model makes students more active especially while working in break out rooms in small groups, students have to be more active than activities carried out as a whole class because there are less students in these rooms compared to main rooms and students may feel obliged to take part in the activities. (S7, Interview Data, 07.05.2021)

4.2.1.4 Facilitating student interaction and cooperation. Participants declared that the interaction and cooperation between them strengthened in flipped classrooms. Although feeling very motivated was not reported by most of them in FL experience questionnaire, one of them attributed her motivation to the interactive nature of flipped classroom activities. They also highlighted the challenge of communicating through distance education platforms during lessons that's why they noted that they were more enthusiastic about interacting and cooperating with their peers in break-out rooms. Being able to learn from each other in flipped classroom was another point mentioned in the interview. They mainly stressed positive sides of the treatment; however, one participant's comment about group work activities contrasted with the others. She expressed the difficulty she encountered in catching up with quick learners while working in groups. Their opinions are presented in the excerpts below:

[...] Being prepared for the lesson facilitated the motivation and interaction level of students. Compared to non-flipped classrooms, we were more interactive in flipped classrooms since we were better prepared. This interaction with my peers motivated me while working in breakout rooms. (S1, Interview Data, 07.05.2021)

[...] We mainly worked in groups, which was a factor in promoting the interaction between my peers. Working in main rooms in a distance education platform does not enable us to exchange ideas with our peers and learn from each other easily. That's why the more we work in breakout rooms, the better we cooperate with our friends. (S2, Interview Data, 07.05.2021)

[...] Most of the students were prepared and interacted well in breakout rooms. It was an effective experience for most of us. In other classes, some students may not be willing to cooperate in breakout rooms, they may mute themselves, but they were more enthusiastic and cooperative about the flipped classroom activities. (S6, Interview Data, 07.05.2021)

[...] Since we cannot connect with each other as we did in face to face education, working in breakout rooms and cooperating with our friends gave us an opportunity to learn from each other in addition to knowing our friends. Compared to non-flipped classrooms, more students were active in flipped learning because most of them had an idea about the lesson content. (S8, Interview Data, 07.05.2021)

[...] While working in break out rooms, cooperating among each other has both positive and negative sides. Concerning the negative sides of it, some students may answer the questions earlier than me in group work activities while I am still figuring them out, which interferes with my thinking process. I may have difficulty catching up with the quick learners. (S10, Interview Data, 07.05.2021)

4.2.1.5 Learning at self-pace. The opportunity to learn at their own pace in flipped classroom was stressed by some of the participants. They reported watching the video lectures prepared by the instructor more than once to answer the questions embedded in them. The participants compared their experience in FL with non-flipped classrooms by emphasizing that they could pause or rewind the video when they missed a part of the lesson. One of them added that this learning method could be beneficial to learn and revise the vocabulary. Their comments can be seen below:

[...] The videos were engaging and did not sound like a lecture or homework. I was motivated to watch them. I watched them again to answer some of the questions when I couldn't remember their answer. If the questions had not been embedded in them, I wouldn't have watched the videos. (S2, Interview Data, 07.05.2021)

[...] In contrast to non-flipped lessons, in flipped classroom we can pause or rewind the video when we have difficulty in comprehending the subject. This is an opportunity in FL which facilitates our learning. I used this rewind option frequently. Especially, when I couldn't answer the questions embedded in the video I rewound and watched the video again. It doesn't have to replace f2f classes but while learning or revising the vocabulary, it is a lot easier. (S5, Interview Data, 07.05.2021)

[...] It helps you learn more because you have your own time to do everything and at your own pace, you don't need to rush. If you miss one thing in non-flipped classroom, you can't go back and repeat it and learn more but in flipped classroom, you have this chance. (S10, Interview Data, 07.05.2021)

4.2.1.6 Easily accessible course content. Accessing the course content easily was among the other advantages of FL underlined by the participants. They declared that since the video lectures were always available to them, they could watch them when they wanted to revise the vocabulary particularly before the exams. One of participants found them more enjoyable and effective than paper-based materials and added that accessing these materials easily helped them to retrieve the words. Similarly, the other participant mentioned that having these lectures at their disposal whenever they needed was an advantage of this learning method. Even though she was absent on the day of the lesson, she was able to learn the topics covered in that class through these video lectures. Their remarks are indicated in the following excerpts:

[...] One of the benefits of FL is that it allows us to revise the words we had studied previously. When we want to remember them before the exams, we can go back to the video we watched before and watch it again to refresh our memory. These lessons are always available to us, which makes learning easier. (S4, Interview Data, 07.05.2021)

[...] I rewatched the videos before Language Task exam and it was more enjoyable and effective rather than working individually with our own paper-based materials. These videos provided us with useful resources when we wanted to go back and get ready for the exams. (S7, Interview Data, 07.05.2021)

[...] It is an effective method because in a non-flipped classroom when you miss a point because you were absent on the day of the lesson, you cannot go back and revise what was covered in the lesson, and the points you missed are not repeated in the class on the next day but it is not the case in flipped classroom. You can have access to the course material whenever you want. I think this is an advantage of it. (S9, Interview Data, 07.05.2021)

4.2.1.7 Flexibility. The flexible nature of flipped classroom was another point raised by the participants. One of them mentioned that FL benefited her because she felt more comfortable in her own zone and preferred to learn individually rather than

learning with other students in the classroom. Because of being a shy person, she was unable to concentrate on the topics well; however, she was more relaxed in flipped classroom thanks to the flexible learning conditions offered to her. The next participant touched upon similar points regarding flexibility by highlighting that she had other responsibilities during the day; thus, she wasn't able to attend all of the online classes delivered synchronously every day. She also noted that having access to video lessons at her own convenience was more suitable for her, which made getting ready for the next week's flipped classroom smoother. The points highlighted by them are given below:

[...] In this level, we need to learn lots of vocabulary and if you don't study them, it becomes difficult for you. However, flipped classroom helps you understand and engage more. I feel more engaged because the lectures are in video format. I feel more comfortable in my own zone and I learn better when I am alone. I am not good at communicating with others easily because I have been a quiet person ever since I was born. I prefer learning alone through video lessons to learning in the classroom because it provides flexibility and it helps me focus more. If there are lots of people around, I cannot concentrate easily. If you teach me alone, I learn better. (S1, Interview Data, 07.05.2021)

[...] It also gives flexibility to learners. During the day, I am busy with housework, I also have other responsibilities like taking care of my sisters. When I finish all the work, I can watch the videos and get ready for the lesson at my own convenience. I liked watching the videos on my own and they are more convenient than synchronous classes for me because I am alone at home and I have to do the cleaning and cooking and sometimes I may miss these lessons but watching the videos after I finish my work was much easier for me. It gave me more flexibility compared to synchronous classes. (S3, Interview Data, 07.05.2021)

4.2.1.8 Increasing student engagement. Feeling more engaged in flipped classroom was brought up by three of the participants, supporting the relatively low mean score about motivation and engagement in the FL experience questionnaire. They made comments about their eagerness to study more thanks to the videos posted by the instructor. In addition, they claimed to show more effort in the activities they completed in flipped classroom as a result of being engaged and motivated. Their opinions on this category are illustrated below:

[...] If I have competition, I feel more engaged. When I see that you post these videos, I don't want to be the last person to watch them. It gives me motivation and it makes me work harder. These video assignments pushed me to study harder. (S6, Interview Data, 07.05.2021)

[...] My participation was more different in flipped classroom because I put more effort in the activities we did than non-flipped classroom because I felt more motivated and engaged to do things. (S7, Interview Data, 07.05.2021)

[...] I was more engaged in the lesson because I had prior knowledge about the topics we studied in the lesson, and I was able to complete in-class tasks more effectively. It affected my motivation positively. (S5, Interview Data, 07.05.2021)

4.2.1.9 Facilitating learning. Nearly all of the participants expressed that they benefited from flipped classroom as it facilitated what they learnt in the vocabulary lesson. Their statements were in line with the findings of the FL experience questionnaire regarding learning better and more in the flipped classroom. They found FL effective because it gave an opportunity to them to adopt a more systematic vocabulary study approach. Rather than studying the words just before the exam, they were able to revise them regularly every week by absorbing them in small units. Moreover, they stated the importance of coming to class prepared and processing the words with ease because of the effort they showed before and after the flipped lesson. Their satisfaction about better learning opportunities they had are demonstrated below:

[...] I used to study the vocabulary just before the exam, which was overwhelming for me. This treatment helped me to revise the words more regularly and it contributed to my learning and performance in the exam. (S1, Interview Data, 07.05.2021)

[...] Thanks to flipped learning, I was able to adopt a more systematic vocabulary study approach. Rather than studying all the words before the exam, I divided and absorbed these words in small parts every week. I believe that it helped me learn better. (S2, Interview Data, 07.05.2021)

[...] Watching the videos before the lesson helped me to remember the words better. I used to write down their meaning, and other forms while watching the videos. It allowed me to do in-class tasks much more comfortably. However, coming to the

lesson underprepared may make me feel anxious when I cannot perform well. (S4, Interview Data, 07.05.2021)

[...] I love taking notes before language classes and it motivates me better. Having worked on the next day's topic and coming to class prepared make me more confident. Learning vocabulary is not an easy task because you may forget them easily since you don't have the chance of using the words. However, remembering the new words became much more effective in this learning model because we both watched the videos before the lesson and completed in-class tasks. (S6, Interview Data, 07.05.2021)

[...] We need to go over the content before and after the language classroom and I am in the habit of being prepared before the lesson. For this reason, I found flipped learning highly beneficial, it helped me to retrieve the words by encouraging preparation. I was able to consolidate the words easily. (S9, Interview Data, 07.05.2021)

4.2.1.10 Being prepared for the class. Coming to class prepared was the other common theme touched upon in the semi-structured interviews. Participants compared their performance with non-flipped classrooms and made comments about the contribution of being prepared for the lesson to their learning experience. It was noticed that the activities became more meaningful to them as a consequence of being familiar with the subject of the lesson. There was also a comment stating that in addition to promoting their learning, FL encouraged them to learn in a more positive learning environment. The comments below clearly demonstrate their ideas on this issue:

[...] Being prepared before the lesson was beneficial for us. I did not use to study before the lesson but these videos helped me to get prepared for the lesson. (S3, Interview Data, 07.05.2021)

[...] It has a positive effect on my vocabulary competence because we came to class prepared and we did more practice in the classroom. Doing the vocab activities would take longer in non-flipped classrooms as I did not know the meaning of the words, their collocation and other forms but in flipped classroom, it took less time since we came to class prepared. (S6, Interview Data, 07.05.2021)

[...] I think it is an effective learning method because it makes you work the subject before the lesson and while doing the activities, the words become more meaningful. (S7, Interview Data, 07.05.2021)

[...] Compared to non-flipped classrooms, we could complete the activities more easily in breakout rooms as everybody was prepared for the lesson. It created a positive learning atmosphere among us, and it contributed to our motivation and interaction. It also facilitated our learning. (S10, Interview Data, 07.05.2021)

4.2.1.11 Learning grammar through FL. Being asked about their suggestions to have a more successful flipped classroom model, some participants expressed their preference for flipped grammar lessons. They remarked that they might experience difficulty in learning complex grammar concepts in this level and watching the video lectures prepared to teach grammar would be advantageous to them. They also favored these lectures so that they could compensate for the grammar topics they missed on some days due to illness or other excuses. Their suggestions on this category are clear in the following excerpts:

[...] It should be done for grammar classes as well. We may have difficulty in understanding some grammar objectives in the lesson but having a flipped grammar class could make the understanding of complex topics easier. (S4, Interview Data, 07.05.2021)

[...] Grammar classes can be flipped as well. We may miss the lessons due to illness or we may not listen to the lesson on specific days, but if we have access to lecture videos, we can always watch them. (S5, Interview Data, 07.05.2021)

[...] The grammar objectives in this level were harder than I expected. I may have difficulty in understanding them in the lesson. It could have been used for teaching grammar as well. (S8, Interview Data, 07.05.2021)

To conclude, the categories emerged from the semi-structured interviews indicated that the participants were aware of the contribution of FL activities to their performance in vocabulary lessons. Their positive attitude towards the treatment was evident in their comments. Comparing their experiences in this learning model with non-flipped classrooms, they mostly appreciated flipped classroom because of its positive effects on their learning process. Facilitating the interaction among students, having access to course content with ease, being provided with better learning

opportunities, and coming to class prepared were the most common themes highlighted in these interviews.

4.2.2 Reflective journal results about the perceptions of the instructor on FL. To address the fourth research question regarding the perceptions of the instructor about teaching English in a flipped classroom, the common themes and categories in the teacher’s reflective journal were analyzed via content analysis. While examining this qualitative data, the codes were identified and classified under categories. The categories emerged from the teacher’s reflective journal were sorted under four groups, which were enthusiasm for flipped classroom, interactive course design, increased workload and screen time, as well as underprepared students. They are shown in Table 14 below:

Table 14

Categories Emerged from the Teacher’s Reflective Journal

1- Enthusiasm for flipped classroom
2- Interactive course design
3- Increased workload and screen time
4- Underprepared students

Contrary to the findings of the semi-structured interviews carried out with students, teacher’s reflective journal revealed both advantages and disadvantages of flipped classrooms. The first category with regard to the positive sides of the treatment was the enthusiasm and willingness students showed during the implementation process. Having watched the videos and completed the pre-task assignments, they joined in-class activities eagerly. In terms of fulfilling their responsibilities, their overall performance was satisfactory which is clear from the quote below:

[...] The reaction of the students towards flipped classroom was positive in the first three weeks of the treatment. Contrary to my expectations, most of them showed enthusiasm for watching the videos, completing pre-class activities, and attending flipped classroom activities. According to my observations, they worked more

effectively and eagerly in break-out rooms thanks to being prepared. (Teacher's Reflective Journal, 14.04.2021)

The next category in the reflective journal was the interactive course design, which also emerged in the semi-structured interviews. The difference between non-flipped and flipped classrooms was obvious in terms of interaction among students. Because most of them were prepared for the lesson, they also felt more confident and they participated more in group work activities, as indicated in the following quote:

[...] The group work activities enhanced their interaction more compared to non-flipped classrooms because they were already familiar with the content of the lesson. This interaction between students also contributed to their overall motivation and course participation. This familiarity with the topics improved their self-confidence as well. (Teacher's Reflective Journal, 14.04.2021)

In addition to the advantages of FL stressed above, some of its drawbacks were brought up by the researcher. To this end, the third category was about the increased workload and screen time of the instructor caused by the demanding nature of designing flipped classroom activities. The whole process including tailoring the activities to the needs of the students, preparing videos, carrying out the implementation, and catching up with the syllabus at the same time required a considerable amount of effort. Moreover, when the workload in the preparatory school and the online classes delivered during the days of the Covid19 pandemic were considered, the implementation of FL definitely increased the time spent by the researcher in front of the computer screen as well. These challenges are presented below:

[...] As I hadn't experienced this model before, I had to plan every detail of it in advance from the format of the video lectures to the content of the vocabulary activities I would use in the lesson. This planning stage was the most demanding part for me. To prepare a 10-minute video lecture on Edpuzzle I had to devote around 4 hours a day, which was rather overwhelming considering my workload. (Teacher's Reflective Journal, 07.05.2021)

[...] As a consequence of delivering online lessons synchronously during the period of the Covid19 pandemic, I had to spend many hours in front of the screen. With this flipped teaching implementation, the amount of this screen time doubled, which

was another challenging aspect of this process. (Teacher's Reflective Journal, 07.05.2021)

Students coming to class underprepared was the last category indicated in the reflective journal. Being also raised by a few students in the semi-structured interviews, it inhibited the performance of some students working in groups. Although most of the students were familiar with the target vocabulary covered in the video lectures, there were few students who hadn't prepared well and this lack of preparation influenced the group dynamics. It is demonstrated in the following quote:

[...] There were also a few students who were less active than the others because of not being prepared. These students could not move as quickly as the others who had already studied the target vocabulary before coming to class. Unfortunately, their lack of preparation interfered with the dynamics of the group and influenced the progress of students in the same group. (Teacher's Reflective Journal, 14.04.2021)

In conclusion, the findings of the teacher's reflective journal revealed that though the implementation of FL required considerable investment of time and effort, it could be employed in language classrooms successfully to build up the interaction between students. Encouraging the enthusiasm of the students for learning more was another reason to integrate this approach into language teaching. Nevertheless, it should be noted that some students' being underprepared was one of the biggest challenges, affecting both instructors and students adversely.

Chapter 5

Discussion and Conclusions

This study aimed at exploring and comparing the effects of FL on vocabulary gain of upper-intermediate EFL students enrolled in a preparatory program at a foundation (non-profit, private) university. The study also attempted to find out if flipped learning had any impact on their perceived autonomy level. In addition, this study sought to examine the perceptions of the participating students and their instructor about FL in an EFL classroom. Quantitative data from pre-and, post-test results, student surveys, and qualitative data from semi-structured interviews and teacher's reflective journals were obtained in this mixed method research study. In this chapter, the findings of the four research questions are discussed elaborately. Conclusions besides implications and recommendations for further research are presented in the end.

5.1 Discussion of the Findings for the Research Questions

5.1.1 Discussion of the findings about the difference between the vocabulary gain of students. The first research question aimed at answering whether there was any difference between the vocabulary gain of upper-intermediate EFL students studying in flipped and non-flipped classrooms. Surprisingly, the data analysis revealed that there was no statistically significant difference between control and experimental groups in their scores of post-tests. Indeed, their scores in pre- and post-tests were very close to each other. Even though the students in the experimental group improved their post-test scores, the treatment did not have any significant effect on their vocabulary gain (See Table 8 and Figure 10).

These findings contradict with some of the studies in the literature suggesting that students who received flipped instruction were more successful than those who received non-flipped instruction (Alpat, 2019; Al Qasmi et al., 2022; Hsieh et al., 2017; Hung, 2015; Lee & Wallace, 2018; Solimani et al., 2019; Soltanabadi et al., 2021; Soltanpour & Valizadeh, 2018; Tulay, 2019; Zarrinfard et al., 2021; Zou & Xie, 2019). Nonetheless, the results of this present research conform to other previous studies which indicated that flipped instruction did not make a statistically significant difference in students' academic skills like reading, writing or vocabulary competence (Aydemir, 2019; Lin, 2019; Nam, 2019; Oh, 2017; Suranakkarin, 2017).

One of the reasons lying behind the contradictory results of this study might be concerned with its sampling method. The control and experimental groups consisted of 34 students which were selected through convenience sampling because of being available. As emphasized by Creswell (2012) in this type of sampling, the participants are not purposefully selected; thus, they may not represent the whole population.

Also, the number of the participants in this study was small compared to others which reported positive outcomes in terms of students' academic achievement (Adnan, 2017; Hsieh et al., 2017; Hung, 2018; Lee & Wallace, 2018; Solimani et al., 2019; Zou & Xie, 2019). To exemplify, Adnan (2017) carried out a study with 70 participants to explore the effect of flipped instruction on English major students' midterm, e-portfolio and essay scores. Data analysis indicated that students in the flipped classroom received higher essay scores than their counterparts in the non-flipped classroom.

Similarly, in Lee and Wallace's (2018) study, the perceptions and success rates of 79 students in a flipped and non-flipped classroom were compared. Based on the results, there was a significant statistical difference in students' mean scores in the final exam, meaning that students who were in the flipped classroom were more successful than the students in the non-flipped classroom. Thus, the result of this current study could have been different if the sample size had been bigger. That's why it may not be applicable to other language learning environments including more participants.

The next reason for the unanticipated results of this study could be attributed to the extreme conditions caused by the Covid19 pandemic. Flipped instruction was

implemented during the spring term of 2021 through online video conference platform Zoom. The atmosphere in the online classroom was not similar to the atmosphere in face to face classrooms and the students were not accustomed to this way of teaching and learning. Besides, the distance among them impacted on many aspects of education like instructional quality of the classes, motivation and engagement level of the students as well as the rapport between students and the instructor as mentioned in the teacher's reflective journal. In addition, all of the students could not successfully overcome the psychological burden of the pandemic and not all of them had the self-discipline to manage their own learning. The relatively low motivation and engagement level of the students was evident in the descriptive analysis of FL experience questionnaire results as well, indicating that participants were not as motivated and engaged as they were satisfied with FL. Briefly, all of these reasons mentioned above might have affected the entire process of the treatment.

Another possible explanation for these results may be the lack of proper implementation of flipped classroom model. It is important to bear in mind that the activities that are carried out in the classroom lie at the heart of FL and using classroom time effectively counts more than the video lectures assigned to students prior to the lesson. Also, the flipped classroom is based on the principles of motivating students to be active learners and maintaining that they are fully engaged in their learning process (Bergman & Sams, 2012). Even though the classroom activities used in this study were prepared by the researcher meticulously, factors like time constraints, loaded syllabus and lack of face to face interaction might have inhibited their effectiveness.

The findings of this study are consistent with Oh's (2017) research which was designed to determine the effect of peer teaching on student engagement and vocabulary learning of college students in a flipped classroom. Being split into two groups, the students had flipped and non-flipped instruction for five weeks and the results indicated that the student engagement and success rate did not differ significantly in two groups. Nonetheless, it was also found out that the engagement level of the students was associated with their success rate. That is, the most successful students were the ones who were better engaged. When this factor is taken into consideration, the unexpected results of this study could be concerned with the relatively low engagement level of the students in the experimental group.

As stressed by Flipped Learning Network (2014), one of the fundamental characteristics of FL is that students are expected to adopt an active role and to show enthusiasm for taking responsibility in their learning process. Otherwise, they are unlikely to benefit from the flipped classroom. Regarding the study habits of the participants in this study, the analysis of semi-structured interviews demonstrated that the students lacked learner autonomy and systematic study skills which are necessary to be an independent learner and to attain achievement. Several students reported that they were not in the habit of revising vocabulary regularly by adding that thanks to this treatment, they were encouraged to change their study routine.

These results also accord with Lin's (2019) study which examined the writing performance of Taiwanese college students receiving flipped instruction blended with mind mapping and peer assessment tools. The students in the experimental group gave peer feedback by using online mind mapping tools whereas the students in the control group assessed their peers' writing tasks without using online tools. According to the findings, there wasn't a statistically significant difference between two groups in terms of their writing scores.

With respect to the first research question, the post-test scores of the two groups did not differ significantly but the mean scores of the students in both groups increased at the end of the treatment. Thus, it can be implied that FL contributed to the vocabulary competency of the experimental group students although they did not outperform their peers in the control group.

5.1.2 Discussion of the findings about the difference between the perceived autonomy level of students. The second research question attempted to investigate the effect of FL on students' perceived autonomy level. After analyzing the data, it was revealed that there was no statistically significant difference in the autonomous learning skills of students in the control and experimental groups at the end of the study (See Table 9). So far, very little attention has been paid to the role of FL in the development of perceived autonomy level of students and this finding is contrary to the previous studies which suggested that FL promoted learner autonomy (Han, 2015; Huang, 2020; Lin, 2019; Nam, 2019; Tsai, 2021). On the other hand, it appears to be partly consistent with that of Aydemir (2019) who investigated whether flipped instruction had an effect on pre-service English teachers' self-regulated learning skills.

The findings illustrated that FL did not have any significant effect on their self-regulated learning. Although it does not seem directly associated with learner autonomy, self-regulated learning requires “deliberate planning, monitoring, and regulating of cognitive, behavioral, and affective or motivational processes toward completion of an academic task” (Hadwin, 2008, p.187). Therefore, the results of these two studies seem to support each other to some extent.

As mentioned above, the finding of the current study differs from previous research. In one of them, Tsai (2021) intended to determine the effects of FL on learner autonomy of English major students at a linguistic course. Experimental group students were provided with video lectures, online quizzes and e-journals on which they wrote reflections about their learning process on a weekly basis. On the other hand, control group students covered the course objectives through their textbook. The treatment took place in seventeen weeks and data analysis indicated a significant difference between two groups in terms of learner autonomy. In addition, experimental group students were found to be more confident, independent and goal-oriented. Nonetheless, whether students would maintain this learner autonomy in the future was not clear. Contrary to Tsai’s (2021) research, this current study was conducted in seven weeks and the analysis of learner autonomy questionnaire did not reveal a significant difference between control and experimental groups as mentioned earlier. The reason for this discrepancy may be explained by the difficulty of changing students’ study habits within a short period of time. Besides, the results could have been consistent with the literature if the students had been given an opportunity to reflect upon their autonomous learning practices as it was done in the above research. However, the learner autonomy questionnaire was the only data collection tool employed to compare the difference in two groups and self-reflection activities that would promote independent learning were not incorporated into this present study.

Similarly, the outcome of this study is contrary to that of Han (2015) who described the design and implementation of a flipped classroom model and how it helped to foster learner autonomy of advanced level adult learners. The main purpose of this study was to equip students with language learning strategies they could use independently. To accomplish this aim, students were assigned oral summary tasks for each unit they covered in the lesson, and they participated in cooperative in-class activities. Similarly, they prepared a presentation on the ways of learning English

effectively and shared their suggestions with their classmates as a final project. At the end of the course, a development in learner autonomy was observed. However, it was reported that these results did not rule out the influence of other factors like students' high level of motivation. There are two likely reasons for the inconsistency between Han's (2015) study and this current one. The first reason lies in the effect of training students in learner autonomy, which was not the primary focus of this study. However, as Nunan (1997) maintains, in order to encourage students to be independent learners, their awareness should be raised and they should be directed towards determining their own goals. Therefore, neglecting the necessary training for learner autonomy to prioritize other areas like language development could be the cause of this difference. The second reason may be related to the characteristics of the students who were not as motivated as Han's (2015) study, which was also revealed in the FL experience questionnaire. In brief, along with the factors mentioned above, the characteristics of students which evolved throughout their education life might have played an important role in this unexpected outcome.

5.1.3 Discussion of the findings about the perceptions of the students on FL.

The third research question intended to explore the perceptions of the students about learning English in a flipped classroom. To identify experimental group students' perception on flipped instruction, FL experience questionnaire was employed at the end of the treatment. It consisted of 14 items with 3 constructs, which were satisfaction, motivation and engagement. In addition to analyzing the means and standard deviations of each construct, students' perceptions for each item were analyzed via descriptive statistics. The findings indicated that students' overall attitude towards FL approach was positive (See Tables 10 and 11).

This result corroborates the findings of a great deal of the previous work revealing students' positive feelings about FL (Alpat, 2019; Hung, 2018; Jaramillo, 2019; Kang, 2015; Karmaker & Singh, 2016; Özkal, 2019; Solimani et al., 2019; Suranakkarin, 2017; Tulay, 2019; Zou & Xie, 2019). Although the experimental group did not perform better than the control group in the post-test, they were satisfied with FL which could be related to student-centered activities incorporated into course design rather than didactic teacher-led approach as indicated by Moranski and Kim (2016). Furthermore, replacing the time spent to give input in the lesson with pair and group work might be another reason for this outcome, which is in agreement with

Suranakkarin's (2017) observations. Another possible explanation for this is likely to be related to the integration of technology through video lectures which serve the needs of digital natives as argued by Prensky (2001). This point was touched upon by some students in the semi-structured interviews as well.

There are, however, other possible explanations. Enhancing students' interaction skills by devoting more time for communicative activities and stimulating their engagement might be considered as one of them (Suranakkarin, 2017). Additionally, making alterations in the mode of course delivery by utilizing a variety of approaches like computer assisted learning which can be accessed by students after class might have a role in students' positive attitudes towards FL (Baker, 2000; Bishop & Verleger, 2013).

As mentioned earlier, the implementation period of this study was carried out under the conditions of the pandemic and students were deprived of the physical interaction they used to have in real classroom settings. Therefore, they definitely needed to communicate with their peers during online classes, which was not easy to achieve due to the nature of distant education platforms. At this point, flipped instruction was found effective to fill this gap since it facilitated students' cooperation skills and the results of semi-structured interviews revealed that students were pleased to cooperate with their friends in break-out rooms during most of the contact hours, which is in line with the findings of the literature (Hunley, 2016; Margolis & McCabe, 2006). The positive perceptions of the students could also be attributed to the flexible learning conditions that allowed students to learn at their own pace in addition to having access to the course materials whenever they needed (Adnan, 2017).

However, the finding of this study is somewhat contrary to that of Hung (2018) who examined the impacts of two different flipped classroom models on students' speaking anxiety and motivation level. The participants watched videos prior to class and were provided with game-based learning. On the other hand, the experimental group received gamified flipped instruction by using QR codes and the control group used worksheets. As a result of data analysis, Hung (2018) concluded that FL instruction helped students to feel less anxious in speaking and it was also effective in increasing their motivation level, which was not the case in this present study. All in

all, there seem to be lots of possible reasons for students' satisfaction with FL approach and most of them were consistent with the findings of the literature as indicated above.

5.1.4 Discussion of the findings about the perceptions of the instructor on FL. The fourth research question aimed at exploring the perceptions of the instructor about teaching English in a flipped classroom. With this aim, common themes and categories in the teacher's reflective journal kept by the researcher were analyzed via content analysis. The categories emerged from the teacher's reflective journal were classified under four groups, which were enthusiasm for flipped classroom, interactive course design, increased workload and screen time along with underprepared students (See Table 14). The findings indicated that the instructor's overall attitude towards FL approach was positive but some of its drawbacks were reported too.

These results seem to be consistent with other research which showed both positive and negative sides of flipped classrooms (Aydemir, 2019; Kang, 2015; Karmaker & Singh, 2016; Tsai, 2021; Yaşar, 2020). As far as teacher's reflective journal is concerned, interactive course design being emerged as one of the common themes was also demonstrated by Aydemir (2019) who examined the effect of flipped instruction on pre-service English teacher's classroom interaction. The findings of her study illustrated that this method facilitated students' engagement and interaction. The researcher of this current study also observed students' eagerness to communicate with their classmates during flipped classes. As mentioned previously, the courses had to be offered in an online classroom owing to the Covid19 pandemic. In spite of these conditions, students did not lose their willingness to cooperate and interact with each other in break-out rooms, which was not the case in non-flipped classes. These findings were also supported by Karmaker and Singh (2016) who found out that thanks to flipped instruction, classroom time was used much more effectively, enabling students to communicate with their classmates more.

Regarding the negative sides of the FL, increased workload and screen time were perceived as a disadvantage by the instructor. Since designing and planning flipped classroom activities require a great deal of effort on the part of the teachers, this is not a surprising result. Also, this is partly in line with Yaşar's (2020) findings which showed that some of the participants were not pleased with the heavy workload and the extra tasks assigned to them in the flipped classroom. Concerning these two

research, it seems clear that FL might put an extra burden on the shoulders of both teachers and students.

Additionally, another drawback of FL was students coming to class underprepared as stressed in the teacher's reflective journal. It was an important factor affecting the quality of the instruction because these students were supposed to cooperate with others in the break-out rooms and their lack of preparation inhibited the performance of the whole group they were studying. This finding reflects that of Kang (2015) who also concluded that some students' coming to class without doing the pre-class homework was demotivating for the rest of the students but they were satisfied with the activities carried out in the flipped classroom. In summary, when all aspects of FL are taken into consideration, it appears that particularly teachers need to demonstrate commitment and dedication while flipping their classes. Despite the demanding nature it has, its benefits like facilitating student engagement and interaction should not be underestimated.

5.2 Implications and Recommendations

On the basis of the findings obtained from this present research, several implications and recommendations would be offered. To begin with, this research may encourage the classroom practitioners, instructors and teachers to avail themselves of the advantages of the current language teaching approaches which will satisfy the needs of this current generation that is intimately familiar with digital tools. Hence, educators, policy makers and other stakeholders are recommended to embrace the technological advances by flipping their courses to assist students' learning in and outside the classroom.

Taken together, these findings set an example by suggesting the role of flipped classrooms in promoting student-centered learning, raising students' engagement and improving the quality of cooperative learning practices. Moreover, after the unexpected outbreak of the Covid19 pandemic, educators all around the world had to make the transition from face to face to online classes and the findings of this research provide useful insights into the integration of flipped instruction in a way that minimizes the challenges encountered as a result of the pandemic.

In general, it seems that flipped classrooms might be blended with the existing pedagogical approaches perfectly to create better opportunities for hands-on activities

so that the lesson content can be reinforced in the classroom with the scaffolding of the teacher. In this respect, learning should not be restricted to classrooms and students should be encouraged to push their boundaries and to take the advantage of digital learning tools thanks to the incorporation of the latest educational methods.

With regard to the recommendations, first of all, the evidence from this study suggests that further research is required to explore the effects of flipped classrooms on EFL students' motivation and engagement level. Next, more studies regarding the role of perceived autonomy level in enhancing students' success rate in flipped classrooms would be worthwhile. Third, further work needs to be done to establish whether FL would change less autonomous students' study habits in the long run. Fourth, experimental investigations, using a broader range of participants in diverse classroom settings, could shed more light on the perceptions of the students towards FL. Finally, preparing flipped classroom activities might be perceived as a demanding task by the teachers but once they are created, using them repetitively might ease the burden on them. That's the reason why they should not be hesitant to apply this model in their classrooms. In brief, FL could be implemented successfully as a complementary approach to leverage the language learning ability of students in addition to their participation and involvement in an EFL context.

5.3 Conclusions

The present study was designed to determine the effects of FL on vocabulary gain of upper-intermediate EFL students in flipped and non-flipped classrooms at a foundation university. The second aim of this study was to find out if FL had any impact on their perceived autonomy level. Finally, it set out to find out the perceptions of the participating students and their instructor about FL in EFL classrooms.

This study has shown that although the students in the experimental group improved their post-test scores, there was no statistically significant difference between control and experimental groups in terms of their vocabulary gain. It has also revealed that there was no statistically significant difference in the autonomous learning skills of the students in two groups as a result of the FL treatment. Despite these contradictory results, the students adopted positive attitudes towards this learning method. The categories emerged from the semi-structured interviews have demonstrated that all of the students were satisfied with this experience and FL was

regarded as a favorable approach that facilitated their vocabulary competence in addition to cooperation among them. In respect of the instructor's attitude on FL, teacher's reflective journal indicated that it has both positive and negative aspects. It was found to be a triggering factor fostering students' interaction and motivation. On the other hand, requiring a considerable time investment, it put an extra burden on the shoulders of the teacher inevitably. Another finding of the study was that dealing with students who were not well-prepared for the lesson was demotivating not only for the students but also for the instructor.

The present study has been one of the first attempts to thoroughly examine the vocabulary gain of students in a flipped classroom in a Turkish EFL context. Despite the fact that it did not have a significant effect on students' academic achievement, the qualitative findings confirmed the previous research by stressing the importance of providing students with the language input that appeals to different learner styles, promoting student-centered learning, and encouraging learning at self-pace. These results have also confirmed that in order to create a learning environment addressing the needs and expectations of the twenty-first century learners, up-to-date pedagogical approaches must be embedded in the course design of every subject including language learning.

In conclusion, though FL did not affect students' academic success and perceived autonomy level significantly, the participants' and their instructor's overall attitude was positive. Therefore, it could be successfully incorporated into the syllabus of language classrooms to transform the conventional way of education into technology-enhanced teaching and to tailor our instruction to the needs of our students.

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