Using gamification to enhance sixth grade pupils' motivation

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المستخلص:

هدفت الدراسة للتعرف على فاعلية استخدام برنامج الكتروني قائم على التلعيب لتنمية الدافعية لدى تلاميذ الصف السادس الابتدائي. للإجابة على أسئلة الدراسة، استخدمت الباحثة المنهج شبه التجريبي، حيث طبقت الدراسة على عينة مكونة من (٥٠) تلاميذ وتلميذات مدرسة بلاط الابتدائية. وقد وزعت العينة على مجموعتين أحداهما تجريبية تكونت من (٢٥) تلميذ وتلميذة، والأخرى ضابطة تكونت من (٢٥) تلميذ وتلميذة، واستخدم البرنامج الالكتروني القائم على التلعيب في تدريس المجموعة التجريبية، بينما استخدمت الطريقة التقليدية في تدريس المجموعة الضابطة وذلك في الفصل الدراسي الثاني من العام (٢٠٢١– ٢٠٢٢). ومن أجل جمع البيانات، استخدمت الباحثة مقياس للدافعية قبلي وبعدي وذلك لقياس دافعية التلاميذ نحو اللغة الإنجليزية قبل وبعد الدراسة. بعد تحليل النتائج ومعاجلتها إحصائيا، أظهرت النتائج وجود فروق ذات دلالة إحصائية بين المجوعتين (الضابطة والتجريبية) لصالح المجموعة التجريبية في التطبيق البعدي للمقياس. كما أظهرت النتائج أثر استخدام التلعيب في زيادة الدافعية لتعلم اللغة الانجليزية

الكلمات المفتاحية: التلعيب – الدافعية

Abstract

Gamification is a comparatively new concept in education, especially in teaching EFL. Hence, this study aimed to explore the effect of using gamification to enhance sixth grade pupils' motivation. The researcher adopted the quasi- experimental approach. The sample of the study consisted of (50) pupils who distributed into two groups: A control group and experimental one, each of them has 25 pupils at Balat primary school. An electronic program –based on gamification was used in teaching the experimental group while the traditional method was used with the control one. In addition, a motivation scale (pre & post) was used to determine the pupils' motivation for English language. Moreover, the results of the study revealed that there were significant differences in post application of the motivation scale between both groups in favor of the experimental group. In this study, gamification was considered effective in enhancing EFL learners' motivation. Thus, gamification efficiency may be due to its challenging and motivating nature in adding inspiring gaming elements to traditional learning. This study recommends the use of gamification as a useful and strategy for enhancing pupils' motivation for English language.

Keywords: Gamification, Motivation.

Introduction:

By the wide spreading of digital gadgets and apps, new sub-fields of study have been developed in CALL (computer –assisted learning language), such as gamification. Gamification is a comparatively new constructivist approach in education. (Ertmer & Newby, 2013). Hence, gamification is the application of game design theory and strategies to non-game related fields. The basic goal of gamification in education is to increase students' participation and motivation. Since well-designed games have no problem involving not only young learners but learners in general, it makes sense to look for ways to integrate game design and instructional design. One of the main roles of the constructivist designer is to rank and create real and appropriate experience for the learners.

According to Domínguez, et al., (2013) gamification emerges in education and it has many benefits to serve the emotional and cognitive goals. Therefore, gamification leads to reinforcing and motivating students, and can then lead to improved learning processes and outcomes. According to Werbach & Hunter (2012), gamification is the use of game elements and game design techniques in non-game contexts. The normal patterns used in the game design are described as game elements. Some of these elements sometimes known as components, seen in most of the games, embracing: points, badges leader boards, progress bars, progression charts, performance graphs, quests, levels, avatars, social elements. In accordance with this point, Flores (2015) assured that the suitable use of game elements in the classroom could result not only in improving motivation and learning experience but also facilitate accuracy and fluency in language of learners. Thus, all these elements have various goals and can be adapted to principally any work, business or education affiliated environment.

Additionally, Soria (2017) asserts that gamification measures progress, it is a form of feedback that motivates pupils to continue performing an activity, because it is sensed as a reward for the work performed. One of the most effective points in gamification is that pupils receive rewards when they successfully complete a task or a mission, that is to value not only the result but the education process as well. Thus, this study seeks to use gamification and examine its effect to enhance sixth grade pupils' motivation.

literature review

Gamification has used on a great scale in research studies in the last few years and its concept has been evolved. In addition, recent studies in the field of educational technology have focused on the elements of play that fulfil learning and increase motivation to engage learners in the learning environment.

Gamification in Education

According to Sailer et .al (2017) Gamification refers to the use of game elements in non-game contexts and matches game elements with motivational mechanisms to engage learners to achieve aims of education. Thus, using Gamification in educational methodologies is the process of converting typical academic units into interesting gaming themes. The key indicator of a student's knowledge building is engaged behavior and the kind of attention and personal involvement that a young learner has with a learning activity. The more the young are engaged with the learning process, the higher chance they have of enhancing their learning. gamification plays a vital role in motivating learners to be more productive, to compete with other fellows, and to get better rewards for outstanding effort.

Furthermore, in traditional instructional methods, the students earn their rates based on a performance of a task as they substantiate achievement whereas in gamification, the effort is rewarded, with badges or points even when the object is not completed: "That is what gamification does, it rewards the effort not the winning" (Folmar,2015, p.7).Gamification in education is the use of the principles of games and their elements in the field of education, in order to engage students, increase their enthusiasm and motivation for education, and create an attractive educational environment that attracts attention and increases motivation. In accordance with Muntean (2011), Gamification combines two kinds of motivation: The intrinsic and extrinsic motivation. In addition, the game elements are greatly essential for the second language learner. For example, by using extrinsic rewards like levels, points, and badges to enhance engagement while intrinsically motivating towards, mastery, autonomy, and sense of belonging.

Gamification, Game-based learning and Games:

Gamification, game-based learning and games are notions in the education world that frequently get perplexed and mixed up. In spite of the fact that they are very

similar, they are really different. According to Isaac (2015) view, gamification uses game elements such as badges and points in non- game activities. It has a set of tasks in which the player is given additional points or a specific reward. Then, losing points is possible, because the point is to motivate the learner to complete some tasks and gamification is usually cheap and easy to use. On the other hand, game based learning establishes specific learning outcomes as a goal of a game activity and the adoption of games for learning, it has a set of learning goals, losing points is possible or not possible, because the point is to motivate the respondents to take some action so that learning takes place. Game –based learning is usually expensive and difficult to use. Finally, Games are activities engaged in by players voluntarily for fun. There is a goal that reflects pleasure with or without rules, Winning or losing is part of the game.

Gamification as a motivation source

motivation plays an important role in the learning of English language, so depending on effective teaching strategies, such as gamification is essential, for its effective role in arousing motivation and attracting learners to learn the English language. There are some reasons to use Gamification as a motivation source. According to Çeker & Ozdamlı (2017, p223) who asserts that" gamification has great impact on increasing learners' motivation especially on young learners". The reasons are going to be discussed as follows:

1- Adopting some boring work to more manageable entertaining ones.
2- Transferring hard work procedures to more enjoyable tasks.
3-Helping to be able to focus more easily
4- Increasing participation
5- Providing motivation and satisfaction in business
6-Helping individuals increase the use of media tools in order to achieve some objectives.
7-Helping learners to be active more and be always participating
8-Helping individuals to be more conscious and be able to use media tools easily in order to satisfy their needs.
9-Games are suitable for the experience, abilities and tendencies of pupils.

Thus, gamification plays a vital role in interactive learning, and it is effective in pupils' motivation for English language. In addition, gamification applications have been on the fore in foreign language learning and motivation.

Gamification apps for enhancing and motivating an English language process

Different gamification applications help manage gamified lessons. Moreover, teachers can integrate gamification activities into online learning platforms such as Duolingo which is a gamification language learning translation platform where individuals advance through several standards. In addition, class dojo that helps in motivating L2 primary school pupils through strategies that have avatars, points, and leader boards. Parents can be engaged and joined with the teacher. It follows, takes part, assesses and the pupil shares along with instantaneous feedback (Hammonds & Vivian, 2013). And also Edmodo which is a secure social networking platform for education with gamification elements like badges and quests. It can be used as an expansion of the classroom for all educational standards. And then *Kahoot!* is a web-based platform that has the gamification elements (i.e., points, rewards, challenges etc.). In accordance with Wang (2015), Kahoot helps educators and learners produce educational game-like platforms by designing online quizzes, surveys and virtual conversations that adopt classroom community instructiveness and improve learning engagement and motivation.

 Previous Studies on motivation &gamification

Some studies investigated the use of gamification in motivation such as Ashameri& Badr (2019) which aimed to identify the effectiveness of using gamification strategy in the development of motivation towards learning English in secondary students in Hail. The total number of students was (149) divided into two groups an experimental group and control group of the first and third grades. The results indicate that the students who learned using the Gamification were more successful than the students who obtained their education using traditional educational methods, as the students' motivation to learn the English language has been modified as a result of the interaction between each other and the teacher during the use of the Gamification strategy.

Moreover, Banat (2009) aimed to examine the levels of motivation to learn English among a sample of Jordanian university students and their relationship to some variables. A sample consisted of (412) male and female students studying the English language course in Jordanian universitie**s.** the results of the study indicated that the levels of motivation to learn the English language among students according to the ten fields, ranged from medium to large, and there were statistically significant differences in the levels of motivation to learn the English language.

Brewer et al. (2013) aimed at using Gamification components to better engage children and motivation in laboratory studies. The study was on children. In this study, the researcher used gamification elements such as points, levels, and prizes for progress in the experimental group to motivate children. The study recommended researchers use Gamification elements, such as points and prizes, to encourage children to complete studies. The findings can be useful not only to researchers conducting studies with young children, but also to researchers trying to motivate participants of all ages. Thus, it is concluded that the results of the studies are different. Some agreed that most students were motivated for learning English language and this was due to different reasons such as the boring teaching methods and techniques used by teachers as well as the lack of motivation towards learning English. However, the majority saw that students have motivation for English in the studies that created an exciting environment of teaching and learning and gave students the opportunity to be motivated.

The Problem of the Study

As a teacher of English, the researcher observed that some young graders in Balat primary schools lacked motivation in learning English language and did not pay attention to the explanation of the lesson**.** To get information about this problem, the researcher visited a number of schools in Balat administration and conducted informal interview of a sample of EFL teachers and some of their students in the primary schools. To conclude, based on the observation, the semi structured interview of some teachers, and the recommendations of some previous studies indicated that some 6th primary school Balat pupils suffer from a low level of motivation**.** Consequently, this study seeks to use gamification to enhance sixth grade pupils' motivation.

Question of the study
The present study proposes the following question:
-What is the effectiveness of Gamification in developing the Primary School pupils` motivation?

Hypotheses of the study
a) There is a statistically significant difference between the mean scores of the experimental group pupils in the pre -post – assessment of the motivation scale, favoring post-assessment results.
b) There is a statistically significant difference between the mean scores of the experimental group pupils and that of the control group pupils in the post – assessment of their motivation, favoring post-assessment results.

Methodology

Population of the study

The participants were 50 pupils at Balat Primary School (the academic year - 2021-2022). They have studied English for 6 years. Their age range from 11 -12 years.

Instruments of the study

The researcher developed the following instrument

Students' learning motivation scale

The researcher developed the following instrument "The motivation scale towards learning EFL" from Alzytunia (2016) because it was suitable for the age of the students. The scale was applied on (50) sixth pupils from Balat Primary School to examine the clarity of the scale items and instructions. It was also applied to identify the scale validity and reliability. The scale consisted of five domains. The first domain tackled self–participation competence for learning English; the second one expressed task value for learning English; the third one tackled beliefs about learning English; the fourth one tackled goal for learning English and the last one was about achievement goal of learning English vocabulary.

validity of the motivation scale:

Table (1) shows the correlation of primary school by using Pearson Formula. According to each item within its domain was significant at levels (0.01) and (0.05).

the whole motivation scale. According to the table, it can be concluded that the scale was highly consistent and valid as an instrument for the study. Correlation (r) table value at 0.391 at sig. 0.01 level and (df)=39 table value at 0.334 at sig. 0.05 level and (df)= 39 Correlation (r) The Table (1) shows that correlations of the test items were significant at (0.01) which indicates that there was a consistency between the items and this means that scale was highly valid for the study.

The researcher also computed the correlation between the five domains with the whole of the motivation scale as shown in Table (2) below.

Table (1) shows the correlation coefficient of each domain with the whole motivation

Domains	Items	Pearson Correlation	Domains	Items	Pearson Correlation	Sig. level
Self –participation competence	1	0.518**	**Beliefs about learning English**	17	0.564**	Sig at (0.01)
	2	0.696**		18	0.522**	Sig at (0.01)
	3	0.475**		19	0.337*	Sig at (0.01)
	4	0.648**		20	0.669**	Sig at (0.01)
	5	0.652**		21	0.451**	Sig at (0.01)
	6	0.618**	**Goal for learning English**	22	0.637**	Sig at (0.01)
	7	0.665**		23	0.382**	Sig at (0.01)
Task value for learning English	8	0.659**		24	0.583**	Sig at (0.01)
	9	0.475**		25	0.633**	Sig at (0.01)
	10	0.446**		26	0.389**	Sig at (0.05)
	11	0.583**		27	0.477**	Sig at (0.01)
	12	0.587**	**Achievement goal**	28	0.619**	Sig at (0.01)
	13	0.389**		29	0.416**	Sig at (0.01)
	14	0.556**		30	0.554**	Sig at (0.01)
	15	0.422**		31	0.522**	Sig at (0.01)
	16	0.669**		32	0.522**	Sig at (0.01)

Table (2) Correlation coefficient of each Domain with the whole scale

Domains	Pearson correlation	Sig. level
Self –participation competence	0.912**	Sig at (0.01)
Task value for learning English	0.955**	Sig at (0.01)
Beliefs about learning	0.815**	Sig at (0.01)
Goal for learning	0.870**	Sig at (0.01)
Achievement goal	0.858**	Sig at (0.01)

As shown in table (2), there is a correlation between the domains and the total degree of the motivation scale sig. level at (0.01) which shows a high internal consistency of the motivation scale which reinforces the validity of the scale.

- Reliability of the motivation scale:

The researcher calculated the reliability of the scale which was measured by Alpha Cronbach and Jetman equation.

Table (3) Alpha Cronbach Coefficients for the motivation scale Domains

Domains	Total	Alpha Cronbach coefficient
Self –participation competence	7	0.790
Task value for learning English	9	0.718
Beliefs about learning	5	0.595
Goal of learning	6	0.631
Achievement goal	5	0.578
Total	32	0.921

The results in table (3) show that the total degree of reliability of the five domains is 0. 921.Thus the scale is suitable for being used in the study.

Reliability coefficient

Table (4)

Domains	Before	After	Total
Self – participation competence	0.749	0.856	0.859
Task value for learning English	0.727	0.740	0.742
Beliefs about learning	0.577	0.594	0.601
Goal of learning	0.800	0.801	0.801
Achievement goal	0.477	0.646	0.653
Total	0.666	0.727	0.731

Table (4) shows that the reliability coefficient by using Jetman equation as the total degree of of reliability of the five domains of administrating the first motivation scale is 0.666 and total degree of the total degree of reliability of the five domains of administrating the second motivation scale is 0. 727.In addition, the table shows that the reliability coefficient is 0.731 and this indicates that the scale was reliable to be applied on the sample of the study**.**

Controlling motivation scale:

To make sure that the sample participants were equivalent, the researcher applied the motivation scale. The results of the motivation scale were recorded and statistically

analyzed using" t-test". Table (5) shows the comparison between the two groups of the sample of the pretest.

Table (5) Test results of controlling motivation scale

Domain	Group	No	Mean	Std. Deviation	T-value	Sig. Value	sig. level
Self – participation competence	Experimental	25	14.60	3.175	0.533	0.597	Not sig
	Control	25	14.16	2.641			
Task value for learning English	Experimental	25	15.36	2.722	0.606	0.547	Not sig
	Control	25	14.84	3.313			
beliefs about learning	Experimental	25	12.32	2.719	0.495	0.623	Not sig
	Control	25	12.68	2.410			
Goal of learning	Experimental	25	12.72	2.301	0.756	0.453	Not sig
	Control	25	12.24	2.185			
Achievement goal	Experimental	25	12.76	2.847	0.472	0.639	Not sig
	Control	25	12.40	2.533			
Sum	Experimental	25	67.76	5.674	0.806	0.424	Not sig
	Control	25	66.32	6.896			

The results of the motivation scale were recorded and statistically analyzed using "t-test". Table (5) indicates that there were no statistically significant differences between the performance of the experimental group and that of the control group on the pre-application of the motivation scale and this indicates the equivalence of both the experimental and control groups.

Study Design

The researcher adopted the aquasi- experimental approach. Students were randomly assigned to a control group (N=25) and an experimental group (N=25). The motivation scale was administered to both groups before and after the experiment.

Gamification environment design

The researcher used the application of Class Dojo based on Gamification. Class dojo is available online at http://Classdojo.com . This application is a free and user- friendly platform. The first step is to log in as a teacher to use this website. Next, the teacher created a class that generates a code for pupils to join the class. (see figure 1)


Figure (1)
pupil's code sheet

Then after pupils' join, the idea of the program was explained to the pupils and how this program could help them to be motivated and how it would be used to track their behavior and performance, and they would be evaluated through points or badges, and

reports would be sent to parents in case they excel or fail. In addition, pupils chose their avatars (see figure2)
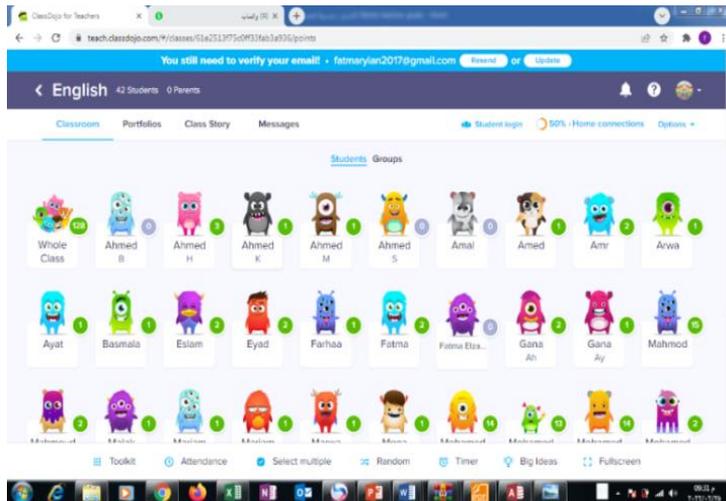
(figure2) Pupils ' avatars

After that, the home page smart sparrow of the application that included a set of main icons was used to move to other pages of the application. (see figure3)
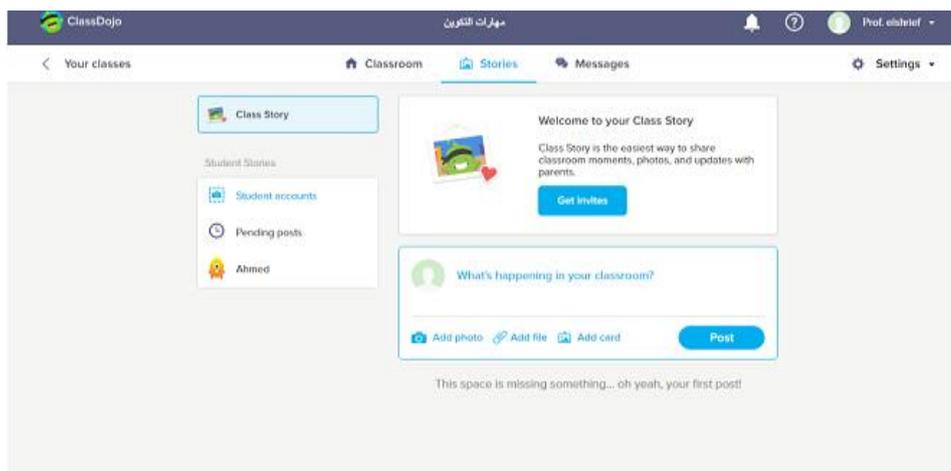

Figure (3) home page smart sparrow

Furthermore, the researcher identified how to earn and subtract points of the elements of gamification and then the required behaviors and methods of evaluation are identified by self-elements for the pupil's behavior, achievement and social evaluation for the group achievement. And also Identified how to earn points by referring to ward chart in the classroom.

Additionally, who performed best during the lesson was determined and awarded digital trophies by the reports.

(see figure 4)
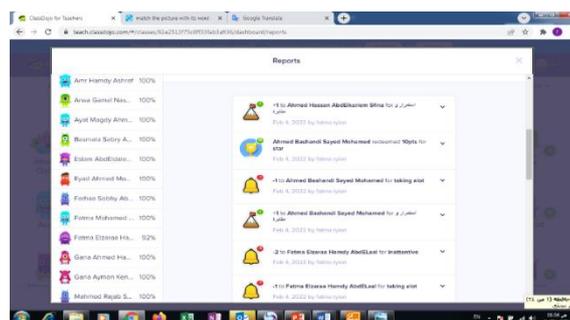
Figure (4) progress bar of class dojo

After setting up the content , it was uploaded to the application of class dojo by producing a set of multimedia of videos, sounds, texts, pictures and animation and some software programmes are used such as Microsoft power point, Microsoft word and the site of word wall resources https://wordwall.net/resource .

 - Google forms were used to write some electronic questions to produce electronic evaluation tools. The E- content based on vocabulary of the lessons which had three units and each unit had four lessons.

Findings & Discussion

The first hypothesis is "There is a statistically significant difference between the mean scores of the experimental group pupils in the pre -post – assessment of their motivation, favoring post-assessment results. To test this hypothesis, means scores of the experimental group results of the pre - test and post – test was computed. T-test Paired Samples statistics was used to analyze the data statistically and the effect size of independent sample was calculated by using (η^2) Eta square. The results are shown in the following table:

table (6) T-Test Results of Differences between the Experimental Group before and after

Experiment of learning motivation scale and effect size (η^2) Eta square and "d" value

Domains	Experiment	Mean	Std. Deviation	T. Value	Sig. Level	η^2	D
Self – participation learning	After experiment	30.30	2.24	21.18	Sig. at 0.01	0.922	6.87
	Before experiment	13.60	3.23				High
Task value For learning English	After experiment	40.15	2.06	24.20	Sig. at 0.01	0.939	7.85
	Before experiment	16.85	5.29				High
Beliefs about learning	After experiment	21.65	1.39	14.40	Sig. at 0.01	0.845	4.67
	Before experiment	13.35	2.72				High
Goal of learning	After experiment	26.05	1.88	21.59	Sig. at 0.01	0.925	7.00
	Before experiment	12.75	2.43				High
Achievement goal	After experiment	19.15	2.033	8.75	Sig. at 0.01	0.668	2.84
	Before experiment	11.40	2.72				medium
Total	After experiment	137.30	5.29	29.68	Sig. at 0.01	0.959	9.63
	Before experiment	67.95	7.0				High

 Table (6) indicates that the total "t" computed value is (29.68) and it is significant at (0.01) and "t" table is (2.70). This means that there are statistically significant differences in the mean scores between the result of pre- motivation scale (before experiment) and the result of post-motivation scale (after experiment) of the experimental group in favor of the experimental group after experiment due to using Gamification. and the table also shows that "t" value is (29.68), the effectiveness size "η2" equals (0.959) and "d" equals (9.63). This means that the effect of Gamification is significant. This large effect may be due to the activities and techniques which are used in Gamification to develop students' motivation for English learning of the experimental group more than their counterparts in the control group

The second Hypothesis

The second hypothesis is "There is a statistically significant difference between the mean scores of the experimental group pupils and that of the control group in the post – assessment of their motivation, favoring post-assessment results". To test this

hypothesis, means scores of the experimental group and control group results of the post – motivation scale was computed. T-test Paired Samples statistics was used to analyze the data statistically by using (SPSS)and the effect size of independent sample was calculated by using (η^2) Eta square" and "d" value . The results are shown in the following table

table (7) T-Test independent sample Results of Differences between the Experimental Group and control group in the post learning motivation scale and effect size (η^2) Eta square and "d" value (N experiment)=(N control)=25

Domains	Group	Mean	Std. Deviation	T. Value	Sig. Level	η^2	D
Self –participation learning	Experimental	30.30	2.227	17.87	Sig. at 0.01	0.894	5.80
	Control	15.20	3.054				High
Task value for learning English	Experimental	40.15	2.059	15.26	Sig. at 0.01	0.860	4.95
	Control	25.75	3.683				High
Beliefs about learning	Experimental	21.65	1.387	13.22	Sig. at 0.01	0.821	4.29
	Control	12.90	2.614				High
Goal of learning	Experimental	26.05	1.877	16.51	Sig. at 0.01	0.878	5.36
	Control	16.40	1.818				High
Achievement goal	Experimental	19.15	2.033	4.72	Sig. at 0.01	0.370	1.53
	Control	15.15	3.200				low
Total	Experimental	137.30	5.292	25.00	Sig. at 0.01	0.943	8.11
	Control	85.40	7.625				Higr5\4r3

Table (7) indicates that total "t" computed value is (25.00) and it is significant < (0.01) and "t" table (2.70). This means that there are statistically significant differences in the mean scores between the experimental group and control one in favor of experimental group due to using gamification. The result analysis of the second hypothesis shows that there are statistically significant differences at ($\alpha < 0.01$) in the total average score of the post application of" the learning motivation scale" between the experimental and control group in favor of the experimental group. The mean of the post application on the experimental group reached (137.30), whereas the mean of the control group was (85.40). This result indicates that using gamification that was used by (experimental group) was more effective than the traditional method (control group) in developing students' motivation for English learning. And the table also shows that the total degree of the test: "t" value is (8.11), the effectiveness size"η2" equals (0.943) and "d" equals (8.11). This means that the effect of gamification is significant. This large effect may be due to the activities and techniques which are used in gamification to develop students' motivation for English learning of the experimental group more than their counterparts in the control group.

Discussion

the findings from the 5-level Likert Scale showed that students in the experimental group showed significantly more enjoyment and felt more attentive than students in the control group. In addition, the significantly higher level of motivation found in the experimental group might be a result of a higher level of intrinsic motivation caused by technology and gamification. Thus, gamification might positively have satisfied some psychological needs, such as the sense of competence, independency and social relatedness that contributed to students' intrinsic motivation necessary for L2 learning (Flores, 2015& Garland, 2015).

According to (Deci & Ryan, 2012) self-determination theory assumes to convey intrinsic motivation, you need to satisfy three psychological needs; autonomy, competence and relation. In this study, the learning gains for the experimental group

might be due to Gamification's role to satisfy these psychological needs of intrinsic motivation. Furthermore, Aparicio et al. (2012) indicated that competition is a factor that can heighten the sense of competence that subsequently improves intrinsic motivation. Even though competition is not always an essential factor in gamification, it is still considered an important element for its success to increase motivation and engagement. So far, the findings of this study showed a significant learning and motivational effect with using gamification. This result is similar to the findings of Su &Cheng (2015) and Hamari et al., (2014), who found that after experimenting gamified and non-gamified learning materials, students reached a higher performance level and also demonstrated greater motivation. The current study found a direct relationship between students' motivation and their learning achievement. In addition, it is agreed with the results of the previous studies such as Lui (2014), Hasegawa et al (2015), Alzaid (2018), Waer (2021), Nahmod (2017), Medina & Hurtado (2017), Rutherford (2020) who emphasized that using gamification in teaching is more effective and productive. So the researcher attributed this to the learning in light of using gamification in enhancing motivation.

Conclusions:

Based on the current study findings, the following conclusions were derived:

1- Gamification is more effective and has superiority over the traditional method in teaching English language

2- Gamification provides students with a better learning environment, which affects their achievement and performance in English.

3- Gamification promotes a learning environment that provided opportunities for exploring and investigating ways for understanding new concepts.

4- Gamification increases students' motivation to learning and raises the degree of cooperation among students.

Recommendations:

In light of the study findings and conclusions, the following recommendations have been put forward for different parties involved in English language learning-teaching process:

Recommendation to the Ministry of Education:

The Ministry of Education is recommended to:

1- Conduct workshops and training programs on Gamification aiming at familiarizing teachers with gamification and using it in teaching all English language skills and areas (i.e. vocabulary, structure, phonology and functions).

2- Include gamification in" teachers' guide" books and distribute them among teachers.

3- Develop and enrich the "Teacher's Guide" with approaches and techniques that increase and enhance the teaching and learning of vocabulary areas in their teaching with the supervisors, senior and junior teachers.

Suggestions for Further Research

1. The current study was limited to teaching and learning vocabulary and increasing motivation. More studies should focus on using gamification with other English skills, sub-skills and areas.

2. Investigating the effectiveness of an electronic program based on Gamification in developing the oral fluency of English Majors.

3. Investigating the effectiveness of using gamification in raising cultural awareness at the secondary stage.

4. Investigating the effectiveness of using gamification in raising students' attitude towards leaning English at the preparatory stage.

5. Investigating the effectiveness of using gamification in teaching grammar for primary students.

6. Future research is also recommended to investigate the effectiveness of using gamification on other school subjects.

7. It is also recommended to investigate the effectiveness of using gamification on students' motivation for learning other school subjects.

References

Alzaid, F., (2018). The effect of Gamification Based –Formative Assessment on Motivation and Vocabulary Acquisition in ESl classroom, Mcgill university. *Faculty education*, (5), pp.574-602.

Alzaytuniya, S., H. (2016) *The Effectiveness of Using Flipped Classroom on Tenth Graders' Grammar Learning and Motivation for English*. (Master thesis), Islamic University. Gaza: Palestine

shamari,T., A . &Badr (2019). The effectiveness of using the Gamification strategy in developing the mortivation towards learning English among secondary school students in Hail. *faculty education, 5*(35), pp. 574-602.

Aparicio, A. F., Vela, F. L. G., Sánchez, J. L. G., & Montes, J. L. I. (2012). *Analysis and application of gamification.* In Proceedings of the 13th International Conference on Interacción Persona-Ordenador*, pp.1-2.

Banat, S. (2009). Motivation standard for learning foreign language English of Gordian students sample, *Studies &researches Gursh Journal.*12 (2), pp.305-331.

Brewer, R., Anthony, L., Brown, Q., Irwin, G., Nias, J. & Tate, B. (2013), *Using Gamification to motivate children to complete empirical studies in lab environments*. 12th International Conference on Interaction design and children, pp. 388-391.

Çeker, E., & Özdaml, F. (2017). What Gamification is and what it's not. *European Journal of Contemporary Education*, 6(2), 221-228.

Deci, E. L., & Ryan, R. M. (2012). Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. In *The Oxford Handbook of Human Motivation*, pp. (85–107). Oxford: Oxford University Press.

Domínguez, A., Saenz-de-Navarrete, J., de-Marcos, L., Fernández-Sanz, L., Pagés, C., & Martínez-Herráiz, J.-J. (2013). Gamifying learning experiences: Practical implications and outcomes. *Computers & Education*, 63, pp. 380-392. Retrieved from://doi: 10.1016/j.compedu.2012.12.020

Flores, J. F. (2015). Using Gamification to enhance second language learning.*Digital Education Review*, 27, pp.32–54. Retrievedfrom http://revistes.ub.edu/index.php/der/article/view/11912/pdf

Folmar, D. (2015). *Game it up: Using Gamification to incentivize your library* (vol.7). Maryland: Rowman & Littlefield

Garland, C. M. (2015). *Gamification and Implications for Second Language Education:A Meta Analysis*. (Master Thesis), St. Cloud State University. Retrieved from culminating project in English: Retrieved from http://repository.stcloudstate.edu/engl_etds/40/.

Hamari, J. K., Koivisto, J., & Sarsa, H. (2014). *Does Gamification work? A literature review of empirical studies on Gamification*. 47th Hawaii International Conference on System Science. IEEE, pp.3025– 3034. Retrieved from http://doi.org/10.1109/HICSS.2014.377

Hammonds, L., Matherson, L. H., Wilson, E. K. & Vivian, H. W. (2013). Gateway tools: Five tools to allow teachers to overcome barriers to technology integration. *The Delta Kappa Gamma Bulletin. International Journal of Professional Educators*, 80 (1), pp. 36-40

Hasegawa, T., Koshino, M., & Ban, H. (2015). An English vocabulary learning support system for the learner's sustainable motivation. *Springer Plus*, 4(1), pp.1-9. Retrieved from http://doi.org/10.11-86/s40064-015-0792-2

Isaacs, S. (2015). The Difference Between Gamification and Game-Based Learning. Retrieved from http://inservice. ascd.org/the-difference-between-Gamification-andgame-based-learning/

Lui, S. (2014). Use of Gamification in vocabulary learning: A case study I in Macau. *In 4th CELC Symposium Proceedings*. Retrieved from http://www.nus.edu.sg/celc/research-books/4th%20Symposium%20proceedings/13).%20Sze%20Lui.pdf

Medina, E. & Hurtado, C. (2017). Kahoot! A Digital Tool for Learning Vocabulary in a language classroom. *Revista Publicando*,12(1), pp.441–449

Muntean, C. C. I. (2011*). Raising engagement in e-learning through Gamification*. The 6th International Conference on Virtual Learning ICVL, (1), pp.323–329. Retrieved from http://icvl.eu/2011/disc/icvl/documente/pdf/met/ICVL_ModelsAndMethodo logies_paper42.pdf

Nahmod, D. (2017). *Vocabulary Gamification Vs Traditional Learning instruction in an Inclusive High School Classroom* (Order No. 10621488). Available from ProQuest Dissertations & Theses Global. (1933396264). MA dissertation. New Jersy: Rewan University. Retrieved from https://search.proquest.com/docview/1933396264?accountid=178282

Salier, M., Heinz, M., Hense, J. & Mayr, S. (2017) How motivates: An experimental study of the effects of effects of specific game design elements on psychological need satisfaction, *Computers in Human Behavior Journal,*69, pp.371-380. D

Soria (2017) *Gamification in English Teaching in Primary Education*. (Master thesis). University of Valladolid. Retrieved from:https://uvadoc.uva.es/bitstream/handle/10324/29552/TFG-O-1222.pdf?sequence=1

Su, C. H., & Cheng, C. H. (2015). A mobile Gamification learning system for improving the learning motivation and achievements. *Journal of Computer Assisted Learning*, 31(3), 268-286

Waer, H. (2021). Using Gamification in EFL vocabulary learning and learners' attitudes toward Gamification us*e. Journal of Scientific Research in Education.22(2), pp.475-570*

Wang, A. I. (2015). The wear out effect of a game-based student response system. *Computers & Education,* (82), PP. 217-227.

werbach, k., & Hunter, d. (2012). *For the Win: How Game Thinking can revolutionize your business.* philedephia: wharton digital press.