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Game-Based Learning in Secondary Education: an analysis of the students' perceptions about traditional and ICT-based games in the EFL classroom

FINAL PROJECT: MODALITY 2

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ABSTRACT

Game-Based Learning focusses on getting people to learn about a certain subject or getting a certain skill by means of playing (García *et al.*, 2008). This paper introduces a traditional game such as a cards game and an ICT-based game such as Kahoot! into a 21 students' classroom in a 3rd year of Secondary Education. The study aims to investigate the students' perceptions about a traditional game and a more interactive game introducing the ICTs in the classroom. Two identical qualitative questionnaires were devised in order to collect the data about the students' perceptions on both games. The parameters rated in those questionnaires are *satisfaction*, *motivation*, *engagement*, *difficulty* and *learning usefulness*. Results show the efficacy of introducing games in general into the routine classroom practices with a little leaning in favour of the ICT-based game, and call for further research with other types of students in regard to other academic and educational contexts and with different levels of English.

Key words: Game-Based Learning, gamification, traditional games, ICT-based games, students' perceptions

1. INTRODUCTION

1.1. JUSTIFICATION

The emergence of the Internet was a revolution at managing and accessing to knowledge, and over time this has led to the creation of a new educational environment focused on facilitating the access to knowledge throughout the Information and Communication Technologies (hereinafter referred to as 'ICTs') (UNESCO, 2008; Cervera & Cantabrana, 2015). This new educational stage presents a challenge to the students as well as the teaching staff and families. On the one hand, teachers should learn how to use ICTs in order to lead the students in making the best use of it (Rangel, 2015). On the other hand, families play a key role since young people have an uncontrollable access to Internet. That is the reason why we, as future teachers, should teach our students how to make a proper use of ICTs.

As a future teacher, I deem that the emergence of ICTs and their attractiveness to students are two aspects about upon which any future teacher or any teacher in general should be reflected upon. Likewise, traditional or analogue games can also be helpful and easier to adapt into the classroom context and contents, so they should also be taken into account. In order to motivate our students, we should make learning more fun, and Game-Based Learning (GBL) might be a good way of going about this (Al-Azawi *et al*., 2016), throughout the introduction of playing activities in the classroom designed for or by students as well as the implementation of an ICT tool (Hamari & Nousiainen, 2015). As a student, I have always perceived English subject as a game, it was easy for me and I loved English lessons in secondary education, but I also could see how difficult and tedious it was for some of my classmates. As I see it, English lessons in high schools have not changed much since I was a student in secondary education, and English has become increasingly important in today's society. English lessons should be more playful in order to encourage demotivated students to learn a new language and to help them to see these lessons as an opportunity of knowing new cultures and being full prepared for future requirements. Hence, GBL approach might be helpful to accomplish these objectives: to motivate and engage students within the English lessons and make them players of their own learning.

The main research goal of this work is to learn about the students' perceptions about the implementation of two different kinds of games, namely, a traditional game such a cards game and a more interactive game based on an ICT tool implemented in the classroom.

1.2. STRUCTURE

This work is structured in four main sections. The first section (point 2) is focused on the differences between GBL and gamification, the concluding remarks derived from the analysis of GBL vs. gamification and the goals of the study of this piece of work. The second section (point 3) focuses on the description of the method of the study carried out during the second practical training period in *IES Miquel Peris i Segarra*. This section is subdivided into four subsections: setting and participants; measurement instruments; material and pedagogical implementation; and, data collection procedure. In section three (point 4) are analysed and discussed the results of the study. And, finally, the fourth section (point 5) is the conclusions derived from the elaboration of this work and a subsection about the limitations of the study and further research.

2. GAME-BASED LEARNING vs. GAMIFICATION

Gaming is beginning to play an important role in the development of education in our country. In the last 10 years, gaming has evolved to the point of using it as a learning medium in different educational disciplines (Karagiorgas & Niemann, 2017). Along with gaming, we are living in the Digital Era and ICTs are causing a strong impact on education: game features and to play in itself have always been present in education, ever since the world was only analogue and we only had paper, scissors, crayons, glue and chalk in a classroom but, with the emergence of ICTs, the educational environment and the transfer of information have evolved to a different level.

During the information collection process I found out different methods related to the use of games in a learning context and that created me uncertainty at the time of defining the approach I was going to implement in my practical training period in *IES Miquel Peris i Segarra*. The most difficult task was to identify the difference

between gamification (Kim, 2015) and GBL so, in order to define the teaching method that I was going to use, I carried out some research about *gamification* and *GBL,* as the line that divides these two concepts may be blurry in some aspects. In fact, according to Caponetto *et al.* (2014), both gamification and GBL are very frequently used as synonyms, while as a matter of fact they are different approaches to the teach-and-learn process.

2.1. GAME-BASED LEARNING

According to Clarke *et al.* (2016), adopting games and play as systems for representing real-life conditions, imparting knowledge and moral teachings, and generally nurturing social evolution has existed for thousands of years, and that is how they define GBL. Many researchers tie together GBL with digital environment, in fact, it was Prensky who coined the term *Digital Game-Based Learning* (DBGL) in 2001 and highlighted the effectiveness and impact of DGBL on education. Nevertheless, as it will also be outlined below with the *gamification* approach, GBL does not require the only use of ICTs. Scholars like Prensky (2001), Squire & Jenkins (2002), Gee (2003) and Clark (2007) claim that electronic or computer games are more engaging and motivating than the traditional ones. Thinking about the Digital Era that we live in, it might be true that electronic games engage and motivate students in a different way than the traditional ones (Prensky, 2001). However, an analogue game (such as a card or board game) gives teachers the opportunity to adapt the curricular aims more easily (Lieberoth, A., & Hanghøj, T., 2017).

Emin-Martinez & Ney (2013) address to teachers interested in integrating games into their lessons, not only digital games but other game-like activities such as role-plays, simulations, etc. According to them, in order to adapt a '*pure' game*[1] or create an educational game:

[1] *'Pure' games*. Exercises which possess both of the essential characteristics of games (*competition* and *rules*). *Scrabble* and *football* are two well-known examples, as are familiar card games such as *bridge*, *rummy* and *poker* (Ellington, H., Gordon, M. & Fowlie, J., 1998: 2).

> Teachers involved in Game-Based Teaching (GBT) have to choose a content adapted to the use of a game, to browse, test and select games, to design a pedagogical scenario, to facilitate the flow of the game, to ensure learning and assessment… (Emin-Martinez & Ney, 2013: 1).

Below is a list with some of the key features that GBL shows (Reyes, 2016):

- Use of games in the classroom with the purpose of teaching.
- Suitability of the contents in line with the game.
- Games have rules and specific objectives.
- There is the possibility of "losing" since there are rules and objectives.
- Playing a game is rewarding by itself.

Through GBL students practise their learning with the game itself. Games are a support tool for the knowledge's learning, uptake and evaluation. GBL helps students to improve their thinking skills while they learn and revise contents actively. Students have the control of the learning while they get immediate feedback as well as the teacher receives useful information about students. Regarding the timing, a GBL activity would only last one or two lessons with the objective of motivating and engaging students while contributing to the built of important critical thinking skills and to the development of problem solving strategies, and in the case of using an online game or ludic tool it would also contribute to the students' digital literacy.

2.2. GAMIFICATION

According to Karagiorgas & Niemann (2017: 499), the term *gamification* was coined by Nick Pelling in 2002. However, according to Kim (2015), it was not until 2010 that the term came to be widely adopted. De Byl (2013) states that gamification is a way to use game elements to learn but without the entertainment value. Kim (2015) identifies these *game elements* or, according to her *defining characteristics* or *building blocks*, as goals, rules, feedback system and voluntary participation. Marczewski (2013) considers gamification as "the application of gaming metaphors in non game contexts to influence behaviour, improve motivation and enhance engagement" (Marczewski, 2013: 4). Deterding *et al.* (2011: 9) define gamification as simple as "the use of game design elements in non-game contexts",

but this definition they give is alien to education and it seems more focused on the business or marketing sector. Regarding gamification in education, there is some controversy about whether this approach requires the only use of ITCs or not, but Foncubierta & Rodriguez (2014: 2), in their definition of gamification, state that it is:

> *La técnica que el profesor emplea en el diseño de una actividad de aprendizaje (sea analógica o digital) introduciendo elementos del juego (insignias, límite de tiempo, puntuaciones, dados, etc.) y su pensamiento (retos, competición, etc.) con el fin de enriquecer esa experiencia de aprendizaje, dirigir y/o modificar el comportamiento de los alumnos en el aula* (my italics).

As GBL, gamification's main objective is to motivate students but also to influence their behaviour through the gaming elements (avatars, dices, badges…). Furthermore, gamification focuses more on leading pupils to learning in studies than games. Kiryakova *et al.* (2014: 3) state that:

> The key element of gamification is the inclusion of tasks that learners have to perform. The performance of tasks leads to accumulation of points, transition to higher levels, and winning awards, and all these actions are aimed at achieving predetermined learning objectives.

Gaitán (2013) considers that some of these actions or mechanical techniques extrapolated from games can be:

- Points accumulation: a quantitative value is assigned to specific actions and students accumulate points.
- Grading levels: a number of levels are defined and students must overcome them.
- Awards: students "collect" awards as they get different objectives.
- Rankings: students are classified according to the points or objectives achieved, outlining the best ones in a list or ranking.
- Challenges: students compete among themselves, the best ones obtain points or an award.

- Missions: students have to solve or overcome a challenge or objective individually or in groups.

According to these game mechanics students can find motivation by means of a reward (getting a deserved award), a status (having a valued social hierarchic level), an achievement (as an improvement or personal gratification) or a competition (mere desire of competing and trying to be the best) (Gaitán, 2013). A clear example of gamification would be *ClassDojo*. This tool is a platform to manage the classroom. It connects teachers with students and their families. Students have their own avatars and get or lose points depending on their behaviour and work in class. A teacher can modify students' behaviour challenging them to get more points in order to get a reward (for example playing a song at the end of the lesson when a student gets 30 points or modifying their own avatar when he or she gets 60 points). Students can compete with each other or work as a team depending on the teacher's commands. Using *ClassDojo*, teachers can gamify the entire learning process in order to motivate, engage and modify students' behaviour within the classroom.

Broadly speaking, the aim of gamification is not to crate or play a game but to take advantage of the punctuation-reward-objective systems to motivate students at the time of learning tedious contents for them and modify their behaviour in class by rewarding them in those tasks that do not show any kind of incentive for them.

2.3. GAME-BASED LEARNING vs. GAMIFICATION: concluding remarks and their conception in this study

Given the above definitions, the key difference observed between both approaches is that gamification transforms the whole learning process into a "game" or "adventure", while GBL uses games as part of the learning process. The goals of both approaches are relatively the same, they are trying to solve a problem, motivate, and promote learning using game-based thinking and techniques (Kapp, 2012). The objective of GBL is teaching a skill or specific learning outcome through games, instead of creating a big learning adventure as a complete pedagogical system.

Following this concluding remarks, it was decided to implement the GBL approach during the practical training period and test the students' motivation and engagement during the process. As it has already been mentioned in section 1, ICTs facilitate the access to knowledge and turn out really attractive to students, and teachers should take advantage of that. Therefore, two activities were designed, a cards game and a *Kahoot!*, to compare students' motivation in front of a traditional game and a playful ICT tool.

Before going ahead, it is important to clarify that *Kahoot!* is a tool usually considered to gamify the learning process and not a game in itself. We can consider it *shallow gamification* (Lieberoth, 2015) if the teacher transforms the learning process into a kind of quiz show in which he or she performs as a TV presenter and the students perform as contestants. However, the own *Kahoot!* creators define it as a GBL platform to play, learn and have fun (Brand *et al.*, 2018). Among other papers that consider *Kahoot!* a GBL platform, Wang & Lieberoth (2016) chose *Kahoot!* for their study, which focusses on evaluations of the use of GBL applications and the effect they have on students. They presented this paper in the *European Conference on Games Based Learning*. Dellos (2015: 49) takes *Kahoot!* "as a digital game resource that provides teachers an opportunity to create quizzes, surveys and discussions that engage students in content knowledge in a competitive game play format". Moreover, Graham (2015: 6) defines it as "a free online classroom response system designed to allow instructors to quickly and easily create question-based learning games that can be used to assess student learning, review concepts, teach new material, and/or facilitate classroom discussion".

Therefore, on the basis of these definitions and the concluding remarks derived from gamification and GBL definitions I chose *Kahoot!* to design a GBL activity and implemented it as such.

2.4. GOALS

Taking into account the notions described in the previous sections, the goal of this piece of research is to analyse the students' perceptions to the introduction of playful activities into the routine lessons. The aim of these playful activities is to engage and motivate all the students in the classroom and what is meant by this

research is to find out and compare the students' perceptions in front of a traditional game (such as the *Cards Game*) and an interactive game introducing the ICTs in the classroom (such as *Kahoot!*).

3. METHOD

3.1. SETTING AND PARTICIPANTS

The study was carried out during the second practical training period of this master course in *IES Miquel Peris i Segarra* (*Castelló de la Plana*, Spain). The participants of the study are a group of 21 fifteen-year-old students in the 3rd year of secondary education. Among all the groups of secondary education it was chosen this group due to the working atmosphere in the classroom and the willingness of the students.

Regarding the games, they were implemented in two different lessons after a few days working in the future tenses in the classroom. They were presented as a review of the work done in class the days before but in a playful way. Although this group is comprised of 21 students, the attendance on the days that the games were implemented was of 20 students each day.

3.2. MEASUREMENT INSTRUMENTS

A questionnaire was devised in order to evaluate the students' perceptions about the classroom implementation of each kind of game (Annex 1). The questionnaire is conceived of as a measurement instrument to evaluate such perceptions in terms of five main parameters: *motivation*, *engagement*, *satisfaction*, *difficulty* and *learning usefulness*. In order to allow for comparison, each of these items were parameterised into Likert scales (Table 1).

1	2	3	4	5
Molt malament, molt insatisfet/a, molt difícil, gens útil	Malament, poc satisfet/a, prou difícil, poc útil	Bé, suficient, adequat, satisfet/a	Prou bé, prou satisfet/a, prou fàcil, prou útil	Molt bé, molt adequat, molt satisfet/a, molt fàcil, molt útil

Table 1 The Likert scale presented to the students to evaluate both activities.

On the one hand, both questionnaires, which are presented to students as satisfactory surveys, are exactly the same to evaluate both activities, the *Kahoot!* and the *Cards Game*.

On the other hand, as we can see in Table 1 and Annex1, the questionnaires and Likert scales are elaborated in Valencian to make sure that the students fully understand the parameters that they have to rate and the gradation of the Likert scale.

The questionnaires were devised in order that the students could evaluate those five parameters from 1 to 5, being 1 the expression of the lowest satisfaction and 5 the expression of the highest satisfaction. However, it is important to highlight that when rating the parameter of *difficulty*, number 1 expresses that the activity is very difficult and number 5 expresses that it is very easy. Therefore, the higher the students' punctuation is in the results, the easier they found the activity.

3.3. MATERIAL AND PEDAGOGICAL IMPLEMENTATION

The material used in the pedagogical implementation are the tool *Kahoot!* together with some of the students' mobile phones and the four stacks of cards specifically designed for the *Cards Game*. The contents and learning goals of both activities are the use and practice of *will* and *be going to* and to identify the difference between *spontaneous decisions*, *predictions based on your own opinion*, *predictions based on evidence* and *plans or intentions about the future*. The structure of these games and their implementation are developed hereunder.

3.3.1. *Kahoot!* activity

The structure of *Kahoot!* is the structure of a quiz game with multiple-choice questions. The *Kahoot!* about future tenses is composed by 14 questions presented to the students in three ways: as an introductory information to the multiple choices; as dialogues in which the multiple choices are the answer of a second speaker; and, as sentences with a gap in which the multiple choices are the possible answers to fill in the gap (Annex 2). Some of the questions include a picture as a visual support to help students at the time of choosing their answers

(Figure 1). Besides, the first questions only show two options to make easier the introduction to the *Kahoot!* and to the game dynamics.

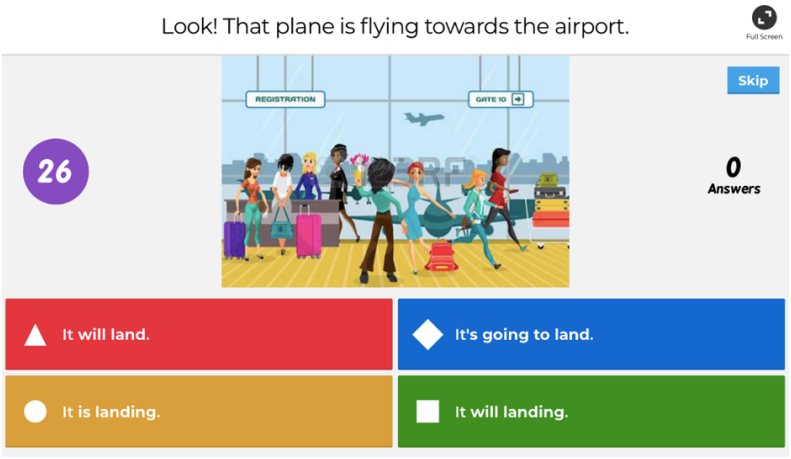

Figure 1 Example of a Kahoot! question.

3.3.2. *Cards Game* activity

The *Cards Game* is designed to play with 4 groups of students. The aim of the game is to build 12 sentences by linking cards and, at the end, classify them into *spontaneous decisions*, *predictions based on your own opinion*, *predictions based on evidence* and *plans or intentions about the future* in a separate sheet of paper. In this case, the *Cards Game* is also a kind of multiple choice game but on a larger scale given that there is only one possible match to build the 12 sentences. That makes the game more challenging for students.

Figure 2 Coloured stacks of cards.

The game is composed by 4 identic stacks of coloured cards, one per group. Each stack of cards contains five different coloured stacks of cards (Figure 2): 4 blue cards which contain the first intervention of a dialogue (there are 4 sentences that are dialogues); 12 yellow cards with the beginning of the sentence or the the beginning of the answer of a second speaker in the case of dialogs; 12 red cards with the future forms of *will* and *be going to* not conjugated with the subject of the sentence (students have to conjugate them when they classify and write them in a separate sheet of paper); 12 orange cards with the main verb of each sentence; and 12 green cards with the ends of the sentences (Annex 3).

3.4. DATA COLLECTION PROCEDURE

During the second practical training period a didactic unit was prepared based on the grammar of *will* and *be going to* in a group of 3rd year in *IES Miquel Peris i Segarra*. After some days working in the grammar contents in class with some activities from the students' books (*Spectrum 3 Students' Book* and *Workbook*), both games (*Kahoot!* and *Cards Game*) were prepared as a review to conclude the didactic unit. The procedure followed in each game to get and collect all the data is specified hereunder.

3.4.1. *Kahoot!*'s data collection procedure

The first game implemented was the *Kahoot!*. In order to play *Kahoot!*, the students were notified in advance to bring at least six mobile phones with data network on May 4th, the day the game was scheduled. That day, after correcting some activities, the students played the *Kahoot!* about *will* and *be going to*. It was decided to play the *Kahoot!* before *Cards Game* due to the extra difficulty that the *Cards Game* could entail to the students.

In the *Kahoot!*, the students were organized in 6 groups. The spatial configuration of the classroom is organized in groups of three students, therefore, to play this game they were grouped in 4 groups of three students and 2 groups of four students. This cluster was considered the most appropriate one in order to allow the entire group play and participate more comfortably with a mobile phone per group. Moreover, at the time of grouping them, advantaged

students were gathered with less-advantaged students in order to equalize the level of the groups.

After introducing what *Kahoot!* is for those who did not know it, students inserted their group names and personal names into the tool. Given that the own tool provides all the results at the end in an Excel file, this facilitated the identification of the students as distributed in teams. Once the students finished the activity, they were asked to rate the activity with the evaluation assessment that the own tool provides at the end of the quiz and to fill in the qualitative questionnaire about the activity (Annex 1).

3.4.2. *Cards Game*'s data collection procedure

Regarding the *Cards Game*, it was implemented on May 10th and it was scheduled for the entire lesson. First of all, students were grouped in 4 groups of five taking into consideration the students' fluency in English in order to even the English level among teams. To facilitate the game dynamics, each team put together four tables making a big one and they were advised not to use their chairs and to play standing up. This way they were able to move freely to see all the cards spread over the grouped tables. Having the teams separately placed around the classroom made it easier for the teacher to give them feedback when needed.

Once the students finished building the 12 sentences by linking the coloured cards and classifying them into *spontaneous decisions*, *predictions based on your own opinion*, *predictions based on evidence* and *plans or intentions about the future*, they corrected the activity on the blackboard. Immediately after that, they were asked to fill in the qualitative questionnaire about this activity (Annex 1).

4. RESULTS AND DISCUSSION

The results of the research about the students' perceptions reveal the satisfaction, the motivation and the engagement that they perceived while they were

playing both games and the level of difficulty and the usefulness of both activities in the teach-and-learn process.

Hereafter, Figure 3 shows the results of the students' perceptions about the *Kahoot!* (purple) and the *Cards Game* (blue). Each one of the parameters will be discussed in detail down below.

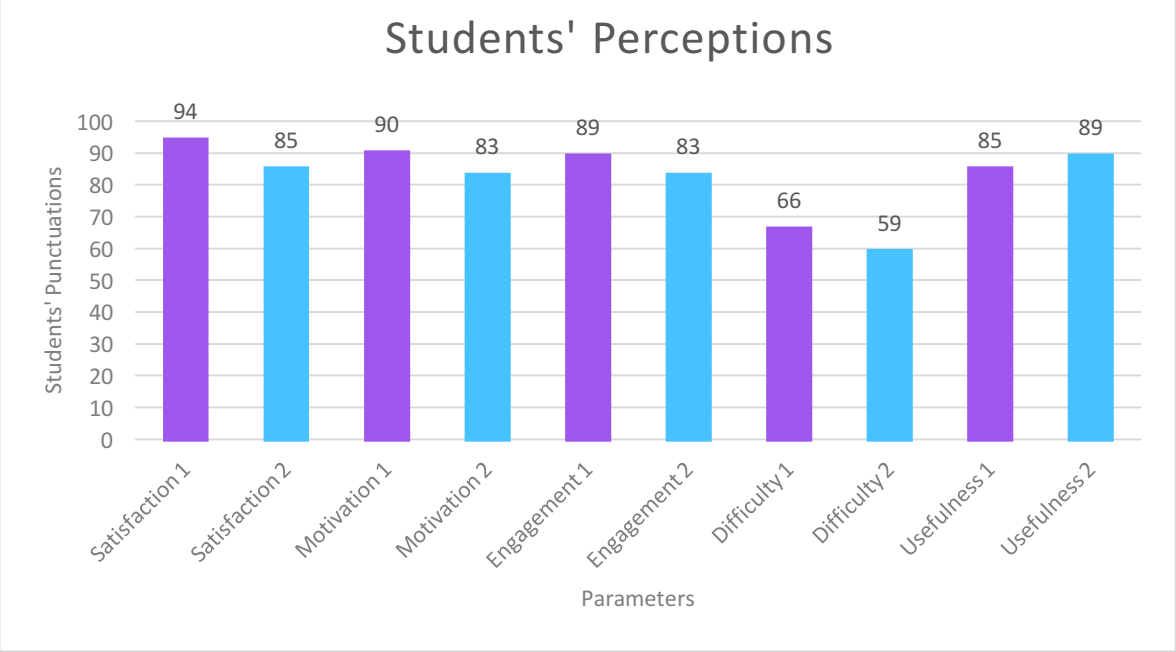

Figure 3 Results of the students' perceptions about Kahoot! and Cards Game

4.1. ANALYSIS OF THE RESULTS

In this study, the parameter *satisfaction* makes reference to how much the students liked the *Kahoot!* and the *Cards Game*. In Figure 3, the results show that students liked much more the *Kahoot!* than the *Cards Game* with a difference of nine points.

Related to the parameter of *satisfaction*, the parameters *motivation* and *engagement* make reference to how much enthusiasm and how involved the students felt during the activities. Overall, results show that the students felt more motivated and engaged during the *Kahoot!* than the *Cards Game* and one of the reasons might be because of the music that *Kahoot!* plays to create a challenging environment. Collins (2009) and Kamp (2014) state that ambient and dynamic music has been a key part of digital game design. Likewise, Hébert

et al. (2005) and Zhang and Gao (2014) agree that music in video games has been linked to stress responses and aggressive behaviour. Wang and Lieberoth (2016: 8), in their study about *Kahoot!* observed that "audio and music affect the classroom dynamics in a significant positive way, and points also contribute to improve the classroom dynamics but to a more limited extend". These might be some of the reasons why students liked more and felt more motivated and engaged during *Kahoot!* than *Cards Game*.

Another element that may affect in students' preference about *Kahoot!* is the difficulty that the students found in each game. According to students' punctuations about the parameter *difficulty*, they found the *Cards Game* more difficult than the *Kahoot!*. One of the reason might be that while the *Kahoot!* was challenging just for a few seconds in each of the questions due to the countdown to fill in the gaps, the *Cards Game* was designed to make them think more than a few seconds. As specified hereinbefore, in the *Cards Game*, students had around 40 minutes to link all the cards, build 12 sentences and classify them in *spontaneous decisions*, *predictions based on your own opinion*, *predictions based on evidence* and *plans or intentions about the future*. This way we can see the *Kahoot!* as a game in which students play with short challenging sequences of time while the *Cards Game* challenges the students during a longer period of time.

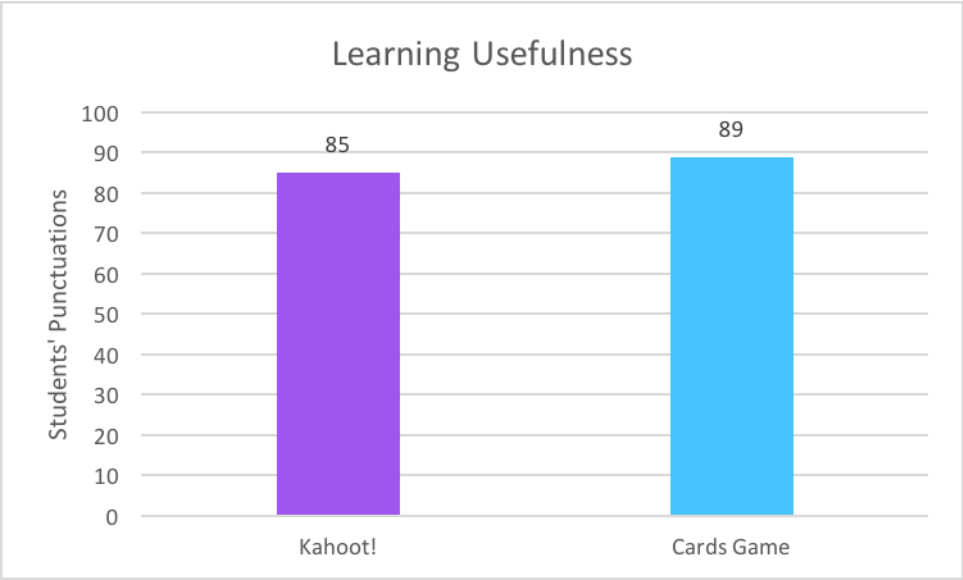

Figure 4 Students' perception about learning usefulness

However, despite they found the *Kahoot!* easier and more motivating and engaging, if we observe Figure 4 we can see they found more useful the *Cards Game* in terms of the teach-and-learn process about the future tenses. The parameter *learning usefulness* makes reference to the perception of the students about the fact of learning while they are playing. In Figure 4, we can see that the difference in the rating is only 4 points but it is quite interesting. This might be because the elaboration of the *Cards Game* was partly designed to the students' needs. They had some difficulties to identify if they had to use *will* or *be going to* to talk about future plans or make predictions. The *Cards Game* was useful to revise some helpful "formulas" to identify, for example, if we were talking about a prediction based on our own opinion (*I believe…*, *I think…*) or a prediction based on evidence (*It's getting late!...*, *Look!...*).

4.2. GENERAL DISCUSSION

Based on the experience of the *Kahoot!* and the *Cards Game* in the classroom and the results, both games were a success. Adolescents feel comfortable when using technology and, more particularly, mobile phones. Probably, the technology in combination with the music and the countdown that the *Kahoot!* provides during the game might be some of the reasons why the students preferred it over the *Cards Game*. However, the students apparently felt that with the *Cards Game* they had really overcome the difficulties that they had when using *will* or *be going to* to talk about the future.

Besides that, another impression perceived in the classroom was that the fact of grouping them to do an activity and changing the disposition of the tables makes them feel that they are doing something different to what they are used to do in the classroom. They had the feeling of playing a game and did not have the feeling of learning when, in fact, they were doing both things.

5. CONCLUSIONS

This study aimed to analyse the students' perceptions about a traditional game and an ICT-based game in order to see if students found more motivating and engaging the implementation of a traditional game or a game based on an ICT tool.

After observing the students during the implementation of both activities and the results of the questionnaires, it is possible to state that both games were a success in terms of motivation and engagement with a little leaning in favour of the ICT-based game, the *Kahoot!*. Overall, the students felt a higher level of satisfaction, motivation and engagement during the implementation of the *Kahoot!* and they even found it easier to play than the *Cards Game*. However, they perceived that the *Cards Game* was more useful for them at the time of achieving the grammar knowledge about *will* and *be going to*. On the other hand, although the design and the elaboration of the *Cards Game* is more complicated in terms of time and money investment than the *Kahoot!*, it is easier to adapt to the students' needs.

The general feeling among the students during the *Kahoot!* and the *Cards Game* was that they were playing and not learning, they were competing at the same time that they were working cooperatively and, in the end, they were doing a completely different activity from the ones that they are used to.

Somehow, the ICTs are an amazing hook to engage and motivate students nowadays but also traditional games. Despite of the problem about defining the theoretical approach of the study (GBL or gamification), since the beginning, it was clear the idea of implementing an ICT-based game due to the importance of the ICTs in education today. However, during the first practical training period, it soon became apparent the limitations of the ICTs in the day-to-day work of a teacher, for example, old computers that do not always work and bad Internet connexion. Therefore, it was decided to also implement an analogue game such as the *Cards Game* and in the end compare both situations and the students' perceptions about both.

5.1. LIMITATIONS AND FURTHER RESEARCH

It is important to understand the framework in which this study was carried and the time constraints. At the time of designing activities and games like these ones it is important to know the students' limitations and needs. For example, it was needed the IES Tutor help, who knew better the students, at the time of grouping them in each activity. During the practical training period it was observed that there are a lot of external factors (such as school trips, other subjects' exams, students' concerns, etc.…) that affect the course of the lessons and the timing of the didactic units.

Another limitation was the number of participants in the study, it would have been interesting to implement both games in other groups of 3rd year in order to have more data for the study. Moreover, it would also have been interesting to carry this study in other levels or even in other high schools in order to obtain more data from different kinds of students who belong to other contexts. All the same, the study showed positive results about the students' perceptions and willingness when implementing any kind of game in their routine classroom practices.

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ANNEX 1

NOM:

Enquesta de satisfacció sobre l'activitat *Kahoot!*.

Valora de l'1 al 5, sent l'1 l'expressió de mínima satisfacció i el 5 la de màxima.

1	2	3	4	5
Molt malament, molt insatisfet/a, molt difícil, gens útil	Malament, poc satisfet/a, prou difícil, poc útil	Bé, suficient, adequat, satisfet/a	Prou bé, prou satisfet/a, prou fàcil, prou útil	Molt bé, molt adequat, molt satisfet/a, molt fàcil, molt útil

Valora de l'1 al 5 quant t'ha agradat aquesta activitat.

1	2	3	4	5

Valora de l'1 al 5 quant t'ha motivat aquesta activitat.

1	2	3	4	5

Valora de l'1 al 5 com d'implicat t'has sentit durant el desenvolupament de l'activitat.

1	2	3	4	5

Valora de l'1 al 5 com de difícil t'ha semblat l'activitat.

1	2	3	4	5

Valora de l'1 al 5 com d'útil has trobat l'activitat per al teu aprenentatge.

1	2	3	4	5

NOM:

Enquesta de satisfacció sobre l'activitat *Cards Game*.

Valora de l'1 al 5, sent l'1 l'expressió de mínima satisfacció i el 5 la de màxima.

1	2	3	4	5
Molt malament, molt insatisfet/a, molt difícil, gens útil	Malament, poc satisfet/a, prou difícil, poc útil	Bé, suficient, adequat, satisfet/a	Prou bé, prou satisfet/a, prou fàcil, prou útil	Molt bé, molt adequat, molt satisfet/a, molt fàcil, molt útil

Valora de l'1 al 5 quant t'ha agradat aquesta activitat.

1	2	3	4	5

Valora de l'1 al 5 quant t'ha motivat aquesta activitat.

1	2	3	4	5

Valora de l'1 al 5 com d'implicat t'has sentit durant el desenvolupament de l'activitat.

1	2	3	4	5

Valora de l'1 al 5 com de difícil t'ha semblat l'activitat.

1	2	3	4	5

Valora de l'1 al 5 com d'útil has trobat l'activitat per al teu aprenentatge.

1	2	3	4	5

ANNEX 2

Those trainers are too expensive.

Full Screen

Skip

21

0
Answers

- I've decided that I'm not going to buy them.
- I've decided that I will buy them.
- I've decided that I won't buy them.
- I've decided that I'm going to buy them.

Look! That plane is flying towards the airport.

Full Screen

Skip

26

0
Answers

- It will land.
- It's going to land.
- It is landing.
- It will landing.

I'm sorry you've decided to leave us. _____ you when you're gone.

Full Screen

19

Skip

0
Answers

We're going to miss

We're missing

A: Where are you going?

Full Screen

27

Skip

0
Answers

B: To the hairdresser's. I'll have my hair cut.

B: To the hairdresser's. I'm going to have my hair cut.

ANNEX 3


A: There isn't any milk left in the fridge.
A: The phone is ringing and I am in the shower!
A: The phone is ringing and I am in the shower!
A: Oh, I have cut my finger!