Game-based education to improve linguistic competence: an experimental study

Master's degree in Teacher Training for Secondary School, Vocational Training and Language Teaching
Speciality: English Language

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Academic Year 2022-2023

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Vic, Barcelona. June 15th, 2023

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Abstract

Català

Desenvolupat en un marc teòric sobre *gamificació*, en aquest projecte s'ha portat a terme una recerca a Catalunya en un centre de secundària de la comarca del Vallés Oriental per a provar si l'ús de jocs en un context EFL promou una implicació eficient cap a l'adquisició del llenguatge. A l'inici ens hem plantejat dues qüestions. Primer, si la gamificació és integral en el context EFL tenint en compte conceptes com ara motivació, cooperació, angoixa, estrès i trobada del nombre de vegades que l'alumnat té contacte amb les paraules. Segon, si la gamificació és un enfocament millor que una metodologia d'ensenyament més tradicional basada en l'ús de "paper i bolígraf". Per provar-ho, hem fet ús de tres instruments de mesura: un joc gratis de paraules en línia, *Wordle*, un test de vocabulari, i un seguit d'entrevistes amb el professorat. Les dades que hem recollit d'aquests instruments ens proporcionen un seguit de temes per tractar al voltant de l'ús de jocs a classe en el context d'EFL. Podem concloure que, tot i haver-ne obtingut resultats generalment positius, aquesta recerca no té la força necessària per determinar quina metodologia d'ensenyament és més eficaç. Tanmateix, podem afirmar que la gamificació proporciona resultats de caire molt prometedor en relació amb la implicació i la motivació en el context d'EFL.

Mots clau: *gamificació, motivació, EFL, vocabulari, Wordle*

English

Framed into *gamification*, this project has carried out research in Catalonia in a Secondary education school in the Vallés Oriental county to test whether the use of games in the EFL context promotes efficient engagement toward language acquisition. Two research questions were established at the beginning. First, whether gamification is comprehensive in the EFL context regarding concepts such as motivation, cooperation, anxiety, stress and word encounters. Second, whether gamification is a better approach to teaching than a more traditional pen-and-pencil methodology. To test so, we used three instruments: a free online word game, *Wordle*, a vocabulary test, and a set of interviews with the participants' English teachers. The data collected from the three instruments provides several research topics to be discussed around the use of games in EFL classes. We can conclude that, although obtaining general positive results, our research is not sufficiently strong to determine which teaching method is better. However, we can confirm that gamification yields promising results in engagement and motivation in the EFL context.

Keywords: *gamification, motivation, EFL, vocabulary, Wordle*

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1. Introduction

Secondary Education in Catalonia is in a current state of change. Both the organisation and building of the new curriculum bring the opportunity to reorganise and create materials which are useful and motivating for students. Findings that fulfil these goals ought to be a true and potential area of study. This proposal is established on the conception that gamification, either by using language content *games* or adapting materials in a game-like manner actually works as a tool to work on foreign language acquisition, henceforth FLA, and a number of reasons are provided in the literature review. Today, many schools are moving towards a *project-work* approach in which students learn and work in teams to develop both productive and receptive skills. Regarding students' improvement in these skills, gaming might contribute to a great extent.

The motivation for this research is to investigate the effectiveness of games regarding language acquisition in the EFL context. As it has been discussed in the literature, video games are found to be enjoyable and motivation for language study is enhanced (Peterson, 2010). This motivation usually goes hand in hand with the possibility of immersion. Immersion in a task is believed to be one of the best scenarios for learning. The content and possibilities that games display, plus a positive attitude towards learning, can result in acquiring not only useful vocabulary but also important expressions, idioms, and grammar, and, as a consequence, improving language skills on the whole. For the last two decades, the rise of Internet accessibility and the creation of websites that focus on language acquisition have facilitated learnability. Online, learners can find an infinite number of sites that can be accessed to practice their productive and receptive skills, as well as to improve their vocabulary and grammar, more specifically.

English is a compulsory subject that not all students wish to undertake. In Spain, like in most European countries, English has been established as a key language to be learnt at schools across Primary and Secondary education. There is a strong reason for this. English, as it is well known, works as a *Lingua Franca* for commerce, economy, and official business in Europe. Therefore, it is obvious that schools in the European continent would want to encourage their students to acquire a minimum level of English to provide them with more opportunities for the future. In Secondary Education, traditional classes have become tedious in the sense that students learn and review the same grammar and vocabulary throughout the whole ESO. Introducing games into the traditional coursebook curriculum may help students to engage with the lessons. As Fahandezh (2021, p.84) suggests, to escape from boring classes, teaching can be changed into an active learning process by using game-based learning approaches and strategies.

The term *gamification* dates back to 2002. It was coined and first used in the literature by Nick Pelling. Gamification is defined as the application of game design elements like points, leaderboards, and badges in a non-game context (Zhang et al., 2023, p, 2). In the class context, gamification is used as a tool to enhance learner engagement and achievement (Yavuz et al., 2020). The use of games promotes an effective context for learning. Digital game-based language learning is advantageous since it makes use of game aspects to provide a less stressful learning environment for students (Reinders & Wattana, 2015).

With this in mind, this paper can be understood as a little contribution to action research in terms of investigating how the use of games can affect the acquisition of vocabulary in the EFL class. That can be understood as the main goal. This study will focus on a specific online game, namely *Wordle*. We decided to use this game because most of the study participants had already used it to practice their language skills during the academic year. Moreover, this game allows teachers and researchers to create links for specific words to contextualise the game into a lexical field. This game is just a tool in an infinite list that can be used for educational purposes. There seems to be a broad rise of awareness in that the use of digital games in today's education system can help acquire language in the EFL context. It is in this field that we want to situate the project at hand.

To make the observations, some research has been carried out. In it, the students of a school in Catalonia used this game to learn and practice a specific set of words. This list of words has been specifically designed to be practised in two different measurable instruments that will be presented in the methodology section. We have obtained some specific results that will be analysed and discussed in the sections below. Once discussed, we will present the conclusions that can be extracted from this paper. Finally, we will mention the limitations and lines for future research that can be observed from the analysis that we made and how the data was collected, among other variables.

2. Literature Review

2.1. Gamification Strategies in Student-Centred Teaching Methods

A look at the literature regarding gamification and gamified lessons suggests promising results for EFL classes. Language learning relies on students' previous language experience and knowledge. Even so, learning a foreign language means facing new grammatical features, vocabulary, useful expressions, idioms, etc. Traditionally, language learning in the school context tended to be centred on using textbooks. These coursebooks enumerate the rules of the language and suggest activities

that accompany these explanations. The four main skills are practised and acquired in a very straightforward and routine-like manner. Every unit in the coursebook used to have a set of reading, listening, speaking and writing activities that made classes somehow dull and scarcely motivating. For years, the pedagogies used to teach English have been evolving to the point in which traditional classes are seen as somehow unproductive and inefficient. Today, many teachers and researchers believe that gamified classes make way for a better understanding and acquisition of the language. The swift towards a less rigid student-centred methodology through games creates valuable opportunities to engage in language learning outside the confines of traditional classroom environments (Peterson, 2010).

By means of typing *word games* on the Net, we can obtain a list of several games that can be used for educational purposes in the EFL class. Games such as *Wordle*, *Contexto* and *Spelling Bee* can be used to improve specific skills or to strengthen the acquisition of vocabulary. They are easily accessible for current learners in the Catalan territory. The only materials needed to use them are laptops and an Internet connection. Once in-game, students need to concentrate thoroughly and use their brains to perform well. The aim of *Contexto,* for instance, is that of finding a specific word through context. To do so, players can write any word in the search bar. Once tapped, their word will be given a score that tells the player how far or how close is their word, in context, to the word that the game is looking for. This game requires its players to think of lexical fields and narrow them down into specific concepts. It is a different but interactive means of practising vocabulary. On the same line, *Spelling Bee* is a word game. However, its purpose is different. Here, players find a hexagonal set of squares resembling a bee hive with a letter in each spot. Players need to combine the different letters provided by the game to produce words. The game itself tells you how many possible words can be obtained from the hive, granting the game a competitive spirit. A final numerical punctuation is provided once you give up or complete the game. *Wordle will* be dealt with later in this paper. If used correctly, these games can provide a positive learning atmosphere in the EFL class and enhance intrinsic motivation.

2.2. Motivation

As mentioned earlier, English is established as a compulsory subject in most countries. What this implies is that students must take it regardless of their wishes. For this reason, teachers must find strategies to *motivate* their students to learn the language. Motivation is a core performance factor to succeed in EFL classes. As suggested by Kraus (2020, p.381), "lack of motivation, and attendant feelings of disinterest, and lethargy are perennial issues in EFL classes, especially when students [...] are reluctantly compelled to undertake English studies due to, for example, educational policies and/or for graduation requirements". Learning a language is not a matter of

days but years, maybe decades. Students need to feel attracted to the foreign language to activate the learning process. All of them, even the most skilled. As Dörnyei states, "without sufficient motivation, even individuals with the most remarkable abilities cannot accomplish long-term goals" (Dörnyei, 1998, p.117). As suggested by Guilloteaux (2008, p.55), "motivation provides the primary impetus to initiate second or foreign language (L2) learning and later the driving force to sustain the long and often tedious learning process". It seems clear that one of the teachers' goals is to provide an integral teaching practice that focuses on improving student's motivation levels to keep them engaged in the lessons.

To meet motivation, activities should be appealing to students regarding their needs and expectations. For decades, the literature has been struggling to emphasize that the teaching curriculum ought to provide topics which interest its students. One of the advocates of this idea is Dörnyei. He has devoted years to studying how to rise and maintain motivation in learning and teaching practices. As he claims, "The first step has to involve our finding out about the interests, hobbies and needs of our learners: if we wish to relate content to student interests and experiences, we need to be knowledgeable about them" (Dörnyei, 2001, p.65). He, then, provides a series of ideas on how to learn about student's learning expectations. Moreover, he claims that we, as humans, learn outside the traditional learning environments by carrying out tasks which interest and immerse us. At this point, he insists that teachers should incorporate activities which are "stimulating and enjoyable" into their students' curriculum. (Dörnyei, 2001, p.72).

In finding activities that incorporate current students' interests we encounter that the implementation of games may improve rising their motivation levels. In research carried out by Almusharraf (2021), motivation levels rose when learning through the use of *Kahoot* questionnaires in comparison to traditional teaching methods. *Kahoot*, just like many of the new digital tools that can be used for teaching, poses an alternative to traditional classes in a way that feels more attractive to today's student generations. Undoubtedly, many teaching strategies used by the end of the past century are obsolete for several reasons, namely new student-centred pedagogical approaches, current legislation and the rise of new technologies. These new technologies are appealing to young students and can be extended to learners of different competence levels from an inclusive point of view.

To test motivation, teachers need to take action in providing students with tools and activities and use them to measure if they are engaging and enjoyable to them. As Dörnyei suggests, "the proof of motivation is in displaying it in action" (Dörnyei, 1998, p.122). Hence, teachers need to conduct action research in Burns' (2009) sense to investigate today's teaching contexts and develop new ideas that can satisfy learners' goals and expectations. As mentioned above, this paper intends to

promote an action research approach in investigating the outcomes of the use of games in the EFL context.

2.3.   Gaming Cooperative Spirit and Point Awarding

Another aspect generally discussed in the literature is the rise of cooperative work through games. As suggested by Fahandezh (2021), digital games can help trainers and learners by providing a fun, interesting, and creative condition to get better performance in learning a language. Learning through games can improve teamwork, communication and social interaction among students. (Fahandezh, 2021, p.84). Regarding working on productive and receptive skills, gamified classes can be comprehensive in the sense that they can be used to focus on any of the four main skills or all at the same time. The rise of information and communication technologies, ICTs, has provided enterprises with a chance to create digital gaming software that, when used correctly, makes an efficient tool for learning purposes. *Wordle*, just like Quizziz, Mentimeter, or Kahoot, among several others, allows students to interact with the language from a relaxed and interactive perspective. It is crucial to note that today's youngers were born into the modern digital era. Most of them have their personal mobile phone and can easily access an unlimited number of playable sources. Students' *digital competence* generally surpasses teachers'. As noted by Zhang (2023) digital literacy is something teachers need to take into account when using digital technology to create gamified language learning activities. Indeed, digital competence is an obvious topic to work on, since the new curriculum in Catalonia posits it as a key requisite to be developed during ESO.

Motivation and cooperation are also dependent on several facts through games. One reason why the use of games seems to have a positive outcome is the attribution of points and rewards. Learning through competition has also been proven to be efficient in various studies. To exemplify this, the study by Zhang (2023) provides an extensive discussion on the positive aspects of using game activities in class. The participants in this study found gamified activities captivating and motivating and made them develop their language skills further, as the results display. The possibility of obtaining rewards made some of the students display a healthy competitive atmosphere that helped students understand lessons better. However, as it is also discussed here, motivation does not apply uniformly to all students. Those who already feel motivated in foreign language classes seemed to not need game-like activities to increase their motivation levels and would even detach themselves from the class environment, while less motivated students generally increased their motivation for language learning.

Motivation does not seem to apply to all students fairly in the same way. This was also noted in a study by Hanus & Fox (2015) in which already motivated students found their intrinsic motivation harmed when participating in game-like activities. The ultimate desire is that of promoting a positive rise in intrinsic and extrinsic motivation. As explored by Montosa (2018), among many others, gamification can easily function as a promoter of extrinsic motivation. It is an external strategy, device, etc that can help students immerse in developing a task. However, as Montosa mentions, it should be "desirable for intrinsic motivation to be prioritised in order to achieve better outcomes" (Montosa, 2018, p.20). When students are intrinsically motivated, they carry out tasks for pleasure and the outcomes are generally better than those induced by extrinsic motivation. Therefore, as he goes on to suggest in his dissertation, educators should find a way to transform extrinsic factors, related to gaming in the EFL class, into intrinsic, as a means of reducing the possible negative impact that rewards can cause on learners. As many studies have suggested, extrinsic motivation through the awarding of points can easily go off track once learners expect an increase in the number of rewards that they expect to obtain as time goes by.

2.4.   Anxiety and Stress vs Immersion

Certainly, two of the factors that impede improvement in EFL are anxiety and stress. In the early 1980s, Krashen argued that there is a strong connection between anxiety, stress and language acquisition. Students learn best in a context where the levels of stress are low and therefore, language acquisition is facilitated. As discussed in Hitosugi (2014), the use of digital games provides a safe atmosphere in which players can develop their language skills in a stress-free environment. The game outcomes do not make a difference in the real world and repetition can be used to improve in all different skills. Practice makes perfect. Along the same line, Yavuz (2020) argues that gamification can be an effective technique to reduce anxiety in the language learning process. A less strict atmosphere can reduce anxiety and enable students to act autonomously and engage in risk-taking language situations, as discussed in Shatz (2015). It is often observed in foreign language classes that the students who participate the most are those who have developed their language skills better. Having developed a higher degree of competence in a language enhances participation. As a consequence, those students with poorer language skills tend to participate less. For that reason, digital games can provide the perfect context for learning, by taking risks.

Directly related to a decrease in the levels of stress and anxiety we can find immersion. In a 2020 study by Kraus et al, they observed that the use of games in class was successful concerning class participation. Students were able to develop their language skills more attractively than they were used to. In their own words, "the games encouraged genuine, spontaneous and consequential

communication" (Kraus, 2020, p.388). Indeed, as explored in Shatz (2015), gamification has been seen to promote risk-taking situations that truly enhance language learning. Dull learning scenarios are not, anymore, good means of learning the language. In this line of thought, as discussed by Reinders and Wattana (2015), these new digital scenarios create a positive attitude towards learning since learning through games makes up a less stressful environment for students. Students who find themselves motivated to participate actively in an activity may immerse themselves in it, thus favouring language acquisition. The literature generally agrees on the positive outcomes of immersion when related to learning. Studies by Cheng (2015) and Brown & Cairns (2004) suggest that immersion through games provides a positive basis for learning when students are conscious of the goals, time limit and expected results. Again, as discussed in Cheng (2015), immersion can be even more beneficial if these games are attractive to the student players.

2.5.   Class Management

A further aspect worth mentioning is facing class management in gamified classes. Kraus (2020) and Redjeki (2021) observed that gamification led to a less organized class environment in such a way that the final objectives of some lessons were not met sometimes. They come up with several ideas to implement as criteria for using game-like activities in class while not losing control of it. Moving from rigid pen-and-pencil classes to digital game-like ones forces the teacher to reorganise these in such a way that it might be difficult to attain all the expected goals. An overwhelming sense of motivation in students may lead towards losing control over class management, and that should be noted as a fact to take into consideration too.

2.6.   Encounters With Words

Incidental and intentional vocabulary acquisition are strategies used in the EFL class to learn the core terms of the language. It seems obvious that to learn new words in L2, the learner needs to find the words in context to understand their meaning and integrate them into the lexicon. As explored in Webb (2007) repeating the encounters with these words create valuable opportunities to accelerate the acquisition of the lexical items. However, as one could expect, there is no specific number of encounters required to learn a new word. Moreover, he distinguishes between high and low-frequency words, which are all relative to the learner and context. As the literature suggests, some lexical items may require 6, 8, 10 or even 20 encounters to become part of the lexicon of learners. Moreover, the quality of the input is also a factor to consider. As explored in Krashen (1989), those learners who are exposed to contextualised input are more capable of understanding and acquiring the new word forms than learners who are exposed to decontextualised input. In

other words, intentional vocabulary acquisition in which there is instruction through a focus on specific parts of speech or language units, seems to provide a better learning context than through incidental learning, such as reading for pleasure.

Time is also a variable that goes hand in hand with word encounters and exposure. As explored above, contextualisation certainly provides a positive scope for vocabulary acquisition. Conversely, time lags provide negative scopes in the EFL class. Barcroft (2007) studied the idea that time lags and retrieval of information could harm language acquisition. As he suggests, once words are learnt through encounters and use, the information encompassed by these words is stored for future access. The possibility to retrieve the meaning and, or form to use that vocabulary item requires exposure to the word. Indeed, Barcroft discussed the idea that memory is finite and the information belonging to previously learnt lexical items can disappear if language is not nurtured.

2.7. Research Questions

Building upon the literature review presented above, this study seeks to answer the following research questions concerning the instruments described in the methodology section below.

1. Is *gamification* a comprehensive means of learning English in the EFL class context regarding motivation, cooperation, anxiety, stress and word encounters?
2. Is *gamification* better an approach to teaching than a more traditional pen-and-pencil methodology in the EFL class?

3. Methodology
3.1. Participants

The participants of this study are on the one hand a total of 270 students and on the other hand a total of 6 English teachers from a school in Caldes de Montbui, a town on the outskirts of Barcelona. The students range from 12 to 18 years old and there are no distinctions made regarding gender or age. All students regardless of the academic year they are undergoing are taken into account equally. The investigation was executed partially during the Master's degree placement in the school as a *practicum* study. The data was collected in three different stages. The first collection of data was carried out during the placement. The rest of the data was collected afterwards, through a vocabulary activity and a set of recorded interviews in Catalan.

3.2.   Instruments

This study has used three different instruments to measure the effectiveness of games in an EFL class: a *Wordle* activity, a final vocabulary revision test, henceforth FVRT, and a set of interviews with the teachers in the foreign languages department. All of these instruments are interrelated and focus primarily on testing whether language learning in the EFL class can be promoted through games. Each of the instruments, though, serves as data to analyse the upsides or downsides of using games from a different perspective, to obtain a comprehensive view from several angles. The data gathered itself frames this study into a mixed methods approach. From analysing the following three instruments, the study will obtain both quantitative and qualitative data. Regarding quantitative data, both the *Wordle* game and the *FVRT* will provide a numerical record of the points obtained in both tasks, which is saved as a digital resource. Conversely, teacher *Interviews* will provide a trustworthy block of qualitative data. The discussion of both qualitative and quantitative data will help understand whether the use of games is an efficient tool to promote English in the EFL class.

The context of the study is the following. In the school, the foreign languages department prepares a special day related to the English language and culture, namely English Day. During this special event, the whole school devotes a large part of the timetable to practising and learning English through some activities. Generally, some game activity is used to encourage students to participate in the special event. This academic year, English Day's topic was the film *Shrek*. All of the activities sought around the film themes, the characters and the medieval world.

Before this special event, some preparation was carried out. First, all the students watched *Shrek I* in English class between two or three sessions. The film was watched with subtitles in English and some vocabulary was explored at the same time as the projection. Later, before English Day, all the groups worked on some of the vocabulary and film themes through a comprehension task which was meant to prepare the students for a *board game* that was played at the special event. After this preparation, English Day arrived.

Two different activities were planned for that day. The first was a drawing task, in which all the students who participated could listen to an online talk in English on how to draw using digital tools. The expert drew some of the different characters in the film using a digital app on a tablet computer. The second activity was the board game. To start this game, all the students needed to complete a *Wordle activity,* which is the first instrument in this study. After completing it, they played a *goose board game* that focused on the different themes and topics that were extracted from the film. These themes are the ones that students had previously worked on before English

Day. The different squares in the game were used to encourage students to participate in many speaking, writing, listening, mimicking or brainstorming activities. Besides having fun, one of the school's goals for playing this game was to make students practice their receptive and productive skills in English.

3.2.1. Wordle

The first instrument used in this study is a *Wordle* activity. *Wordle* is a free game found online that aims to discover words by following some simple steps. It can be used to stimulate the brain and, for that reason, many websites include them as mini-games. For example, there is a free *Wordle* every day on the *New York Times* website, which anyone can try solving. We decided to make use of this online game because the students in the school were already used to playing it as part of vocabulary practice for English classes. All the students knew the game already and the mechanics of how to play it. The only difference with their previous knowledge of the game was that the specifically prepared *Wordle* activity for English Day was unlimited in the sense that even if they failed to discover a word, they could try again. On official websites, there is only one try per day for each word, which makes the game harder in terms of stress and the possibility to take risks in solving the game. In terms of participants, students in ESO (generally ranging from 12 to 16 years old) were the only ones who participated in this activity. Students in Baccalaureat (generally ranging from 16 to 18 years old) did not participate in this specific activity.

So, how does *Wordle* work? The mechanics behind *Wordle* are very easy. There is a hidden word to discover. To do so, there are a maximum of 6 tries. To try to discover the word, the player can write a word with the same number of letters inside the provided boxes, in a specific language. When done so, two things can happen. One, the word has been correctly guessed and all letters appear in green colour. Two, the word is not correctly guessed in the precious try and as a consequence, the letters used turn either green, yellow or black, respectively. This different display of colours has an underlying meaning. Black letters are letters not found in the hidden word. Yellow letters are found in the hidden word but they are not in their correct position. Green letters are in the hidden word and they are in the correct position. The player wins the game if they can guess the word either in the final guess or before. It should be noted, too, that the game has language settings and as a consequence, one cannot write random incoherent letters, like inventing a new word as a guess. Players need to focus on structure, syllables and number of letters to come up with actual words. This enhances concentration and as a result, it can benefit language learning.

In the following box, there is an invented example of a *Wordle* game in which players need to find the word *shield*, which is one of the words in *Shrek's* game. This is not a genuine example obtained

from the answers of students from the first set of data. The reason for this is that the collection of data of this first instrument did not aim at observing the different attempts of students in trying to guess the different words. Conversely, the instrument was aimed to measure the total amount of guessed words by students in a specific amount of time.

Figure 1 - Wordle Example

Hidden word → Shield

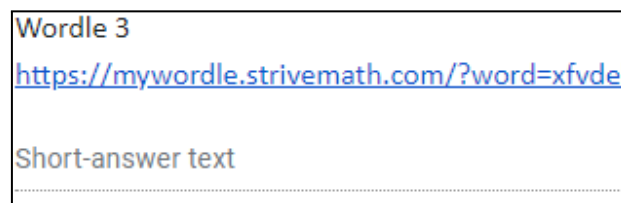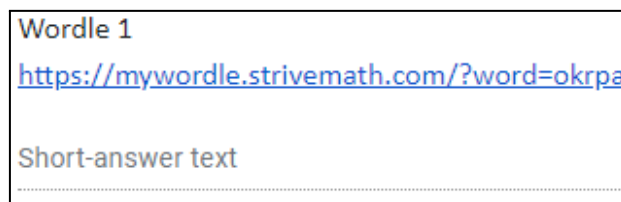|						
C	A	S	T	L	E	GUESS 1
K	N	I	G	H	T	GUESS 2
P	R	I	S	O	N	GUESS 3
G	O	L	D	E	N	GUESS 4
S	H	I	V	E	R	GUESS 5
S	H	I	E	L	D	GUESS 6 / HIDDEN WORD
S	H	I	E	L	D	HIDDEN WORD

To play correctly, the idea is that players come up with words which have the maximum number of different letters in the first 3 guesses. Some of those letters will go green or yellow, as can be seen in the example. With this in mind, the 4th and 5th guesses need to concentrate on reorganising the letters in yellow to make them green. Finally, the 6th guess is when players need to come up with a final answer. If the hidden word is correctly found, all letters will turn green and the game is won. If some letters do not turn green on the last try, the game is lost.

This *Wordle* activity was the starting point of the *goose board game* activity. The activity was designed in such a way that students would receive a reward for every 10 discovered *Wordles*. These rewards would serve as jokers to unveil parts of the board game or simply skip some of the unknown questions. The results of using this activity to obtain points or rewards will be dealt with during the discussion part. To access the *Wordle* activity, we created a **Google Forms** document **(see Appendix 1)** that all students were able to access from their computers. To prevent loss of time, not all students were allowed to access their computers but it was decided to select a member of each board game team to access the document. Therefore, even though all the students participated in the game, the document was able to collect 30 answers. In other words, 30 teams made up of 5 students participated in the *Wordle* game. These teams were of heterogeneous essence for organisational reasons of the school. The different teachers organised the teams making

them heterogeneous so that all the students had equal opportunities to take part in the different activities for the special day. The reason to pinpoint this is that the data collected from this instrument in terms of teams of students display the effort of all the different members of each group, even if not all of them sent their answers to the document. In other words, the sum of the skills of the different members in each group resulted in a defined answer as a whole group unit for this instrument, taking into account that teams were heterogeneous.

In the document, students found a total of 50 links to different *Wordles*. All of the hidden words were vocabulary items that students heard or read from the subtitles in the film *Shrek*. Some of the words were key to understanding the plot and themes of the film. The students had a total of 30 minutes to complete as many *Wordles* as possible before moving on to the main board activity. All of the links were shuffled so that groups could not cheat from one another and students were allowed to make use of their glossaries, in case they were not able to remember some of the vocabulary items. It should be noted that all the classes worked to some degree on the vocabulary of the film either during the projection or while completing the plot and theme activities before English Day. For most of the students, the *Wordle* activity was carried out the same week as they watched the film and worked on the different activities. The following figure shows an example of the sort of link that students encountered when opening the document *Wordle* document:

Figure 2 - Example of *Wordle* links

Wordle 1

https://mywordle.strivemath.com/?word=okrpa

Short-answer text

Wordle 3

https://mywordle.strivemath.com/?word=xfvdel

Short-answer text

Figure 3 - Shrek's Vocabulary List

The following Table provides the list of 50 vocabulary items obtained from the sum of the film and students' glossaries.

BRAVE	BREATH(n)	CASTLE	CHALLENGE	COACH
COWARD	CREATURE	DUNGEON	DWARF	DRAGON
DONKEY	EXPEL	FACILITY	FAINT	FAIRY TALE
FEARFUL	GIANT	GNOME	HIDEOUS	JOURNEY
KEEP(n)	KINGDOM	KNIGHT	LAYER	LORD
MUD	OBJECT(v)	OGRE	OUTRAGEOUS	PAL
PERK	PRINCESS	PRISONER	QUEST	SHIELD
SPELL	SPEAR	SPOOKY	SPELL	SQUATTER
STINK	SUCCEED	SUNSET	SWORD	SWAMP
UNORTHODOX	VILLAIN	WARRIOR	WILL(n)	WINDMILL

3.2.2. Final Vocabulary Revision Test

The second instrument from which we have collected data is a vocabulary activity test passed among students around a month after playing *Wordle* for English Day. This test has three activities that include all the different vocabulary items in the 50 *Wordles* list. This instrument aims at measuring primarily numerically the number of vocabulary items that students can remember and use correctly in context. The final vocabulary activity is divided into three different tasks.

The former is a *fill-in-the-gap* activity about *Shrek's* plot. Here, the students need to locate the words in the box in their correct position to obtain a coherent plot of the film. The number of gaps is equal to the number of words in the box and no repetitions are expected. Regarding the second task, students find a set of words and definitions that they need to match. Again, the number of words matches the number of definitions. All of the definitions are extracted from official English dictionaries that students use in their English classes. This way, the definitions are written in a language register that they are used to face in ordinary classes. The latter activity is a *multiple-choice* task in which students must decide from some choices which is the one that best fits the sentence above. Just like the *Wordle* instrument, this *FVRT* (**see Appendix 2**) provides a numerical grade for every student who participated. The maximum amount of points that a student can obtain is 87. The answers for the plot activity count as 1 point each, the answers for the

definitions task count as 2 points each and the answers for the multiple choice part count as 5 points each. The participants benefited from 45 minutes to do the test.

The reason for using this instrument is to measure two aspects. First, to notice if there is any evidence of having used *Wordle* in the results obtained from the vocabulary revision activity. If so, we can discuss whether there is a genuine connection between the use of this specific game and FLA. Second, to check whether the use of glossaries before English Day has helped achieve a better result in this same vocabulary activity. This, again, will be analysed within the third instrument, thanks to the interviews with teachers.

3.2.3.   Teacher Interviews

The third instrument analysed in this research is a set of teacher *interviews **(see Appendix 3)***. These interviews took place scarcely a week after the final vocabulary task was passed among students. In them, some different questions related to gamification, vocabulary teaching strategies and the outcomes of the gamification activities during the English Day event were asked to the different teachers in an informal face-to-face chat. As mentioned earlier, all the students of this school watched *Shrek I* before English Day. One means of doing so could have been watching the film either off-class as homework or gathering all classes at the same time in the auditorium. Despite this, the foreign languages department decided to project the film class separately during the week before the English Day class. In a way, the students were "bombarded" with *Shrek* for three to four days right before English Day.

As a result of watching the film in class groups, many strategies were used to learn the film vocabulary. The way students faced the vocabulary items in the film varied slightly from one teacher to another. To give some examples, in some classes the students were expected to write glossaries on their own while watching the film. In others, the teacher wrote keywords in the margins of the whiteboard to help students focus on the most important words which were necessary to understand the film. In some others, not only did the students build a glossary but they also discussed some of the terms once the projection was over. To have an overview from several angles, we decided to interview the foreign languages department teachers.

Thanks to the interviews, we could explore the differences among each teacher concerning all of the activities surrounding the English Day event. These differences would bring up several variables that affected the collection of the data from the other two instruments. Therefore, through the information collected from the interviews, we will try to analyse whether it is possible to anticipate the results in both activities about the different strategies used for teaching the

vocabulary in the film. What we are trying to analyse here is first, whether students perform better if they are exposed to better learning strategies and second, whether exposure to better learning strategies makes students more motivated to learn and perform in upcoming tasks.

The reason to include these interviews as a measuring instrument is to understand how and why every teacher used their approach and, or, strategy to teach the vocabulary of the film the way they did. In addition, the different questions in the interview are important to this project since they aim to describe the real point of view of actual teachers who find themselves teaching in today's changing education system. The data obtained through the interviews is qualitative even if directly attached to the quantitative data obtained through the first two measuring instruments.

4.   Results

The investigation conducted using the methodology displayed above has provided a set of results that will be shown in this section. The results obtained are extracted from the three instruments, namely the *Wordle* activity, the *FVRT* and the teacher *Interviews*. To collect the data, for both *Wordle* and the *FVRT* we decided to use a *Google Forms* document. The reason to use this document is that it allows scoring. Thanks to this, the different groups in the *Wordle* activity and each student individually in the *FVRT* have obtained a final score that may be used to connect the research questions to the results.

4.1.   Wordle

The numerical data collected from the *Wordle* activity is displayed in the following bar chart. The image is taken directly from the summary provided by the *Google Forms* document from which students completed the exercise. The chart collects the number of responses to each score.

Figure 4 - Insights (summary) of the *Wordle* document
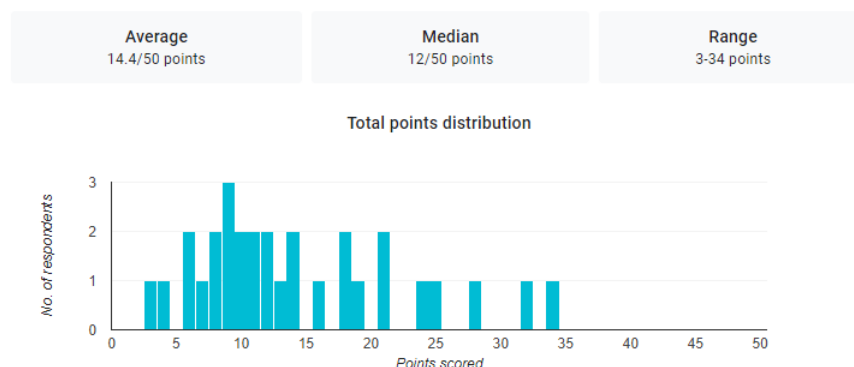
The total scoring is explained as follows. 1 team scored 3 correct links; 1 team achieved 4 links; 2 teams achieved 6 links; 1 team achieved 7 links; 2 teams achieved 8 links; 3 teams achieved 9 links; 2 teams achieved 10 links; 2 teams achieved 11 links; 2 teams achieved 12 links; 1 team achieved 13 links; 2 teams achieved 14 links; 1 team achieved 16 links; 2 teams achieved 18 links; 1 team achieved 19 links; 2 teams achieved 21 links; 1 team achieved 24 links; 1 team achieved 25 links; 1 team achieved 28 links; 1 team achieved 32 links; 1 team achieved 24 links.

The chart also shows some extra information, such as the average points, rating at 14.4 points for a maximum of 50 points, the median established at 12 points for a maximum of 50 and finally, the scoring range detailed in between a minimum of 3 and a maximum of 34 achieved links.

4.2.   Final Vocabulary Revision Test

The numerical data collected from this activity is displayed in the following charts. To collect the data, just like with the *Wordle* activity, we used a *Google Forms* document. The results obtained from this task compile the results of the three different activities as a final numerical number for each participant. As we explained in the methodology section, each of the activities in the test was graded differently. Although we will comment on these figures in the discussion section, it is worth mentioning that there are two different bar charts for the same instrument for a specific reason.

The results obtained in Figure 5 are obtained by taking into account the specific answers to each question and no spelling mistakes in writing the answers. However, the bar chart in Figure 6 considers spelling mistakes of correct answers and accounts for possible different answers in some possible ambiguous or context-free questions. In other words, in Figure 6 we are acknowledging

that the participant could have made a spelling mistake or that they may be conscious of the lexical item even if they used it incorrectly in the expected spot.

Figure 5 - Insights (summary) of the FVRT with a strict approach
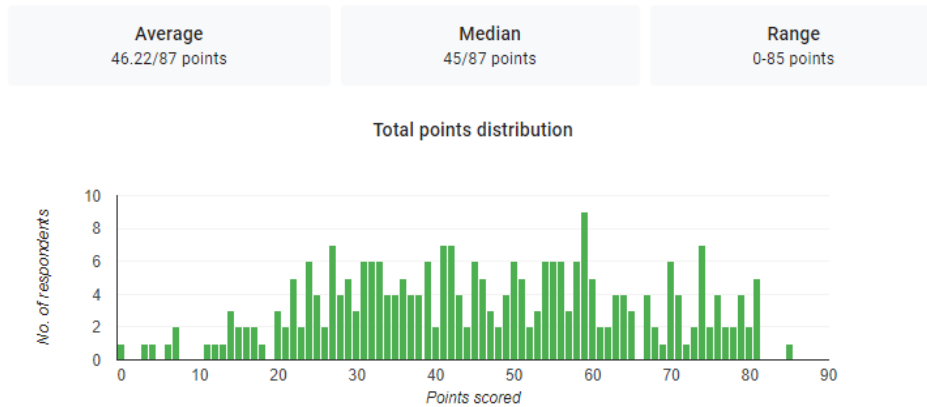
As can be seen in Figure 5, using a **strict** approach, the chart displays an average rate of 46.22 points for a maximum of 87 points, a median established at 45 points for a maximum of 87 and a score range from 0 to 85 points.

Figure 6 - Insights (summary) of the *FVRT* with a <u>flexible</u> approach
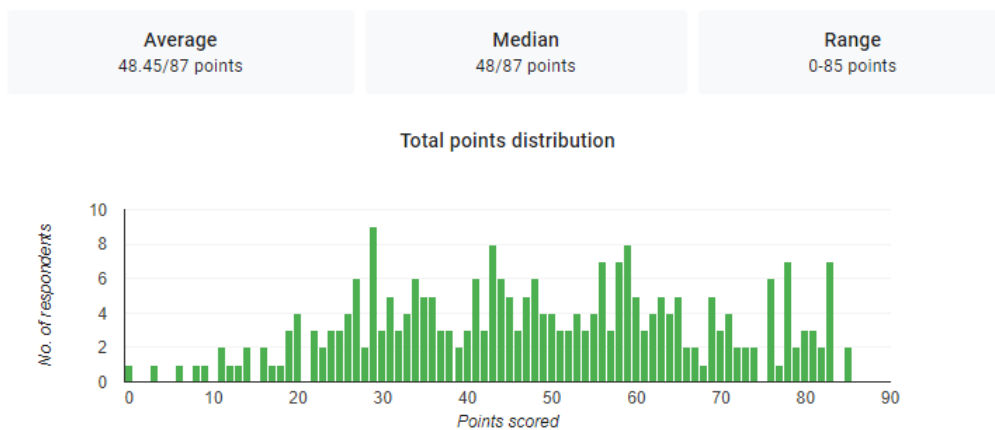
As can be seen in Figure 6, using a **flexible** approach, the chart displays an average rate of 48.45 points for a maximum of 87 points, a median established at 48 points for a maximum of 87 and a score range of 0 to 85 points.

4.3. Teacher Interviews

The results obtained from teacher *interviews* are of qualitative essence. It should be noted that the questions asked during the interviews can be found in **Appendix 3**. To display the outcome of the different interviews, we have decided to summarise, through generalising, the answers to the different topics discussed in the interviews. Therefore, these summaries, even if descriptive, are objective in the sense that their sole aim is to mention what the interviewed participants have said. It is important to state that the specific results obtained in the *Final Vocabulary Revision Test* were not shared among teachers before the interviews. The reason to do so was to obtain less biased answers in the interviews.

- Regarding teaching methods that include gaming strategies in the EFL class, all of the participants agree on the fact that learning through games can benefit their students when games follow a specific goal or are contextualised. In addition, most of the participants agree that games should be part of the teaching curriculum.

- Regarding the glossaries built up while projecting *Shrek I* in class, most of the interviewees acknowledge that they made use of their strategies for helping their students with the acquisition of new words. However, as we will see in the discussion, some strategies were different to one another.

- As to the *Wordle* activity, most of the teachers coincide that it was a useful way to keep students immersed in practising the language. The use of ICTs, as some teachers suggest, is an efficient means of getting their students engaged in their lessons and, in this particular case, in the gamified vocabulary activity. However, they also admit, generally, that the time limit in which students could benefit from playing the game was not sufficient for improving their language skills.

- Regarding the *FVRT*, most of the interviewees mentioned that the time lag between playing *Wordle* and the *Final Test* may have triggered a negative effect on the retention of the vocabulary. Some students reported high levels of anxiety when taking the test since they were not able to remember part of the lexical items in their glossaries. However, the teachers also acknowledge that the different encounters with the words throughout the projection, the pre-task in class and the *Wordle* could have been enough to obtain decent results on the test.

- As to the use of *Wordle* and other gamified activities for language learning purposes with any group of students, most teachers agree on the fact that it should be important to take into

account students' abilities and skills to adapt games to the diversity found in class. As they openly suggest, when adapted, games can provide a motivating atmosphere that engages students in learning.

5.   Discussion

In this section, we will describe the results obtained from the three different instruments while connecting them to the theoretical framework previously described. Some of the data discussed here can be observed not only in the results section but also in Appendices 1 and 2, but we will specify it in turn.

5.1.   Insights on Wordle

As commented above, we have used *Wordle* in this research to understand whether the use of games can be efficient and positive in the EFL class regarding the acquisition of vocabulary. This game helped students interact with the language from a lesser traditional perspective, following Peterson's (2010) view. Moreover, it posited a fun way to face learning vocabulary, as suggested by Fahandezh (2021). The information that can be extracted from Figure 3 suggests that from the 30 groups who participated in the activity, none were able to find the fifty hidden *Wordles*. Indeed, most of the groups were not able to find at least half of them. However, all the groups found at least some. Despite this, we would suggest that the final result is positive, in essence, since students were immersed in playing, broadly speaking. We should note that the students played this game in between two more activities during their *English Day* and that affected vastly the desired game playing conditions. Moreover, instructions were shared among teachers, not only those in the foreign languages department, and as a consequence, these could have not been clear to all groups of students.

The studies by Cheng (2015) and Brown & Cairns (2004) posited that goals, time limits and result expectations in game-playing are key in order to providing an immersive atmosphere for learning. In this line, our research provided an immersive scenario thanks to the award of points. However, the fact that instructions may have been misguiding could affect participants' willingness to play the game thoroughly to obtain the rewards. We can connect this to class management in the sense that teachers had to organise the class to form groups and provide instructions on how to play the game. Even though the game was known to everybody, the students rapidly became disorganised and that affected the outcomes of this research similar to Redjeki's (2021) observations, concerning the objectives that we had settled.

Playing *Wordle* could help build a cooperative spirit, individually, among students as explored in Fahandezh (2021). Besides, it could also be observed a competitive spirit among playing groups too. What Figure 3 displays is that the groups obtained an average score of 14.4 identified *Wordles*. As we commented in the methodology section, obtaining at least 10 *Wordles* granted students with rewards for the follow-up game. We can state that most groups obtained at least 1 reward, which was crucial to advance faster in some stages of the board game coming up next. Regarding the use of attractive materials to engage students, it could be noted that not all students were engaged in the same way. As we collected students' emails to share the overall scoring information of Instruments 1 and 2 with all English teachers after the interviews, we could observe which groups worked well and which others disconnected from the task. Most teachers agree that their students felt captivated by the game thanks to the reward system. We could say that thanks to extrinsic motivation students became immersed in playing the game to obtain as many rewards as possible during the agreed time limit. This goes in line with the observations by Montosa (2018). Transforming this extrinsic motivation into intrinsic is something that this research has been unable to fulfil. It will be commented on in the limitations section. In any case, we observe that summing cooperation and competitivity can engage students in playing *Wordle* when there is a clear goal. In this case, for students, the goal was to obtain rewards, whereas for teachers the goal is to engage students to passively learn a specific list of vocabulary. In addition, following Hitosugi (2014) and Yuvuz (2020), playing *Wordle* in groups could benefit the participants in creating a safe atmosphere while practising their language skills.

In this regard, it must be mentioned that the fact that students did not complete the fifty *Wordles* does not mean that they did not go over most of the fifty vocabulary items. In other words, since students used their glossaries while playing the game, they visualised and encountered the words, even if they were unable to find the solution to each *Wordle* link. It is true, though, that *Wordle* does not situate words in a clear context since the game is context-free. If we follow Krashen (1989) and Webb (2007), we must acknowledge the fact that *Wordle* links are somehow decontextualised. They are designed to make students think of syllables and word structure rather than semantic fields or word contexts, unlike the game *Contexto,* mentioned in the literature review. Despite this, it is obvious that all of the *Wordle* links had to be solved with words from the film *Shrek I*, which clearly contextualises the lexical field. Those students with a well-developed glossary could perform to a better degree.

Regarding time limits, as we stated in the methodology section, *Wordle* was encapsulated in between two other activities and as a consequence, the time limit played against the participants and the study, itself. We need to consider time a crucial variable in this investigation since it affects

the results directly, not only in *Wordle* but also in the *FVRT*. We believe that due to the time limit primarily, and maybe partially also due to competitivity and immersion, many groups wrote incorrectly some of the words in the answers' sheet. This can be seen in the images included in Figure 6 in Appendix 1. When counting the final scores in the *Wordle* document, we accepted orthographically incorrect answers as correct since it was absolutely clear that the students were conscious of the vocabulary item. Failing in writing correctly the word does not mean that they do not recognise it. As explored in the literature above, learning a language requires time and word encounters to firmly store and learn the language correctly.

5.2.   Insights on the Final Vocabulary Revision Test

The *FVRT* was used in this investigation to test the outcome of the different opportunities from which the participants were able to acquire the specific vocabulary list. Some parts of the test can be seen in Appendix 2. As mentioned above, the participants had several opportunities to encounter the words that were tested with this instrument. These encounters: the film, the pre-activities in class, the *Wordle* and students' glossaries are understood as the four opportunities to integrate the vocabulary in their lexicons. However, as Webb (2007) suggested, there is no exact number of encounters to integrate a word completely into someone's lexicon. We acknowledge that. The purpose of this test was not to expect students to perform with the maximum possible score, but to have an overview of the process of learning the vocabulary from the film after playing *Wordle*. It is true, as some teachers comment on the interviews, that part of the vocabulary was known to them through online gaming and reading off-class. Many students in the ESO age range play online games at home, which tend to be about war and the medieval world. Broadly, words such as *warrior, shield, sword* and *giant* were used correctly in the *FVRT*. We were already expecting that, though.

Something that we were not expecting was the time lag which occurred between English Day games (*Wordle* and the board game played afterwards) and the *FVRT*. For schedule reasons, students took the test between three to four weeks after English Day. Following Barcroft's (2007) view, this time lag has probably affected negatively the outcomes of the test. In addition, the interviews report that students faced a state of anxiety when they realised that they had to take a test on the vocabulary of *Shrek* so long after English Day. Most of them had not revised the vocabulary and probably performed poorer than they even expected.

After analysing the results in the *FVRT*, we decided to accept some answers if the context was correct, even if the precise answer was not submitted. In these cases, students got half of the maximum punctuation for the question. We believe that some instances of the activities may have

been a bit ambiguous and for that reason, we accepted some "incorrect" answers if and only if it could be seen that the participant matched the "incorrect" word to a context that could be relevantly attached to. It could be seen that the students knew the vocabulary item, but they did not use it in the specific spot. An example of this can be seen in Appendix 2, figure 10. For this reason, the results section for the *FVRT* has two bar charts. Figure 5 displays the outcomes of the test if we had used a strict approach. By this, we mean accepting only the answers that we were expecting them to write, regardless of possible ambiguity or context-related answers. Figure 6 displays the outcomes of the test from a flexible point of view. Through this approach, we have accepted some answers that were incorrect but could be ambiguous in the context provided. We believe that the fact that the participants were not aware of this *FVRT* made them rush through the questions and the time limit of 45 minutes did not help either. Certainly, they did not have the time to re-read through their answers before submitting the test.

For this research, we have decided to take into account the flexible approach as the outcome of the *FVRT*. As Figure 6 summarises, the participants' score average is of 48.45 points. Visually, more students passed the test than failed. However, as we mentioned above, we were not expecting all of the students to obtain a score of 87 points. It is interesting to observe that most of the students were able to answer many questions correctly, even if they failed many others. What this indicates is that from the list of 50 vocabulary items, a large number of these were identified by the participants. We can state that the different encounters with the words, one of them through playing *Wordle,* have helped students acquire some part of this vocabulary. Again, it should be noted that creating a well-contextualised environment helps students retrieve stored information in their minds, as Barcroft (2007) suggested.

5.3.   Insights on Teacher Interviews

To understand whether *Wordle* was efficient in helping the participants acquire the vocabulary from *Shrek I*, it is crucial to hear teachers' opinions. As we have shown in the results section, the overall feeling is that the teachers have found *Wordle* to promote a positive engaging atmosphere in class. As we discussed above, these participants already knew the game from their English classes. The teachers use this game for two reasons. First, they believe in the positive outcomes that it grants. Second, it is "stimulating and enjoyable" to students in Dörnyei's (2001) terms. Regarding our investigation, teachers have acknowledged seeing both a cooperative spirit and a rise in motivation during English Day activities, not only *Wordle*. However, aside from the positive aspects that *Wordle* may have contributed to language acquisition, most teachers had reservations about some aspects of the game and the *FVRT*. Most of these doubts were regarding goals and time.

In terms of time, as teachers have suggested and we have stated above, it is impossible not to acknowledge that the time lag between *Wordle* and the *FVRT* affected our research questions negatively. Time is always a variable that must be taken into account seriously in EFL classes. Learning a language means rehearsing, revising and practising. The participants of the study were not asked to revise the glossaries during the three to four weeks time lag that occurred between instruments 1 and 2. Most of them were not aware that there was a final test either. This is directly connected to the goals established for the research. Students were aware that they were watching *Shrek I* in class because English Day was coming up. However, most of the participants were not aware of the different activities that they would be doing, related to vocabulary and *Shrek*. In other words, the goals behind *Wordle* and the *FVRT* were not explained to most of the students explicitly and that may have led to obtaining undesired results. We could state that the outcomes of this research could have been more in line with Dörnyei (2001) and Krashen (1989) if participants had been aware of all the different stages from the beginning. Setting up a well-contextualised schedule could have promoted students to engage better in the activities to perform with lesser stress on the *FVRT*.

Despite this, it is worth commenting that teachers generally believe that the different encounters with the words, employing *Wordle* and the other activities developed in the school should have been enough for students to perform well on the test. There were only a few difficult words which were already contemplated to be tough for students. A large number of the words on the list were not new to them, not only because of gaming or reading, as mentioned above, but also due to the natural process of learning.

Finally, it should also be discussed that despite teachers acknowledging the positive outcomes of using ICTs for educational purposes in terms of gaming, they also commented on adapting the materials to teachers with special needs. Just like the teaching curriculum is adapted to diversity, teachers believe that games must be adapted to students to encourage them to perform according to their possibilities. As we mentioned in the methodology section, instruments 1 and 2 were passed among students disregarding all possible variables. We never took into consideration, for this investigation's sake, participants' age, gender or diversity. If the materials had been adapted, probably the outcomes would have been different.

6.   Conclusion

The paper in hand has revolved around several concepts and topics to discuss the validity of the use of games in the EFL context to promote language acquisition, more specifically for learning vocabulary. The different sections above have been used to settle the project into a certain framework, develop the project and obtain the results. Finally, we have commented on the results to reach the conclusions.

In the beginning, we questioned two things. First, whether *gamification* is a comprehensive means of learning English in the EFL class context regarding motivation, cooperation, anxiety, stress and word encounters. Second, whether gamification is a better approach to teaching than a more traditional pen-and-pencil methodology in the EFL class. Regarding the first question, the data that we have analysed suggests that gamification is indeed a comprehensive strategy that can contribute to enhancing language acquisition. The results obtained from our instrument 1, the *Wordle*, concerning instruments 2 and 3 have displayed positive insight into the concepts provided in this question. We have observed, first, that games generally engage students in developing tasks and that contributes to rising their motivation levels and second, that games generate a spirit of cooperation among their players, our participants of the study. Moreover, as was observed not only by the investigators but also obtained through instrument 3, teachers' interviews, the levels of anxiety and stress are lower when playing games in class. As some teachers mentioned, the students were capable of engaging better with the language after they played *Wordle*. Finally, the fact that our *Wordle* activity was used to enhance the lexical field in *Shrek*, contributed to some degree to the results obtained in the *FVRT* as it helped students encounter the different lexical items while checking their glossaries and the *Wordle* links.

Regarding the second question, our study has not been able to provide a trustworthy answer. It may be true that teachers' interviews have provided a nice insight into acknowledging that the use of games is a very efficient strategy in the EFL context to help develop several language skills, but that is not enough. Moreover, the scope of this project is not big enough to be able to establish a conclusive answer to this question. We would rather leave the answer to this question to future research after collecting and analysing sufficient data. However, guided by the interviewees, who are the voice of experience, games can contribute to improving language skills when using them both in specific contexts and for specific purposes. Using games and, or other traditional strategies are not mutually exclusive in teaching. We could say that learning a language is like running in a long-lasting race; the best way to get to the finish line is by using the strategies that best fit the runner.

7. Limitations and Future Research

After discussing the results obtained in this investigation, we have come across some limitations and possible paths for future research. As in every research, the methodology plays a crucial role since it determines the variables around which the project will evolve and provides a path through which the results will be obtained. In our case, our methodology has provided specific outcomes, already discussed, related to the research questions cited in the literature review. However, it is impossible to disregard that many things could have been organised differently and probably, the results would have been distinct from what we have obtained.

If we were to assess ourselves, it would be interesting to suggest that the scope from which this project has been carried out may have been too large. The total amount of participants can be seen as excessive for the objectives that we established at the beginning of the project. For this reason, in future lines of research, it would be probably more useful to develop a smaller experimental project in which fewer participants are used. One example of a project with fewer participants could be teaching a "didactic unit" in two separate heterogeneous classes with students of similar levels. One of the classes would follow a traditional pen-and-paper approach whereas the second class followed a 100% gamified approach. After some lessons and activities, the results could be compared to understand whether the gaming approach is more efficient than traditional approaches.

Moreover, it would be interesting to develop a project in which several games are used. This way, the outcomes would be more comprehensive since games can be of all sorts, not only to teach vocabulary. In our investigation, we have centred all of the attention on a single game, and the outcomes cannot be extrapolated to the vast amount of games that not only teachers but also students can find on the Net.

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Appendix 1 - Wordle

Figure 7 - Example of an ill-written word in the *Wordle* document

This figure illustrates an example of an ill-written word in the *Wordle* document that students used both to play *Wordle* and to submit the answers to the links. We counted this answer as correct for the reasons mentioned in the discussion section.

Figure 8 - Example of a Wordle game for the word Brave

https://mywordle.strivemath.com/?word=xfryp
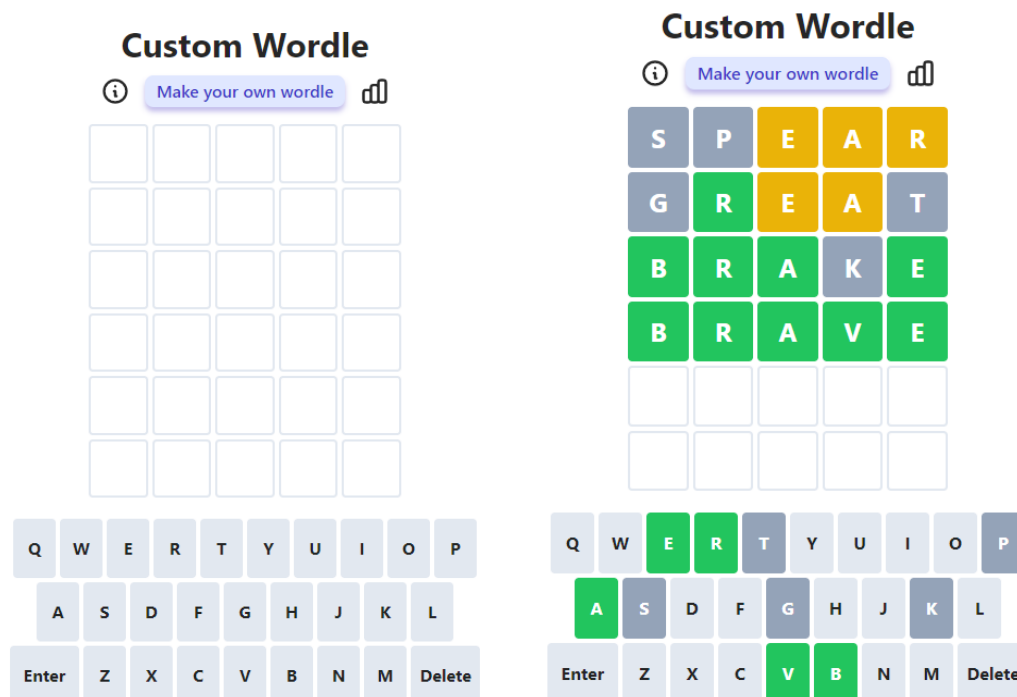
In Figure 8 we can observe an actual example of how the game is played. The link above can be used to access the game directly and play. The number of tries is unlimited. Players can come up with words that match the number of squares to find the hidden word. This example was played by us, it is not a genuine example obtained from the participants.

Appendix 2 - Final Vocabulary Revision Test

This Appendix provides some insight into the format of the *FVRT* passed among students as the second instrument in this investigation.

Figure 9 - The activities in the *FVRT*

Vocabulary revision

Dear students, this vocabulary revision is **not an exam** but an **activity** to check how much of the **main vocabulary** from the film **Shrek** you are able to remember. The time limit to complete this activity is **60 minutes**. When you finish, please **submit** your answers.

a) Part 1 - The film's plot

Shrek's Plot

Fill in the gaps with the following words:

fairy tale - hideous - journey - keep - knight - lord - ogre - pal
princess - quest - shield - spear - spell - succeeds - swamp - sword
villain - windmill - hero - castle - challenge - creature - donkey - dragon

Shrek is a beloved animated film that tells the story of a **(a)**_____ beast named Shrek who lives alone in a **(b)**_____. When a group of **(c)**_____ **(d)**_____ invade his swamp, Shrek decides to travel to the nearby castle to confront the **(e)**_____who sent them there.

At the **(f)**_____, Shrek is given a **(g)**_____ by Lord Farquaad: rescue **(h)**_____Fiona from a **(i)**_____guarded by a fierce **(j)**_____. If he **(k)**_____, the fairy tale creatures would be removed from his swamp. Shrek is accompanied by a talkative **(l)**_____, who becomes his loyal **(m)**_____and companion.

After reaching the tower, Shrek manages to rescue Fiona as a true **(n)**_____. However, Shrek discovers that Fiona is more than a princess. Despite her appearance, Shrek and Fiona form a bond, and they **(o)**_____back to the lord's castle. One night in a **(p)**_____, Donkey finds Fiona in her **(q)**_____appearance, as a result of the **(r)**_____cast on her.

Upon returning to the castle, Shrek and Fiona confront the lord, who turns out to be a little **(s)**_____. Throughout the **(t)**_____, Shrek and his friends defeat the lord and his army of **(u)**_____, armed with **(v)**_____, **(w)**_____and **(x)**_____. Fiona is revealed to be a true ogre at heart, and she and Shrek fall in love.

b) Part 2 - Matching the definitions

(a) _____: To force someone to leave a place.   15 points

(b) _____: An imaginary creature of human appearance which is extremely tall and strong.

(c) _____: Shocking and morally unacceptable.

(d) _____: Someone who is kept in prison as a punishment.

(e) _____: To smell very unpleasantly.

(f) _____: Armoured solider ready to fight.

(g) _____: Strange and frightening.

(h) _____: Earth mixed with water.

(i) _____: To be against a marriage.

(j) _____: To discover the essence through the nose.

(k) _____: Time in the evening when you last see the sun in the sky.

(l) _____: Eagerness to want something to happen in the future.

(m) _____: Showing no fear.

(n) _____: Underground prison of a castle.

(o)_____: To become unconcious for a short period of time.

	a	b	c	d	e	f	g	h	i
will	○	○	○	○	○	○	○	○	○
mud	○	●	○	○	○	○	○	○	○
stink	○	○	○	○	○	○	○	○	○
dungeon	○	○	○	○	○	○	○	○	○
warrior	○	○	○	○	○	○	○	○	○
expel	○	○	○	○	○	○	○	○	○

c) **Part 3 - Choose the word/s that best fit**

Shrek is a feared creature not only for his appearance but also for his bad 5 points
_____

- [ ] facility
- [ ] breath
- [ ] coach

One night, Shrek's swamp happens to be full of fairy tale _____ 5 points

- [ ] squatters
- [ ] warriors
- [ ] gnomes

Some of the fairy tale creatures in Shrek's swamp were _____ and 5 points
_____

- [ ] ogres and gnomes
- [ ] gnomes and dwarfs
- [ ] dwarfs and giants

The images above are a summary of the three different activities in the *FVRT*. These images do not display the complete test, but pieces of it. All of the vocabulary items in the three activities together form the list of the fifty words used in this project to measure the effectiveness of *Wordle* (digital games) to enhance vocabulary acquisition.

Again, as mentioned in the discussion section, some answers were accepted if the context was correct, even if the precise answer was not submitted. We believe that some instances of the activities may have been a bit ambiguous and for that reason, we accepted some "incorrect" answers if and only if it could be seen that the participant matched the "incorrect" word to a context that could be relevantly attached to. It could be seen that the students knew the vocabulary item, but they did not use it in the specific spot. In the following figures there are some examples of these incorrect answers that have been counted as correct:

In the first activity, the answer to question a) was expected to be *hideous*. Most of the students, however, answered *ogre* instead. We were expecting an adjective instead of a noun, but it can be seen that *ogre creature* does not sound that bad as compared to the expected answer *hideous creature*.

Figure 10 - Incorrect answers counted as correct for ambiguity reasons

It should be clarified that although the introduction to the test states that students have 60 minutes to complete the activities, they only had around 45 minutes in total. The reason for this is that from the 60-minute session, 5 to 10 minutes were devoted to explaining the test, plus 5 minutes was used for turning on the laptops. Therefore, the average total amount of time was close to 45 minutes.

Appendix 3 - Teacher Interviews

The following questions were asked to six teachers through an informal chat after the *FVRT* was passed.

1. Do you think that it is necessary to incorporate games as a teaching tool in EFL classes?

2. Do you believe personally in the efficiency of games as teaching methods?

3. Regarding the acquisition of vocabulary, how did you promote learning the vocabulary of the film *Shrek* while projecting it?
   3.1. [If students were asked to build a glossary] Do you believe that this can be an effective way to learn specific vocabulary?
   3.2. [If students were not asked to build a glossary] How can students be aware of the most important vocabulary of the film, without the guidance of the teacher?

4. *English Day - Wordle*
   4.1. Do you believe that the *Wordle* game played during English Day could be efficient in promoting/reinforcing the vocabulary seen in the film?
   Do you think that the time limit given to the game affected the outcomes?
   4.2. Do you think that having worked on a glossary could help in playing *Wordle?*

5. Final Vocabulary Revision Test
   5.1. Do you believe that the sum of the 3 chances to acquire the vocabulary of the film (glossary, pre-tasks to English Day, Wordle) helped the students to perform well on the *Final Vocabulary Revision Test*?

6. Do you think that *Wordle* as an ICT game can be used with any group of students? Why/ why not?

7. What is your final opinion on the use of digital games in class?