

**KARADENİZ TECHNICAL UNIVERSITY \* THE INSTITUTE OF SOCIAL SCIENCES**

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**APPLIED LINGUISTICS**

**THE USE OF GAMIFICATION AMONG HIGH SCHOOL STUDENTS TO ENHANCE  
EFL LEARNING**

**MASTER'S THESIS**

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**MAY-2019**

**TRABZON**

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## ÖZET

Teknoloji hayatımızın vazgeçilmez bir parçasıdır ve akıllı telefonlar, internet, sosyal medya, bilgisayar ya da mobil oyunlarla dijital yerli olarak da adlandırılan gençlerin ilgi ve merakını büyük oranda cezbetmektedir. Okul sonrası hatta okul saatlerini oyun oynayarak geçiren öğrenci sayısı bir hayli fazladır. Oyunların insanları bu denli bağlaması oyunlara ait belirli özelliklerin öğrencilerin motivasyon ve katılımını artırmak ve böylece etkili bir öğrenme ortamı yaratmak için eğitim alanında da kullanılmaktadır ve bu sürece oyunlaştırma denmektedir. Bu çalışmanın amacı, oyunlaştırmanın öğrencilerin İngilizce öğrenme başarıları üzerine olan etkilerini belirlemek ve öğrencilerin oyunlaştırma ve oyun öğelerine (puanlar, ödüller, rütbe, avatarlar, liderlik tablosu...) yönelik tutumlarını bulmaktır. Bu amaçla, ClassDojo uygulamasında bir oyunlaştırma tasarımı geliştirildi. Çalışmaya Ankara'da bir Anadolu Lisesinden 104 tane 9. sınıf öğrencisi katılmıştır. Öncelikle anket uygulaması yoluyla veri toplanmıştır. Daha sonra 11 katılımcıyla yarı yapılandırılmış görüşme gerçekleştirildi. Araştırma sonuçları, oyunlaştırmanın öğrencilerin katılım ve motivasyonunu artırmada etkili olduğunu göstermiştir. Öğrencilerin dil becerilerini geliştirmelerine katkıda bulunmuştur. Ayrıca, öğrenciler oyunlaştırmaya yönelik olumlu tutum sergilemişler ve oyun elementlerini sevmişlerdir.

**Anahtar Kelimeler:** Oyunlaştırma, oyun elementleri, öğrenme başarısı, motivasyon, katılım

## ABSTRACT

Technology is an indispensable part of our lives and it holds interest and attention of young people, who are also called the digital natives, with smart phones, the internet, social media, computer or mobile games. The number of students who spend their after school or even in school hours with playing games is pretty high. The fact that games engage people led to the use of certain game qualities in educational settings with the aim of increasing learner motivation and engagement, thus create an effective learning environment and this process is named as gamification. The aim of this study is to identify the effects of gamification on the enhancement of students' English learning achievement and find out the attitudes of the learners toward gamification and game elements (points, rewards, ranks, avatars, leaderboards...) With this aim, a gamification design was developed with the ClassDojo app. The study involved 104 9<sup>th</sup> grade participants from an Anatolian High School in Ankara and data were collected firstly through questionnaires. Afterwards, a semi-structured interview was conducted with 11 participants. The results yield that gamification was effective in increasing the participation and motivation of the participants. It contributed to the development of language skills. In addition, the students developed a positive attitude toward gamification and they enjoyed the game elements in general.

**Keywords:** Gamification, game elements, learning achievement, motivation, engagement.



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## LIST OF ABBREVIATIONS

EFL : English as a Foreign Language

CD : ClassDojo



## INTRODUCTION

Language learning is a rigorous process that requires significant amount of effort by the learners. On this path, they often encounter difficulties, which sometimes easily discourage them. For that reason, over the years different methods and techniques have been developed to motivate learners, create a more enjoyable learning environment, and increase learner engagement in order to reach desired learning outcomes. Integration of technology and social networks into English classes has been among these efforts and a need of the time.

Today, technology is indispensable in lives of all ages, from young to elders. We fulfil a considerable number of our daily tasks using computers, laptops, smart phones and etc.; however, we use these facilities for entertainment as well. For instance, there is an increasing fondness for computer or mobile games among young people. Game players spend a great amount of time with the intention of “developing their problem-solving skills within the context of games (Gee, 2008, cited in Lee & Hammer, 2011: 1). Seeing this fondness, game producers can devote seven years to design a game and employ 2000 developers in this process. This is the group who created the stellar “Red Dead Redemption 2”, launched on October 26, 2018, the game sold \$725 million worldwide in its first three days, achieved biggest opening weekend in all entertainment releases and sold more in 8 days than its predecessor did in 8 years (Palumbo, 2018). Likewise, another creation of the same company “Grand Theft Auto 5” brought in \$1 billion in its first three days when it launched on Sept. 17, 2013.

Turkish game designers also attempt to distinguish themselves in the game field. Being among the 10 most played games worldwide, Zula is played in more than 100 countries in eleven different languages and it continues to grow rapidly internationally. (Küçük bir odadan dünyaya, 2018). There is a great amount of investment on games. Players pay a good amount of money to buy games. They also buy and sell their own accounts; they even pay for additional equipment, such as knives, swords or shields that will make them stronger in the game.

Above mentioned success of the game industry has inspired gamification of the other fields. Game aspects that attract the players have been utilized in different sectors ranging from business, banking, medicine, and army for the purpose of boosting efficacies. This kind of an entertainment has captured the special attention of education researchers as well. Such implementation of game aspects is named as gamification, which has been defined as “the use of game design elements in

non-game contexts” (Deterding et al., 2011:1) and also as “using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems” (Kapp, 2012:10). The use of technological devices demands high amount of interactivity, and so do the learners today, who placed technology in the centre of their lives (Johnson, 2012), Considering the fact that the ideal language learning context for today’s students consists of technological devices such as smart boards, mobile phones, computers and etc., the orientation to a gamified learning is in line with their mode of learning. Their fondness on games can be utilized for language learning as they constitute a great number of game players today. Integration of game elements such as points, badges, avatars, rewards and etc. into L2 learning has been considered to motivate and engage learners more actively by giving them a chance “to enhance [...] language learning experience and at the same time acquire the skill to solve any task or challenge the class, the unit, or the topic presents” (Flores, 2015:43).



## **CHAPTER ONE**

### **1. FRAMEWORK OF THE STUDY**

#### **1.1. Background of the Study**

Gamification, which is the use of game qualities such as game elements and game techniques in a different context with the purpose of actively engaging people in a specific area (Werbach and Hunter, 2012), has been used in many different areas, including business, army, in-service training, education and so on. In education, it has been a trendy research area since the eighties (Surendelegat al., 2014). Different studies have dealt with the relationship between gamification and education from various perspectives. Learner motivation has been one of the issues discussed widely in relation to gamification. Although it has been dismissed by other learning theories due to its considering only observable and measurable things, ignoring internal factors such as feelings or thoughts as well as failing to explain various facts about language acquisition of young children; Slota (2014) touches upon the behaviouristic aspect of gamification; as in gamified learning student behaviours are generally reinforced with points, badges, scores or rewards (as cited in Israel, 2017:4). According to Werbach and Hunter (2012) either it is extrinsic or intrinsic; motivation through gamification is of great significance. Additionally, Kapp (2014) reveals that intrinsic and extrinsic motivation must co-exist in a gamified design; hence, it is more likely to ensure productive learning outcomes.

Each gamified design uses different game elements such as badges, scores, quests, levels, which are indicated in various studies. Thiebes et al. (2014) and Flores (2015) call attention to game elements used in gamification focusing on learner motivation. On the other hand, a group of studies discuss game elements with a focus on their impact on the learners. Research results reveal that engagement and enjoyment are more frequently observed impacts (Barata et al., 2013; Eleftheria et al., 2013; de Freitas & de Freitas, 2013), which are followed by sense of achievement and participation (Goehle, 2013; Gibson et al., 2013).

In relation to the use of gamification in language learning, Rego (2015:13) notes that “learner mobility and mobile devices can promote a more engaging and meaningful language learning experience”. Furthermore, games generally present the player with new challenges. The player needs to fulfil some quests to move forward, get higher badges and rewards. Likewise, when these elements are implemented into language learning, the learner will be faced with new challenges and be more engaged. Fogg (2002:89) refers to these challenges as “trigger”, which pushes the

learner to accomplish certain tasks. This may result in a fundamental change in the way that students approach foreign language learning: a switch to using the language from learning it.

A great deal of language learners today belong to a generation, whom Prensky (2001) refers to as “digital natives” and Tapscott (1998) names as “the Net Generation” they have spent their whole lives with mobile phones, computers, games, the internet, Facebook; thus they are ““native speakers” of the digital language of computers, video games and the Internet” (Prensky, 2001:1). As a consequence, “today’s students think and process information fundamentally differently from their predecessors” (Prensky, 2001:1). The book-based learning with heavy grammar drills and gap-fill activities does not meet language learners’ needs or fails to stir up their interest. They are digital natives, who can get bored easily in a traditional classroom. Many of them do not take notes in class, take a photo of the board and send a WhatsApp message to the class’s group.

As Ahmed (2015:6) points out students’ attitude towards the language can “nurture or hinder the learning process effectively”. Having negative attitude can result in demotivation and eventually the learners give up, however if they have positive attitude, the learning process forwards more effectively and results in success (Genç & Aydın, 2017). For the sake of an effective learning and teaching process, taking into account any aspect that has a positive impact on the motivation and success of the learners seem quite reasonable. Based on this notion, this study aims at presenting the potential benefits of gamification and reveal to what extent and how it is influential on high school EFL learners.

## **1.2. Statement of the Problem**

Many teachers of English encounter with student-related issues in their professional lives. The good aspects of students feed their motivation. On the other hand, students’ being unwilling to participate, lack of motivation to learn and low English proficiency pose “challenges to their motivation to develop professionally” (Korkmazgil, 2015:144).

It is a widely known fact in Turkey that English proficiency of most speakers is not at a desired level. Despite the fact that Turkish students start learning English at primary school, majority of them cannot speak English proficiently when they finish high school or university. The low English proficiency of Turkish speakers has been indicated in Education First English Proficiency Index (EPI) as well. Among the 88 countries in the world, Turkey is the 73<sup>rd</sup> with very low English proficiency (2018). There have been continuous attempts by Ministry of National Education for advancement in the education system for the sake of an improvement in English learning such as adaptation of the communicative language teaching, which, according to the research results, failed in practice as the teachers’ classroom practices kept being carried out with traditional teaching methods (Kırkgöz, 2009). Furthermore, there have been other changes in



English curriculum so as to standardize English language teaching and meet the European Union standards (Kırkgöz, 2009). Beginning English instruction at 2<sup>nd</sup> grade rather than 4<sup>th</sup> grade as practiced before has been another attempt that is still in practice today.

In addition to the educational reforms by the authorities, taking into account the student dependent issues is of great essence. As reported by Fakeye (2010), the relationship between language performance and attitude is considerably important. In a study conducted by Karahan (2007) with 8<sup>th</sup> grade Turkish students, although the majority of the participants agree that English is of vital importance, they find it not pertinent to the Turkish culture and hence; not interesting. In another study by Durer and Sayar (2012), research results yield that students get too anxious when they speak English in class. Games or play-like activities have been implemented into education for several reasons and maintaining a more comfortable learning context to drive away anxiety of the learners has been among these; because “when confronted with obstacles, people may feel depressed, overwhelmed, frustrated or cynical; feelings that are not present in the gaming environment” (Huang and Soman, 2013: 6).

Prensky (2001:1) notes that “today’s students are no longer the people our educational system was designed to teach”. There is a tremendous gap between students of today and the past. In pursuance of meeting the needs of the “digital natives”, there has occurred a transfer from traditional teaching and learning methods as they are considered boring and ineffective by the students, which led teachers to look for innovative ways to motivate their students, they find it difficult to connect in a meaningful way.

According to the research results, teachers confirm that students get more engaged in assignments that they needed to use technology (Wang et al., 2014). Based on the engagement theory of Austin (1984:519) that “the effectiveness of any educational practice is directly related to the ability of that practice to increase student engagement” and taking into consideration the suggestions of Boyle et al. (2011:72) that learning is most effective when it “is active, experiential, situated, problem-based and provides immediate feedback”, this study aims to increase the involvement of students and consequently improve their language performance using the aforementioned prompts.

In addition, considering the fact that English is the contact language worldwide and the teaching and learning of English is crucial for almost all countries and the Ministry of National Education has been exerting successive efforts to that end, it is necessary to carry out research to find out if gamification can improve the proficiency of the high school English learners, their perceptions on English learning and if it promotes motivation or not.

### **1.3. Purpose of the Study and Research Questions**

This study aims to seek the potential effects of a gamified English learning process on high school students and find out whether gamification improves motivation. All in all, this study aims to answer three major, four minor questions as;

1. How does the use of gamification function in language teaching and learning?
  - 1.1. Does gamification have an influence on learner motivation?
  - 1.2. What effects does gamification have on the enhancement of language learning?
  - 1.3. What effects does gamification have on student performance?
2. What are the perceptions of students on the game elements?
  - 2.1. Which game elements and mechanisms of gamification attract the students more?
  - 2.2. Which game elements improve learner satisfaction (avatars, leader boards, points, level-ups)? Why?
3. What are the attitudes of language learners towards the use of gamification in EFL learning?

### **1.4. Significance of the Study**

It is fair to say that a great number of studies are unanimous about the benefits of gamified learning. On the other hand, Surendeleg et al. (2014:1611) in their own literature review on gamification observe that most of the studies on gamification “use qualitative analysis which explains gamification from a theoretical perspective”. Additionally, the relevant literature is mostly about the effects of gamification on education in general, not particularly on language teaching and learning and research on the attitudes of learners towards gamification is limited; whereas, this study may contribute to existing research on gamification in English learning in particular and seek the attitudes of learners towards this new trend. Research results may yield worthwhile information on the potential benefits of gamification, provide curriculum planners insight into how to blend gamification elements into the curricula and assist teachers looking for different ways to include their students more into the learning process and lead to their active participation. It may also encourage the teachers, not very keen on using technology in their class, to adapt it as an effective teaching strategy that will benefit the students.

The fact that games are highly appealing to students may bring about an increase in their level of interaction and eventually lead to development of a positive attitude towards language learning.

There exist digital versions of many English coursebooks. The research results may lead the material designers to prepare these additions in a gamified form. Additionally, in order to increase motivation and provide a self-directed learning, the policy makers of online learning softwares such

as Dyned, FluentIQ, Transparent Language and etc. may develop the content including certain gamification principles.

### **1.5. Limitations and Suggestions for Further Research**

The current study was carried out with utmost treatment, it nonetheless bears some limitations. The first limitation is related to the sample size. The study was carried out in one school in Ankara. A study with a wider sample size from different public and private schools could have yielded different results or may have made the generalizations of this research be established on stronger grounds. Secondly, the study may have suffered from the possibility of data-collector bias, especially during the interviews as the person carrying out the experimental process also collected the data. If they were different people, there could have been changes in the conditions of data collection. In addition to that, getting longitudinal data through learning journals or diaries could have been useful as the emotional state of the participants at the time of interviews and questionnaires may have influenced their replies. Furthermore, the findings regarding the contribution of CD on the language learning process of the participants and its effects on the enhancement of their English were derived from their replies; however pre-post tests could also have been employed to reach more consistent and reliable data.

Considering the findings and outcomes of the present study, some suggestions can be made for further research. For instance, the current study utilized questionnaires and interviews as the data collecting tools. Further research may be conducted with other tools as well so as to increase the validity and reliability of the research. In addition, this study sought for the views of the students, and the perceptions of the English teachers on gamified English teaching process may be explored in further studies. Furthermore, in connection with a limitation of this research, a further study could be conducted with a larger sample size to gather richer data. Lastly, pre and post tests may be utilized to gauge student learning and find out whether there is a significant amount of difference in academic achievement of the participants in further studies.

### **1.6. Outline of the Study**

The current study consists of four chapters. The first chapter presents the framework of the study by stating the problem, giving background information about the study and indicating the significance of studying this subject. In addition, it includes the purpose of the study with the research questions, which are answered with the help of quantitative and qualitative data collection tools. The limitations of the study and suggestions for further research are also explained in this chapter.

The second chapter is designated for presenting a review of the literature, which gives information about the subject with a reference to studies undertaken before. It introduces the

concept of gamification, explains motivation and continues with laying the theoretical foundations of the study by referring to the motivational theories and motivation. Lastly, the chapter gives the use of gamification, particularly in language teaching with a reference to the previous studies.

The third chapter lays the methodology used in the study. It provides information about the research design of the study, the participants, the setting, data collection tools and the process of data analysis.

In the fourth chapter, analyses of the data are given with a discussion of the findings. At the end of the chapter, some conclusions are drawn based on the findings from the data and final comments are presented. The study concludes with several pedagogical implications.



## **CHAPTER TWO**

### **2. REVIEW OF THE LITERATURE**

#### **2.1. Introduction**

This chapter initially presents an overview of the concept of games with a following review on categorisation of game interventions in educational contexts. Later, the focus is directed to the literature on attempts of defining gamification and elements of gamification in general. As a next step, it lays out an analysis of the relationship between gamification and motivation with regard to motivational theories. Later, it attempts to compile and present the previous research on gamification in education. The section concludes with a review on use of gamification in language teaching and learning in particular.

#### **2.2. Categories of Gaming in Education**

Juul (2005:6) defines games as “a rule-based formal system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels attached to the outcome, and the consequences of the activity are optional and negotiable” and in a more simplified form Salen and Zimmerman (2004:11) say that game is “a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome”. Contrary to games, plays denote free activities that are not grounded on certain rules (Groh, 2012).

Although it is not very much related to the current study, it would be beneficial to keep in mind that besides the entertaining feature of the games, there are certain aspects that bring about concerns. The fact that games require a high investment of time due to the need of an effort to reach the goals and come up with a solution to the conflicts in the games, leads to addiction to games, which is a matter of concern throughout the world today. In addition, people who play video games excessively turn out to have difficulty in socializing with their peers (Zastrow, 2017). In addition, video game addiction is associated with certain problems such as depression, attention deficit or disorder, hyperactivity disorder and obsessive-compulsive disorder (Kuss & Griffiths, 2012). Gaming disorder was also acknowledged by the World Health Organization for the first time in 2018, in the 11th Revision of the International Classification of Diseases. The disorder is characterized as “impaired control over gaming, increasing priority given to gaming over other

activities to the extent that gaming takes precedence over other interests and daily activities, and continuation or escalation of gaming despite the occurrence of negative consequences” (“Gaming Disorder” 2018). Games are also reported to cause an increase in the suicide rate of many teenagers. For instance the challenges in the games Momo and Blue Whale are linked to the death of hundreds of children (Chilling Challenge, 20.02.2018). Taking into account the adverse effects of games, it would be beneficial to be selective about the games and have a control of the time spent with games.

Lastly, gamification is connected with the rule-based, goal-oriented nature of games (Deterding et al., 2011). The concept of game is included in educational settings in various ways; thus it would be better to have a brief look at these game interventions so as to develop an idea on what gamification shares in common with these methods or how it differs from other ways of game integrations for the purpose of enhancing learning.

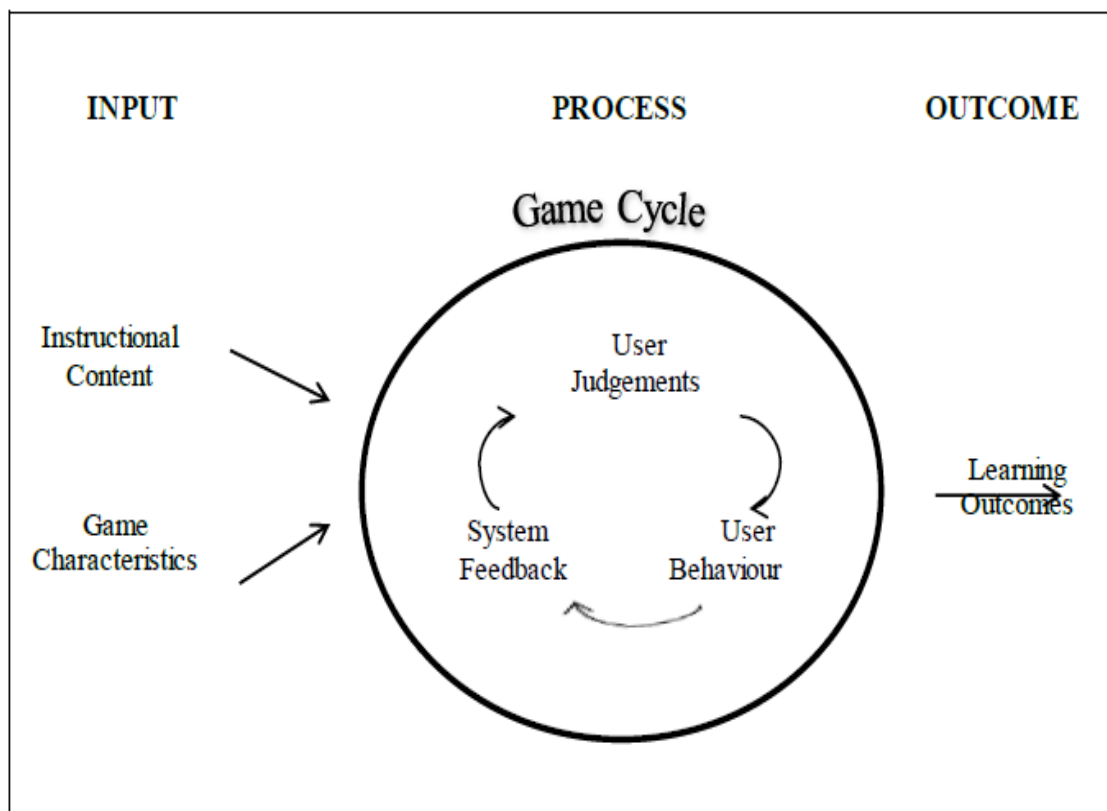
### **2.2.1. Game-Based Learning**

Game-based learning is a type of learning that makes use of games to contribute to the educational purposes and processes (Michael & Chen, 2006). Poulsen (2011:20) points out that game-based learning is concerned in promoting learning, not the game itself and describes this process as “the act of appropriating games or game mechanics, recreating the scenario-based, problem-oriented learning processes found in games in order to fulfil specific learning purposes. Game-based learning necessitates the integration of learning and the game, in other words, one needs to master the learning goals behind the game so as to succeed in the game as well. According to Malone (1981) there are four characteristics of games that make them engaging educational tools: challenge, fantasy, complexity, and control. Tang et al. (2009:3) proposes some characteristics of game-based learning as:

- motivating and engaging but not necessary entertaining;
- requires participation from learners;
- has clear learning objectives defined in the game-play and scenarios presented while knowledge can be imparted through storytelling and narrative;
- scenarios defined are reflective and transferable to the real-world experience;
- provides freedom to interact in the game world through a set of defined actions;
- provides clearly defined feedback for every action taken;
- both assessment and lesson can take place during game-play;
- matches learner’s pace and intellectual ability;
- highly scalable so can be used for educating large numbers of learners concurrently.

Garris et al. (2011) present an input-process- output model of game-based learning. According to this model, the first process is designing an instructional program that makes use of specific features of games. Secondly, these game features stimulate a cycle that comprises user reactions such as enjoyment, interest, behaviours such as persistence, spending time on task or feedback. If the design blending instructional content with the game is successful, the learner is accepted as having self-determined motivation and engagement in play results in accessing the achievement of learning outcomes as seen in Figure 1.

**Figure 1: Input-process-output Model of Game-based Learning**



**Source:** Garris et al., 2002:445

### 2.2.2. Simulations

A simulation is “a realistic, controlled-risk environment where learners can practice behaviours and experience the impacts of decisions” (Kapp, 2014, ch.3). Simulations are designed to imitate real life activities and they provide the learners with opportunities to practise for situations they may come across in the context of their jobs; for instance doing surgery or other medical treatments and landing an airplane. Simulations share some aspects with games; both are competitive and goal-oriented and they have storytelling. They differ in some features; for instance simulations are realistic, however games include fancy elements. Unlike games, storytelling in simulations is realistic. Simulations do not provide every kind of learning and it is most fruitful as

application of learning. The learners obtain knowledge and apply that knowledge and use simulation to practise. By providing the learners with a context, application, practice in a low-risk environment to assure confidence and examples of results by doing right or wrong, simulations bridge the Learn- Do gap (Kapp, 2014).

### **2.2.3. Serious Games**

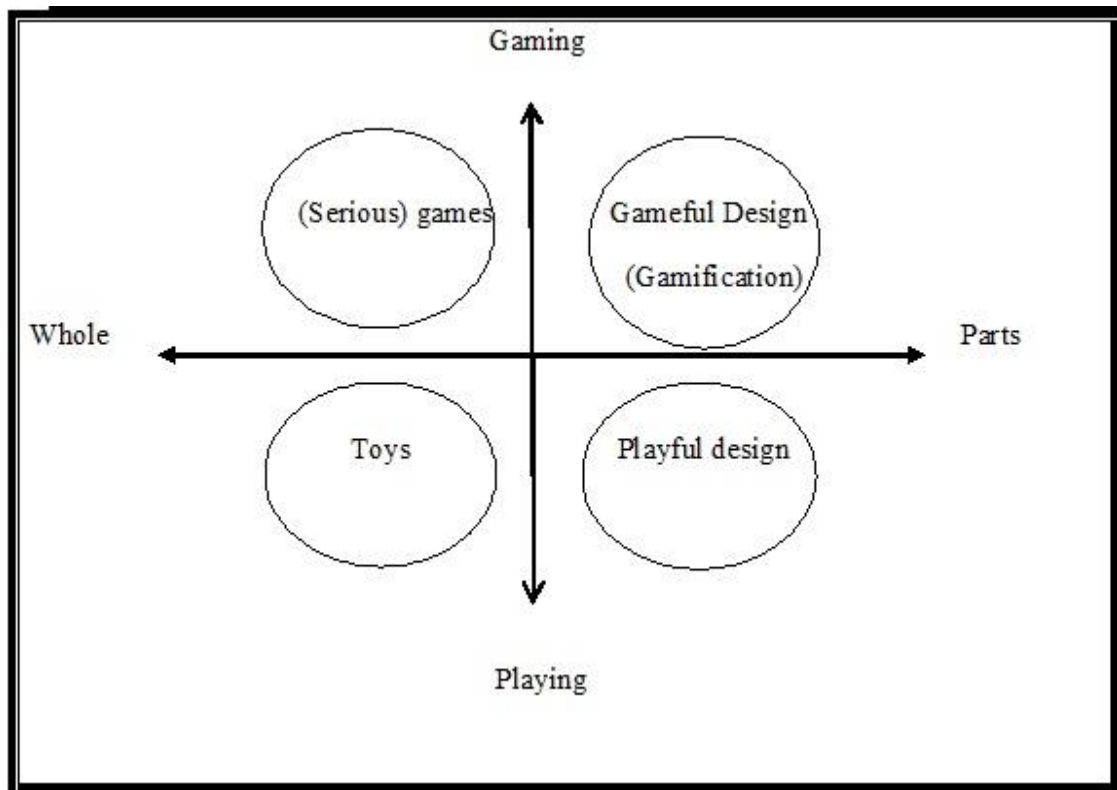
Serious games are designs of games that serve to a specific objective beyond entertainment (Deterding et al., 2011; Peng et al., 2010; Kapp, 2014). They do not need to be fun (Deterding et al., 2011). In accordance with Deterding et al., Clark Abt, who is credited for coining the term “serious games” gives a clear explanation of the term as follows:

Games may be played seriously or casually. We are concerned with serious games in the sense that these games have an explicit and carefully thought-out educational purpose and are not intended to be played primarily for amusement. This does not mean that serious games are not, or should not be entertaining (Abt, 1987, cited in: Michael & Chen, 2006: 21).

Serious games are used in various fields such as medical education and surgical skills training (Graafland et al., 2012). Serious games are also designed to change behaviour and reinforce attitude rather than to teach, and some of them have a persuasive function such as discouraging smoking or encouraging recycling (Boyle, Connell & Hainey, 2011). Different from serious games, gamified applications contain only certain aspects specific to games. Deterding et al. (2011) formulated an infographic (see Figure 2.) illustrating the difference between designing a full game and utilizing only some of the game elements in other contexts.



**Figure 2: Serious Games and Other Learning Designs**



**Source:** Adopted from Deterding et al. (2011:13)

Unlike Deterding et al. (2011), Kapp (2012:18) argues that serious games are a sub-set of the concept of gamification and puts forward that:

Gamification encompasses the idea of adding game elements, game thinking, and game mechanics to learning content. The goal of gamification is to take content that is typically presented as a lecture or an e-learning course and add game-based elements (story, challenge, feedback, rewards, etc.) and create a gamified learning opportunity either in the form of a full-fledged educational game [...] or in the form of an engaging classroom experience wherein the learners participate in a story-based challenge to master the content presented.

## **2.3. Gamification**

### **2.3.1. Definition**

Although “gamification” as a term was coined by the British game developer, Nick Pelling, in 2003, it was not before 2010 that the term was commonly used (Werbach and Hunter, 2012). Since then, different definitions of the term have been composed. It can be clearly comprehensible from these definitions that the essence of gamification is making use of game elements in a non-game context. Werbach and Hunter (2012:26) define gamification as “the use of game elements and game-design techniques in non-game contexts and Lee and Hammer (2011:1) define it as “the

use of game mechanics, dynamics, and frameworks to promote desired behaviours”. A similar definition was coined by Zichermann & Cunningham (2011) as the course of game thinking and game mechanics for the purpose of actively involving people and solving problems. On the other hand, Kapp (2012:10) offers the broadest definition of the term as “using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning and solve problems”. As seen with these definitions, the primary ambition of gamification is motivating individuals and increasing engagement.

Kapp (2012) distinguishes “game thinking” in his definition as the most significant element of gamification, because the idea of thinking about an everyday activity as a game and including the elements of cooperation, competition, challenge, exploration and problem solving provides enthusiasm and willingness for involvement.

Simões et al. (2013) and Domínguez et al. (2013) are a few of the researchers who call attention to the aspect of gamification that it helps increase user or learner engagement. Since people are presumed to be more engaged and tempted to yield better results (Kim, 2012) and they give powerful emotional responses like awe, wonder, curiosity, frustration and cheer when they play games (McGonigal, 2011) gamified applications are being employed in many different fields today.

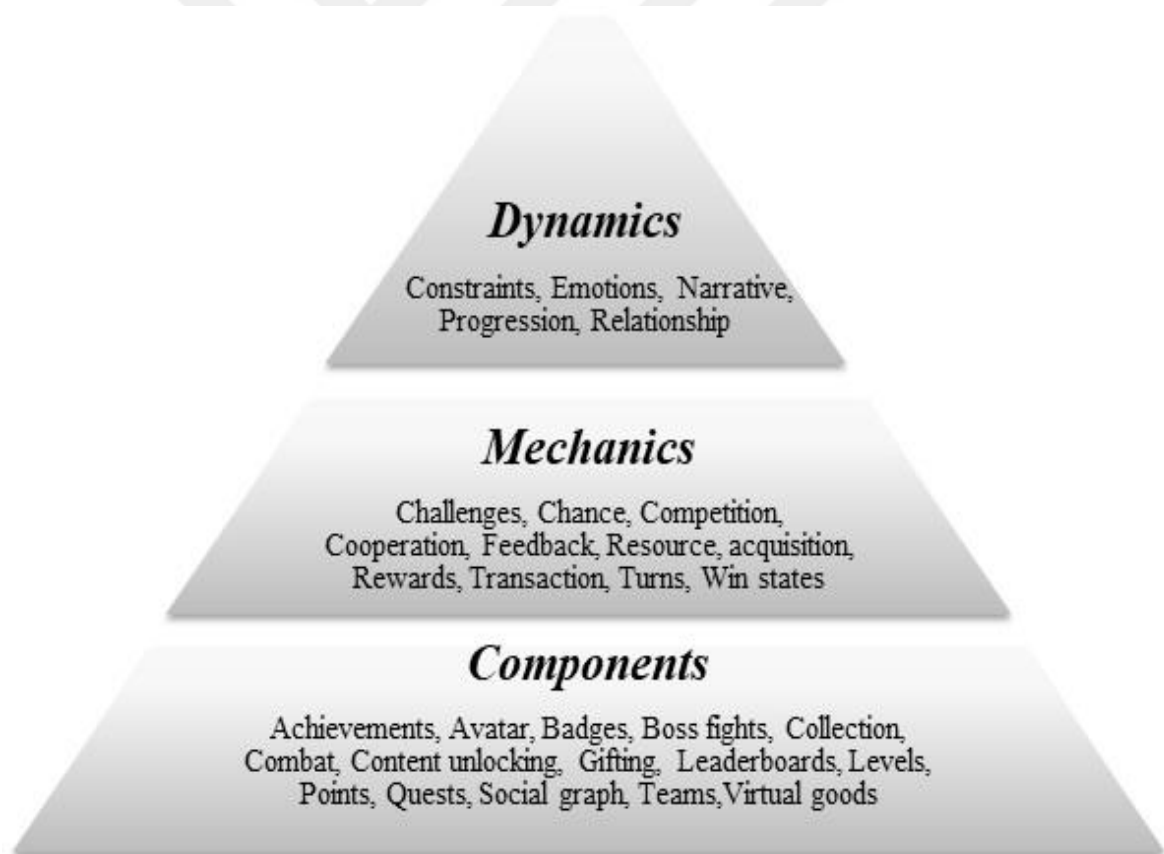
Another characteristic of gamification that is influential in the gamification design is challenge (Sailer, et al., 2016) and so as to provide motivation of the individuals, challenge needs to be not too hard or too easy to perform (Kapp, 2012) .

### **2.3.2. Game Design Elements**

Gamification includes some aspects specific to games. These game elements are the qualities that make games popular and worthy of paying great sums of money to possess. Reeves and Read (2009) diagnosed the “Ten Ingredients of the Great Games” as self-representation with avatars; three-dimensional environments; narrative context; feedback; reputations, ranks, and levels; marketplaces and economies; competition under rules that are explicit and enforced; teams; parallel communication systems that can be easily configured; time pressure” (as cited in Deterding et al., 2011: 11). These game elements are the building blocks of gamification applications as well (Deterding et al., 2011; Werbach & Hunter, 2012). Depending on the context, gamification design is included with some of these game elements in order to improve performance, productivity or meet certain psychological needs. Each of them is described to be serving to specific purposes. For instance, research results suggest that “badges, leaderboards, and performance graphs positively affect competence need satisfaction, as well as perceived task meaningfulness while avatars, meaningful stories, and teammates affect experiences of social relatedness” (Sailer et al. 2017: 371). In another study (O'Donovan et al., 2013), research results yield that the most effective game

elements in an educational setting are badges, progress bars, leaderboards, a storyline and a visual. Lots of authors, interested in gamification, have compiled lists of frequently used game design elements (Werbach & Hunter, 2012; Zichermann & Cunningham, 2011; Sillaots, 2014; Deterding, et al., 2011; Sailer et al, 2017; Zichermann and Linder, 2013) and some of them specifically focus on game elements with regard to motivation (Sailer, Hense, Mandl, & Klevers, 2013; Antin & Churchill, 2011; O'Donovan, Gain & Marais, 2013). Werbach and Hunter (2012) categorize game elements that are related to gamification in three groups in a decreasing order of abstraction: dynamics, mechanics, and components. *Dynamics* constitute the highest level of abstraction in a gamified design and they are not directly included into the system, *mechanics* are the processes that foster user or learner engagement and *components* are the specific representations of the mechanics and dynamics. In their pyramid, each mechanic is tied to one or more dynamics and each component is tied to one or more mechanics or dynamics. It is impossible to include all of the elements in a gamification design, not even all the items in a category (see Figure 3).

**Figure 3: Pyramid / Hierarchy of Game Elements**



**Source:** Werbach & Hunter (2012)

Here we discuss the most frequently referred and used elements and their effects on the gamification design as follows:

### 2.3.2.1. Points

Points are the main elements in most of the games and gamification designs. They are collected and rewarded for completing certain activities or overcoming some specific tasks (Werbach & Hunter, 2012). It seems that points are important for providing feedback. Sailer et al. (2013) also argue that points mostly address behaviourist learning approach. For instance, they serve as positive reinforcement or rewards. Zichermann and Linder (2013) also indicate that points address our inherent desire to keep score and share feedback and they are significant in a gamified design for shaping behaviours. The authors also mention five different kinds of points based on their functions: *XP* (Experience points), *Redeemable* (currency points that one can earn and redeem), *Reputation* (points that contribute to establishing reputation), *Skills* (indicate ability in a specific area); *Karma* (points that are earned for helping others and they are nonredeemable). In essence, all gamified systems begin with an XP point system as the authors mention.

### 2.3.2.2. Badges

*Badges* and *achievements* are sometimes used interchangeably. Badge is defined as “a visual representation of some achievement within the gamified process (Werbach & Hunter, 2012:74). Badges are considered to be effective, because the prospect of winning a badge motivates users to work toward their goals (O’Donovan, Gain and Marais, 2013). In addition, Antin and Churchill (2011) put forward five motivational aspects of badges:

1. **Goal Setting:** Badges function as a goal setting device. They challenge players or learners to reach the target that is set for them. They are more useful and influential if the target is not too easily accomplishable. Additionally, goal setting is effective as users or learners can see their progress towards the goal and they intensify their efforts when they see themselves closer to the goal.
2. **Instruction:** Badges provide instruction about the types of activities within the system. This function is beneficial for teaching the inexperienced users and helping the experienced ones for diversifying their participation.
3. **Reputation:** Badges are the virtual markers of reputation. They allow users to show others their interests, expertise, past interactions and what they are able to. They are also functional to decide on the reliability of the other people or the content”.
4. **Status / Affirmation:** Badges are motivating as status symbols. They let others learn about one’s achievements and expose previous accomplishments. In addition, by reminding of past achievements they provide personal affirmation.

5. **Group Identification:** Users who have the same badge experience a sense of belonging as they undergo the same or similar procedures with the people in the same group. Increased group identification is significant for promoting increased cooperation in collaborative situations.

#### **2.3.2.3. Leaderboards**

Leaderboards allow users to see their achievement compared to other users or learners in a gamified environment. They determine the best performer in a certain activity (Crumlish & Malone, 2009). They also rank players according to their success based on some criteria (Costa et al., 2013). Werbach and Hunter (2012) assert that leaderboards may push the learners to move forward if there are a few points to the next level, on the other hand, they may be demotivating if someone is at the bottom end of the leaderboard. Competition, stemming from leaderboards may lead to social pressure, which promotes engagement, participation and eventually learning (Burguillo, 2010). This is proved in another study by Costa et al (2013). Research results show that leaderboards improved the punctuality of some participants as well as creating competitiveness and fostering social behaviours like comparison. In another study by O'Donovan, et al. (2013), leaderboards are found to be the most motivating element in a gamification design consisting of points, ranks, progress bars, the end prize and badges as game elements.

#### **2.3.2.4. Performance Graphs and Progress Bars**

They show the progress of individual players. Progress bars represent progression towards a goal, while performance graphs compare past and present individual scores (Sailer et al., 2013). Each of them is significant for providing feedback. Unlike the leaderboards, performance graphs and progress bars do not compare an individual to others; rather it shows one's present and previous performance.

#### **2.3.2.5. Avatars**

Avatar is visual representation of a player in form of a character, which may undergo different developmental stages (Werbach and Hunter, 2012). Avatars may be chosen or they may be created by the player or the learner (Kapp, 2012). Authors and researchers analysing the use of avatars in games or educational context highlight their function as triggers of feelings of identity and feelings of belonging to a community (Annetta and Holmes, 2006; Sailer et al., 2013; Rourke et al., 1999; Annetta, 2010). Choosing among offered avatars, which are leading to different forms of gameplay may promote the sense of autonomy. They permit the player to create another identity. In addition, maintaining development progress with the avatar can generate positive feelings and emotional bonds. (Sailer et al., 2013). In the same vein, Rourke et al. (1999) also report that

avatars have the potential for building and sustaining group commitment through expressions of feelings like using a person's name and referring to the group as "we". In their study, Annetta and Holmes (2006) observed that students who had the right to choose which avatar they wanted to be felt higher course satisfaction compared to students who could choose only a male or a female avatar. Additionally, identifying oneself with the community increased social presence of the individual.

#### **2.3.2.6. Quests, Levels and Rewards**

Werbach and Hunter (2012) define quests as challenges with objectives and rewards. They are efficacious in a game design for setting clear goals, making the resulting consequence of a goal prominent and stressing the significance of a player's actions (Sailer et al, 2013).

Levels show the progress of the users and provide them with a sense of accomplishment. They are indicated with numbers or values like bronze, silver or gold (Zichermann & Linder, 2013). They also "serve as a marker for players to know where they stand in a gaming experience over time" (Zichermann and Cunningham, 2011: 45).

Rewards show the success of the player and they are employed to increase motivation. According to Zichermann and Cunningham (2011), rewards may be in forms of points, status, virtual currency, access to a superior content or features, (virtual) goods and power. In order to develop a successful gamification design, one have to include rewards and feedback, additionally not only success but also the effort need be rewarded (Raymer, 2011).

To sum up, these game elements are the most commonly used ones to gamify education. Some of them are found to be considerably invaluable while some are disfavoured. According to Kapp (2012), points, badges and rewards are the least beneficial and exciting elements of games and gamification should be constructed based on some other elements of games such as problem solving, engagement, storytelling or visualization of the individuals; hence, the desired effectiveness of game-thinking can be maintained. Each of the game elements serves different purposes, for that reason including any or all of the elements for the purpose of gamification does not make sense. It is of utmost importance to ensure that the elements included into a gamified design meet the demands of that particular content (Werbach & Hunter, 2012).

#### **2.4. Motivation**

Researchers in various fields, ranging from education, psychology, sociology, to business and so on have defined the concept of motivation for years. In Ryan and Deci's (2000: 54) own words "to be motivated means *to be moved* to do something". In a broader sense, Dörnyei and Ottó (1998: 64) define motivation as follows:

In a general sense, motivation can be defined as the dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and values the cognitive and motor processes whereby initial wishes and desires are selected, prioritised, operationalised and (successfully or unsuccessfully) acted out.

Common aspects that most authors agree on motivation are that *it is an internal state* (Ryan and Deci, 2000; Kleinginna and Kleinginna, 1981) *a driving force* (Gardner, 2010; Dörnyei and Ushioda, 2011;) and it is *goal-oriented* (Lawler, 1973; Denhardt et al., 2008). According to Ryan and Deci (2000), the motivation degree and orientation or the type of motivation differs from person to person. In a similar manner, Covington (2000) mentions the emergence of two different perspectives on motivation: The first or earlier perspective viewed motivation as an internal state, a need or a condition that pushes individuals to act. Later, that perspective was considered to be limited for predicating human behaviours on just physiological grounds and psychological motives such as the needs for social approval, power, and achievement were considered significant to understand motivation.

Maehr & Meyer (1997) refer to motivation as “personal investment”, which may be observed in the direction, intensity, persistence and quality of the actions taken and the affects displayed. In a similar manner, Campbell and Pritchard (1976) remark that motivation is “a label for the determinants of the choice to initiate effort on a certain task, the choice to expend a certain amount of effort, and the choice to persist in expending effort over a period of time” (cited in Roos and Van Eeden, 2008: 55).

As seen in various definitions of motivation, it has the potential to push someone to act in order to reach a goal. The more motivated a person, the higher is the effort he/she puts into an action and the higher is the persistence. In this respect, Gardner and MacIntyre (1993) assert three components of motivation: willingness to achieve a goal, effort dedicated in this direction and contentment with the activities or tasks related to this goal. Gardner (2007) also puts forward that a motivated person is attentive, goal-oriented, tenacious, self-confident and stimulated. As can be seen from the definitions, a motivated individual has desires and expectancies. Bringing together the common points in the definitions above Dörnyei and Ushioda (2011: 4) summarize the concept of motivation as:

- the *choice* of a particular action,
- the *persistence* with it,
- the *effort* expended on it.

In other words, motivation is responsible for

- *why* people decide to do something,
- *how long* they are willing to sustain the activity,
- *how hard* they are going to pursue it.

### **2.4.1. Types of Motivation**

A great many theories of motivation are concerned about the quantity of motivation, one that is high or low; however some of them focus also on the type or orientation of it, besides its degree. The orientation or the type of motivation is concerned with the manners and goals that lie behind people's actions, such as curiosity, interest, getting higher grades or approval (Ryan & Deci, 2000). With the aim of understanding what leads a person to behave in a specific way and finding out whether an action stems from intrinsic forces or environmental factors, researchers developed self-determination theory and based on this theory divided human motivation into three categories as *amotivation*, *intrinsic motivation* and *extrinsic motivation*. They defined *amotivation* as the state that one has no intention to act, in other words it is lack of motivation. *Intrinsic* and *extrinsic motivations* are going to be explained in detail in following sections.

#### **2.4.1.1. Intrinsic Motivation**

Human behaviours were initially explained through drive theories, which were later found to be not satisfactory to examine *the complexities of behaviour* and the normal developmental patterns; for instance, behaviours that did not require reinforcement could not be explained with the behaviouristic stimuli-response relation (Deci & Ryan, 1985: 4). Drive theories' lack of encompassing whole dimensions of behaviours led to the emergence of intrinsic motivation, which is "the motivation to engage in work primarily for its own sake, because the work itself is interesting, engaging, or in some way satisfying" (Amabile et al., 1994: 950). In a similar way, Ryan and Deci (2000: 56) describe intrinsic motivation as "the doing of an activity for its inherent satisfactions rather than for some separable consequence". In other words, an intrinsically motivated person is engaged in an activity for its own sake and for the joy, challenge and fun involved in it rather than for extrinsic rewards or for refraining from punishment. There are no external rewards; on the contrary the joy that the individual experiences throughout the activity or the process is regarded as a reward. According to Deci and Ryan (1985: 32-33) intrinsic motivation is "based in the organismic needs to be competent and self-determining". The authors put forward their view in an explanatory manner as follows:

The intrinsic needs for competence and self-determination motivate an ongoing process of seeking and attempting to conquer optimal challenges. When people are free from the intrusion of drives and emotions, they seek situations that interest them and require the use of their creativity and resourcefulness. They seek challenges that are suited to their competencies that are neither too easy nor too difficult.

In his Academic Motivation Scale, which was developed based on research; Vallerand (1997) comes up with three types of intrinsic motivation:



*Intrinsic motivation to know:* It is the motivation for engaging in an activity for the feelings that emerge through inquiring new ideas and developing knowledge.

*Intrinsic motivation to accomplish:* It is motivation related to the desire to complete a task or achieve goals for the pleasure and satisfaction experienced through accomplishment.

*Intrinsic motivation to stimulate:* It refers to sensations, such as fun and excitement that are provoked by performing an activity. An example statement for each type of motivation is given in Figure 4.

**Figure 4: Academic Motivation Scale**

SAMPLE ITEMS FROM EACH OF THE SEVEN SUBSCALES OF THE GLOBAL MOTIVATION SCALE	
“In general, I do Things . . . ”	
<b>Intrinsic motivation – Knowledge</b>	“ . . . because I like to discover interesting new things.”
<b>Intrinsic motivation – Accomplishment</b>	“ . . . because I like the feeling of being able to master what I do.”
<b>Intrinsic motivation – Stimulation</b>	“ . . . because of the positive stimulation I experience while doing these activities.”
<b>Identified regulation</b>	“ . . . because I choose to do them in order to reach my goals.”
<b>Introjected regulation</b>	“ . . . because I would feel guilty if I did not do them.”
<b>External regulation</b>	“ . . . because I don’t want to let other people down.”
<b>Amotivation</b>	“ . . . although I don’t see what it does for me.”

**Source:** Vallerand (1997: 285)

Malone & Lepper (1987) also came up with four types of intrinsic motivation, which they put forward as *challenge*, *curiosity*, *control* and *fantasy*. With regard to challenge, they point out that, activities that are rather easy or impossibly hard to manage, fail to stir high amount of interest, on the other hand activities with an average level of difficulty arouse the highest amount of interest. In this respect, Malone & Lepper (1987:231) accept goals and uncertain outcome as challenge and suggest that:

Having a goal alone is not enough to make an activity or environment challenging. If one is certain to achieve a goal or certain not to achieve the goal, then the environment will not be

challenging. In fact, some models of motivation specify that motivation will be maximal when uncertainty is maximal.

The authors acknowledge curiosity as the most evident intrinsic motivation for learning. As for control, it would be fair to say that human beings are tempted to have a control over their environment and things they do. Lastly, fantasy is accepted to foster intrinsic motivation for activities such as computer games, reading, drama and etc.

When we relate these four types of intrinsic motivation to gamification, we can say that “fantasy” and the virtual learning environments may function as a motivating factor for learners as in most computer games. Likewise, uncertain outcomes may increase “curiosity” and “function” as a challenge that the learner would want to overcome. Concerning the aspect of “control”, it would be fair to say that control is a motivating element in most computer games and likewise, it would serve as a motivator in gamified learning contexts. Learners who have control of their actions may feel more engaged and gradually feel more competent on what they are doing.

#### **2.4.1.2. Extrinsic Motivation**

Intrinsic motivation is a type of motivation that is of utmost significance, particularly for learning; however, not every activity captures students’ special attention or interest to perform eagerly. In such cases, external motives function for the fulfilment of the demands in life, learning environments or any other areas that one can break into. In situations, where inner willingness for the enjoyment of an activity for its own sake is out of the question, people are extrinsically motivated. Extrinsic motivation is defined as “a construct that pertains whenever an activity is done in order to attain some separable outcome” ( Ryan & Deci, 2000: 60).

Despite some views suggesting that extrinsically motivated behaviour is deprived of autonomy, SDT puts forward that the extent of autonomy through extrinsic motivation differs greatly depending on its degree of internalization (Gagne et al., 2017). In this respect, Deci and Ryan (1985) mention four types of extrinsic motivation in their SDT: *external regulation*, *introjected regulation*, *identification* and *integrated regulation*.

Being the most basic form of extrinsic motivation, *external regulation* is concerned with behaviours in order to reach or refrain from consequences controlled by another. Behaviours are performed for reward or satisfying an external demand. The second type of extrinsic motivation is *introjection*, through which a kind of regulation is internalized and it controls behaviours that are performed under pressure to avoid guilt and anxiety or to maintain self-esteem. It is more persistent than external regulation since there is no need for external integrations for introjected behaviour. With respect to *identification*, it would be fair to say that it is a more autonomous and more self-

determined type of extrinsic motivation. Ascribing value is an important aspect in this type of regulation. A person performs a behaviour based on the value s/he ascribes to the outcome that will be maintained. Regarded as the most autonomous type of extrinsic motivation, *integration* or *integrated regulation* is related to regulations that are completely assimilated to the self. The extrinsically motivated actions of a self get more self-determined and s/he internalizes the reasons for doing an action and adopts them for himself. Integration also includes eliminating an activity by choice (Vallerand, 1997). For instance, a student may prefer not to hang out with friends at the weekend, because that may conflict with his/her attempts to complete an assignment that is due Monday. Integrated motivation is the closest one to intrinsic motivation in that they are both autonomous and unconflicted, however integrated behaviour is still extrinsic as it is done for the instrumental value assigned to the outcome of that behaviour.

Lastly, it would be right to highlight that one does not necessarily proceed through each stage of internalization for a determined regulation. It should be taken into account that one can start an action intrinsically motivated however along the progress may lose motivation and performs just for the instrumental value of it or just because others want him to behave that way. Quite the opposite, a person performing introjected behaviours may change and does some particular activities just for their own sake, so there may be movement between orientations.

#### **2.4.2. Gamification and Motivation**

The concept of motivation is an aspect of utmost significance in education. The former Secretary of Education of USA, Terrel Bell, highlights the point as: “There are three things to remember about education. The first is motivation. The second one is motivation. The third one is motivation” (as cited in Maehr & Meyer 1997: 372). That is why it has been studied in the past, in present and very probably will keep being studied in the future as well. This is because the motivational drives of individuals change overtime and their motives are highly dependent on environmental factors (Deci & Vansteenkiste, 2004). Taking these views into mind, it would be fair to remark that stirring the digital natives of today and sustaining their motivation has been a rigorous task nowadays. In pursuance of reaching the goals in educational settings and to motivate the learners, gamification of the learning content or the procedure has been a newly acknowledged enterprise by educators.

In order to understand what lies behind the tendency towards gamification in educational contexts it would be better to have a look at the motivational theories and their relation to gamification.

### **2.4.2.1. Motivational Theories and Gamification**

Motivation theory deals with two components of behaviour, which are *energy* and *direction*. *Energy* is related to the inborn needs of individuals in addition to the needs that come into existence through dealings with the environment; while *direction* is associated with “the processes and structures of the organism that give meaning to internal and external stimuli, thereby directing action toward the satisfaction of needs” (Deci & Ryan, 1985: 3).

In order to analyse the effectiveness of gamification, there exist six motivational perspectives in literature which may be applicable to gamification context: the trait perspective, the behaviourist learning perspective, the cognitive perspective, the perspective of self-determination, the perspective of interest, and the perspective of emotion.

#### **2.4.2.1.1. Trait Theory of Motivation**

According to the human motivation theory of McClelland (2009), human behaviours are based on three kinds of motives and needs which are achievement, need for power, and need for affiliation. They constitute human characteristics that generally do not change in time or in different context, in other words they are needs that are valid for all human beings regardless of gender, age, culture or race. Sailer et al. (2013) exemplify the function of these motives with respect to gamification. For instance, a learner with strong desire of achievement will be motivated if gamification design gives prominence to achievement and success or a learner who has a strong power motive is going to be motivated if gamification design includes status, control and competition. Lastly, learners with high affiliation motive will be motivated when membership is a feature of the gamification design or when collaboration is more important than competition.

#### **2.4.2.1.2. The Behaviourist Learning Perspective**

According to Skinner’s (1963) behaviourist learning theory, motivation occurs as a result of positive or negative reinforcements given at the end of previous experiences. Behaviour which is reinforced tends to be repeated and strengthened while it fades away when it is not reinforced. Educational researchers with a behaviouristic orientation emphasize the concepts of *incentive* and *reinforcement*. Promises are accepted as incentives while actualization of the promises is considered as reinforcement (Glynn et al., 2005). When we relate these behaviouristic views to gamification, it is possible to say that learners get motivated if gamification yields immediate feedbacks as positive or negative reinforcement or learners are likely to get motivated when they are rewarded.

#### **2.4.2.1.3. The Cognitive Theory of Motivation**

The cognitive perspective characterizes motivation based on the expectancy theory, the goal setting theory and the attribution theory. The expectancy theory focuses on an individual's choice of behaviour over others based on certain expectancies and the role of his/her decision in the process of achieving goals (Brewin, 1987). This theory consists of three variables, which are expectancy, valence and instrumentality. The *expectancy variable* describes that the efforts of an individual are the consequences of a need to accomplish certain goals. *Valence* marks the value that an individual ascribes on the rewards or reinforcements and *instrumentality* refers to the view that an individual will get a reward upon the satisfaction of the expected performance (Vroom, 1964). The goal setting theory proposes that goals may be influenced by situational variables. The attribution theory concentrated on how a person interprets past events and how this shapes the way s/he thinks or behaves at present (Weiner, 1986). In educational settings, the most important elements that have an impact on attributions of achievement are accepted to be ability, luck, effort and task difficulty (Weiner, 1974). When learners respond to an instructional event, they are considered to respond their attributions with regard to that event (Glyenn et al, 2005).

Sailer et al. (2013) relate the principles of the cognitive perspective of motivation to gamification and asserts that learners may be more motivated when gamification design includes clear and achievable goals, signifies the importance of a persons' action within a given situation, draws attention to the resulting consequences of a goal and prompts mastery orientation related to the goals.

#### **2.4.2.1.4. The Perspective of Interest**

Interest is" a kind of motivational trait, rooted in a stable person and environment relationship" (Hidi et al., 2004: 92), so the scope of interest-related motivation is content and context specific, in other words it is shaped by the interaction of the person and his or her environment. It is accepted as the promoter of student attention and memory (Renninger & Wozniak, 1985) as well as the core ingredient of engagement in learning environments (Ainley, 2007). According to research, motivation that comes through interest highly influences the way learners comprehend and organize learning tasks. A student's interest for a topic or a classroom activity is "specific, develops over time, is relatively stable, and is associated with personal significance, positive emotions, high value, and increased knowledge" (Wade, 2001: 245). Motivation that is developed through interest is observable when gamification arouses interest for the context, strengthens the feeling of flow by providing feedbacks and clear goals and adjusting the difficulty level to the learners' proficiencies.

#### **2.4.2.1.5. The Perspective of Emotion**

Emotions are so essential in educational contexts that Sylvester (1994) points out that emotion “drives attention, which in turn drives learning and memory.” Moreover, Vail (2002) refers to them as the “On-Off switch for learning” and adds that “faced with frustration, despair, worry, sadness or shame, children lose access to their memory, reasoning, and the capacity to make connections” (as cited in MacFadden et al, 2016: 23). Obviously, having negative emotions may cause adverse impact on learning process as Goleman (1996:78) also highlights the issue and puts forward that “emotional upsets can interfere with mental life” and students who are suffering from anxiety, anger and depression “do not take in information efficiently or deal with it well”.

The perspective of emotion suggests that emotions have an important role on motivation in instructional contexts. They may also be influenced by instructional strategies. With this regard, Asleitner (2000) introduced the FEASP (Fear, Envy, Anger, Sympathy, and Pleasure) approach, which is based on an instructional design that integrates emotions into classroom instruction and investigated the efficacy of the FEASP approach. According to the results, when teachers used sympathy or pleasure related FEASP strategies, the students had high amounts of pleasure and sympathy. Similarly, fear strategies reduced fear and envy strategies reduced envy.

When we relate the above mentioned views on emotion to gamification, it is possible to say that gamification can increase motivation by excluding feelings such as envy, fear or anger as it creates a relaxed learning environment and by promoting feelings of sympathy and joy (Sailer et al., 2013).

#### **2.4.2.1.6. The Perspective of Self-Determination**

Self-determination is the ability to make choices and to some extent have a control over what we do and how we do it (Deci et al., 1991; Ryan & Deci, 2002). According to the self-determination theory (SDT), human motivation is divided into three categories as *amotivation*, *intrinsic motivation* and *extrinsic motivation* (Ryan & Deci, 2000). *Amotivation* is the state that one has no intention to act, in other words it is lack of motivation. Intrinsic and extrinsic motivations are explained above. The SDT focuses on psychological need satisfaction. *Competence*, *autonomy* and *relatedness* are considered to be innate needs that must be satisfied (Deci & Ryan, 2000).

The theory is considered to be quite fitting for exploring motivation for games (Frederick & Ryan, 1995) as the theory has been applied to some similar areas like sport (Giannakis, Chorianopoulos, & Jaccheri, 2013) and puzzle play (Deci, 1975). It may be acknowledged as an aspect of utmost importance in education as well considering how influential motivation is for education. With this regard, Deci, Vallerand, Pelletier and Ryan (1991: 325) note that self-

determination “is concerned primarily with promoting in students an interest in learning, a valuing of education, and a confidence in their own capacities and attributes”. Research results show that students with self-determined motivation are tempted to be more successful and emotionally steady (Deci, 1996).

Given that a great deal of educational activities could not be designed intrinsically captivating, there occurs a need to foster students’ motivation in order to value and engage in such activities on their own without pressure from the outside. Self-determination theory clarifies this matter as the *internalization* of values and *integration* of self-regulation (Deci & Ryan, 1985). *Internalization* is explained as “the process through which an individual acquires an attitude, belief, or behavioural regulation and progressively transforms it into a personal value, goal, or organization” (Deci & Ryan, 1985: 130).

In sum, having self-determined motivation leads to more fruitful results in learning environments, which is also emphasized by Deci et al. (1991: 342) that “In terms of education, it has become ever more apparent that self-determination, in the forms of intrinsic motivation and autonomous internalization, leads to the types of outcomes that are beneficial both to individuals and to society.”

## **2.5. Gamification in Education**

### **2.5.1. Previous Research on Gamification and Education**

Gamification has been a keyword in the field of education due to its potential to make learning more motivating and engaging. As seen in Fig. 5., studies related to the use of gamification in education basically focus on the issues on the word cloud.

**Figure 5: Word Cloud Derived from the Abstracts of the Papers on Gamification in Education**



It is used in educational contexts mostly with integration of game elements and research results yield significant outcomes that need be noticed (Domínguez et al., 2013; Yildirim, 2017; Dicheva et al., 2015).

Studies in relevant literature that deal with the implementation of gamification to learning environments have been carried out at various education levels; however the proportion seems to be higher for university level (Caponette et al., 2014).

For their study Domínguez et al. (2013) used Blackboard 8 (BB8) as e-learning platform and they also implemented gamification for a course called “Qualification for users of ICT”. The participants of the study were university students consisting of an experiment and control group and the researchers intended to increase student motivation and engagement. They applied a mixed-methods research design, collecting qualitative and quantitative data and the research results show that students who finished the gamified experience got higher scores in practical assignments and in total score; on the other hand they did poorly on written tasks and despite the fact that they had higher motivation in the beginning, they did not participate much in class activities on the whole. Additionally, the qualitative analysis of the experiment group indicates that gamification has emotional and social impact on the learners thanks to the reward systems that motivate them. The learners found reward systems as fun and encouraging, because they could track their progress and compare with the classmates. From another point of view, some students found the system dispiriting and not fun. Competing with the classmates for a rank did not interest these students at all.



In another study by Yildirim (2017) with sophomore Mathematics Education students, gamification design was implemented to determine its effectiveness on student achievement and find out their attitudes toward the lesson in a 14 week experimental process. They applied Moodle system and they made use of levels, medals, cups, badges, leaderboards and experience points (XP) to foster motivation. The researcher applied a quantitative research design and used pre-test and post-tests with experimental and control groups. The research results show that gamification-based teaching practices influenced students' achievement and their attitude toward the lesson in a good way. On the other hand, they could not observe any significant difference on students' attribution of importance to the lesson, but they developed positive attitudes toward the lesson.

Furthermore, Marti-Parreño et al., (2016) aimed to seek teachers' attitudes towards and their actual use of gamification. The participants were teaching at universities and research results indicate that a little more than one tenth of the teachers used gamification despite having positive attitudes. There occurred no differences of use based on age, gender or type of institution as public or private. Notwithstanding that, they observed more positive attitude from teachers of private universities compared to those of public universities.

In a review of gamification use in education reported by Dicheva et al. (2015) the results show that gamification led to higher engagement, increased attendance and participation for voluntary and involuntary activities and significantly increased the quantity of answers or contributions. Gamification also reduced the gap between the lowest and the highest graders. Dicheva et al. (2015) also analysed the use of game elements and found out badges, leaderboards and points to be the most commonly used game elements.

Kyewski & Krämer (2018) attempted to find out the influence of badges on motivation, activity and performance in an online course. In their experimental field study, students were divided into three groups. The first did not get any badges, the second had badges visible to classmates and the last group had badges only visible to themselves based on their performances. The results yield that unlike the common view, badges had no significant impact on learners' motivation and performance. Motivation of students in each group declined during the process and only the badges visible by the learners themselves were conceived positively.

To sum up, integration of gamification is a highly beneficial learning strategy; however there exist certain essential points that need to be taken into account. Jackson (2016) puts forward these points as:

Effectively integrating gamification into education demands a thoughtful analysis of the students involved, the course material and learning objectives, the holistic structure of the learning

experience, then consideration of what specific elements and mechanisms will most effectively guide the student through a meaningful learning experience.

## **2.6. Gamification in Language Learning and Teaching**

There are many studies carried out on the use of gamification in the field of language teaching and education, and as reviewed in the literature a great majority of them explore the effect of gamification on vocabulary development (Kayseroğlu and Samur, 2018; Lui, 2014; Mchucha et al., 2017; Lam, 2014; Perry, 2015). The focus of this part is exploring research related to gamified learning experiences in language classrooms (Osipov et al., 2015; Kayımbaşıoğlu et al., 2016; Kayseroğlu and Samur, 2018; Shatz, 2015 ).

Kayımbaşıoğlu et al. (2016) conducted a study to explore the impact of information and communication technologies (ICT) and gamification on second language acquisition. The subjects of the study were 60 preschool children. They used Phaser desktop and mobile gaming framework to develop five different types of games such as matching, ordering, classification, selection game and slide show. The instructor has the ability to adjust the difficulty level of the games depending on the pedagogic level of the students. Each game has rules and rewards. Research results show that teaching language with ICT along with gamification improved students' language acquisition and the researchers also observed that technology integration reduced distraction of the students.

Shatz (2015) conducted a study named “Using Gamification and Gaming in Order to Promote Risk Taking in the Language Learning Process”. Depending on the notion that taking risks is essential for success in the language learning process, the researcher employed gamification to promote risk taking and thus improving language learning. The participants of the study were 360 men and 166 women, most of whom were native English speakers learning Finnish. They were divided into three groups based on their language risk taking as low, moderate and high. Research results show that the high language risk taking group displayed higher score and self-confidence, and lower anxiety compared to the other two groups.

In another study, Osipov et al. (2015) observed effectiveness of gamification in online e-learning for practical foreign language speaking skills training. The learners had the right to choose to be either teacher or student. In this system, there were pre-set teaching and learning materials that could be visible to both participants. Increasing user motivation by means of gamification was another aim of the system. The effectiveness of the application was determined based on analysis of the log files to see the studying time, the number of connections and game bonus points earned by the users. The gamification techniques used in this application include time banking – the

students initially get 30 minutes and as they take lessons, virtual system currency as minutes is spent from their account and they get minutes when they are teachers–, sequential lessons presentation, achievement and badges and peer evaluation. According to their results, most of the learners were attracted by the application and they kept being in dialogue which enabled developing speech communication skills.

Kayseroğlu and Samur (2018) investigated the effect of gamified vocabulary learning on Turkish students learning German as a second language. The participants in their study were 3<sup>rd</sup> grade young learners in a private school in İstanbul. They carried out a six-week experimental process and employed a gamified question and answer tool “The Quiz Game” during this process. The students played the game for 20 minutes each time. The researchers constructed a mixed methods research design for data collection. For qualitative data collection they conducted interviews and personal motivational inventory with the aim of finding out the perceptions of the students on their experience with the gamified learning. As for qualitative data collection, they employed pre/post-tests to trace the progress of the learners. The findings from this study indicate that 97% of the students showed willingness for learning German vocabulary and according to the analysis of the pre and post-tests, there was a considerable amount of difference between scores of vocabulary knowledge of both groups.

In conclusion, gamification is a technique that has been implemented in different subject areas for the purpose of reaching more fruitful learning outcomes. According to the data in the Council of Education Thesis Centre, forty one studies in various fields ranging from education, business, engineering and so on have been carried out on use of gamification since 2014 and the number of studies has been increasing since then. As research suggests, gamification has attracted the attention of the researchers in Turkey as well.

## CHAPTER THREE

### 3. METHODOLOGY

#### 3.1. Introduction

This chapter presents research design of the study and then lays a justification for utilizing certain methods, gives descriptions of the setting and the participants and lastly, explains how research was carried out, which is followed by data analysis.

#### 3.2. Research Design of the Study

In an attempt to find out high school students' attitudes towards the use of gamification and whether the concept has any benefits on their language learning motivation or enhances their English, a mixed-methods research design is considered to be most appropriate for the current study. The reason lying behind preferring a mixed-methods research design is that it is the kind of research that “combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration” (Johnson et al., 2007:123). As accessing detailed data is significant for the study, a qual- quan combination is presumed to be the right choice “to achieve an elaborate and comprehensive understanding of a complex matter, looking at it from different angles” (Dörnyei, 2007: 164). Furthermore, a mixed-methods research design will be most proper for the study as mixed- methods studies provide the researcher with a chance to “clarify and explain relationship between variables”, “explore relationships between variables in depth” and “confirm or cross-validate relationships discovered between variables” (Fraenkel & Wallen, 2009: 558).

The mixed-methods research, combining both qualitative and quantitative approaches is classified into six types as *the exploratory design, the explanatory design, the convergent parallel design, the embedded design, the transformative design and the multiphase design* (Creswell, 2012). The current study is a model of explanatory design as the process for this type of design begins with quantitative data collection and analysis, which is followed by a qualitative research process. Quantitative and qualitative data are analyzed separately and the findings of the qualitative analysis are used to elaborate on and interpret the quantitative findings (Fraenkel & Wallen, 2009). As Creswell (2012:542) puts forward the rationale behind implementing an explanatory design is

that “the quantitative data and results provide a general picture of the research problem; more analysis, specifically through qualitative data collection, is needed to refine, extend, or explain the general picture”.

Taking into account the views mentioned above, the same principles were applied in the current study. First quantitative data were gathered through questionnaires, which were utilized to establish a baseline regarding the main views of the participants on gamification process, the game elements. By employing the questionnaire, it was also aimed to draw a picture of possible benefits of using CD. Later in light of the data gathered from the questionnaires, semi-structured interview questions were developed to elaborate on the findings in the interviews and find out the reasons for the answers.

Another reason for gathering both quantitative and qualitative data for this study is benefiting from the strengths of each to the greatest extent possible. For instance, quantitative research is “systematic, rigorous, focused and tightly controlled” and it provides “reliable and replicable data that is generalizable to other contexts” (Dörnyei, 2007:34).

Questionnaire survey enables a researcher to collect huge amounts of data in a considerably short time; yet it is lacking of deepness as “the respondents’ engagement tends to be rather shallow” and thus not able to “explore complex meaning”. However adding a qualitative component in the form of a follow- up interview can wipe this weakness away by providing the participants with a chance to “explain or illustrate the obtained patterns, thereby adding flesh to the bones” for the reliability of the study (Dörnyei, 2007: 71). Additionally, qualitative inquiry presents a “fuller picture and understanding” and “enhance description” (Johnson et al., 2007:122). For this reason, qualitative inquiry was incorporated for the study by gathering data through interviews and open ended questions at the end of the questionnaires.

In brief, with the aim of determining the perceptions and attitudes of high school students’ toward gamification and finding out to what extent it contributes to their English learning, the current study is based on the explanatory design that collected data through questionnaires and follow-up interviews. The next section gives details with regard to the questionnaire and interviews used for data collection.

### **3.3. Data Collection Tools**

#### **3.3.1. Questionnaires**

Considering that this study intends to find out students’ attitude towards gamification and game elements and whether gamification motivates them and enhances their achievement;

administering a questionnaire was considered to be the most appropriate way to compile data in the initial stage of data collection. Questionnaires are of great value for most research in many fields since they are “relatively easy to construct, extremely versatile and uniquely capable of gathering a large amount of information quickly in a form that is readily processible” (Dörnyei, 2007: 101-102). This was the reason for conducting questionnaires in this study as well.

In order to design the questionnaire of the study, a small sized literature review was undertaken and bearing in mind the words of Dörnyei (2007:112) that “borrowing questionnaire items is an acceptable process if the sources are properly acknowledged”, an item pool was drawn up based on published questionnaires in the field. The items of the questionnaire were a modified version of items in various studies such as the Intrinsic Motivation Inventory (IMI), Attitude/Motivation Test Battery, Bozkurtlar and Samur (2017), Schoech (2000), Özkan 2016), Dörnyei et al. (2006). After the construction of the item pool, the first draft of the questionnaire was formulated by placing the items into related sections. This process was followed by review of the questionnaire items by qualified experts in the area, a Phd holder and a Phd student. Based on expert opinion, number of items was reduced, closely related items were eliminated, some items and sections were added and some modifications and corrections were carried out on items and sections related to wording. This process helped the construction of the second draft of the questionnaire. After that, the questionnaire was presented to expert opinion once again. Mindful of his feedback, the final draft of the questionnaire was shaped.

The questionnaire consisted of five sections (See Appendix 1). In the first section, the participants were asked personal information about their age, gender, ClassDojo points, the most and least loved features of ClassDojo and contribution of ClassDojo to their language skills. The second section inquired about the views of students on the English lesson. In the third section, the students were expected to reflect their general views on ClassDojo and the fourth section explored their views on the game elements. In the final section, the students were asked open ended questions to state details on their opinions.

### **3.3.2. Interviews**

Interviews were carried out in the second phase of the data collection procedure. In order to be able to elaborate on the quantitative data and get more in-depth information about the participant students’ attitudes and perceptions on gamified English learning, a semi-structured interview with 13 questions was conducted (See Appendix 3). The reason for employing semi-structured interview was that with semi structured interviews “the dialogue can meander around the topics on the agenda—rather than adhering slavishly to verbatim questions as in a standardized survey—and may delve into totally unforeseen issues” (Adams, 2015). The pre-established questions of the

interview were constructed based on the questions in the questionnaire and some of them were based on the findings of the quantitative phase of the study.

Eleven voluntary students that took part in the questionnaires were interviewed and the interviews were conducted in Turkish. Lastly, the interviews were transcribed and content analysis was carried out.

### **3.4. Setting and Participants**

The research was conducted with 104 participants, who were freshman high school students in an Anatolian High School in Ankara. They had six hours of English lessons per week. The sampling procedure for the study was convenience sampling as the participants were selected according to certain criteria such as “availability at a certain time, easy accessibility, or the willingness to volunteer” (Dörnyei, 2007:99). For the quantitative part of the study the sample size was 104. As for the interviews, the participants were selected based on their easy accessibility and availability, namely convenience sampling was applied again. Eleven out of 104 participants were interviewed to get richer and deeper data.

### **3.5. Piloting**

Since the questionnaire items and the interview questions of the current study were formulated by the researcher herself, it was of great significance to present the instruments to expert opinion if there were any problems with the items or the questions or check whether they were understandable by the participants. For this purpose, piloting of the questionnaire and interview questions were carried out which is a process that “a researcher makes changes in an instrument based on feedback from a small number of individuals who complete and evaluate the instrument” (Creswell, 2012:390).

Clarity of the questionnaire items was carried out with a PhD student and a PhD holder in the Department of Western Languages and Literature at Karadeniz Technical University. They expressed their opinions related to the questionnaire as whole and an item-by- item examination was also carried out. They observed some issues related to wording and unclear statements were identified in order to reach more understandable and clear items. They also suggested additional items and sections. In light of their corrections and suggestions, the final draft of the questionnaire was constructed.

The pilot test of the interview was undertaken with a PhD student and three students that took part in the quantitative phase of the study. The expert was consulted to learn if the questions were relevant to the study and they were feasible to provide desired data. By piloting the interview

questions with the students, it was aimed to see if the questions were understandable by this age group so that they could think about them and answer with ease.

### 3.6. Gamification Design in ClassDojo

In this study, ClassDojo was used to gamify the language learning process of the students. It is available both as an app and a website. ClassDojo is a tool that connects teachers with students, parents and colleagues; however in this study there was no contact to parents or other colleagues. The experiment process lasted four months in six hours of English lessons per week. The content is prepared based on the 9<sup>th</sup> grade English lesson curriculum. The details of the experimental procedure are given below in Table 1.

**Table 1: The Timeline of Experimental Procedure**

Week	Topic	Goals	Activity
1			<ul style="list-style-type: none"> <li>• Introducing the process</li> <li>• Creating Classdojo accounts</li> </ul>
2			<ul style="list-style-type: none"> <li>• Introducing the process</li> <li>• Creating ClassDojo accounts</li> </ul>
3	<p>Countries, nationalities and languages</p> <p>Famous festivals and carnivals around the world</p>	<ul style="list-style-type: none"> <li>• Being able to match the countries and the nationalities</li> <li>• Telling the languages spoken in a country</li> <li>• Being able to introduce themselves and other people by referring to their country and nationality</li> <li>• Being able to introduce and talk about a festival</li> </ul>	<ul style="list-style-type: none"> <li>• Reading and listening to a blog about a person and her family’s country, nationality and languages they speak</li> <li>• Speaking: Introducing themselves</li> <li>• Workbook activities</li> <li>• Speaking: They introduced the Notting Hill Carnival (<i>Homework: They made a research about the Notting Hill Carnival and explained it in 5 to 6 sentences</i>)</li> </ul>
4	<p>Prepositions of Place</p> <p>Have got</p>	<ul style="list-style-type: none"> <li>• Telling the place of things in their classroom or home</li> <li>• Talking about the school subjects and</li> <li>• Talking about the school materials</li> </ul>	<ul style="list-style-type: none"> <li>• Identifying the place of things in a Picture of a classroom (from the book)</li> <li>• Writing: Describing their ideal classroom in three paragraphs</li> <li>• Talking about their school timetable using <i>have got</i></li> </ul>
5	<p>Numbers and percentages</p>	<ul style="list-style-type: none"> <li>• Saying numbers and percentages in English</li> </ul>	<ul style="list-style-type: none"> <li>• Activities on numbers</li> <li>• Listening: A radio program about pets in UK</li> <li>• Listening activities</li> <li>• Writing a “MISSING” advertisement for a pet (group work)</li> </ul>



**Table 1 Continued**

<b>Week</b>	<b>Topic</b>	<b>Goals</b>	<b>Activity</b>
6	There is /are	<ul style="list-style-type: none"> <li>• Being able to tell the place of things using there is/are structure</li> </ul>	<ul style="list-style-type: none"> <li>• Reading: MyVirtual bedroom (from the book)</li> <li>• Reading activities</li> <li>• Writing: Designing a virtual room and describing it</li> </ul>
7	Present Simple	<ul style="list-style-type: none"> <li>• Being able to tell the things we do regularly</li> <li>• Being able to talk about personal details and hobbies</li> </ul>	<ul style="list-style-type: none"> <li>• Reading: Working with Elephants</li> <li>• Reading activities</li> <li>• Activities on Present Simple in the Student's book and workbook</li> <li>• Listening –an interview about free time activities</li> <li>• Speaking (Ss write two true and two false sentences about themselves and the students try to guess the false ones)</li> <li>• Writing a personal profile for an e-friends forum</li> </ul>
8	Adverbs of Frequency	<ul style="list-style-type: none"> <li>• Telling how often we do things</li> <li>• Being able to describe school life and free time activities</li> </ul>	<ul style="list-style-type: none"> <li>• Reading: "Glasgow School of Sport" (in the book)</li> <li>• Reading activities</li> <li>• Exercises in the workbook</li> <li>• Speaking: Students are given a list of activities. They ask and answer questions using adverbs of frequency</li> </ul>
9	<p>Making suggestions and giving opinions</p> <p>-this, that, these, those</p>	<ul style="list-style-type: none"> <li>• Being able to make suggestions and give opinions</li> </ul>	<ul style="list-style-type: none"> <li>• Listening two friends making suggestions to each other and giving opinions about which school clubs to join</li> <li>• listening activities</li> <li>• Speaking: Ss are grouped and given a list of "Ten cool things to do this week". They make suggestions to each other about these things (<i>group work</i>)</li> <li>• Reading and listening to a text with this/that structures "A Tour of our School"</li> <li>• Summarizing the topic</li> <li>• Exercises on this/that/these/those</li> <li>• Ss write a script for a tour of their school</li> </ul>
10	Comparatives	Being able to compare people, places and weather	<ul style="list-style-type: none"> <li>• Reading and listening to the text "Port Aventura" in the book.</li> <li>• Drawing attention to comparative adjectives in the text.</li> <li>• Summarizing the topic</li> <li>• Exercise with comparatives in workbook</li> </ul>
11	Comparatives and Superlatives	Being able to compare people, places and weather	<ul style="list-style-type: none"> <li>• Listening "The coldest place in the World"</li> <li>• Listening activities</li> <li>• Comparing weather in different cities on a map</li> <li>• Making a comparison of three places with regard to local attractions, holiday destinations, shopping centres...and present it to the class (<i>group work</i>)</li> </ul>

**Table 1 Continued**

<b>Week</b>	<b>Topic</b>	<b>Goals</b>	<b>Activity</b>
12	Present Continuous	-Being able to describe activities happening now, -Being able to talk and write about a photo.	<ul style="list-style-type: none"> <li>• The present continuous structure is introduced.</li> <li>• Reading: "A Talented young Photographer" (in the book)</li> <li>• Reading activities</li> <li>• Speaking: Students are given some photos and they talk about what people are doing in these photos.</li> <li>• Writing: Ss write about their favourite hobbies by describing what they are doing in a photo related to their hobby</li> </ul>
13	Can/ can't/must/mustn't	-Talking about abilities, permission, obligation and prohibition -Being able to order a meal in a restaurant	<ul style="list-style-type: none"> <li>• Introducing the modals</li> <li>• Reading: "Street Food" (in the book)</li> <li>• Reading activities</li> <li>• Group work: Making a poster of rules at home or school</li> <li>• Workbook exercises</li> <li>• Listening related to ordering food in a restaurant</li> <li>• Group work: Roleplay-Ss make their own menu and prepare their restaurant role-play</li> </ul>
14	Sequencing words  Past Simple	Putting actions in an order  Being able to talk about past events	<ul style="list-style-type: none"> <li>• Reading: "Freddie's favourite meatballs"</li> <li>• Reading activities</li> <li>• Writing a recipe using the sequencing words</li> <li>• Introduction of the structure</li> <li>• Reading "Fashion: Changes across six centuries" (in the book)</li> <li>• Listening: Descriptions of suspects in a bank robbery</li> <li>• Listening activities</li> <li>• Exercises on Past Simple</li> <li>• Past Simple exercises in the book</li> </ul> <p>Speaking: Ss use a group of words given in categories of time, subject, verb, object and place to write the funniest sentences</p> <ul style="list-style-type: none"> <li>• Group work: Role-play for shopping for clothes</li> </ul>
15	Administration of the questionnaire		
16	Interviews		

The students from three different classes formulated their own accounts and they were given avatars automatically by the system. They shared their learning by adding photos, videos, and homework to their portfolios. The teacher tried to encourage the learners by assessing their behaviours in class and their learning process in general by giving points (See Figure 6). Some of the characteristics of a good language learner, derived from Lightbown and Spada (1997) and Rubin and Thompson (1983) (as cited in Nunan, 2000), were placed on the feedback part on ClassDojo (See Figure 7). The teacher logged in ClassDojo and opened the class on the smart

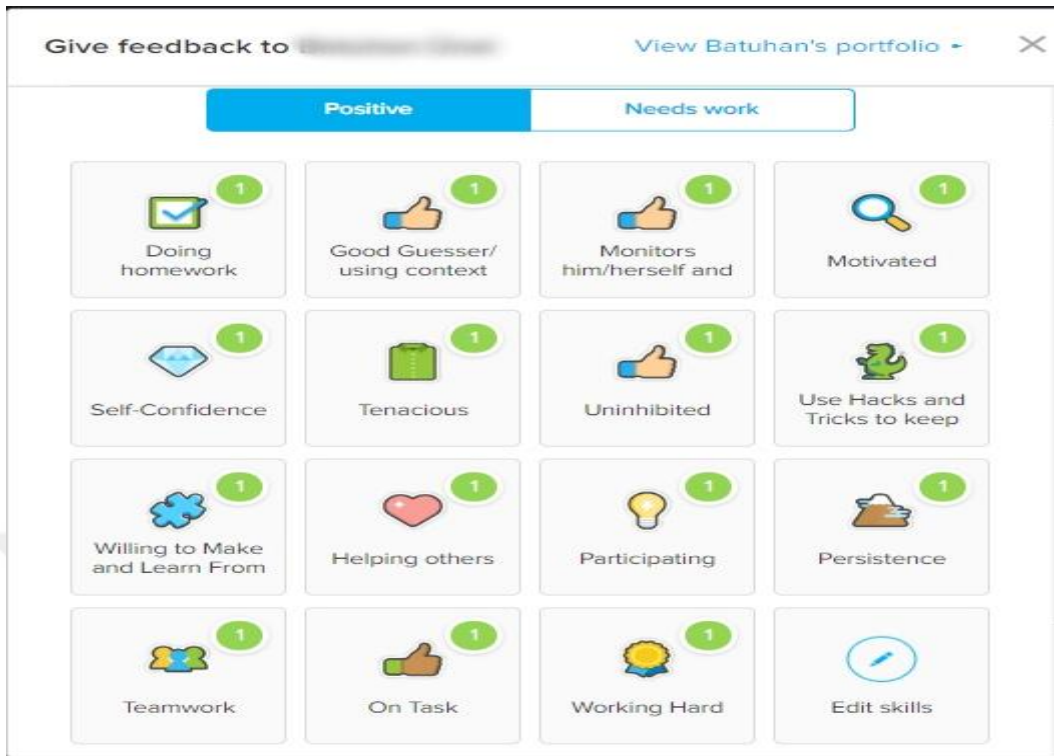
board in each session. Students got points according to their participation during the lesson. There were two categories for the assessment of each student: “positive” and “needs work”. Under the title of positive, they get points for participating, doing homework, helping others, willing to make and learn from mistakes, team work, being self-confident, uninhibited and motivated, persistence and so on.

**Figure 6: Example of a ClassDojo Classroom Showing Students and Their Points**

The screenshot displays a ClassDojo classroom interface for a class of 36 students. The top navigation bar shows '9C 36 Students 0 Parents' and includes icons for notifications, help, and user profile. Below the navigation bar are tabs for 'Classroom', 'Portfolios', 'Class Story', and 'Messages'. The main area is titled 'Students' and shows a grid of 36 student cards, each with a colorful avatar and a point value. The students are arranged in three rows of 12. The bottom toolbar contains various classroom management tools: 'Toolkit', 'Attendance', 'Select multiple', 'Random', 'Timer', 'Big Ideas', and 'Invite parents (0%)'.

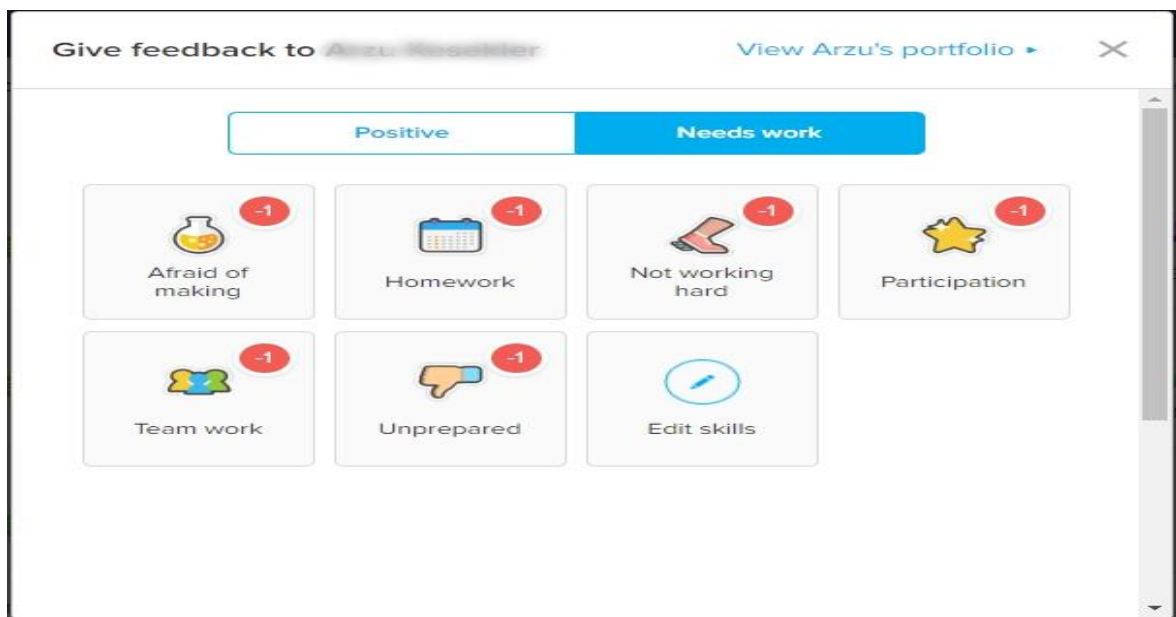
Student Name	Points
Whole Class	952
Adem Akın Onal	30
Ahmet Teniz	5
Aleyna Dağlı	29
Alperen Açı	27
Arzu Kesekler	29
Aylinke Verda Ayvat	22
Aydeniz Erden	19
Aysima Guzel	36
Berkay Boz	37
Bilgesu Birci	37
Emre Kurt	16
Busenur Ekici	25
Ceyda Yıldırım	34
Elif Çetinkaya	37
Eyülül Yılmaz	25
Gamze Kızılateş	30
Gizem Habuoğlu	33
Gökçü Keleş	25
Hacer Zehir	22
Hayrunisa Kutlu	32
Hikmet Berat Unverci	20
Keklik Ece Kulaksız	34
Mehmet Efe Kanayünlü	35
Melike Onay	30
Merve Nur Erkek	15
Rahla Tok	26
Selenay Kürücü	23
Selin Kiyak	22
Sümeyye Zeliha Çömez	18
Tolgahan Torbacıoğlu	20
Yunus Emre Çelik	34
Yusuf Arda Akçürek	25
Özge Elverir	23
Özlem İlayda Aslan	33
İlayda Duymaz	28
Serife Sude Çelik	13
Add students	

**Figure 7: Teacher Feedback Section on ClassDojo**



On the other hand, they lose points for not working hard, lack of participation, not doing homework, being passive during team work, being unprepared or afraid of making mistakes. Students got points for these characteristics when they behaved accordingly or fulfilled certain tasks. (See Figure 8).

**Figure 8: The Qualities for Getting Minus Points**

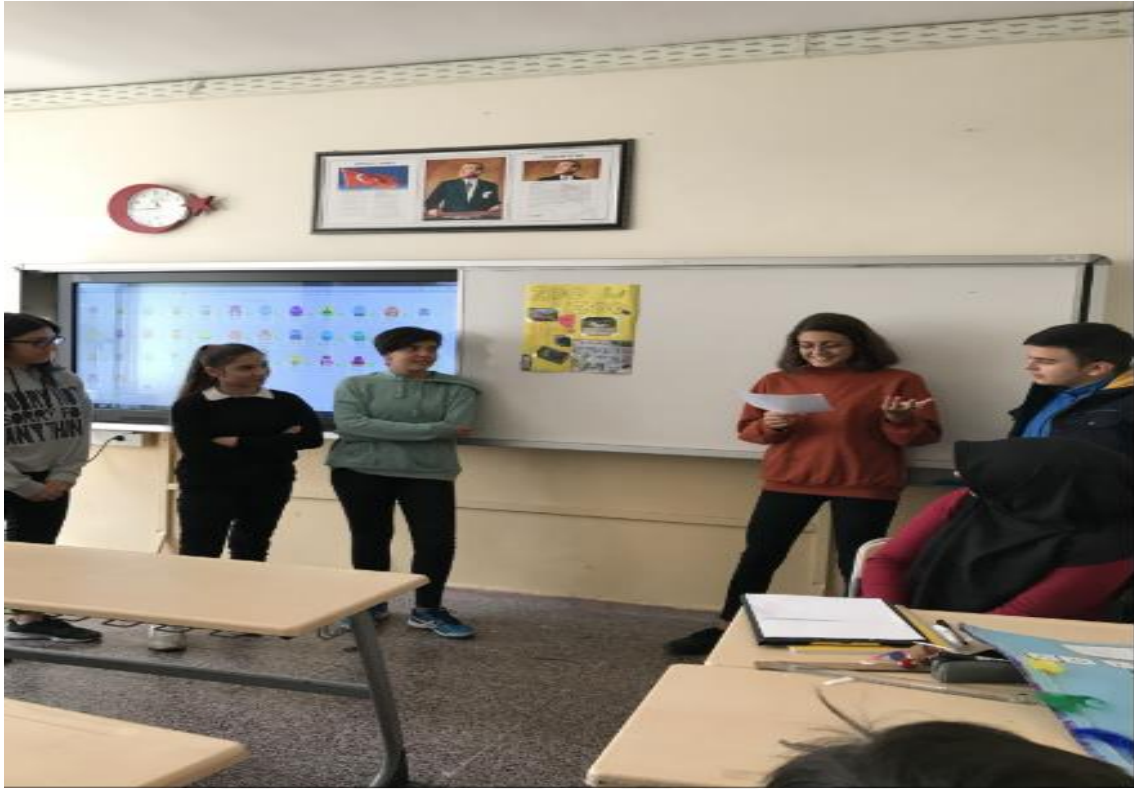


In the toolkit of the app, there were “timer”, “random”, “group maker” and “think pair share” parts. “Random” option was used when the students did not want to participate; ClassDojo picked a student randomly or it was used to create groups of students randomly for team works. When the teacher assigned students with certain tasks and with team works in class, the “timer” counted down and the bell rang when the time was up (See Figure 9 & 10). The students got points based on their performance during this limited time. With “think pair share”, the teacher asked students questions and they discussed.

**Figure 9: Students Working on Their Team Work**



**Figure 10: Students Presenting their Team Work Assignment**



The students were placed in seven ranks: grandmaster, master, diamond, platinum, gold, silver, and bronze as in the computer game “League of Legends”, many of them were quite familiar with. There were five or six students in each group. Students that had the same points were challenged, the teacher asked these students questions related to the previous lessons and some details they learned in the course book before, such as the character in a reading text; or they completed certain quests to overtake the others. It was considered to help increase their involvement and motivation. At the end of each lesson, they could see their progress report and learn how many points they got or lost; which was intended to make them concentrate on the parts that they found themselves weak, furthermore they could view their order on the leaderboard (See Figure 11).

**Figure 11: Leaderboard, Ordering Students from the Highest to the Lowest Points**



The students had the right to change their avatars with others already loaded on the App when they reached fifteen points. As for rewards, when the students reached twenty points, they were able to upload a different character from the games they play or film characters or any other picture as their avatar. The students, who completed the process in the grandmaster rank, had their class participation grades as 100 and those who completed in the master rank got 95. Students in the following groups got their grades 5 point less than those in an upper rank. If the whole class point reaches 600 by the end of the term, there would be an activity outside of school for all the students such as going to the cinema, theatre or a visit to a museum or any other activity they wanted. Another reward was “homework pass”; students that got more than 10 points in a week had the right to not do one of the homework. A brain- storming session was held with the students related to other possible rewards that might attract them; and a cinema ticket, an English practice book or test book for other school subjects were decided to be other rewards for students that complete the process as a Grandmaster.

### 3.7. Data Analysis

The quantitative data of the study was provided through a questionnaire consisting of 5 categories. The participants were asked questions to indicate their opinions regarding the use of gamification in an English class. The Statistical Package for Social Sciences (SPSS 22.0) was utilized for analyzing data. For the analysis of the Likert scales in the questionnaire, ‘descriptive

statistics' were employed and with the intent of presenting general framework, frequency and percentage calculations were performed for each item.

As for the qualitative data analysis, the first step was determining the common points in the open-ended questions, which the students replied at the end of the questionnaire. The second step was undertaking *tape analysis* of the interviews in the form of “taking notes while listening to the recordings, possibly by marking parts of the data [...] that warrant more elaborate subsequent analysis” and *partial transcription* of essential points with the aim of getting to know the data thoroughly (Dörnyei, 2007: 248). Afterwards, certain themes and common points were identified and categorised according to their relation to our research questions. As the next step, they were described and interpreted. Lastly, a final interpretation was derived by combining the findings of the questionnaires and the interviews.





## CHAPTER FOUR

### 4. FINDINGS AND DISCUSSION

#### 4.1. Introduction

This chapter presents analyses of the findings of the data collected through quantitative and qualitative methods and the discussions of the findings. Initially, the chapter gives the analysis of the questionnaires and proceeds with the analysis of the semi structured interviews to deeply analyze students' views on the use of gamification.

#### 4.2. Analysis of the Quantitative Data

In this section, the findings and the analysis of each part of the questionnaire will be reported and discussed with regard to the research questions. Firstly, the demographic data related to the participants of the study is given. In the second part, students' attitude toward English lesson is analysed. Part three presents attitudes toward ClassDojo, which is followed by analysing whether ClassDojo is a source of motivation in the next part. In the fifth part, attitude toward game elements is presented and in the sixth part, the contribution of ClassDojo to language skills is explained.

In the initial stage, inherent consistency reliability of the Likert scales was calculated with Cronbach Alpha coefficient and the Cronbach Alpha reliability score was found to be ,966, which shows that the questionnaire is reliable and valid as seen in Table 2.

**Table 2: Cronbach Alpha Value of the Questionnaire**

Cronbach's Alpha	N of Items
,966	100

#### 4.2.1. Demographic Data

As mentioned before, the study was carried out with 104 participants, who were freshman high school students. Table 3 gives the gender distribution of the participants.

**Table 3: Gender Distribution of the participants**

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Female	70	67,3
Male	34	32,7
<b>Total</b>	<b>104</b>	<b>100,0</b>

According to Table 3, 104 participants, 70 of whom are female (67,3 %) and 34 of whom are male (32,7%), were included in this study. The female students were more than twice as many as male students.

**Table 4: Participants' Age Profiles**

<b>Age</b>	<b>Frequency</b>	<b>Percent</b>
14	36	34,6
15	67	64,4
16	1	1,0
<b>Total</b>	<b>104</b>	<b>100,0</b>

As seen in Table 4, 36 of the participants are 14 years old (34,6 %). More than half of the participants are 15 years old (64,4 %) and only one participant is 16 (1,0%).

#### 4.2.2. Analysis of Students' Attitudes Towards English Lesson

This section is designated for analyzing and presenting data gathered through the first Likert scale in the questionnaire related to the participants' attitudes towards the English lesson and discussing the findings.

Before starting to analyze the data in this part, inherent consistency reliability of that Likert scale was calculated with Cronbach's Alpha, yielding .873, which indicates that the validity of the findings was ensured.

As it can be inferred from the values in Table 5, students do not seem to have negative attitudes toward the English lesson. According to the table, more than half of the students (64,4 %) *agreed* or *strongly agreed* that speaking in English class gives them pleasure. More than three-fourths of them (78,9%) like the activities in the English class while only 9,6 % of them think the

opposite. There is also a group (11,5 % of the respondents), who are undecided about the statement. On the other hand, English is not the favourite school subject for the majority of the participants (27,8%), while a considerable number of them (36,5%) could not decide about the statement. A little more than half of the participants (61,9 %) affirmed that they do the English homework without getting bored whereas 38,1% of them object to this statement. Additionally, a great majority of the respondents (66,4 %) liked the English course books. There is also a group (18,3% of the participants) who neither agrees nor disagrees with that statement.

**Table 5: Attitudes Towards the English Lesson**

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	f	%	f	%	f	%	F	%	F	%
<b>1. Speaking in English class gives me pleasure.</b>	3	2,9	10	9,6	24	23,1	26	25,0	<b>41</b>	<b>39,4</b>
<b>2. I like activities in English class.</b>	2	1,9	8	7,7	12	11,5	<b>45</b>	<b>43,3</b>	37	35,6
<b>3. English is one of my favorite school subjects.</b>	12	11,5	17	16,3	<b>38</b>	<b>36,5</b>	15	14,4	22	21,2
<b>(R) 4. I get bored when I study English.</b>	30	28,8	<b>33</b>	<b>31,7</b>	20	19,2	12	11,5	9	8,7
<b>5. I have fun doing English class activities.</b>	5	4,8	10	9,6	13	12,5	36	34,6	<b>40</b>	<b>38,5</b>
<b>(R) 6. I have difficulty in understanding English.</b>	<b>29</b>	<b>27,9</b>	26	25,0	28	26,9	12	11,5	9	8,7
<b>(R) 7. I feel anxious during the English lesson.</b>	<b>52</b>	<b>50,0</b>	25	24,0	15	14,4	6	5,8	6	5,8
<b>8. I do the English homework without getting bored</b>	8	7,7	18	17,3	24	23,1	<b>28</b>	<b>26,9</b>	26	25,0
<b>9. I like the books we use in the English class.</b>	9	8,7	7	6,7	19	18,3	32	30,8	<b>37</b>	<b>35,6</b>

The fourth, sixth and the seventh items were reverse-coded and this was taken into consideration during the process of analyzing the findings. In this respect, 63 participants (66,8 %) objected that they get bored while studying English. Almost half of the students (57,9 %) *strongly disagree* or *disagree* that they have difficulty in understanding English. In addition to this, almost three- fourth of the participants *strongly disagree* or *disagree* that they feel anxious in the English lessons. On the other hand, those who feel anxious in the English lesson constitute a small proportion of the sample (10,6 %).

In sum, overall attitude of most participants towards the English lesson seem to be positive, so they like the activities in the English class, they do not get bored while studying English, they

like speaking in English, they do not get bored while studying English and doing the English homework and they like the course books. As they possess positive attitude, they are not anxious in the lesson, which probably dispels the possibility of having difficulty in understanding English. The fact that they like the course books used can also be an indicator of their having fun doing English class activities.

#### 4.2.3. Attitudes Towards ClassDojo

In the questionnaire, there were 21 items eliciting data associated with the attitudes of the students' towards ClassDojo. They were expected to reveal some facts concerning their perceptions on the use of ClassDojo for learning English and whether ClassDojo was beneficial to enhance their learning achievement. Here below are the details showing the frequencies and the percentages of the participants' response to the related items in Table 6.

**Table 6. Attitudes Towards ClassDojo**

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	f	%	f	%	f	%	F	%	F	%
<b>1. Thanks to ClassDojo, I participate more during the English lesson.</b>	4	3,8	12	11,5	12	11,5	<b>39</b>	<b>37,5</b>	37	35,6
<b>2. Thanks to ClassDojo I began to like English lessons.</b>	5	4,8	18	17,3	28	26,9	<b>34</b>	<b>32,7</b>	19	18,3
<b>3. I think ClassDojo is fun.</b>	5	4,8	11	10,6	22	21,2	22	28,9	<b>38</b>	<b>36,5</b>
<b>4. (R) Using ClassDojo in English class stresses me.</b>	33	31,7	<b>35</b>	<b>33,7</b>	14	13,5	17	16,3	5	4,8
<b>5. ClassDojo makes me happy.</b>	6	5,8	13	12,5	<b>34</b>	<b>32,7</b>	33	31,7	18	17,3
<b>6. With ClassDojo, I am more focused in the English lessons.</b>	6	5,8	24	23,1	19	18,3	<b>33</b>	<b>31,7</b>	22	21,2
<b>7. I like sending homework to ClassDojo.</b>	13	12,5	12	11,5	25	24	<b>32</b>	<b>30,8</b>	22	21,2
<b>8. (R) I am having technical problems with the use of ClassDojo.</b>	39	37,5	<b>41</b>	<b>39,4</b>	6	5,8	13	12,5	5	4,8
<b>9. I love helping my friends with the use of ClassDojo.</b>	11	10,6	13	12,5	14	13,5	<b>39</b>	<b>37,5</b>	27	26,0
<b>10. Using ClassDojo in English class is useful.</b>	4	3,8	6	5,8	18	17,3	33	31,7	<b>43</b>	<b>41,3</b>
<b>11. (R) I think ClassDojo is a waste of time.</b>	<b>45</b>	<b>43,3</b>	29	27,9	17	16,3	5	4,8	8	7,7

Table 6 Continued

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	f	%	f	%	f	%	F	%	F	%
12. (R) ClassDojo is not for me.	35	33,7	31	29,8	18	17,3	7	6,7	13	12,5
13. ClassDojo appeals to our age.	7	6,7	14	13,5	22	21,2	37	35,6	24	23,1
14. Thanks to ClassDojo, I can reach my teacher more easily.	6	5,8	17	16,3	25	24,0	31	29,8	25	24,0
15. I think I learned English better with ClassDojo.	8	7,7	11	10,6	38	36,5	28	26,9	19	18,3
16. I think Classdojo is similar to the games I play.	14	13,5	27	26,0	17	16,3	23	22,1	23	22,1
17. I am generally satisfied with ClassDojo.	7	6,7	7	6,7	14	13,5	45	43,5	31	29,8
18. (R) It's hard for me to send homework to ClassDojo.	38	36,5	30	28,8	18	17,3	5	4,8	13	12,5
19. Thanks to ClassDojo, I am more interested in English.	11	10,6	11	10,6	22	21,2	36	34,6	24	23,1
20. I am happy with the learning environment offered by ClassDojo.	6	5,8	13	12,5	15	14,4	41	39,4	29	27,9
21. I would like my friends to benefit from ClassDojo.	8	7,7	6	5,8	9	8,7	36	34,6	45	43,3

Having a closer look at the values of some items in this table simply presents the fact that overall, students developed positive feelings towards ClassDojo. 65,4% of the students *agree* that ClassDojo is fun while a small part of them (15,4 %) objected to this statement by disagreeing. Furthermore, almost half of the participants (49%) confirmed that CD made them happy, Majority of the students (59,6) thought that ClassDojo appealed to their age and a considerable amount of the respondents (63,5) liked helping their friends with the use of ClassDojo. In addition, almost three fourths of the respondents are satisfied with ClassDojo and 67,3% of them are content with the learning environment offered by Classdojo. On the other hand, majority of the students *disagreed* with the statement that CD was not for them. In the same vein, a great proportion of the students were not stressed by ClassDojo.

The items trying to reveal thoughts of the participants about whether CD contributes to their English learning process would also present a general picture of the students' satisfaction levels, hence, give an idea about their general attitudes. Upon being asked whether they participated more in the English lesson thanks to ClassDojo, more than half of the students (68,3%) replied that they

participated more, 15,3 % answered that there was not an increase in their participation and 11,5% were undecided. Besides, a great majority of the respondents (60%) began to like English thanks to ClassDojo while 22,1 % of the respondents rejected this statement. Additionally, with CD more than half of the students (52,9%) were more focused in the English lessons and 57,7 % of the students were more interested in English thanks to CD. In addition to this, using CD in the English class was considered to be useful by almost three fourths (73%) of the participants while only a small proportion of the group (9,6 %) *disagreed* with the statement. Almost half of them (45,2 %) confirmed that they learned English better with CD. With the highest percentage (77,9%) in this part, most of the students agreed or strongly agreed that they wanted other students to benefit from CD.

With regard to other issues such as teacher availability, sending files to ClassDojo and technical considerations, a little more than half of the students confirmed that they liked sending homework to ClassDojo while almost one fourth of them thought the opposite. On the other hand, 65,5 % of the students did not have difficulty sending their homework to CD, but 17,3 % of them affirmed that it is hard for them to send their homework. 76,9 % of the respondents did not have technical problems while using CD, whereas 17,3 % of them faced problems. A great majority of the students objected to the statement that CD is a waste of time, however a small proportion of them (12,5 %) considered the opposite. Finally, while 44,2 % of the respondents resembled CD to the games they play, 39,5 % of them objected to this view and 16,3 % of them were undecided.

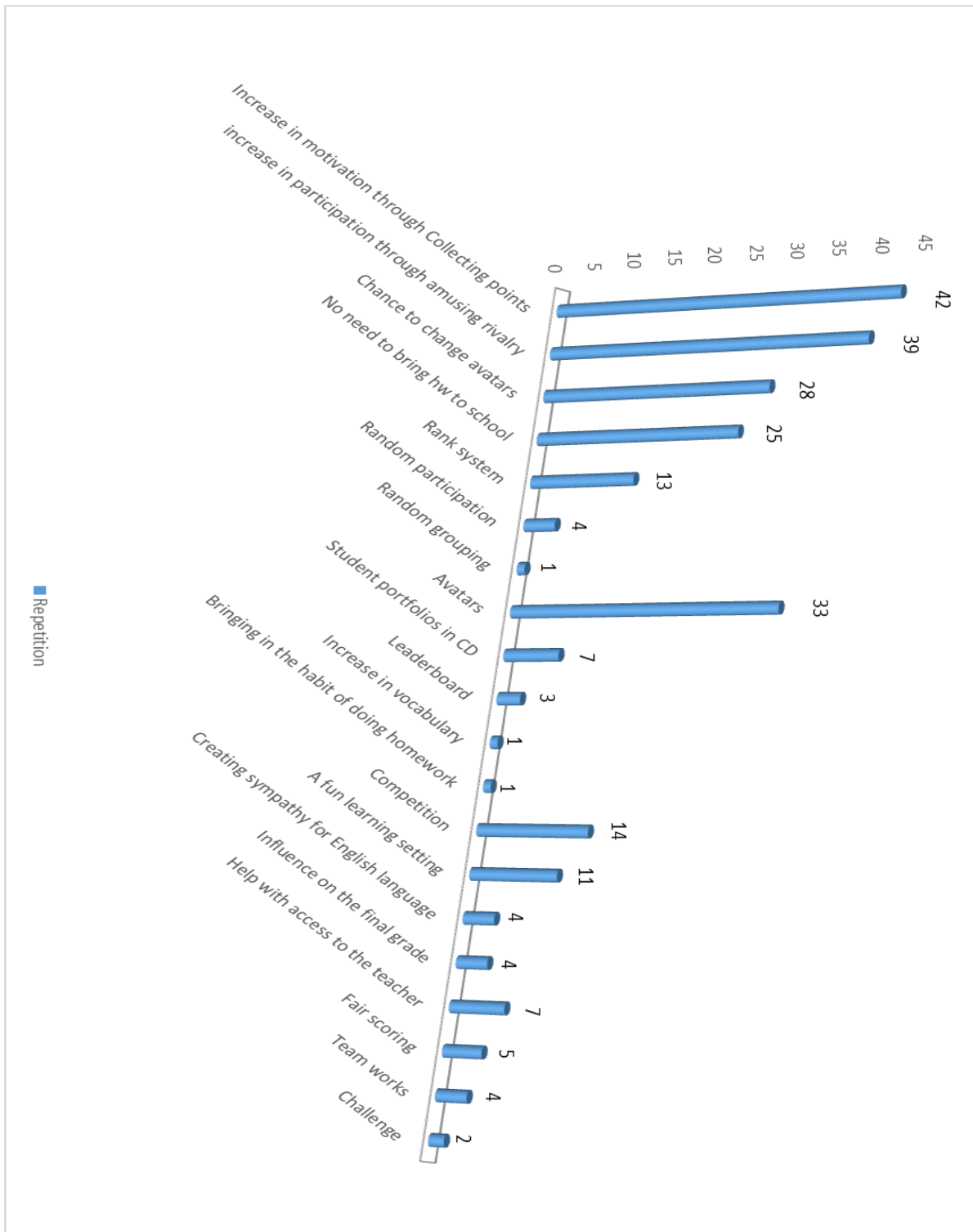
All in all, it appears that most of the students have positive attitudes towards ClassDojo. It seems that they think CD is appealing to their age and for that reason they liked the amusing learning environment created with CD and for that reason they were not stressed during the process or they did not consider CD as a waste of time. Additionally, CD made them happy. Eventually, these all influenced their learning process and they focused more in class and their participation increased thanks to CD. Correspondingly, they liked working on CD and enjoyed sending homework. They were also aware of the fact that they liked English more and learned English better with CD. Thanks to the positive feelings, they were not troubled by sending homework and they got more interested in learning English and by virtue of the benefits they obtained with CD, they wanted their friends as well to use it.

#### **4.2.3.1. The Most and Least Loved Features of ClassDojo**

In the questionnaire the students were asked to state the three features of CD that they liked the most and three features they did not like at all. Based on the responses of 104 participants the most commonly repeated features of CD were identified. According to the results, the most commonly repeated loved feature of CD is *increase in motivation*, which was one of the expected outcomes of the study and 42 of the participants confirmed that there occurred an increase in their

motivation with CD. Second most loved feature is *increase in participation through collecting points*. It seems that the fact that students liked increasing their points, which happened through participation eventually led to enjoying participation for its own sake. The third most repeated loved feature is *avatars*, which was followed by *changing avatars*. 33 of the students loved avatars and 28 of them stated that they liked being given a chance to change their avatars. As seen with their answers, being one of the game elements, avatars achieved capturing the attention of the students. *Lack of need to bring homework to school* was the fifth most repeated feature of CD that was loved by the participants. As they sent some of their homework to CD and got feedback from there, they did not bring their homework to school. 25 of the participants stated this aspect as their top three loved features. *Competition, rank system, a fun learning setting, help with access to the teacher, fair scoring, influence on the final grade, leaderboards and challenges* were the other most loved features. In addition, *increase in vocabulary, bringing in the habit of doing homework* and *random grouping* were the other features that were repeated only once. Chart 1 presents the detailed information below.

**Chart 1: The Number of Students, Including These Aspects in Their Top Three Loved Features of CD**

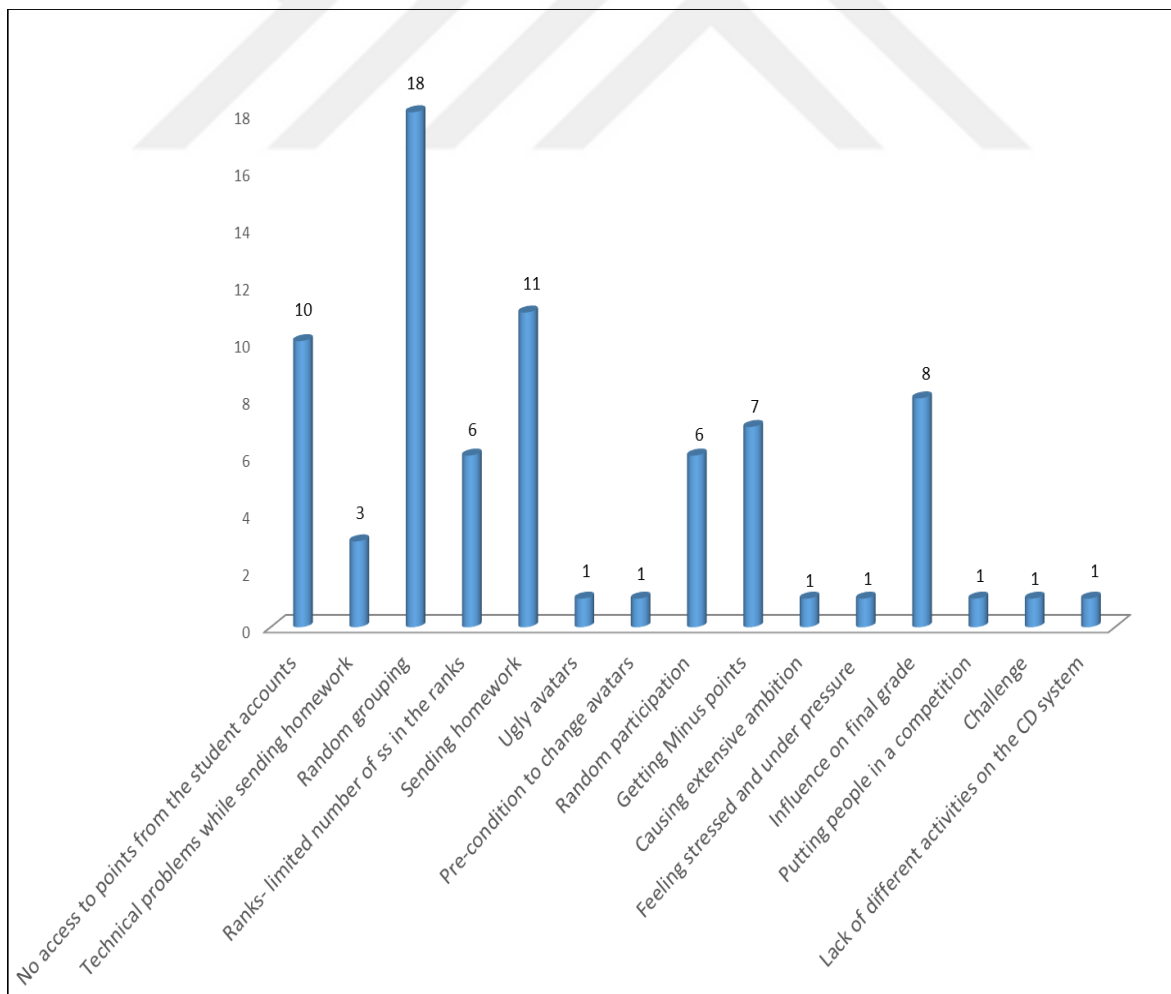


As for the least favoured features of CD, 44 of the participants did not state any negative features and 28 of them mentioned only one feature that they did not like. The least loved feature of CD is *random grouping*. The students did not like working with students they were randomly



brought together for the group tasks. It is followed by *sending homework* and 11 of the participants stated sending homework to CD as the least loved feature. Although sending homework was favoured by 25 participants since they did not need to bring homework to school, it was one of the least loved features of 11 participants and 3 participants indicated *the technical problems while sending homework* as the reason behind this view. The participants also wanted to follow their points from their own accounts; however the points were visible only by the teacher, which was the third least loved feature of CD. The fact that CD points of the participants influenced their performance grade was one of the least loved features while 4 of them stated this feature as one of their top three loved features. Following these, *getting minus points, ranks* and *random participation* were the other least loved features. In addition, there were features, stated only once, which were *ugly avatars, condition to change avatars, extensive ambition, feeling stressed and pressured, putting people in a competition, challenges* and *lack of different activities* on the CD application. Chart 2 below shows the number of participants disclosing these as their top three least loved features of CD.

**Chart 2: The Number of Participants Indicating Their Top Three Least Loved Features of CD**



#### 4.2.4. ClassDojo as a Source of Motivation

In this section, 18 items associated with the possible motivational aspect of CD were analyzed. The related research questions are 'How does the use of gamification function in language teaching and learning?' and specifically 'Does gamification have an influence on learner motivation?'. The respondents were asked to indicate their perceptions of the degree that CD has a motivating influence on their learning. Here below are the details that show the frequencies and the percentages of the participants' response to the related items in Table 7.

**Table 7: Findings Regarding Students' Views on Motivational Aspect of CD**

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	f	%	f	%	f	%	F	%	F	%
1. I love activities with Classdojo.	6	5,8	7	6,7	25	24,0	43	41,3	23	22,1
2. I think Classdojo is fun.	6	5,8	14	13,5	16	15,4	44	42,3	24	23,1
3. I feel comfortable in class with Classdojo.	10	9,6	15	14,4	28	26,9	36	34,6	15	14,4
4. (R) I'm not interested in Classdojo.	34	32,7	34	32,7	17	16,3	10	9,6	9	8,7
5. I find classdojo lessons more enjoyable.	10	9,6	12	11,5	21	20,2	45	43,3	16	15,4
6. (R) I find Classdojo boring.	35	33,7	31	29,8	19	18,3	7	6,7	12	11,5
7. I would like Classdojo to be used in other courses.	22	21,2	11	10,6	30	28,8	18	17,3	23	22,1
8. I strive to improve my English with Classdojo.	4	3,8	17	16,3	14	13,5	40	38,5	29	27,9
9. Thanks to Classdojo I am more willing to attend English lessons.	5	4,8	12	11,5	20	19,2	43	41,3	24	23,1
10. (R) Using Classdojo in English class stresses me.	30	28,8	32	30,8	22	21,2	8	7,7	12	11,5
11. I'm pretty good at using Classdojo.	11	10,6	14	13,5	32	30,8	33	31,7	14	13,5
12. Classdojo helps me to speak better English	9	8,7	16	15,4	30	28,8	36	34,6	13	12,5
13. Classdojo increases my motivation in English.	11	10,6	8	7,7	23	22,1	37	35,6	25	24,0
14. I would like to use Classdojo again.	15	14,4	11	10,6	19	18,3	32	30,8	27	26,0

Table 7 Continued

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	f	%	f	%	f	%	F	%	F	%
<b>15. (R) Classdojo makes me feel under pressure.</b>	<b>39</b>	<b>37,5</b>	23	22,1	22	21,2	9	8,7	11	10,6
<b>16. (R) I do not strive to improve my English with Classdojo.</b>	<b>38</b>	<b>36,5</b>	28	26,9	15	14,4	18	17,3	<b>5</b>	4,8
<b>17. Classdojo was effective in loving English.</b>	15	14,4	11	10,6	<b>30</b>	<b>28,8</b>	28	26,9	20	19,2
<b>18. (R) I participate in Classdojo activities, because I have no choice.</b>	<b>34</b>	<b>32,7</b>	20	19,2	18	17,3	11	10,6	21	20,2

Based on this table, it can be easily said that the participants are motivated to improve their English through the use of CD. They are motivated for using CD in the English lesson as most of the respondents loved the activities they did with CD (63,4 %) and almost half of them (49 %) felt comfortable in class when the teacher used CD. Likewise, a considerable amount of them (66,4 %) affirmed that CD helped them strive to improve their English and almost half of them (47,1 %) speak English better thanks to CD. In addition, most of the students (59,6%) claimed that CD increased their motivation and majority of the respondents (64,4%) affirmed that they were more eager to participate in the lessons. This statement was also confirmed in another item that “*I participate in CD activities, because I have no other choice*”. 51,9% of the students objected to the statement while 17,3% of them were undecided.

The fact that they are motivated can be verified with some other items in the section as well. For instance, almost half of the participants (46,1%) affirmed that CD was effective in their loving English. As they consider that ClassDojo has a motivating influence on their learning, most of the students have not developed significant amount of negative feelings. Frankly, most of the students (65,4%) disagreed about being not interested in CD. Similarly, 63,5% of them did not find CD boring or almost the same number of students (63,4%) rejected the statement that they did not strive to improve their English with CD. Most of the students (59,6%) did not feel under pressure when they used CD in class or felt strained due to using CD, which very probably paved the way for the fact that many of them (58,7%) agreed or strongly agreed that English lessons were more enjoyable with CD and more than half of them (56,8%) wanted to use CD again.

#### 4.2.5. Attitudes Towards Game Elements

The items in Part D of the questionnaire are dedicated to get information about the perceptions of the students related to the game elements that were integrated into CD. The related research question is ‘*What are the perceptions of students on the game elements?*’

The section also tries to analyse whether the game elements create extrinsic or intrinsic motivation on the participants’ learning process. The respondents were directed to indicate their level of liking the game elements initially, later they were asked to reflect their opinions related to the game elements (*points, leaderboards, ranking, rewards and avatars*).

##### 4.2.5.1. Sympathy Level for the Game Elements

In the first section of Part D in the questionnaire, the students ranked to what extent they liked the game elements used in CD. This section analyzes the findings of the related research question: *Which game elements and mechanisms of gamification attract the students more and improve learner satisfaction (avatars, leader boards, points, level-ups)? Why?*

Here below are the details showing the frequencies and the percentages of the participants’ response related to the game elements in Table 8.

**Table 8: The Distribution of Students’ Level of Liking the Game Elements**

Game Elements	Very little		Little		Medium		Much		Very Much	
	f	%	f	%	f	%	F	%	F	%
<b>Avatars</b>	5	4,8	4	3,8	28	26,9	22	21,2	<b>45</b>	<b>43,3</b>
<b>Quest</b>	7	6,7	12	11,5	<b>34</b>	<b>32,7</b>	30	28,8	21	20,2
<b>Leaderboard</b>	10	9,6	2	1,9	24	23,1	29	27,9	<b>39</b>	<b>37,5</b>
<b>Ranks</b>	10	9,6	12	11,5	26	22,1	<b>33</b>	<b>31,7</b>	26	25,0
<b>Rewards</b>	6	5,8	8	7,7	24	23,1	20	19,2	<b>46</b>	<b>44,2</b>
<b>Points</b>	8	7,7	5	4,8	18	17,3	30	28,8	<b>43</b>	<b>41,3</b>

Based on this table, it is clear that *avatars* are highly favoured by the participants. 64,5% of them liked *avatars* a lot. When we have a closer look at the table, *points* are the most favoured

game element as 70,1% of the students liked *points* a lot while only 12,3 of them did not like them very much. The second favoured game element is the *leaderboard* in CD, which indicates that the students like seeing their order among their friends. 68 of the students (65,4%) demonstrated that they liked the *leaderboard* a lot while 12 of them (11,5%) did not like the *leaderboard* very much. On the other hand, *quests* are the last in the rank of the most favoured game elements as only 49% of the respondents showed that they liked *quests* very much. The results also show that *ranks* are one of the least favoured game element in the CD system, since 21,2 % of the students reflected that they liked *ranks* not very much.

#### 4.2.5.2. Students' Views on Points

In this section, nine items with regard to the respondents' views on points were analyzed. Below are the details in Table 9 showing the frequencies and the percentages of the participants' response to the related items.

**Table 9: Findings Related to Students' Views on Points**

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	f	%	f	%	f	%	F	%	F	%
<b>1. I get bored in the lesson that I cannot get points.</b>	18	17,3	12	11,5	16	15,4	22	21,2	<b>36</b>	<b>34,6</b>
<b>3. I think it's easy to get points in Classdojo</b>	6	5,8	16	15,4	<b>42</b>	<b>40,4</b>	21	20,2	19	18,3
<b>5. Minus points in Classdojo reduce my motivation.</b>	8	7,7	8	7,7	16	15,4	31	29,8	<b>41</b>	<b>39,4</b>
<b>6. I get angry when I can't get points.</b>	19	18,3	20	19,2	<b>24</b>	<b>23,1</b>	19	18,3	22	21,2
<b>9. I feel sad when I do not get points.</b>	7	6,7	6	5,8	20	19,2	33	31,7	<b>38</b>	<b>36,5</b>

As can be inferred from the table, points motivate a considerable amount of the participants. For instance, more than half of the participants (55,8%) got bored in class when they did not get points although 28.8% of them thought the opposite, which indicates that they are either not interested in getting points or they are intrinsically motivated that their motivation does not diminish by not getting any points. In addition, almost same amount of students (68,2%) feel sad when they cannot get any points in a class hour. Despite the fact that most of them got sad when they could not get points, not that many of them felt anger in the same case, because only 39,5 % of them felt angry when they could not get points. A good many of the students (40,2%) could not decide whether it is easy to get points or not; on the other hand 38,5% of them agreed or strongly

agreed while 21.2% of them objected to this statement. Although many of the students did not get angry for not getting points, getting minus points caused a diminish in the motivation level of most students (69,3%). When we look at the findings in the table, we also see that points function as a source of extrinsic motivation as can be viewed in Table 10.

**Table 10: Items Related to Extrinsic Motivation**

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	f	%	f	%	f	%	F	%	F	%
<b>2. I try to get points to please my teacher.</b>	6	5,8	26	25,0	14	13,5	<b>35</b>	<b>33,7</b>	23	22,1
<b>4. I make an effort to reach the point that my teacher will reward.</b>	1	1,0	7	6,7	7	6,7	<b>48</b>	<b>46,2</b>	41	39,4
<b>7. Since my friends see my score, I try to get more points.</b>	9	8,7	10	9,6	13	12,5	<b>43</b>	<b>41,3</b>	29	27,9
<b>8. I compare my point with the points of my other friends.</b>	10	9,6	10	9,6	16	15,4	<b>38</b>	<b>36,5</b>	30	28,8

Based on the table, it can be clearly said that pleasing the teacher is one of the reasons that students participate in CD activities as more than half of the students (55,8%) agreed, which shows that these students may have extrinsic motivation and they may participate to have a good impression on the teacher rather than to improve their English. Points are also taken into account by the majority (69,2%) for the fact that their points are visible to their classmates, which results in their striving to get higher points. Similarly, points create competition among most of the participants (65,3%) and they compare their points with the others. The findings in the table show that, 6,7% of the participants seem to be undecided about the motivational aspect of the rewards, however it may be inferred that rewards might be the strongest source of motivation as 85,6% of the students affirmed that they strive to reach the points their teacher will reward. On the other hand, rewards had no influence on a small group of the participants (7,7%) maybe because they are amotivated or they have intrinsic motivation to learn English.

#### **4.2.5.3. Students' Views on Leaderboards**

In this section, findings related to participants' perceptions on leaderboards were analysed. They reflected their views based on the eleven items in this section. Below are the details of the frequencies and the percentages in Table 11.

**Table 11: Findings Related to Students' Views on Leaderboards**

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	f	%	f	%	f	%	F	%	F	%
<b>1. Having few points in Classdojo makes me unhappy.</b>	6	5,8	6	5,8	11	10,6	35	33,7	46	44,2
<b>2. I like that my classmates see my points.</b>	14	13,5	15	14,4	<b>33</b>	<b>31,7</b>	18	17,3	24	23,1
<b>3. I like to know my order in the classroom.</b>	10	9,6	14	13,5	17	16,3	<b>34</b>	<b>32,7</b>	29	27,9
<b>4. It makes me happy to be on top of the list in Classdojo.</b>	5	4,8	4	3,8	5	4,8	27	26,0	<b>63</b>	<b>60,6</b>
<b>5. To be at the bottom of the list makes me sad.</b>	6	5,8	6	5,8	10	9,6	32	30,8	<b>50</b>	<b>48,1</b>
<b>6. I envy my friends who are at the top of the Classdojo leaderboard.</b>	<b>43</b>	<b>41,3</b>	25	24,0	17	16,3	10	9,6	9	8,7
<b>7. I like to compete with my friends at Classdojo.</b>	15	14,4	7	6,7	13	12,5	35	33,7	<b>34</b>	<b>32,7</b>
<b>8. (R) I don't care about in what order I am in in Classdojo.</b>	<b>44</b>	<b>42,3</b>	26	25,0	19	18,3	5	4,8	10	9,6
<b>9. I try harder to be on top in Classdojo.</b>	6	5,8	6	5,8	9	8,7	36	34,6	<b>47</b>	<b>45,2</b>
<b>10. It makes me happy to surpass my friend (s) in Classdojo</b>	10	9,6	4	3,8	21	20,2	31	29,8	<b>38</b>	<b>36,5</b>
<b>11. (R) I wouldn't have tried to get points if my friends hadn't seen my order in the leaderboard.</b>	58	55,8	25	24,0	8	7,7	8	7,7	5	4,8

It becomes clear from Table 10 that students have a positive attitude toward the use of the leaderboards in CD. When we look at the values in detail, we can say that having few points or being at the bottom end of the leaderboard makes the students unhappy. Almost the same number of students (77,9%) and 78,9%) *agreed* on the related items 1 and 5. For that reason, most of the students (79,8%) strived to be on top of the leaderboard. Additionally, 88,6% of the students got happy for being on top of the leaderboard or would be happy if they could be at the top, however a small proportion of the students (8.6%) were not interested in being at the top and 5 of them (4,8%) had no idea about what it felt like being at the top on the leaderboard. Most of the students (60,6%) also liked to see in what order they were on the leaderboard, which is also proven by the findings of the statement in Item 8. A great deal of the students (67,3%) rejected that they did not care about

their order on the leaderboard. Despite the facts that many of the students liked competing with their classmates (66,4%) and surpassing them (66,3%), not many of them wanted their classmates see their place on the leaderboard. Only 42 (40,1%) of the students wanted their friends see their points while 29 of them (27,9%) objected and the rest (31,7) were neutral. As mentioned, most of the students liked competing with their classmates and surpassing them; however this did not cause jealousy among most of the students (65,3%) and they did not envy their friends at the top of the leaderboard. In sum, the facts that most students liked seeing their place on the leaderboard and they were not jealous of their high pointed friends reflect that the competitive learning setting created with CD is not a hard one; rather it creates a sweet competition among the learners which functioned to motivate them.

#### 4.2.5.4. Students' Views on the Ranks in ClassDojo

This section presents the analysis of the research findings on students' views concerning the ranks integrated into CD. The percentages and the frequencies of the findings are given below in Table 12.

**Table 12: Findings Related to the Use of Rank System**

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	f	%	f	%	f	%	F	%	F	%
<b>1. It makes me happy to be in Grandmaster or the other top ranks.</b>	2	1,9	3	2,9	4	3,8	20	19,2	<b>75</b>	<b>72,1</b>
<b>2. Challenge times are a lot of fun.</b>	11	10,6	6	5,8	23	22,1	<b>39</b>	<b>37,5</b>	25	24,0
<b>3. I envy my friends at the Grandmaster rank.</b>	<b>42</b>	<b>40,4</b>	22	21,2	20	19,2	6	5,8	14	13,5
<b>4. I try to reach the Grandmaster level.</b>	6	5,8	4	3,8	11	10,6	36	34,6	<b>47</b>	<b>45,2</b>
<b>5. I like that our teacher puts us into a challenge to upgrade our ranks.</b>	12	11,5	9	8,7	17	16,3	33	31,7	33	31,7
<b>6. I fear for falling to the rank of bronze.</b>	15	14,4	6	5,8	17	16,3	28	26,9	<b>38</b>	<b>36,5</b>
<b>7. I like being ranked in Classdojo.</b>	29	27,9	12	11,5	18	17,3	21	20,2	24	23,1
<b>8. I get sad when I'm silver or bronze.</b>	12	11,5	7	6,7	21	20,2	30	28,8	<b>34</b>	<b>32,7</b>



According to Table 12, being in a high rank made the students (91,3%) happy, for that reason, more than three fourths of them (79,8%) tried to reach the top ranks *Grandmaster or Master*, on the contrary a small part of the group (9,6%) had no such considerations. In addition to this, a high percentage of participants (63,4%) had the fear of falling to the rank *Bronze* and many of them (61,5%) got sad when they were *Silver* or *Bronze*. Challenge times that the teacher directed questions to the whole class or to the ones that had the same points failed to capture the attention of 16,4% of the participants while challenging was perceived to be fun by the majority (61,5%). For that reason, many of them (63,4%) confirmed that they liked being put into challenge by the teacher to upgrade their ranks. Although most of the students agreed that they liked striving to reach the Grandmaster rank or liked being at the top ranks Master or Grandmaster, not many of them liked being ranked. Almost the same amount of students liked (43,4%) and did not like (39,4%) being ranked and 18 of them (17,3%) were neutral about the statement. The fact that a considerable amount of students did not like being ranked may be due to the same reason that a close amount of them did not like their friends see their place in the leaderboard. Those in the lower ranks did not want their friends see their ranks or maybe the students in general did not want being separated due to the probability of humiliation they or their friends would be exposed to.

#### 4.2.5.5. Students' Views on the Rewards

This section analyses the finding concerning whether or to what extent rewards are efficient for motivating students and their views on rewards. The findings are given below in Table 13.

**Table 13: Findings Related to Students' Views on the Rewards**

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	f	%	f	%	f	%	F	%	F	%
<b>1. I participate in English class to receive a reward.</b>	14	13,5	6	5,8	18	17,3	<b>33</b>	<b>31,7</b>	<b>33</b>	<b>31,7</b>
<b>2. The rewards of our teacher attract me.</b>	6	5,8	2	1,9	19	18,3	31	29,8	<b>46</b>	<b>44,2</b>
<b>3. I like that the points I collected in Classdojo influenced my final grade.</b>	24	23,1	8	7,7	11	10,6	23	22,1	<b>38</b>	<b>36,5</b>
<b>4. The idea of getting rewards motivates me more.</b>	2	1,9	2	1,9	17	16,3	38	36,5	<b>45</b>	<b>43,3</b>
<b>5. I do my homework more carefully to get a reward.</b>	4	3,8	8	7,7	16	15,4	<b>39</b>	<b>37,5</b>	37	35,6

**Table 13 Continued**

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	f	%	f	%	f	%	F	%	F	%
<b>6. In my opinion “the right not to do homework” is a good reward.</b>	21	20,2	16	15,4	14	13,5	19	18,3	<b>34</b>	<b>32,7</b>
<b>7. I strive to get the Avatar replacement reward.</b>	12	11,5	8	7,7	14	13,5	31	29,8	<b>39</b>	<b>37,5</b>

It appears from Table 13 that rewards were influential in motivating the participants. As we have a closer look at the values, it is clearly seen that students strived for gaining rewards. For instance, 83 of them (79,8%) replied that the idea of gaining rewards motivated them while a very small amount of them (3,8%) thought the opposite. Additionally, 66 of them (63,4%) confirmed that they participated in the class activities with the hope of receiving a reward despite the fact that 19,3% of them disagreed with the statement and 17,3% of them were undecided. The students who disagree with or neutral about the statement may be participating in class without expecting a reward, which shows that they were mostly intrinsically motivated or some of them did not participate as extrinsic motivation incentives failed to work on them.

One another proof of students' being motivated by the rewards is given in the findings of item 7, since 67,3% of them stated that they specifically strived to change their avatars. Similarly, a huge amount of them (73,1%) did homework maybe more meticulously to gain the promised rewards and majority liked that their CD points influenced their performance grades. “The reward of *“Homework pass”* did not seem to attract the participants as much as the others since 53 of them (51,0%) agreed that they liked this reward and 37 of them (35,6%) thought the opposite. All in all, the underlying reason for the high motivation of the students seems to be that they were attracted by the rewards as many of them (74,0%) confirmed.

#### **4.2.5.6. Students' Views on Avatars**

In this part analysis of the findings with regard to students' perceptions on avatars are presented. The students were directed to reply six items concerning avatars in CD. The findings are given in Table 14.

**Table 14: Findings Related to Students' Views on the Avatars**

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	f	%	f	%	f	%	F	%	F	%
<b>1. I like having an avatar in Classdojo.</b>	3	2,9	3	2,9	10	9,6	33	31,7	<b>55</b>	<b>52,9</b>
<b>2. I don't like my Classdojo avatar.</b>	51	49,0	26	25,0	12	11,5	6	5,8	9	8,7
<b>3. I'll try harder to get the right to change my avatar.</b>	14	13,5	10	9,6	18	17,3	32	30,8	30	28,8
<b>4. I like changing my avatar.</b>	14	13,5	8	7,7	20	19,2	30	28,8	32	30,8
<b>5. I am having fun changing my avatar.</b>	12	11,5	7	6,7	16	15,4	33	31,7	36	34,6
<b>6. It is not very necessary to have an avatar in Classdojo.</b>	27	26,0	23	22,1	22	21,2	13	12,5	19	18,3

It is understood that the majority were attracted by the existence of avatars on CD. For instance, 88 of them liked having avatars on CD while only very small amount of them (5,8%) were definitely not interested in avatars. In addition to this, as many of them had the chance to change their avatars at least once during the process, they (74,0%) objected to the statement that they did not like their avatars. The fact that many of the students were attracted by the avatars paved the way for their striving to change their avatars. Similarly, 59.6 % of the students (59,6%) liked changing their avatars and 69 of them (66,3%) confirmed that they had fun changing their avatars. Finally, despite the fact that most of the students liked avatars, strived to change avatars and engaged themselves with changing avatars, only 50 of them (48,1%) objected to the statement that having avatar in CD is not very necessary.

#### **4.2.6. Contribution of CD to Language Skills**

This section analyses findings regarding to what extent CD contributes to the development of language skills. The related research question ‘*What effect does gamification have on the enhancement of language learning?*’ is tried to be replied through student responses. The findings are given below in Table 15.

**Table 15: Findings Related to the Contribution of ClassDojo to Language Skills**

Language Skills	Very little		Little		Medium		Much		Very Much		Mean
	f	%	f	%	f	%	F	%	F	%	
<b>Writing</b>	2	1,9	15	14,4	<b>53</b>	<b>51,0</b>	18	17,3	16	15,4	3.298
<b>Reading</b>	2	1,9	17	16,3	<b>38</b>	<b>36,5</b>	33	31,7	14	13,5	3.384
<b>Listening</b>	10	9,6	18	17,3	<b>37</b>	<b>35,6</b>	17	16,3	22	21,2	3.221
<b>Speaking</b>	4	3,8	26	25,0	<b>31</b>	<b>29,8</b>	27	26,0	16	15,4	3.240
<b>Vocabulary</b>	5	4,8	7	6,7	<b>35</b>	<b>33,7</b>	31	29,8	26	25,0	3.634

According to Table 15, the highest density interval of the distribution for each language skill lies in *Medium*, which shows that CD has at least medium amount of contribution to the development of language skills of the participants. When we look at the findings, it is seen that vocabulary building and improvement of reading skills have experienced a much bigger jump than the other language skills, because almost half of the students (45,2%) indicated that CD has *much* or *very much* contributed to the development of their reading skills. In addition, 57 of them (54,8%) marked that CD was contributonal a lot for their vocabulary learning. Subsequently, reading and speaking were the other highly developed skills. 47 of the respondents (45,2%) said that their reading skills were developed a lot with CD and 43 of them (41,4%) replied the same for speaking. According to the responses of the participants, writing is the least developed language skill throughout the experimental process.

In addition, The Mann-Whitney U Test was used to understand if there is any significant difference between the replies of male and female participants for the whole questionnaire although exploring the gender difference in attitudes towards gamification was not in the scope of this study. Only in this part of the questionnaire there occurred a gender difference in terms of CD's contribution to the development of language skills. Table 16 below displays frequencies of male and female students, mean ranks, sum of ranks of the items and Mann-Whitney U and the significance values.

**Table 16: Gender Difference in ClassDojo's Contribution to Language Skills**

Skills	Gender	N	Mean Rank	Sum of Ranks	U	p
Writing	Male	34	56,87	1933,50	1041,500	,266
	Female	70	50,38	3526,50		
Reading	Male	34	63,99	2175,50	799,500	,005
	Female	70	46,92	3284,50		
Listening	Male	34	61,88	2104,00	871,000	,022
	Female	70	47,94	3356,00		
Speaking	Male	34	64,57	2195,50	779,500	,003
	Female	70	46,64	3264,50		
Vocabulary	Male	34	55,01	1870,50	1104,500	,537
	Female	70	51,28	3589,50		

As seen in Table 16, no statistically significant difference was found between male and female participants with regard to CD's contribution on the improvement of their Vocabulary and writing skills. Contrastingly, there is a difference between males and females concerning the development of their reading, listening and speaking skills since the p values of these skills were found to be smaller than 0,05 ( $p > 0,05$ ). It seems that compared to the female participants, male participants could improve their reading, listening and speaking skills more, so it can be deduced that the male participants were participating less in the reading and speaking activities and they were less concentrated during the listening activities before the use of CD.

### 4.3. Analysis of the Qualitative Data

#### 4.3.1. Analysis of the Open-Ended Questions in the Questionnaire

The last part of the questionnaire consists of four open-ended questions. The first question asks students whether they want to take place in a classroom that uses CD again. The majority

responded that they would want to use CD again. There were some points which were specifically mentioned by the participants in person explaining the reasons why they wanted to or they did not want to take place in a CD used classroom. Many of the students stated that they wanted to take place in such a classroom for several reasons. Firstly, the amusing and enjoyable atmosphere created with CD is one reason that was commonly mentioned by the students. Here are some samples from the replies of the participants:

S19: Yes, because the lessons are more enjoyable with CD. We participate more and I raise my hand more eagerly.

S43: I want to, because the lessons are very enjoyable with CD.

S5: Yes, because thanks to CD the lessons are much more amusing and pleasant.

S35: Yes, I want to because it makes me happy and motivated.

Additionally, a large number of students highlighted certain benefits of using CD such as easiness through sending homework to CD, increase in time spared for studying and doing homework, taking friends as a model and so on. Here are some sample statements below.

S9: I want to, because it provides easiness in class or for homework. The lessons are lots of fun. Especially random, I love it a lot.

S101: Yes, I want to, because CD provides us with quick thinking and competition. We participate in the activities more.

S22: I want to, because thanks to CD, I do my homework and I study more.

S13: Yes, by seeing the points of my friends I realize their levels. I aim at increasing my level by taking the study styles of my friends as a model.

S30: Yes, because we do not bring our homework to the class, we just send it to CD.

Increase in participation and motivation are other issues frequently repeated in the answers of the participants. Many of them consider that their motivation into the lesson increased and they participated in the class activities more throughout the process. This eventually had a constructive influence on their English learning. Followings are some samples in relation with participation and motivation issues:

S93: I want to because I like getting points when I participate.

S62: I want to because I used to participate less, but now when I get points I want to participate more. I get happy.

S78: I want to because it motivates me and so I get more successful in English lessons. Also, getting points and changing avatars are motivating, so is sending homework to CD which also prevents waste of time. These make me happy and I want to use it again and again, but only for English.

S12: I want to take part, because CD enables us have high motivation, leads us to participation and striving both to succeed in English and to get the rewards. CD also helps us gain self-confidence.

S78: I want to, because it motivates me and so I get more successful in English lessons. Also, getting points and changing avatars are motivating, so is sending homework to CD which also prevents waste of time. These make me happy and I want to use it again and again but only for English.

One commonly repeated point noticed from their replies is that a great deal of students enjoyed the competitive learning environment of CD. Here are some samples from their replies:

S27: I want to, as CD creates a competitive and ambitious learning environment. I would want to be in such a class.

S45: Yes, because my interest in the lesson increases more and more with the challenges.

S57: I want to because CD increases my motivation and I am more focused in the lessons. Also I like being in sweet competition with my friends.

Rewards also attracted the participants and they are one of the reasons that the students want to use CD again. In addition, the game-like aspect of CD is signified by one student. Followings are sample statements related with rewards and the game aspect of CD:

S41: I want to because it arouses my interest during the lesson and it is like a game as

S2: Yes, I want to use CD again, because it influences my final grade and motivates me during the lesson.

S3: I want to because now everyone participates to get the rewards. I would once more want to be in a class that everyone speaks, opinions of each one are taken into consideration and even jokes are cracked.

Naturally not all of the participants were attracted by the use of CD and did not experience any or much benefits of the application. They had some specific reasons for not wishing to use CD again such as problems faced while sending homework, conflict with the rank system, habits (favouring the traditional way of learning) and so on. Here are some samples from their replies:

S20. No, because sending homework is hard.

S31: No, because the rank system demoralises us.

S32: No, I don't think it is necessary.

S84: No, because I don't like being ranked.

S89. I don't want to because it is not very necessary. The traditional method is more useful.

S83: I don't want to because when I don't participate in a class but my friends do, their points get higher than mine and I move to a lower rank.

S66: I definitely do not want to take part in such an application again. Because, although I have good English knowledge, CD puts me under pressure and sweeps my interest in the lesson away.

In sum, students mostly want to take place in a class that CD is used mainly for the reasons that it is useful, fosters motivation, leads to participation and creates fun, rivalry and enthusiasm. Additionally, getting rewards was one of the reasons the students highlighted in their answers.

The second open-ended question was what the students would tell about CD if they talked to a friend about it. Their answers were generally common with the issues highlighted by the participants in the first question.

S39: A platform, inciting students to participate.

S33: It is a good application and increased my participation.

S12: I would tell him/her to use this app if s/he wants strive to improve his/her English and that it would help him to participate in class more willingly and without being anxious.

S41: In CD you have an avatar, you need to reach a certain point to change it, which you can manage by participating.

S4: It made me love the English subject more, we participated more and there were some rewards.

S49: I would say that it is a great app. and you should suggest it to your teacher.

S79: I would say that the only difference of it from a game is that it is for education

As can be inferred from the above statements, students enjoyed the game like nature of CD and this has shaped their attitude toward the application and the process. Furthermore, participation is one issue the students frequently emphasize. Students that keep quiet during the lessons generally do not enjoy the lesson very much; it is also the case for Student 12, who thinks that CD contributed for the improvement of his English as he participated eagerly. Additionally, participating probably led to sympathy for the English subject for some students. In short, CD functioned as an incentive for participation and participation increased the interest of them towards the English subject as pointed out by Student 36 as well:

S36: I would say that I liked it and I got more interested in the lesson. I would also say that there are funny avatars and when we compete with friends the lessons get more amusing.

The issues of motivation and amusement were other commonly repeated points. The fact that they were amused during the process and that they got more motivated in the English lessons were also pointed out by many students. Here are some samples from their replies:

S20: It is an entertaining and beneficial application but sending homework is difficult.

S19: It is enjoyable. I like seeing the points of my friends and If I have fewer points than him I study harder to get more points; thus I comprehend the lesson better.

S53: If you get bored while listening in class, want to have an enjoyable lesson and at the same time increase your grades it is a really beneficial app.

S13: I would introduce CD as an app. that we can see our points whenever we want and do our homework in a technological platform. It is like a game and motivates in the English lesson.

S43: An excellent app, it increases my motivation and I like the sweet competition with my friends.



The participants also mentioned the benefits of using CD and some of them highlighted that they got more competitive and ambitious. Followings are sample statements:

S27: I would say that it is beneficial and influences language learning.

24: I would say it is influential on our English learning, because we get points according to our participation in class and this fires us with the enthusiasm to get more points.

22: An enjoyable application that fosters ambition and creates a competitive atmosphere.

Rewards and avatars were also other points the students mentioned their friends as pointed out by Student 5:

S5: I would tell that there are gifts and everyone has their own avatars and that you get the rewards as a result of the points that you collect and best of all, we do not need to bring our homework to school with us.

Students would also reflect their negative attitudes on CD. Here are some samples below:

S32: I would say it is not necessary.

S73: I would not suggest much.

S74: I would say that I don't like it as it influences the final grade.

In sum, based on the findings from this question, it is evident that students liked the points they got when they participated, which increased their willingness to participate and these fostered their motivation. Likewise, sweet competition provided with challenges and rising points motivated them and they enjoyed the amusing learning process, which eventually had an influence on their attitude toward the English lessons.

The third question in the questionnaire was about what the students would want to change about CD if they were given a chance. Many of the students complained about not being able to see their points or ranks from their own accounts as was indicated in the section of top three least loved feature of CD. Likewise, they did not like being put into random groups with any classmate for team works. They argue that working with close friends helps them be more productive for the team work. One more thing that was commonly mentioned is that they did not want their points to be visible to other friends; maybe those with low points would feel humiliated. Students also did not like getting minus points, which was frequently pointed out by them, which shows that the participants like the rewards and getting positive points, but not like punishment or the negative points. Here below are some samples with regard to the issues mentioned above:

S101: I would make the points accessible from the student accounts

S86: I would erase the function of picking random students.

S83: I would not include "random groping"

S79: Yes, random grouping, because anyone cannot get along with anyone for that reason those who are on the same wavelength produces a more fruitful work.

S70: I would not want my points be visible to others.

S3: Games in English could be nice.

S37: I would delete the minus points section, because my points get lower.

S38: I would not want my friends to see my rank and points. That makes me sad.

In question four, the students were asked about their positive or negative additional views. Many of them remarked that they were content with CD as it is or did not write any additional comments. Some of them pointed out the same aspects already mentioned in the first three questions. Additionally, push notification system and access to points from student accounts were mentioned by a few students. Followings are sample answers for this question.

S86: I think, inclusion of push notification system may be beneficial.

S11: Categorising students with the rank system is bad. This may lead people to jealousy and rage.

S21: I would want to see my points from my account.

#### **4.3.2. Analysis of the Interviews**

In this part, the findings and the analysis of the data gathered through face to face interviews with 11 of the participants will be reported. For the purpose of confidentiality, identities have been anonymised; for that reason, the interviewees are going to be called as P1, P2, P3, P4, P5, P6, P7, P8, P9, P10 and P11 across the study.

The interview consisted of 14 pre-determined questions compiled in compliance with the research questions. Based on the content of these questions and the ones formulated at the time of interview, six categories under which the responses of the participants will be discussed below were established. By conducting those interviews, a large amount of qualitative data for the study were obtained.

##### **4.3.2.1. The Students' Perceptions on General Features of ClassDojo**

During the interviews, it was found out that the participants mostly fostered positive feelings towards CD. Most of them seem to be content with almost all features of CD. There were some features that were specifically mentioned by the interviewees with a justification for their opinions. Here are some samples from the interviews regarding the feelings of the participants on CD:

P1: I like CD because of the sweet competition between friends. I also like it because of the group works, and being put into random groups. Some of the friends in the class are more passive, we can establish a dialogue with them thanks to group works.

P2: I did not use to like English before high school, but CD heightens my enthusiasm for the English lesson. I like participating and getting points. It increased my motivation for that reason I like CD.

P3: It has extremely influenced my participation in class and I like that.

P4: I like CD as it improves my English.

P5: I like CD because; CD creates rivalry and ambition among people, so it catches our interest to increase our points. Generally speaking, it influences people in a positive way.

As seen from the replies of the students, their being content with CD is accompanied with an emphasis on how CD contributes to their language learning process. It seems that CD has provided a positive change in the attitudes of some participants towards English learning. It is clear that the findings obtained from the interviews considerably show parallelism with the ones of the questionnaires with regard to the reasons behind feelings and perceptions on CD. The interviewees did not mention many negative feelings about CD, but there were some concerns. Here is one example:

P5: The thing I don't like about CD is that sometimes I hear friends talking between each other and say that "I participated more than you but you have higher points". I don't know if they are true or not. It doesn't happen very often actually but I am worried that it may influence friendship in the class badly.

Some of the interviewees elaborated on other features of CD such as points' being visible to everyone in the class. Although some participants in the questionnaire thought that people may get demotivated and humiliated when their points were seen, the participants in the interviews approached the issue from a constructivist point of view. They point out that this feature of CD functions as a stimulator for them, fosters their motivation and enthusiasm for learning English. Here are some samples from their comments:

P2: I like the competition, it is so amusing.

P1: I have high points for that reason and that my friends see my points and say that "aaa she has lots of points" is again a source of pride for me. It may not be the case for friends who have low points, but I think they should strive more when they see the people with high points. From my point of view, it is quite nice.

P4: Seeing the points of others should stimulate. We can ask our friends how they managed and did the activities or say to ourselves why we should not do the same and so on. We should use these features of CD to improve ourselves.

P5: I am not disturbed about my friends' seeing my points and when I see the points of others, especially those with higher points, I get more ambitious. That application motivates me and I am more willing to participate. Now, I have reached Diamond and I think I have improved my English so much. I say that I am not that bad compared to other friends and it feels good.

As seen from the findings of the questionnaires, "random grouping", a feature of CD to form randomly picked students for team works, is a feature that was worthy of note during the interviews

as well. According to the remarks of the students, it can be deduced that there exist both advantages and disadvantages of being in random groups. The advantage is that the reticent students may have been more active as they had chances to have a closer contact with their friends. On the other hand, group works may have been disadvantageous for the other students who could not focus enough on the task since they were made to work with people they were randomly brought together. Also, due to the passive students a brain storming for the task could not be conducted, which may have influenced the quality of the work. Furthermore, random grouping may have discouraged the students from making an effort. Followings are the views of the participants concerning “*random grouping*”:

P1: I also like the group works, and being put into random groups. Some of the friends in the class are more passive and quiet; we can establish a dialogue with them thanks to group works.

P4: In groups there may be students who do not get along well or there may be students who stay more passive; for that reason I don't like random grouping.

P5: When we are in groups with people, with whom we are in a fight, we might have troubles. Some people do not participate in class in general and they do nothing during the group work, either.

#### **4.3.2.2. Perception Regarding Common Features of CD and Other Games**

As mentioned earlier, the rationale behind the use of gamification is making use of certain game features in different contexts for the purpose of yielding better results in a particular field. In our context, assuming the participants as intense users of technology and players of these games, a gamification design was constructed with CD to observe the results on these digital natives in our context. They were familiar with quite a lot of games that were played on PC or mobile phones. They marked out certain common features of these games and CD. Here are some samples from the interviews of those who see a link between the games they play and CD:

P5: Avatars are seen in many games and our avatars are like cartoon characters and they are successful in catching our interest. It is similar to games because of the ranks and passing levels.

P4: Challenges are very similar to games that are played between two people.

P9: Nowadays, I am playing PubG; there are lower ranks in this game like bronze and silver and I am trying to reach Diamond now, the same happens here at school. I am trying to step up to a higher rank and be a Grandmaster or Master.

P3: Ranks like grandmaster, master and so on are similar to the ones in games. There are quests in games also.

P2: Avatars directly are a very similar feature of CD to games.

P1: The feature of changing avatars is the same as in games. For example in GTA you can pick an avatar.

As seen, from the standpoint of the students the most striking game features CD possesses are the avatars, challenges and the ranks. It is also clear from their remarks that these game features are appealing to them and influence the way they behave in the lessons.

The interviewees also reflected their views regarding whether an actual gamification has been achieved through the use of CD. Based on their replies, it would be fair to say that CD was successful in gamifying the process. While one of the participants (P11) was not very convinced of the presence of a real gamification, the rest believed that CD brought about gamification. Here are some details in their replies regarding the issue:

P6: It is like a game platform, for example in games we race and get a reward. CD is the same. When our points increase we get the rewards and our ranks increase. So I can say that it has gamified.

P11: Not very much gamified...but ClassDojo has brought about some sort of competition in the class. You mentioned CD and points ...I was the only one raising hands in the class, then it became 20 people and more.

P3: I think it gamified...with team works for example. We get in a competition with the other groups to create a better work like in the games

P8: I think it has gamified. The lessons are more enjoyable with CD. When you activate CD everybody participates, but when CD is not active, participation decreases by almost two thirds. I do not get bored during the lesson, time goes by so fast.

P4: Gamified I think. It is not quite a game but the use of avatars, ranks made it game like to great extent, so we can say that Cd has gamified.

P7: There is constant rivalry in games, which is the same for CD. It may not seem to be so for us, but there is competition actually.

P1: It gamified because in the English lesson, I see my friends more childlike, in the other lessons we sit more seriously, we just listen. In the English lesson, when I say that I got points that creates excitement among my friends. Thanks to CD, there occurs an entertaining atmosphere. We are too passive in the other lessons.

Some of the participants explained their views with a reference to games they liked playing as seen in the answers of P10 and P5, who resemble CD to PUBG (Player Unknown's Battlegrounds), a very popular game among people of their age:

P10: Yes nowadays I play PubG, there are lower ranks in this game like bronze and silver and I try to reach Diamond, the same happens here at school. I try to step up to a higher rank.

P5: Gamified, I think. For example, in the game PubG, the more people you kill, the higher rank you get and you win in the end and make progress. Similarly in CD, the more you raise your hand, the higher points you get and your rank increases and you can reach grandmaster rank and make progress. It is also similar to academic games.

#### 4.3.2.3. Perceptions Regarding Getting Points

The findings of the questionnaire revealed that points functioned to motivate a considerable amount of the participants throughout the experimental process. Their influences on the interviewees were almost the same, as indicated in their statements. They explained their perceptions on getting points with an emphasis on how they made them feel and what impact the points had on their learning process. Some of them developed an emphatic approach to getting points as indicated in the reply of Participant 2. Here are some samples from the interviews regarding the perceptions of the participants on getting points:

P1: I am proud of myself when I get points.

P2: I get extremely happy when I get points and there are times that I feel bad for my friends who can't get points. But at the same time it is good as they also get ambitious to get points.

P5: I have interest into learning English but I am not very successful, not fluent as much as some of my friends and I sometimes do not get very high grades in the exams. When I get points, I realize that I have made progress. Then I think that I can do English better.

P7: I feel extremely happy, because when I can't get points, my rank falls.

P9: I think points create rivalry. If you have 35 points and someone else has 40 points, you try to pass that person. It makes us study English more and participate more.

P10: I feel really happy when I get points, because I participate and at the same time knowing that they will influence my grade motivates me more. It increases my desire to participate.

P11: The fact that points will influence our grades doesn't motivate me much. It would be better if the points did not influence our grades.

It is clear from the statements above that points were effective for fostering positive feelings such as pride and happiness as well as promoting motivation and participation. In addition to these, the participants highlighted different views with regard to not getting points and based on their views, it can be deduced that the fact that they could not get points in a class hour had a constructive effect on their learning. Here below are some samples from the interviews verifying this situation:

P1: When I can't get points it is like taking a lesson from it. It is easy to get points but I can't get and I strive to get points. When my friends get point but I can't especially then I strive harder.

P3: I would get sad when I get minus points.

P4: When I do not get points, I don't feel sad very much. I tell myself "not today" and another day I strive again and I try to participate. I get happy when I get points.

The participants also mentioned their views concerning getting minus points. Some of them felt sad or irresponsible while some took lessons from the situation. Followings are samples regarding the issue:

P1: Once I forgot my homework... I felt irresponsible and that made me feel bad. Because I am not the kind of student that generally gets minus points. I tried to make up for it.

P5: I would feel sad but try to make up for it.

P6: If I get minus point, I try to make up for it.

P9: I get sad. Once I did the homework but did not bring it to class and I got a minus point. I felt sad.

P10: I did not feel much sad or broken; I thought I could recover it.

#### 4.3.2.4. Perceptions Regarding Game Elements

While trying to seek answers to what the participants consider on the game elements, it was found out that the answers of eleven interviewees shared certain common points. The most appealing game element is found to be ranks, which was followed by challenges, avatars and rewards. With regard to challenges, the participants thought that they highly entertain in times of challenges. In addition, the students who favour avatars and rewards as their favourite game element state that these are features pertaining to games more than the others. Some of their thoughts on this issue are as follows:

P1: I never had the chance to challenge, but I think challenges are the most entertaining of all the game elements. We do it more actively by speaking. On the leaderboard, you just see your place, but challenge is right at that time and it is more enjoyable.

P2: Challenges and avatars are my favourite. I have lots of fun and I like such entertaining things a lot. My avatar reflects me.

P5: Ranks. They show me how much I learned and that I am motivated.

P6: Avatars are my favourite. I don't like challenges very much. That is maybe because the people in our class want challenges very often. If it weren't so, challenges could have been more enjoyable.

P7: Rewards are more game like, so I like them more. As you complete a mission you get a reward, it is the same in CD. Avatars are special to us and they reflect us.

P8: Ranks are the best. I like being ranked as I see my place or level when I compare myself to the rest. You constantly strive for an upper rank.

P9: My favourite game element is ranks, because being in a high rank is beneficial for improving our English. We keep striving to stay at a high rank and that is beneficial for our English.

P4. Ranks, because they determine my English level and how I am in English to some extent. For that reason, ranking is more important for me compared to avatars and other game elements.

In the quantitative part of the study, it was found out that the *ranks* were the least favoured game element compared to others. On the contrary, it was found out that of all the game elements the interviewees favoured ranks the most. The reason behind appreciating ranks more is that they show their level, provide the participants to compare themselves with their friends, thus the participants consider ranks more beneficial for their learning process. In addition, they conveyed their perceptions on being in a high rank:

P1: Not only for CD but in general surpassing other people is a source of inspiration and it feels good and is important.

P2: Being in a high rank is quite honouring as my friends come and ask me for help and I like it.

P4: It is motivating and at the same time it tells you that you are on the right path. It helps us to verify ourselves.

P5: If I am a master or grandmaster, I think that My English is good, but if I am a bronze or silver, I think that I need to make some progress. Now I am a Diamond and I feel that I can do better compared to the precious years when my English was too bad. Now I am stimulated and encouraged.

P6: Being in a high rank or being a Grandmaster makes me feel that I am good at English.

P7: Being Grandmaster increases my self-confidence and I am not shy to speak anymore.

P8: Being in a high rank is important because it influences your grade. I guess this is more important for me.

P10: It feels so nice to be a high rank. Because unlike the exams, CD is a process, we may get low marks in the exams maybe for not studying enough or having a family problem but if it is not a long term thing and the person participates regularly and gradually increases his/her points, this influences his grades positively.

As it is clear from their replies, some of the participants enjoyed high rank for the psychology it creates on them and as being a leader is important for them while some like them as the ranks influence their grade. The participants also like being high ranks as they are motivated by the ranks.

#### **4.3.2.5. Perceptions on Getting Rewards**

According to the findings from the interviews, it can be deduced that some students enjoyed the process with CD for its own sake and for the enjoyment it gives while some of the participants were influenced from the rewards. The majority of the interviewees also mentioned that rewards had an influence on the learning process of almost all participants. In addition, the reward that attracts students the most seems to be “*influence on performance grade*”. Here are samples from the interviews with regard to getting rewards:

P1: About reward... there is so much competition for getting points in the class now. I think participation increased much more for the reward at the end and I think it has been beneficial.

P5: The fact that CD points influence our final grade is a good reward. I like the “homework pass” reward although some may think what is good about not doing homework. I think that I already know this and why would I compel myself harder. Rewards incite all of us as I hear some conversations.

P6: Rewards do not motivate me, I try to increase my points for myself to stay in a high rank not for the reward.

P7: I think rewards are influential on me. I strive more.

In addition, in relation to the issue of whether rewards are necessary or not, the participants pointed out different views as. For example:

P1: We strive even now without rewards and I think participation will increase much more if there is reward, but it is ok if there is no reward. Personally, I would not strive for the rewards. I participate and do the activities for the joy it gives when we compete.



P10: Rewards are necessary I think because the most important thing at school is grade. I prefer the reward of “influence on performance grade” to books or tickets, because we can’t buy mark but we can get any book we want.

P3: Rewards are influential, but I like English, for that reason it is ok if there is no reward.

The participants were also asked about their preferences as rewards. Some of them again focused on grade, some preferred a social activity and some of them favoured for books or tickets as were seen among the common replies in the questionnaires. Followings are sample statements from the interviewees:

P8: I would put a social activity as a reward. For example taking the top five students to Ankapark, that would attract a lot of people.

P9: A social activity, not as a group, but individually. I like doing social activities on my own.

P11: We have six hours of English lessons per week. When someone gets 10 points a week that makes 50 points in five weeks. When a person reaches 50 points, +1 point may be included in his grade. However, social activities as rewards would attract me more.

P2: Ticket for a museum or tickets for the activities of art fields that are not very common in Turkey would be attracting.

P3: Other possible rewards... This age group is very keen on going out so this kind of rewards would attract more.

#### **4.3.2.6. Perceptions on ClassDojo’s Contribution to English Learning Process**

The interviewees were requested to express their views on how CD contributed to their English. They highlighted certain language skills that were developed more than the others throughout the experimental process. According to the following sample statements from the interviews, speaking and writing were the most developed language skills. They reveal that sending homework helped them improve writing and they improved their speaking as they participated. On the other hand, students did not consider that they could improve their listening skills very much in this process. Their answers were quite similar. Followings are samples from their views regarding this issue:

P1: It contributes a lot on our writing when we do the writing activities in the book and when we send homework to CD. I don’t think it has contributed much on our listening. It has contributed a lot on our speaking as well, especially the friends who were challenged.

P2: Speaking and vocabulary. Because we get points when we speak... Actually all of the language skills...Also, we improve our writing by sending homework to CD.

P6: Speaking. When we raise hands, we speak. It has also improved our writing when we got feedback from our teacher we could correct our mistakes.

P7: I would say speaking. It has improved my speaking because, I strain myself more to participate and get points so I have improved my speaking.

The interviewees were also expected to declare their views concerning the use of CD for the other school subjects. The majority showed positive intentions in using gamification tools for other

subjects and thought that it would be beneficial to use CD for the other subjects while a few of them thought that it would not fit for other subjects except for languages. Here are some samples from their interviews verifying this situation:

P2: It would not fit for other subjects I think. It is good for language learning so we can use it in the German lesson as well.

P3: Personally, I would want to use it in other subjects, because it increased my interest a lot. I would want other subjects to catch my attention like this.

P1: I would want to use CD for the other subjects as well, because I don't see that much participation in the lessons of other subjects. Even though we know the answer, we may be reticent. But in English with CD, we try with the hope of getting points even if we are not sure about the answer. This is not the case for other subjects.

P6: I would want to use CD for maths or for the subjects that am less interested so that they would attract me more.

P7: I would want to use CD for History. I have low motivation in the History class.

P11: I think CD would not fit for maths, but we could use it for other subjects like history or literature.

As can be deduced from their replies, the participants are in consensus about the motivating and assisting influence of CD to enhance students' performance. Participating, which seems to have increased during the process, makes students feel engaged and productive in the lessons. For that reason, most of them consider that it would be beneficial for the other subjects that they are less interested in and the subjects they consider themselves less passive and less successful.

## CONCLUSION

The purpose of the current study was to explore students' attitudes on gamification and to determine how and to what extent gamification contributes to their English learning process. With that purpose, a gamification design was constructed through the use of ClassDojo application.

The fact that there are no studies in the related literature investigating attitudes of high school students' on the use of gamification for learning English with ClassDojo makes this study unique in the field of English language teaching.

Another motive behind conducting this study is that it is getting hard to motivate today's generation, who are also called as the digital natives. Bringing the classroom environment into somewhere that stirs up their interest and enthusiasm is of utmost significance, but the traditional learning or teaching methods fail to intrigue and engage them. With this in mind, it was aimed to see whether gamification would make any difference in their learning process.

Additionally, it is a well-known reality that despite the fact that they seem to have positive attitudes as indicated in various studies (Şentürk, 2015; Üzüm, 2017; Kızıltan & Atlı, 2013), a considerable amount of Turkish students do not display much progress in English or their level of anxiety is rather high (Durer and Sayar, 2012). Consequently, they have low English proficiency as also indicated in Education First English Proficiency Index (EPI). Bearing in mind Turkish students' low English proficiency and attitudes towards language learning, the current study was conducted with the aim of paving the way for a change in their attitudes and improving their proficiency.

According to the engagement theory of Austin (1984:519), "the effectiveness of any educational practice is directly related to the ability of that practice to increase student engagement". In this sense, the gamification design for this study can be considered as effective since the data obtained from both instruments show that the majority of the participants were content with the process of learning English with gamification as they overwhelmingly found CD enjoyable and game-like. The participants developed positive attitude toward the English lesson. Thus, more than half of the participants liked speaking in the class; they did not get bored during the lessons and they had fun doing the activities and the learning process of most participants was not interrupted by anxiety. In accordance with the findings of Wang et al. (2014), the participants were found to be more engaged in assignments that they needed to use technology. Many of the

participants in this study stated that they did their homework more meticulously and they liked sending their homework to ClassDojo.

In addition to developing positive attitudes toward the English lesson, many of the participants also had positive attitude for the ClassDojo application; hence the gamification process. The findings related to this part show that most of the students enjoyed the gamification process and most of them were happy, were not bored and many of them did not feel anxious or stressed. This is probably due to the fact that CD appeals to their age and it has similar features with the games they play as revealed by most of them. Upon being asked to identify the most clear-cut game features present in CD, many of the students mentioned avatars, challenges and the ranks.

The findings also show that the participants mostly believe that an actual gamification has been achieved through the use of CD. With this regard, they distinguish the competitive classroom environment, rivalry among friends, challenges, ranks and getting points in CD as the most evident features of games existing in CD. Some of the participants also noted that there has been gamification as the lessons have been more enjoyable since they started using CD and the team works made the lessons game-like.

Regarding the contribution of CD to their English learning process, a considerable number of participants believe that they participated more in class thanks to CD. Likewise, more than half of the students began to like English with CD and they considered themselves as more focused and more interested since they started using CD. The participants also think that they learned English better, thus most of them would suggest its use to other people. It was also suggested by the participants that CD may be useful for other subjects as well, such as history and literature; on the other hand another group of them assumed that CD would be more proper for learning languages.

When it comes to the feature of CD as a source of motivation, unlike the findings of Domínguez et al. (2013), most of the participants in this study believed that they were more motivated to learn English with CD throughout the procedure. The results yield that the students were more comfortable and they were more willing to participate. In addition, CD was effective in their loving English and they strived to learn English more than before, for that reason many of them assumed themselves to be good at English.

With regard to the notions of the participants on the game elements, it can be said that they were favoured by the students on the whole. Nevertheless, the replies to the most favoured game elements in the questionnaire did not match with the replies in the interviews. In the questionnaire, the most favoured three game elements were points, leaderboards and avatars while they were the ranks, challenges and avatars in the interviews. Most of the participants believe that the game elements are motivating. For instance, students strive to get *points* to get the *reward*, to enjoy the

class hour or sometimes to please the teacher. Kapp (2012) argues that points, badges and rewards are the least exciting and beneficial game elements compared to problem solving, engagement, storytelling or visualization. The results of the study show that the most effective game elements change depending on the context. In this study, the fact that their points, thus their ranks have an influence on their 'performance grade' highly motivates the students. Most of the participants also believe that they participated more in the lessons. The participants also feel proud of themselves, they get happy and they enjoy the competition with friends when they get points. On the other hand, losing points demotivated some of the participants while a group of them strived harder to make-up for the missing points. The students were also attracted by the *leaderboards*, which show their place in class. They got happy when they were on the top and they strived to maintain their position. According to Werbach and Hunter (2012), leaderboards may be demotivating if the students are at the bottom end of the leaderboard. Very probably, those who did not want their points or place on the leaderboard be visible to the others in our context were the participants at the bottom end of the leaderboard. Regarding *ranks*, it can be said that being in a high rank made almost all of the students happy, for that reason they continually tried to reach *Grandmaster* and *Master* levels. Many of them had the fear of falling to the lowest ranks and those in the *Silver* and *Bronze* ranks felt sad. With respect to *rewards*, it was found out that they were effective for motivating students as they strived to get the rewards. For that reason, many of them did the homework more meticulously, they participated more often. While many of the students were not attracted by the reward 'Homework pass', a considerable amount of them made efforts to increase their points in order to make an influence on their performance grade. *Avatars* were among the most favoured game elements both in the interviews and in the questionnaire. The participants enjoyed having avatars and tried harder in order to have a right to change their avatars.

Finding out what effect gamification has on the enhancement of language learning was another aim of the study. With this purpose, ClassDojo's contributions to the language skills across the experimental process were explored. The results from the questionnaires yield that vocabulary development, reading and speaking were successively the most developed language skills. On the other hand, most of the interviewees replied that CD contributed mostly on their *speaking*, *reading* and *writing*. They further elaborated that by participating they improved their speaking and reading skills and by sending homework and getting feedback they improved their writing skills. According to the results from both instruments, *listening* was found to be the least developed language skill compared to others.

In addition, at the end of the procedure there were a good number of students who wanted to use CD in their future studies. The reasons lying behind this view are that they think the lessons are more enjoyable with CD, they feel more motivated, and they enjoy the competitive learning environment created with CD and love comparing themselves with their friends. Those who oppose this view state that sending homework is hard. They also do not like being ranked or they feel

under pressure or assume CD as not a very necessary application for the improvement of their English.

Lastly, although the students enjoyed most features of CD, there were features that did not please the participants and CD was not effective in the enhancement of their English. Participants who were not content with CD would want to make some changes or additions if they had the chance. For instance, a group of them did not want their points or ranks to be visible to other participants; this feature of CD might have discouraged some of the participants and had an adverse effect on their learning. Additionally, they did not like being put into random-groups since they could be in groups with participants that they could not get along well. Since the major aim of learning a language is conducting conversation in this language, the students were forced for the development of this skill through the team works, by which they would have the chance to speak. However, working in random groups may have decreased their enthusiasm and may have failed to serve our goal. They also did not like getting minus points on CD so wanted to discard this part. On the other hand, they wanted to include a push notification system and wanted the points or ranks to be visible from the student accounts.

The current study may help teachers who feed their motivation from the success of their students, their participation and motivation to learn. In addition, the findings of the study may be of use to the teachers who seek different ways to include their students more into the learning process and lead to their active participation since gamification, as the study revealed, increased participation, fostered motivation, helped students develop positive attitudes towards learning English and provided a more enthusiastic learning context. The study may also encourage the teachers, who are not very keen on using technology in their class, to adapt it as an effective teaching strategy that will benefit the students.

On behalf of the students, to whom games are remarkably appealing, the game-like nature of gamification may change their negative attitudes towards learning English. As gamified language learning evokes sympathetic feelings in language learners, the material designers such as book designers or the policy makers of online learning softwares may include gamified content into the coursebooks or the softwares.

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# **APPENDICES**

## Appendix 1: The Questionnaire in English

### THE USE OF CLASSDOJO FOR LANGUAGE LEARNING

This study intends to learn your views on the online educational program ClassDojo. This is not an exam or test, thus there are no right or wrong answers. Your sincere replies are of utmost importance for the study. Thank you for your participation and support.

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**If you accept participating, please tick the box below.**

I am informed about the study and I accept participating.

#### **A. Personal Information**

1. Class: (.....)

2. Gender: (....) Female (....) Male

3. Age:.....

4. Please write your ClassDojo point:.....

<b>5. Please write three features of CD that you like most</b>	1.
	2.
	3.

<b>6. Please write three features you don't like</b>	1.
	2.
	3.

7. Please indicate how much ClassDojo contributed to the development of your language skills?

Language Skills		Very Little	Little	Medium	Much	Very Much
Writing		1	2	3	4	5
Reading		1	2	3	4	5
Listening		1	2	3	4	5
Speaking		1	2	3	4	5
Vocabulary		1	2	3	4	5
Other			2	3	4	

**Appendix 1: (Continued)**

**B. Attitude toward the English Lesson**

**1. Rate each item below to indicate your agreement**

Attitude towards the English lesson	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Speaking in English class gives me pleasure.	1	2	3	4	5
2. I like activities in English class.	1	2	3	4	5
3. English is one of my favorite school subjects.	1	2	3	4	5
4. I get bored when I study English.	1	2	3	4	5
5. I have fun doing English class activities.	1	2	3	4	5
6. . I have difficulty in understanding English.	1	2	3	4	5
7. I feel anxious during the English lesson.	1	2	3	4	5
8. I do the English homework without getting bored.	1	2	3	4	5
9. I like the books we use in the English class.	1	2	3	4	5
10. Diğer (.....)	1	2	3	4	5

**C. Views related to CD**

**1. Please rate each item below to indicate your agreement.**

General views on ClassDojo	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Thanks to ClassDojo, I participate more during the English lesson.	1	2	3	4	5
2. Thanks to ClassDojo I began to like English lessons.	1	2	3	4	5
3. I think ClassDojo is fun.	1	2	3	4	5
4. Using ClassDojo in English class stresses me.	1	2	3	4	5
5. ClassDojo makes me happy.	1	2	3	4	5
6. With ClassDojo, I am more focused in the English lessons.	1	2	3	4	5
7. I like sending homework to ClassDojo.	1	2	3	4	5
8. I am having technical problems with the use of ClassDojo.	1	2	3	4	5
9. I love helping my friends with the use of ClassDojo.	1	2	3	4	5
10. Using ClassDojo in English class is useful.	1	2	3	4	5
11. I think ClassDojo is a waste of time.	1	2	3	4	5
12. ClassDojo is not for me.	1	2	3	4	5
13. . ClassDojo appeals to our age.	1	2	3	4	5
14. Thanks to ClassDojo, I can reach my teacher more easily.	1	2	3	4	5
15. I think I learned English better with ClassDojo.	1	2	3	4	5
16. I think Classdojo is similar to the games I play.	1	2	3	4	5
17. I am generally satisfied with ClassDojo.	1	2	3	4	5
18. It's hard for me to send homework to ClassDojo.	1	2	3	4	5
19. Thanks to ClassDojo, I am more interested in English.	1	2	3	4	5
20. I am happy with the learning environment offered by ClassDojo.	1	2	3	4	5
21. I would like my friends to benefit from ClassDojo.	1	2	3	4	5
22. Other(.....)	1	2	3	4	5

**Appendix 1: (Continued)**

**2. Motivation**

<b>Motivation</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1. I love activities with Classdojo.	1	2	3	4	5
2. I think Classdojo is fun.	1	2	3	4	5
3. I feel comfortable in class with Classdojo.	1	2	3	4	5
4. I'm not interested in Classdojo.	1	2	3	4	5
5. I find classdojo lessons more enjoyable.	1	2	3	4	5
6. I find Classdojo boring.	1	2	3	4	5
7. I would like Classdojo to be used in other courses.	1	2	3	4	5
8. I strive to improve my English with Classdojo.	1	2	3	4	5
9. Thanks to Classdojo I am more willing to attend English lessons.	1	2	3	4	5
10. Using Classdojo in English class stresses me.	1	2	3	4	5
11. I'm pretty good at using Classdojo.	1	2	3	4	5
12. Classdojo helps me to speak better English	1	2	3	4	5
13. Classdojo increases my motivation in English.	1	2	3	4	5
14. I would like to use Classdojo again.	1	2	3	4	5
15. Classdojo makes me feel under pressure.	1	2	3	4	5
16. I do not strive to improve my English with Classdojo.	1	2	3	4	5
17. Classdojo was effective in loving English.	1	2	3	4	5
18. I participate in Classdojo activities, because I have no choice	1	2	3	4	5
19. Other(.....)	1	2	3	4	5

**D. Views related to the Game Elements**

**1. Please rate your level of liking the game elements in ClassDojo.**

	<b>Very Little</b>	<b>Little</b>	<b>Medium</b>	<b>Much</b>	<b>Very Much</b>
<b>Avatars</b>	1	2	3	4	5
<b>Quest</b> (Challenge and other tasks)	1	2	3	4	5
<b>LeaderBoard</b>	1	2	3	4	5
<b>Rank</b>	1	2	3	4	5
<b>Rewards</b>	1	2	3	4	5
<b>Points</b>	1	2	3	4	5

**Appendix 1: (Continued)**

**2. Please rate each item below to indicate your agreement.**

Game Elements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>A. Getting points</b>					
1. I get bored in the lesson that I cannot get points.	1	2	3	4	5
2. I try to get points to please my teacher.	1	2	3	4	5
3. I think it's easy to get points in Classdojo	1	2	3	4	5
4. I try to get points to please my teacher.	1	2	3	4	5
5. I make an effort to reach the point that my teacher will reward.	1	2	3	4	5
6. I get angry when I can't get points.	1	2	3	4	5
7. Since my friends see my score, I try to get more points	1	2	3	4	5
8. I compare my point with the points of my other friends	1	2	3	4	5
9. I feel sad when I do not get points.	1	2	3	4	5
10. Other(.....)	1	2	3	4	5
<b>B. Leaderboard</b>					
1. Having few points in Classdojo makes me unhappy.	1	2	3	4	5
2. I like that my classmates see my points.	1	2	3	4	5
3. I like to know my order in the classroom.	1	2	3	4	5
4. It makes me happy to be on top of the list in Classdojo.	1	2	3	4	5
5. To be at the bottom of the list makes me sad.	1	2	3	4	5
6. . I envy my friends who are at the top of the Classdojo leaderboard.	1	2	3	4	5
7. I like to compete with my friends at Classdojo.	1	2	3	4	5
8. I don't care about in what order I am in in Classdojo.	1	2	3	4	5
9. I try harder to be on top in Classdojo.	1	2	3	4	5
10. It makes me happy to surpass my friend (s) in Classdojo	1	2	3	4	5
11. I wouldn't have tried to get points if my friends hadn't seen my order in the leaderboard.	1	2	3	4	5
12. Other(.....)	1	2	3	4	5
<b>C. Ranking</b>					
1. It makes me happy to be in Grandmaster or the other top ranks..	1	2	3	4	5
2. Challenge times are a lot of fun.	1	2	3	4	5
3. I envy my friends at the Grandmaster rank.	1	2	3	4	5
4. I try to reach the Grandmaster level.	1	2	3	4	5
5. I like that our teacher puts us into a challenge to upgrade our ranks.	1	2	3	4	5
6. I fear for falling to the rank of bronze.	1	2	3	4	5
7. I like being ranked in Classdojo.	1	2	3	4	5
8 I get sad when I'm silver or bronze.	1	2	3	4	5
9. Other(.....)	1	2	3	4	5
<b>D. Rewards</b>					
1. I participate in English class to receive a reward.	1	2	3	4	5
2. The rewards of our teacher attract me.	1	2	3	4	5
3. I like that the points I collected in Classdojo influenced my final grade.	1	2	3	4	5

**Appendix 1: (Continued)**

<b>Game Elements</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
4. The idea of getting rewards motivates me more.	1	2	3	4	5
5. I do my homework more carefully to get a reward..	1	2	3	4	5
6. In my opinion “the right not to do homework” is a good reward.	1	2	3	4	5
7. I strive to get the Avatar replacement reward.	1	2	3	4	5
8. Other (.....)	1	2	3	4	5
<b>E. Avatars</b>					
1. I like having an avatar in Classdojo.	1	2	3	4	5
2. I don't like my Classdojo avatar.	1	2	3	4	5
3. I'll try harder to get the right to change my avatar..	1	2	3	4	5
4. I like changing my avatar.	1	2	3	4	5
5. I am having fun changing my avatar.	1	2	3	4	5
6. It is not very necessary to have an avatar in Classdojo.	1	2	3	4	5
7. Other (.....)	1	2	3	4	5

**E. Personal Assesments**

**Please answer the following questions.**

1. Do you want to take place in aclassrom that uses ClassDojo again? Why/ Why not?

.....  
 .....

2. What would you say if you talked about ClassDojo to a friend?

.....  
 .....

3.If you had the chance to make changes or add other features on ClassDojo, what would you change or add?

.....  
 .....

4. Could you please share if you have any other remarks related to ClassDojo?

.....

Thank you for your participation.

## Appendix 2: The Questionnaire in Turkish

### CLASSDOJO' NUN İNGİLİZCE ÖĞRETİMİNDE KULLANILMASI

Bu çalışma online bir eğitim uygulaması olan Classdojo'nun İngilizce öğretiminde kullanılması ile ilgili görüşlerinizi almayı amaçlamaktadır. Bu bir sınav ya da test değildir, dolayısıyla “doğru” veya “yanlış” cevap diye bir şey yoktur. Vereceğiniz samimi cevaplar çalışmam için çok önem taşımaktadır. Katılımınız ve desteğiniz için teşekkür ederim.

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**Çalışmaya katılmayı kabul ediyorsanız lütfen aşağıdaki kutucuğu işaretleyiniz.**

Bu çalışma hakkında bilgilendirildim ve çalışmaya katılmayı kabul ediyorum.

#### **A. Kişisel Bilgiler**

1. Sınıf: (.....)
2. Cinsiyet: (....) Kız (....) Erkek
3. Yaş:.....
4. Classdojo puanınızı yazar mısınız? :.....

<b>5. Classdojo'nun <u>sevdiğiniz</u> 3 özelliğini yazar mısınız?</b>	1.
	2.
	3.

<b>6. Classdojo'nun <u>sevmediğiniz</u> 3 özelliğini yazar mısınız?</b>	1.
	2.
	3.

#### **7. Classdojo aşağıdaki dil becerilerinizi geliştirmenize ne kadar katkı sağladı?**

<b>Dil Becerileri</b>	<b>Çok Az</b>	<b>Az</b>	<b>Orta</b>	<b>Çok</b>	<b>Çok Fazla</b>
1. Yazma	1	2	3	4	5
2. Okuma	1	2	3	4	5
3. Dinleme	1	2	3	4	5
4. Konuşma	1	2	3	4	5
5. Kelime bilgisi	1	2	3	4	5
6. Varsa diğer (.....)	1	2	3	4	5

Appendix 2: (Continued)

**B. İngilizce Dersine Karşı Genel Tutum**

1. İngilizce dersine ilişkin aşağıdaki ifadelerden size uygun olanı seçiniz.

İngilizce dersine karşı tutum	Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle katılıyorum
1. İngilizce dersinde konuşmak bana zevk verir.	1	2	3	4	5
2. İngilizce dersinde yapılan etkinlikleri severim.	1	2	3	4	5
3. İngilizce dersi en çok sevdiğim dersler arasındadır.	1	2	3	4	5
4. İngilizce dersine çalışırken canım sıkılır.	1	2	3	4	5
5. İngilizce dersi etkinliklerini yaparken eğlenirim.	1	2	3	4	5
6. İngilizce dersini anlamakta zorlanırım.	1	2	3	4	5
7. İngilizce dersinden korkarım.	1	2	3	4	5
8. İngilizce dersi ödevlerini sıkılmadan yaparım.	1	2	3	4	5
9. İngilizce dersinde kullandığımız kitaplar hoşuma gider.	1	2	3	4	5
10. Diğer (.....)	1	2	3	4	5

**C. Classdojo ile İlgili Görüşler**

1. Classdojo ile ilgili aşağıdaki ifadelerden size uygun olanı seçiniz.

Classdojo ile ilgili genel görüşler	Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle katılıyorum
1. Classdojo sayesinde İngilizce dersine daha çok katılıyorum.	1	2	3	4	5
2. Classdojo sayesinde İngilizce dersini sevmeye başladım.	1	2	3	4	5
3. Classdojo'yu eğlenceli buluyorum.	1	2	3	4	5
4. Classdojo'yu İngilizce dersinde kullanmak beni strese sokuyor.	1	2	3	4	5
5. Classdojo beni mutlu ediyor.	1	2	3	4	5
6. Classdojo İngilizce dersine daha çok odaklanmamı sağlıyor.	1	2	3	4	5
7. Classdojo'ya ödev göndermeyi seviyorum.	1	2	3	4	5
8. Classdojo kullanımı ile ilgili teknik sorunlar yaşıyorum.	1	2	3	4	5
9. Classdojo kullanımı için arkadaşlarıma yardım etmeyi seviyorum.	1	2	3	4	5
10. İngilizce dersinde Classdojo kullanımını faydalı buluyorum.	1	2	3	4	5
11. Classdojonun zaman kaybı olduğunu düşünüyorum.	1	2	3	4	5
12. Classdojo bana göre değil.	1	2	3	4	5
13. Classdojo bizim yaşımıza hitap ediyor.	1	2	3	4	5
14. Classdojo sayesinde öğretmenime daha kolay ulaşabiliyorum.	1	2	3	4	5
15. Classdojo ile daha iyi İngilizce öğrendiğimi düşünüyorum.	1	2	3	4	5
16. Classdojo kullanımını oynadığım oyunlara benzetiyorum.	1	2	3	4	5
17. Genel olarak Classdojo'dan memnunum.	1	2	3	4	5
18. Classdojo'ya ödev göndermek bana zor geliyor.	1	2	3	4	5
19. Classdojo sayesinde İngilizce dersine karşı daha ilgiliyim.	1	2	3	4	5
20. Classdojo'nun sunduğu öğrenme ortamından memnunum.	1	2	3	4	5
21. Classdojo'dan başka arkadaşlarımla da faydalanmasını isterim.	1	2	3	4	5
22. Diğer (.....)	1	2	3	4	5



## Appendix 2: (Continued)

### 2. Motivasyon

Motivasyon	Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle katılıyorum
1. Classdojo ile yapılan aktiviteleri çok severim.	1	2	3	4	5
2. Classdojo'yu eğlenceli buluyorum.	1	2	3	4	5
3. Classdojo ile derste rahat hissediyorum	1	2	3	4	5
4. Classdojo ilgimi çekmiyor.	1	2	3	4	5
5. Classdojo kullandığımız dersleri daha zevkli bulurum.	1	2	3	4	5
6. Classdojo'yu sıkıcı bulurum.	1	2	3	4	5
7. Classdojo'nun diğer derslerde de kullanılmasını isterim.	1	2	3	4	5
8. Classdojo ile İngilizcemi geliştirmek için çaba gösteriyorum.	1	2	3	4	5
9. Classdojo sayesinde İngilizce dersine daha istekli katılıyorum.	1	2	3	4	5
10. İngilizce dersinde Classdojo kullanmak beni geriyor	1	2	3	4	5
11. Bana göre Classdojo kullanımında oldukça iyiyim.	1	2	3	4	5
12. Classdojo daha iyi İngilizce konuşmama yardımcı oluyor	1	2	3	4	5
13. Classdojo İngilizce dersindeki motivasyonumu artırıyor.	1	2	3	4	5
14. Classdojo'yu tekrar kullanmak isterim.	1	2	3	4	5
15. Classdojo baskı altında hissetmeme neden oluyor.	1	2	3	4	5
16. Classdojo ile İngilizcemi geliştirmek için çaba göstermiyorum.	1	2	3	4	5
17. Classdojo İngilizceyi sevmemde etkili oldu.	1	2	3	4	5
18. Classdojo aktivitelerine katılıyorum, çünkü başka şansım yok.	1	2	3	4	5
19. Diğer (.....)	1	2	3	4	5

### D. Oyun Elementlerine Dair Görüşler

1. Classdojo'da yer alan oyun elementlerini beğenme düzeyinizi uygun kutucuğu işaretleyerek gösteriniz.

Oyun Elementleri	Çok Az	Az	Orta	Çok	Çok Fazla
<b>Avatarlar</b>	1	2	3	4	5
<b>Quest</b> (Challenge ve diğer görevleriniz)	1	2	3	4	5
<b>LeaderBoard</b> (Sınıftaki herkesin isimlerinin bir arada olduğu ve puanlarınızı gösteren tablo.)	1	2	3	4	5
<b>Rank</b>	1	2	3	4	5
<b>Rewards</b> (Classdojo'da aldığınız ödüller.)	1	2	3	4	5
<b>Points</b> (Yaptığınız şeylerle kazandığınız ve seviyenizi gösteren değerler )	1	2	3	4	5

## Appendix 2: (Continued)

### 2. Oyun elementlerine ilişkin aşağıdaki ifadelerden size uygun olanı seçiniz.

Oyun Elementleri	Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle katılıyorum
<b>A. Puan Toplama</b>					
1. Classdojo’da puan alamadığım derste sıkılırım.	1	2	3	4	5
2. Öğretmenimi memnun etmek için puan almaya çalışırım.	1	2	3	4	5
3. Bence Classdojo’da puan almak kolaydır.	1	2	3	4	5
4. Classdojo’da öğretmenimin ödül vereceği puana ulaşmak için gayret ederim.	1	2	3	4	5
5. Classdojo’da eksi puan almak motivasyonumu düşürür.	1	2	3	4	5
6. Puan alamadığımda sinirlenirim.	1	2	3	4	5
7. Arkadaşlarım puanımı gördüğü için daha çok puan almaya çalışırım.	1	2	3	4	5
8. Puanımı diğer arkadaşlarımın puanıyla karşılaştırırım.	1	2	3	4	5
9. Puan alamadığımda üzülürüm.	1	2	3	4	5
10. Diğer (.....)	1	2	3	4	5
<b>B. Liderlik Tablosu</b>					
1. Classdojo’da az puanım olması beni mutsuz eder.	1	2	3	4	5
2. Sınıf arkadaşlarımın aldığı puanı görmesi hoşuma gider.	1	2	3	4	5
3. Sınıfta kaçınıcı sırada olduğumu bilmek hoşuma gider.	1	2	3	4	5
4. Classdojo’da listenin üstünde olmak beni mutlu eder.	1	2	3	4	5
5. Listede alt sıralarda olmak beni üzer.	1	2	3	4	5
6. Classdojo liderlik tablosunda üst sıralarda olan arkadaşlarımı kıskanırım.	1	2	3	4	5
7. Classdojo’da arkadaşlarımla yarışmayı severim.	1	2	3	4	5
8. Classdojo’da kaçınıcı sırada olduğumu önemsemem.	1	2	3	4	5
9. Classdojo’da üst sıralarda olmak için daha çok çabalarım.	1	2	3	4	5
10. Classdojo’da arkadaş(lar)ımı geçmek beni mutlu eder.	1	2	3	4	5
11. Arkadaşlarım liderlik tablosunda sıramı görmeseydi puan almak için çabalamazdım.	1	2	3	4	5
12. Diğer (.....)	1	2	3	4	5
<b>C. Rütbe Verilmesi</b>					
1. Grandmaster ya da diğer üst rütbelerde olmak beni mutlu eder.	1	2	3	4	5
2. Challenge zamanları çok eğlenceli geçer.	1	2	3	4	5
3. Grandmaster’da olan arkadaşlarımı kıskanırım.	1	2	3	4	5
4. Grandmaster’a erişmek için çabalarım.	1	2	3	4	5
5. Rütbe değiştirmek için öğretmenimizin düello (challenge) yapması hoşuma gider.	1	2	3	4	5
6. Bronz rütbesine düşmekten korkarım.	1	2	3	4	5
7. Classdojo’da sınıfın rütbelere ayrılmasını seviyorum.	1	2	3	4	5
8. Silver ya da bronz olduğum zaman üzülürüm.	1	2	3	4	5
9. Diğer (.....)	1	2	3	4	5

## Appendix 2: (Continued)

Oyun Elementleri	Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle katılıyorum
<b>D. Classdojo'daki Ödüller</b>					
1. İngilizce dersinde ödül almak için derse katılıyorum.	1	2	3	4	5
2. Öğretmenimizin koyduğu ödüller ilgimi çeker.	1	2	3	4	5
3. Classdojo'da topladığım puanlarımın karne notuma yansımaları hoşuma gider.	1	2	3	4	5
4. Ödül kazanma düşüncesi beni daha çok motive eder.	1	2	3	4	5
5. Ödül kazanmak için ödevlerimi daha özenli yaparım.	1	2	3	4	5
6. Bence "ödev yapmama hakkı" iyi bir ödüldür.	1	2	3	4	5
7. Avatar değiştirme ödülünü almak için çabalarım.	1	2	3	4	5
8. Diğer (.....)	1	2	3	4	5
<b>E. Avatarlar</b>					
1. Classdojo'da bir avatarımın olması hoşuma gider.	1	2	3	4	5
2. Classdojo avatarımı beğenmiyorum.	1	2	3	4	5
3. Avatarımı değiştirme hakkı elde etmek için daha çok çabalarım.	1	2	3	4	5
4. Avatarımı değiştirmeyi seviyorum.	1	2	3	4	5
5. Avatarımı değiştirirken eğleniyorum.	1	2	3	4	5
6. Classdojo'da bir avatarımın olması çok gerekli değil.	1	2	3	4	5
7. Diğer (.....)	1	2	3	4	5

## E. Kişisel Değerlendirmeler

Lütfen aşağıdaki soruları cevaplandırınız.

1. Classdojo'nun kullanıldığı bir sınıfta bir daha bulunmak ister misiniz? Neden?

.....  
.....  
.....

2. Classdojo'yu başka bir sınıftan arkadaşınıza anlatsaydınız, ona ne derdiniz?

.....  
.....  
.....

3. Classdojo'da değişiklik yapabileseydiniz değiştirmek istediğiniz bir bölüm olur muydu? Neden?

.....  
.....

4. Classdojo ile ilgili başka paylaşmak istediğiniz olumlu/olumsuz görüşleriniz varsa paylaşır mısınız?

.....

Katılımınız için tekrar teşekkür ederim

### Appendix 3: Interview Questions

1. ClassDojo'yu seviyor musun?
2. Bilgisayar ya da telefonda oyun oynuyor musun? ClassDojo'nun bu oyunlara benzer bir yanı var mı?
3. ClassDojo'da puan aldığında veya alamadığında nasıl hissedersin?
4. ClassDojo'da eksi puan aldın mı ve aldıysan nasıl hissettin?
5. Sınıf arkadaşlarıyla birbirinizin puanlarınızı görmenizle ilgili ne düşünüyorsun?
6. Sence Sınıfta herkesin birbirinin puanını bilmesi yarış ortamının oluşmasını sağlıyor mu?
7. Üst sıralarda olmak senin için önemli mi? Üst sıralarda olmak ister misin?
8. ClassDojo'daki oyun elementlerinden favorin hangisi, neden?
9. Ödüllerle ilgili ne düşünüyorsun? Sence gerekli ya da etkili mi?
10. Sen olsan ne tür ödül olmasını isterdin?
11. ClassDojo'da değişiklik yapabileseydiniz değiştirmek ya da eklemek istediğiniz bir bölüm olur muydu? Neden?
12. ClassDojo'yu diğer derslerde de kullanmak ister misin? Neden?
13. Gerçekten oyunlaştırma hissediyormusunuz?

## Appendix 4: Screenshots from ClassDojo

PARAGRAPH 1

I am a student Cumhuriyet Anatolian High School and my classroom is fantastic and nice. My classroom is big and there are thirty seven students. So it isn't a good place to work.

PARAGRAPH 2

There are desks and chairs. But my opinion should desks for one person. The walls are white and yellow. There is a frame. There are three windows, but the view is ugly. Because there are buildings.

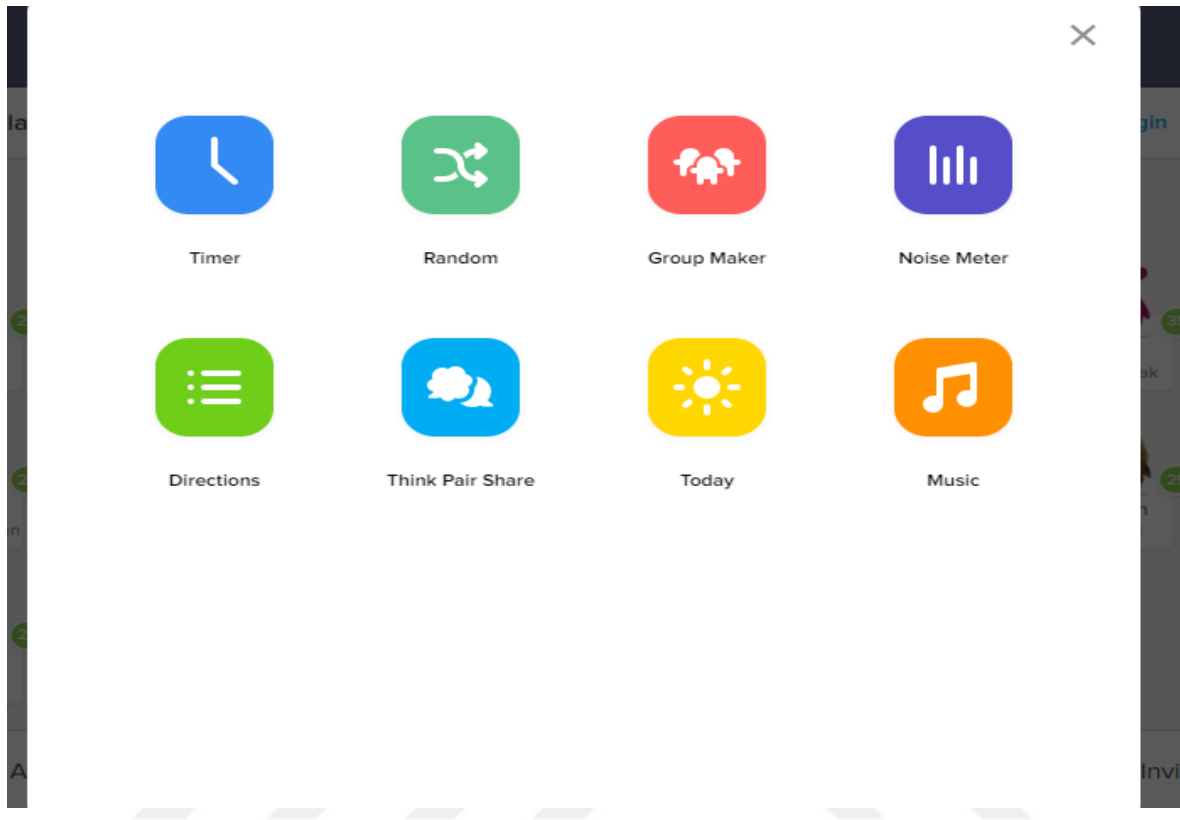
PARAGRAPH 3

In my ideal classroom, I have got the desks and walls it must be colorful and interesting. Buildings should not appear through the window. There should be colorful cupboards inside the class. It is a nice place to study now.

The screenshot shows the ClassDojo teacher dashboard. At the top, there is a navigation bar with the ClassDojo logo, a help icon, and a user profile icon. Below the navigation bar, the main content area is divided into several sections:

- School Insights**: A section with a "Show" button.
- My Classes**: A grid of class cards. Each card displays a class name, a student icon, and statistics. The classes shown are:
  - Örnek sınıf**: 5 Students, 2 Parents
  - 9B**: 35 Students, 1 Parent
  - 9C**: 36 Students, 0 Parents
  - 9D**: 37 Students, 0 Parents
  - New class**: A button with a plus sign to create a new class.
- Your archived classes**: A dropdown menu.
- Teacher Profile**: A sidebar on the right showing the teacher's name, "Bayan Esra KAVAKLI DUMAN", her role as "Teacher at Mamak Cumhuriyet Anadolu Lisesi", and a profile picture.
- School Profile**: A sidebar on the right showing the school name, "Mamak Cumhuriyet Anadolu Lisesi", and a message: "You're the only one here! Invite more teachers to join your school here." with a "here" link.
- Popular teacher resources**: A list of resources with icons and descriptions:
  - Classroom decoration pack**: Make your classroom special with monster art and posters.
  - Student introduction video**: Introduce ClassDojo with this 90-second video.
  - Back-to-School Night presentation**: Show parents how to stay connected with your class.
- Outlook Integration**: A notification for a photo album, "Fotoğraf albümü 19 MAYIS'A ÖZEL İNDİRİM!" from outlook.live.com.

**Appendix 4: (Continued):**



< 9C 36 Students 0 Parents 🔔 3 ? 👤

Classroom Portfolios Class Story Messages 🔗 Student login 🗣️ Invite parents ⚙️ Options

---

All posts

**Activities**

Create activity

**HOMWORK TIME!!!!!!...** 8/36

**write about your school...** 7/36

**Students**

Student login

## Gizem's Portfolio

+ Add post

Nov 07

*\*c-Abada\**

Gizem, I am fourteen years old, I am from Turkey. My birthday is in August. I speak Turkish in the language. and I want to practice my reading when I am on weekdays and I go to school at the After school, I study, do my homework. I go to bed at between nine and ten. I like playing basketball and watching TV.

**Gizem Hatiboğlu** 6 mon...

Nov 05

## Appendix 5: Permission for the Research



T.C.  
ANKARA VALİLİĞİ  
Milli Eğitim Müdürlüğü

Sayı : 14588481-605.99-E.9528967  
Konu : Araştırma izni

14.05.2019

MAMAK KAYMAKAMLIĞINA  
(İlçe Milli Eğitim Müdürlüğü)

İlgi: a) MEB Yenilik ve Eğitim Teknolojileri Genel Müdürlüğünün 2017/25 nolu Genelgesi.  
b) Karadeniz Teknik Üniversitesi'nin 15/04/2019 tarihli ve E.445 sayılı yazısı.

Karadeniz Teknik Üniversitesi Sosyal Bilimler Enstitüsü Anabilim Dalı Yüksek Lisans öğrencisi Esra KAVAKLI DUMAN'ın "Lise Öğrencilerinde Dil Öğrenimini Geliştirmek İçin Oyunlaştırmanın Kullanımı" konulu tez çalışması kapsamında uygulama yapma talebi Araştırma Komisyonumuzca incelenmiş olup ilçenize bağlı Mamak Cumhuriyet Anadolu Lisesinde uygulamanın yapılması Müdürlüğümüzce uygun görülmüştür.

Uygulama formunun (6 sayfa) uygulama yapılacak sayıda araştırmacı tarafından çoğaltılarak, araştırmanın ilgi (a) genelge çerçevesinde, ilçe milli eğitim müdürlüklerinin sorumluluğunda, eğitim-öğretimi aksatmayacak şekilde, okul ve kurum yöneticileri de uygun gördüğü takdirde gönüllülük esasına göre yazımız ekinde gönderilen uygulama araçlarının uygulanmasına izin verilmesini rica ederim.

Turan AKPINAR  
Vali a.  
Milli Eğitim Müdürü

EK:  
Uygulama formu (6 sayfa)

Adres: Alparslan Türkeş cad. Emniyet Mah.4/A  
Yenimahalle/ANKARA  
Elektronik Ağ: ankara.meb.gov.tr  
e-posta: istatistik06@meb.gov.tr

Bilgi için: Ayşe ARDA  
Tel: 0 (312) 212 36 00  
Faks: 0 (312) 221 02 16

Bu evrak güvenli elektronik imza ile imzalanmıştır. <https://evraksorgu.meb.gov.tr> adresinden 5de0-abca-3415-b91f-6cc5 kodu ile teyit edilebilir.

## Appendix 6: Consent Form

Sayın Veli;

Çocuğunuzun katılacağı bu çalışma, “Lise Öğrencilerinde İngilizce Öğreniminin Geliştirilmesi için Oyunlaştırmanın Kullanılması” adıyla, 15 Nisan- 15 Mayıs tarihleri arasında yapılacak bir araştırma uygulamasıdır.

Araştırmanın Hedefi: Oyunlaştırma tekniğinin lise öğrencilerinin İngilizce öğrenme süreçlerine katkısı olup olmadığını görmek ve öğrencilerin bu yöntemle ilgili görüşlerini belirlemektir.

Araştırma Uygulaması: Anket / Görüşme şeklindedir.

Araştırma T.C. Milli Eğitim Bakanlığı'nın ve okul yönetiminin de izni ile gerçekleştirilmektedir. Araştırma uygulamasına katılım tamamıyla gönüllülük esasına dayalı olmaktadır. Çocuğunuz çalışmaya katılıp katılmamakta özgürdür. Araştırma çocuğunuz için herhangi bir istenmeyen etki ya da risk taşımamaktadır. Çocuğunuzun katılımı **tamamen sizin isteğinize bağlıdır**, reddedebilir ya da herhangi bir aşamasında ayrılabilirsiniz. Araştırmaya katılmamama veya araştırmadan ayrılma durumunda öğrencilerin akademik başarıları, okul ve öğretmenleriyle olan ilişkileri etkilemeyecektir.

Çalışmada öğrencilerden kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplar tamamıyla gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir.

Uygulamalar, genel olarak kişisel rahatsızlık verecek sorular ve durumlar içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden çocuğunuz kendisini rahatsız hissederse cevaplama işini yarıda bırakıp çıkmakta özgürdür. Bu durumda rahatsızlığın giderilmesi için gereken yardım sağlanacaktır. Çocuğunuz çalışmaya katıldıktan sonra istediği an vazgeçebilir. Böyle bir durumda veri toplama aracını uygulayan kişiye, çalışmayı tamamlamayacağını söylemesi yeterli olacaktır. Anket çalışmasına katılmamak ya da katıldıktan sonra vazgeçmek çocuğunuza hiçbir sorumluluk getirmeyecektir.

Onay vermeden önce sormak istediğiniz herhangi bir konu varsa sormaktan çekinmeyiniz. Çalışma bittikten sonra bizlere telefon veya e-posta ile ulaşarak soru sorabilir, sonuçlar hakkında bilgi isteyebilirsiniz. Saygılarımızla,

Araştırmacı : Esra KAVAKLI DUMAN

İletişim bilgileri: Tel: 5313113327

e-posta: esravkl@gmail.com

*Velisi bulunduğum ..... sınıfı ..... numaralı öğrencisi .....  
.....'in yukarıda açıklanan araştırmaya katılmasına izin veriyorum.  
(Lütfen formu imzaladıktan sonra çocuğunuzla okula geri gönderiniz\*).*

.../.../.....

İsim-Soyisim İmza:

Veli Adı-Soyadı :



## **CURRICULUM VITAE**

Esra KAVAKLI DUMAN was born in Samsun in 1986. She completed her primary education in Kenan Evren Primary School and continued aramba Foreign Language Intensive High School for her secondary education. She had her bachelor degree in English Language and Literature at Hacettepe University. After graduation she started working as an English teacher in Kars. In 2011, she worked as English teacher in Trabzon and at the same time she started her master's degree in Karadeniz Technical University, Applied Linguistics programme. Currently, she is teaching English at an Anatolian High School in Ankara.

KAVAKLI DUMAN is married and has a son.

