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## An Examination on the Students' Perceptions towards the Effectiveness of Using Game-Based Learning in Learning the English Language for Students in Higher Education

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#### **Abstract**

The use of games in educational settings and for learning purposes is not a new phenomenon. Given the level of engagement that games generate for a wide range of people, as well as the types of individual and social activities they enable, proponents have argued that games are an ideal medium for learning. As a result, the concept of game-based learning is being introduced. The first drawback is that the scientific area on the effectiveness of using gamebased learning in English language learning is too broad and requires more research and the study participants in the papers examined were in primary and secondary schools. The primary goal of this study was to examine students' perceptions of the effectiveness of using game-based learning to learn English for students in higher education. Hundreds of higher education students took part in this study, which used a mixed research method. The perceptions of students from Universiti Kebangsaan Malaysia's Faculty of Social Sciences and Humanities (FSSK) were collected through a questionnaire, and three of them were interviewed. The findings of this study showed that higher students produced a range of conceptions about using games in learning English that were similar to those reported in the current literature. The outcomes of the research below have shown that most of the higher education students believe that game-based learning methods are effective in learning the English language and different from traditional or conventional methods.

Keywords: Game-based Learning, English Language, Higher Education, Learning Effect

#### Introduction

The use of games in educational settings and for learning purposes is not a new phenomenon. However, with the increasing acceptance of games as mainstream entertainment, the question of how to use the promise of games for educational purposes has arisen. Reports on youthful people's game consumption are compelling, with studies like the Pew Internet & American Life Project indicating that 99 percent of boys and 94 percent of girls play games (Lenhart et al., 2008). Reports on how much time youth spend playing games range from 7 to 10 hours per week (Lenhart et al., 2008), with more recent estimates

putting this figure even higher (Homer et al., 2012). Given the level of engagement that games generate for a wide range of people, as well as the types of individual and social activities they enable, proponents have argued that games are an ideal medium for learning (Gee, 2003, 2007; Prensky, 2003, 2005; Squire, 2011). As a result, the concept of game-based learning is being introduced.

The majority of definitions of game-based learning emphasize that it is a type of game play with specific learning outcomes (Shaffer et al., 2005). It is common to assume that the game is digital, but this is not always the case. As a corollary to this definition, the process of designing games for learning entails balancing the need to cover the subject matter with the desire to prioritize game play (Plass, Perlin, & Nordlinger, 2010). Game-based learning entails more than simply providing students with educational games such as The Oregon Trail. It is about changing students' attitudes toward learning as well as learning's attitudes toward students. The goal is for students to enjoy the learning process itself. When a student learns through games, they gain much more ownership of the material, which improves retention. At the same time, the combination of different methods and goal-based learning addresses all of the learning styles. A game can address any student's primary, secondary, or tertiary learning style. Multiple subjects can even be combined into a single game, resulting in a versatile learning tool.

The central idea behind game-based learning is that it teaches through repetition, failure, and achievement of goals. Language learning, particularly English language learning, can benefit from game-based learning. This principle is used in video games to teach the learner from the ground up. The player begins slowly and gradually improves until they are able to navigate the most difficult levels with ease. A well-planned and designed game will provide enough difficulty to keep it challenging while remaining simple enough for the player to win. This same concept is applied to the teaching of an English language curriculum through game-based learning. Students work toward a common goal by selecting actions and experiencing the consequences of those choices. They actively learn and practise doing things correctly. As a result, instead of passive learning, active learning occurs. Game-based learning has been used in a variety of settings, including higher education. Whether they were aware of it or not, students have been exposed to game-based engagement techniques in some form or another. According to the 2014 NMC Horizon Report, games are a trend in higher education with a two to three-year adoption timeframe. According to the report, "the average age of today's gamers is 30, with 68 percent of gamers over the age of 18 – university age" (Johnson et al., 2014, 42).

It is widely acknowledged that providing higher education students with a broad English language skill set is critical for their future and employment opportunities. However, the literature identifies a widespread lack of satisfaction and engagement in this matter, as the common finding among scholars is that students find methods classes "dry" and "irrelevant," causing them to not engage with the material as much as they would with a topic-based course. According to Kim (2015), using game-based learning methods in learning can add an additional level of motivation and incentive to many higher education activities, which can overcome the dryness in the class learning. In addition, with the development of new applications and technologies, incorporating game-based learning has become much easier. Game-based learning can be used to supplement students' lessons, allow students to practise their English in a group setting, and engage students in something they are interested in. Language is also used in games to teach important concepts such as rules and turn-taking, as well as to teach students valuable life skills such as sharing, how to lose gracefully, and the

value of fairness.

English is a common language used in all aspects of life to communicate with native speakers and non-native speakers around the world. For example, the majority of Malaysian studies assessing the English language skills of undergraduates came from the physical sciences through comprehensive literature reviews (Othman et al., 2005). Higher education students, especially non-English major students, need to understand English for their studies in order to gather information and learn; thus, higher education around the world need to include English as one of their educational requirements (Khader & Mohammad, 2010). However, students of English-language learning have been found to be low in grammar, writing, and vocabulary, especially in countries where English is not spoken as a mother tongue (Hashemi, 2011), and Malaysia is one of the countries. This is due to a lack of free time, particularly among non-native English-speaking students, which contributes to the barriers found by Behnke et al (2004) in improving English language proficiency. Another explanation is that in the learning process, when conventional methods such as the use of chalk and boards for educators as well as pens and paper for students are introduced, students feel unmotivated in learning English.

One of the biggest obstacles for educators is success in educating giant classes of students, all of whom have entirely different personalities, different skills and different learning preferences. With high expectations of digital technologies, students want a range of experiences, prizes, surprises and humour to keep up their interest in learning. Seeking innovative ways to gain the interest of learners and involve them in the learning process is now one of the key concerns. Learning isn't just rote memorization. Students will not be able to acquire any information and expertise from a boring learning process, but will appreciate the application of skills and experience to solve real-life problems with the aid of an efficient learning process. Dadheech (2018) states that knowledge and skills learned through gamebased learning are maintained longer than knowledge gained through other learning methods. A successful learning process is one in which you are completely interested in what you do. Game-based learning includes games that are well crafted and have well-executed learning tasks to make learning successful. A well-designed educational game could combine the learning goals of the education system with the enjoyable, finished product of a commercial game and custom-built games. Games developed specifically to teach students will, to a large degree, inspire self-learning and problem-solving skills. Game-based learning literally means including the subject matter of information in games. All kinds of games are learning processes, be it casual gaming for fun or something serious.

There are three methods to integrate games and events into the learning process. The first approach is focused on learners developing and making their own games according to their needs; the second focuses on instructors, trainers or developers designing educational games from scratch to learners' level of knowledge; and the third is the incorporation of commercial prefabricated games into classroom activities for successful learning (Dadheech, 2018). Care should be taken when using a Game-based learning approach as it can be difficult to match learning goals with a game dynamic learning model. It must follow the goals and maintain proper compliance with the curriculum. Game-based learning has changed from learning with lectures and written tasks to learning with games, and has become an integral part of modern education. Being a well-integrated member of contemporary society needs more than just mastery of basic reading and writing skills. It enables learners to explore new methods of working towards the achievement of goals and objectives in an immersive manner.

Therefore, instead of using conventional tools and making students more inspired to learn English, a new approach should be used in the first place to make students interested in learning English. One way to do this is to use the Game-based learning approach by using games as English tools. Game is one of the most modern learning modes in today's academic field, as it is used as a tool for transmitting and acquiring knowledge of a particular subject that is centered in that game to the target users of the game. Huyen and Nga (2003) are among the researchers who argue that while games are seen as time-consuming activities in most English classrooms, they are not just fun, as games demonstrate their own teaching and learning efficiency. Mahmoud and Tanni (2014) also investigated the role of language games in students' attitudes towards English learning. The findings showed that most English educators accepted that students' attitudes towards learning English were influenced by the use of games.

A multitude of research has been performed on the efficacy of the Game-based learning approach in the learning of English. For example, Ma (2019) indicated that experience has shown that the use of educational games in college English as a game mobilizes student enthusiasm, eliminates fatigue from the learning process, and effectively improves students' English skills. It can also be seen that the use of English learning games contributes positively to learning experience based on the information given and inspires learners with a wide variety of personality factors. In addition, the learner shifts away from an introverted shyness mode, becoming more inspired by positive feedback and integrating the elements of the game. Games have also enhanced learning how to write, read and speak, and encouraged teamwork and engagement. Borzenko & Pavlishcheva's paper (2019) argued that specially crafted educational games with the aid of an interactive whiteboard are used in English classes with students as examples of non-standard elements and can be used by any English educator. This paper will therefore provide further evidence of the effectiveness of the use of game-based learning methods in English as a learning language for higher education.

#### **Literature Review**

### An Overview of the Past and the Present of Game-based Learning in Learning English Language

Plato explicitly recommended games as a teaching tool, and Vittorino da Feltre took up his ideas in the Renaissance. Plato (407 B.C.) reinforced the most primitive notion of education. He said that childhood without games was not intact in terms of education, in which games played, to some degree, an important role in student's lives, and the relationship between them was indivisible and indestructible. Rousseau (2009), a well-known educator, also said that having students act as students was a rational power; games remain their tools to get in touch with others and with the world. Until the twentieth century, reality has never changed, and people have acquired a lot of teaching and learning experience to show that their statements have always been true. Game-based learning continues to be a world learning cycle, and games accelerate the process, and Game-based learning was finally introduced in the 20th century as a pedagogical approach at university level in the 1970s by Piaget (1973);Vygotsky (1978).

Game-based learning in western countries is just like pedagogical devices, because they hardly have their own gaming form systems, and there has been insufficient evidence of the advantages of gaming. Boyle (2012) believed the number of game frames or models to be large, so no matter what discipline you teach, you must have a game model that you can use.

Perrotta et al (2013) has also identified the principles and mechanisms of game-based learning with such magical enchantment. First, they argued that educators should set a specific but challenging goal and set a fictional setting or "fantasy;" then they gave students plenty of interaction and a considerable degree of control. Educators should gain instant and constructive feedback as well as share social bond experiences. To sum up, games have the potential to make playing a learning experience. Westerners have games with almost all themes fully integrated.

Game-based learning has been in demand in China for a long time. Xun Zi and Zhu Xi, who played a vital role in Chinese education, both put forward some valuable ideas on gaming teaching. In comparison, however, Chinese modern-day students do not get the hang of true nature. While games can provide an efficient learning environment, not all games are successful and not all games are educational. Similarly, not all games are suitable for all learners, or all learning outcomes should be delivered. Below are a few representative studies. Zhu Lin (2014) pointed out that pre-school English education in kindergartens in China had been popularized due to parents' expectations that their students would be enrolled in key elementary schools and the developmental needs of the kindergartens themselves. Games are the most appropriate means of teaching, given the physical and mental characteristics of students and the objectives of pre-school English teaching. She also said that the game teaching approach works better than the traditional teaching method used to improve the English speaking and listening of students. Zhang (2005) also claimed that interest is a good educator to teach students a foreign language. Games can, at least, hold on to their interest and may draw attention to them. Wang (2011) suggested that all learners should be specific, and that educators should keep this idea central to the planning of lessons and the selection or design of games. Games should also be organized. Goal-driven practice combined with direct feedback increases the level of learning for students. To put it in a nutshell, game-based learning is a learning method that conforms both body and mind to learners. Combined with class observations, this study provides a comprehensive view of game-based learning in the classroom and shares the effectiveness of games provided in the English class.

#### The Effect of Using Educational Games on The Students' Achievement in English Language

One realistic approach to promoting English language learning is the use of language games. It is important for educators to have a full understanding of the meaning of games when using classroom games, which are generally described as a mode of play on rules, competition and fun. The advantages of the games should be considered equally by the educators: the ability to attract the attention of the students; the lower stress of the students; and the possibility of real communication for the students. In the end, educators need to determine the correct use of games in the classroom. It is important to take sufficient time and incorporate it into the daily curriculum and curriculum. However, due to the limitations of the syllabus, games are often not manageable as much as they should be. So, it may be challenging for educators to try to add some classroom games to help students develop their target English language skills.

Some educators think that language games are a waste of time and tend not to be used in classrooms because games are often considered to be just a fun aspect. In reality, games can provide more than that for students who have English as a foreign language (EFL) and English as a second language (ESL). Among the several strategies adopted to improve student skills such as visual aids, CALL (Computer Assisted Language Learning), drama, role-

play, and so on, games represent another cost-effective strategy to promote language skills for students (Richard-Amato, 1996). This paper is intended to convey an explicit understanding of what games are in the classroom, and why and how games are played. Language learning remains a complex task that can be frustrating at times. Constant effort is needed to understand, produce and manipulate the target language. Well-chosen games are invaluable, as they provide students with a break and allow students to practice language skills at the same time. Games are highly motivating, because they're fun and challenging at the same time. In addition, they use meaningful and effective language in proper contexts. They also promote and strengthen cooperation. Players are very inspiring, because they are interesting and fun. They can be used to enable all language skills to be practiced and to practice many different types of communication (Ersoz, 2000).

Language games are not practices aimed solely at breaking the ice between students or killing time. Rogińska (2013) stated that Byrne (1995) gave games the definition of a form of rule-based play. They're supposed to enjoy themselves and have fun. Not just a distraction, a break from daily tasks, they're a way to get the learner to use the language during the game. Similarly, Hadfield (2006) defined games as an activity with rules, goals and a fun element. There are a lot of language games out there. Educators, then, have a variety of choices to make. Educators, however, must take into account several factors when determining which game to use in a specific class and which games would be best suited and most popular with their students. According to Carrier (1990), educators should first consider the level of the game as being appropriate to the level of language of their students. They should choose a game that suits the purpose or content of that class. Educators should also consider the characteristics of students: whether young or old, serious or light-hearted, and highly motivated or not to learn. They should also consider when to use the game.

According to Richard-Amato (1996), while games are often associated with fun, we should not lose sight of their pedagogical values, especially in second-language learning. Games are effective because they provide motivation, reduce stress and give students the opportunity to communicate effectively. The main reason that games are considered successful learning aids is because they stimulate encouragement and students are very interested in the competitive nature of the games; however, they try harder in games than in other courses (Avedon, 1971). When playing sports, students usually try to win or defeat other teams on their own behalf or on their own behalf. The students will be so competitive while playing, because they want to have a turn to play, score points, and win. Students will definitely take part in the class activities. As a result, a educator can introduce new ideas, grammar, and knowledge to students, and so on. As with the dictation game, students are so competitive that they want to finish first and win first. Games can clearly be seen capturing the attention and participation of students. We are going to get the students excited to want to know more. In addition, they can turn a boring class into a challenging one.

Another reason why the game is often used in language classes is that students' stress in the classroom is reduced. There is a lot of pressure on students in traditional classrooms to try to learn the target language. Schultz (1988) said that tension is a major obstacle to language learning. This process, which by its very nature is time-consuming and stress-provoking traditional language learning, raises the stress level to a point where it interferes with student attention and efficiency and undermines motivation. A method has been developed to make students forget that they are in a class that relaxes students by stressing tasks or games. There is an excessive level of stress in the classroom because students have to face unfamiliar or unknown grammatical structures, words, texts, and so on. As a result,

students often feel uncomfortable and anxious in the classroom, which inevitably affects their ability to understand. Games can therefore help to reduce their anxiety, make them feel comfortable and learn more. When students play games, they're supposed to relax and have fun. Since students know they are playing games and want to interact effectively, they don't think about making mistakes, and they don't try to correct themselves in every single sentence. When students are free from worry and stress, they can improve their fluency and standard speech styles.

Next, students learn without realizing that they're learning (Schultz, 1988). For example, when you play a game called "What Would You Do If?" the students will have to pick a hypothetical question from the ones they wrote in the box. They might get a question like, "What would you do if a lion came to this classroom?" Next, they've got to choose the answer they've already written. The answer they get may be "I'd be a fly." Usually, they don't match each other's questions and answers, so students have to use their own imaginations to explain their bizarre answers, and everyone has fun listening to them. The answer might be, "If a lion came to this classroom, I'd be a fly because I'm a good guy, so an angel will come and save me by transforming me into a fly." In trying to clarify, students don't think too much about grammatical errors because they want to interact and understand why it can happen. Besides having fun, students don't care about mistakes and punishment; they even learn a grammatical concept and have the ability to follow it. So, unintentionally, they learn-learn without knowing they're learning. Students stop thinking about the language and start using it spontaneously and naturally in the classroom (Schutz, 1988).

A further advantage is the improved competence of graduates. Playing games in the classroom can greatly increase students' ability to use language, as students have the opportunity to use language with a purpose in a given situation. Hadfield (2006) confirms that games provide as much concentrated practice as traditional drilling and, more importantly, provide an opportunity for real communication, albeit within artificially defined limits, and thus provide a bridge between the classroom and the real world. As in the traditional classroom, students have the opportunity to practice and practice grammatical rules and other functions. Students may want to play games for fun. Educators, however, need more convincing reasons. Educators need to consider which games to use, when to use them, how to link them to the syllabus, textbook or programming, and how, more specifically, different games will benefit students in a variety of ways. The key to a successful language game is for the rules to be clear, for the ultimate goal to be well defined and for the game to be fun. A dissertation on the role of word games in the acquisition of second-language teaching, motivation and ludic tasks has been prepared, an attempt has been made to determine the role of word games and the motivation of students in the second-language classroom environment and to compare games with more traditional practices as effective learning tools. The games were selected for their adherence to the principles of task-based instruction and communicative pedagogy methods.

Quantitative research findings have shown that one game has produced results that confirm the assumptions that motivate this review. In some words, learners who play these styles of word games will be more inspired to learn than learners who do more conventional activities; these games will improve the learning atmosphere, build a sense of community and strengthen the relationship between the learner and the educator. The results of the other three games did not support the hypotheses. These games have produced negative results in the pedagogy of word games. Students described these games as boring and futile, learners said that word games should not be an integral part of the curriculum, and they felt

that their peers did not enjoy the games. Results, however, have shown that enjoyable and imaginative experiences are highly regarded. The qualitative analysis of all four games was more favorable. Together, both quantitative and qualitative evidence indicates that word games can be motivating and efficient, provided they are academically sound, enjoyable, competitive, closely linked to, and timely, the material being studied. Otherwise, learners are not eager to use games (Ojeda, 2004).

To put it briefly, games can help to stimulate curiosity among students. Using one or two games in the classroom can develop a student's yearning for English while completing a teaching plan, which is an indirect interest in learning English. Educators focus on the introduction of different types of play, which will eventually lead students to search for English language skills and thus actively learn English. During this time, indirect interest can be translated into direct interest. Learning is no longer a complex job, with a direct interest in learning the English language. Students can have a lot of fun learning English and insist on learning and using English over the long term. Ma (2019) summarized that the practice demonstrated the use of educational games to teach English at the college. On the one hand, it mobilizes students' enthusiasm and, on the other, it eliminates the fatigue caused by the learning process and effectively improves students' English skills.

In their research, Luo & Lu (2017) concluded that English also constantly innovates in teaching methods, such as enabling educational games to join the teaching process, in order to stimulate student interest and improve the efficiency of the classroom. The use of conventional tools in teaching methods continues to be adopted by English educators. This teaching method does not improve the interest of students and would often lead to a dull and boring classroom atmosphere. Games are going to be a fun and relaxing way to have fun. It will also be a tool for the creation of the intellect. Students must continually suppress their intense curiosity and desire for information when playing games. In addition, educational games are one of the new types of effective teaching methods used to develop learning through games that can promote learning achievement. English language games will also encourage student interaction when students play language games in smaller groups. They will engage in group learning activities that will allow them to connect freely and provide meaningful opportunities for social interaction. (Massaum, Mustaffa & Stapa, 2015). Learning becomes more effective when school students are given the opportunity to participate enthusiastically in the discussion and sharing of ideas. Fromme (2003) agreed with McFarlane's and Sakellariou's (2002) statement to promote the use of games for students and educators from a variety of points of view. Games can reduce anxiety and thus facilitate the acquisition of a second language. Because they are highly motivating and entertaining, by giving them ample opportunity to express their opinions and feelings, they can draw out shy or timid students.

English games or educational games can also help educators create useful and meaningful contexts for learning modern English vocabulary (Cameron, 2001, in Seda, 2010). Managing vocabulary and learning games will be effective because learning is less stressful for students in a fun situation and also increases their motivation. Precisely, Wright et al. (2005) indicated that games are helping and encouraging many learners to maintain their interest. Zahro et al. (2013) used crossword puzzles and puzzles to examine the effects of these games on the student's vocabulary achievements, which showed that the use of guessing games had a clear positive effect on the student's vocabulary achievement. Nguyen Huyen and Nga (2003) also acknowledged that games have been effective in helping their students gradually improve their skills in vocabulary building

#### Research on Game Based-Learning in Malaysia

The research topics on game-based learning carried out in Malaysia focuses on its benefits, readiness and future planning.

Table 1 Previous Game-Based Learning Research Papers in Malaysia

Topic	Scope	Author	Year
Usage	Investigated whether the	Elaish,	2019
	developed VocabGame can motivate	Monther &	
	native Arab students learning the	Ghani, Norjihan	
	English language to achieve better	& Shuib, Liyana	
	performance.	& Al-Haiqi	
	Explores the use of language	Yaccob &	2019
	games in teaching and learning	Yunus	
	grammar, with reference to second		
	language (ESL) learners.		
	Explores the use of massively	Azman &	2018
	multiplayer online games (MMOGs) as a	Dollsaid	
	type of serious games that have English		
	as a Foreign Language (EFL) learning		
	potential.		
	Investigate "GOT IT!" which	Razali,	2017
	stands for Group-oriented Thematic	Amin, Kudus, &	
	Interactive Technique potential ability	Musa	
	in assisting vocabulary retention		
	involving a class of Standard 4 students		

The first study is the development of a Mobile Game Application to Motivate Students in Learning English Vocabulary by Elaish, Monther & Ghani, Norjihan & Shuib, Liyana & Al-Haiqi (2019). This paper shows the outcome of the VocabGame that can motivate native Arabic students to learn English in order to achieve better performance, divided into two groups of 64 students. The first is the control group (high-performance group) and the second is the experimental group (low-performance group) and it has been shown that students in the experimental group have greatly increased their motivation by using VocabGame. The mobile gaming application will therefore be a useful tool for students who have had poor performance while studying English, and will also improve their confidence and motivation in some way. Azman & Dollsaid's second research (2018) is Applying Massively Multiplayer Online Games (MMOGs) in EFL Teaching. This article explains the use of massive online multiplayer games (MMOGs) as a type of serious game that helps learn English as a foreign language (EFL) as a strategy to enhance learning potential. Evidence shows the impact of roleplaying on communication behaviors among EFL game players in MMOGs. The study findings explain that the learning principles of good games, which integrate gaming dynamics, lead the language learner to be active generators of information, knowledge and language. The third study is the use of card games to enhance vocabulary retention: Razali, Amin, Kudus, & Musa's preliminary research (2017). "GOT IT!" is a group-oriented interactive thematic technique consisting of two sets of card games. The aim was to explore its potential ability to assist in the retention of vocabulary, a preliminary study involving the Standard 4 class of students,

and the results of the study indicated that 'GOT IT! "It seems potentially useful to increase learners by retaining theme-based vocabulary learned in their classrooms in English. The last is the English Grammar Language Games in Teaching and Learning: A Review of Yaccob & Yunus Literature (2019). This paper looked at the use of language games for second-language (ESL) learners in teaching and learning grammar. For ESL learners, the results extend to the advantageous use of language games for teaching and practicing grammar. After reading the article, it has shown that this study is useful in helping to show readers the importance of language games as a teaching strategy to help improve the learning of English grammar.

#### Method

In order to address the aforementioned research gap, this study was designed as a descriptive study with an aim to explore how effective are the use of game-based learning method in learning English language for higher education and why is game-based learning method different from conventional method in learning foreign language education like English language through higher education students' perception. In preparation for answering a set of research questions, Brynan (2001) recommends 'a general orientation to the conduct of social research'. This research is designed to find out the effectiveness of using Game-based learning methods in English language learning for higher education; hence, a mixed method will be applied to achieve validity, flexibility, comprehensive data, and completeness according to the aims of this study. This design is deemed suitable as the questions can be answered by gathering statistics and it is also useful in understanding contradictions between quantitative results and qualitative findings. Mixed method gives a voice to study participants and ensures that study findings are grounded in participants' experiences. Thus, this method aims to offset potential weaknesses of both qualitative and quantitative research, by drawing on the strengths of both methods.

#### **Participants**

According to Chang, Chen & Huang (2011), researchers who carry out their research in the same school would improve internal validity of their studies because it would eliminate some of the most important confounding variables. Hence, the sample of this study will come from Universiti Kebangsaan Malaysia (UKM) students. The prospective students were required to answer a questionnaire that has been designed for the higher education students inside UKM as an anonymous online questionnaire and distributed via email, various social networks (Facebook, e.g.) and messengers (WhatsApp, e.g.) to attentive students.

This research focuses higher education students from the Faculty of Social Science and Human Resource (FSSK) in Universiti Kebangsaan Malaysia (UKM). Students of both genders are included in this investigation. Students from this particular course were chosen as a population due to their English language proficiency and expertise as it is believed that they would deliver honest responses and views to this study. In addition, data attained would determine their opinion on the use of game-based learning methods in learning English language among the students. Because of the extensive research about game based-learning among prospective university students has been insufficiently carried out in UKM and the aim is to fill in that gap, the samples were selected randomly among the 100 students to be the respondents to the questionnaire as Hair et al., (2010) regarded that 100 represents the practical minimum size for the subject and 3 participants for the interview.

#### **Research Instruments and Procedure**

First and foremost, the questionnaires were constructed into several sections in accordance with the scope of the study in order to secure a good amount of data collection to answer the research questions. The structured questionnaire was composed prolifically of sixteen questions. In the first section of the questionnaire, the willing participants were informed about the purpose of taking part in the questionnaire. In the second section, they were requested to fill in the demographic information about their age, gender, and the faculty. In the third section, they were proposed to fill in the option which best showed their opinion about games and their effectiveness in learning English Next, the questionnaires were submitted to the instructor to validate its content and accuracy. After perfecting the questions in the questionnaires, the researcher distributed the questionnaires in the appropriate setting and time to the students. The questionnaires were collected after the students had finished answering them. Lastly, the results from the questionnaires provided answers to the research questions were keyed into Microsoft Excel, and the data were obtained and transcribed.

There were three interview sessions conducted by the researcher with different participants. Firstly, the researcher informed the three chosen participants about the interview and sought their permissions. Subsequently, the researcher proceeded to set a date and time with the participants and made sure the interview session was convenient for them. Thirdly, the researcher asked the interview questions and recorded the entire interview with digital devices. Each session was likely to last 2-3 minutes; nevertheless, the interval of time may be lengthened or shortened depending on the answers given by the participants. Lastly, the record was gathered and data were interpreted, transcribed and analysed systematically. The data that has been recorded will be reviewed and transcribed. The main information from the observation was extracted. The extricated data were transcribed into descriptive form. The transcription of the data illustrated the usage of game-based learning in learning the English language and why is game-based learning method different from conventional methods in learning foreign language education like English language.

#### **Data Analysis**

Students from the Faculty of Social Science and Human Resource (FSSK) at Universiti Kebangsaan Malaysia were given the questionnaires (UKM). The data acquired will be utilised to describe the effectiveness of using game-based learning methods in English language learning for students in higher education. It will show how common colloquial Malaysian English is among higher education students and how many factors can influence its use. The study's initial goal is to find out how students feel about using game-based learning methods to learn English for higher education. Furthermore, the purpose of this research is to examine the differences between game-based learning methods and traditional methods in language learning, such as English. As a result, the following research issues were addressed in this study:

- I. What is the perception of students towards the use of game-based learning methods in learning the English language for higher education?
- II. Why is game-based learning method different from conventional methods in learning foreign language education like English language?

### Research Findings Quantitative Findings

#### Section I: Demographic / Respondents' Background

Many concerns relating to gender and language have been described by Holmes (1998). Both men and women have their unique ways of communicating a message, and it is acknowledged that they employ a specific "language" to do it. As a result, it is a truth that gender influences one's speech to some extent. The percentage of male and female respondents to the survey is depicted in the pie. Gender is used as a population comparison ratio, and there are significant disparities in how a man and a woman speak English. Females account for 54 percent of the 100 responders, while males account for 46 percent. This could be attributed to the fact that female students make up the majority of students across Malaysia's tertiary education system, not just in the Faculty of Social Science and Human Resource (FSSK) of Universiti Kebangsaan Malaysia (UKM).

The experiences in learning English are crucial in this study because they reveal a pattern of students' performance as the English language develops; hence, the researcher needs to know roughly how proficient the respondents are in English. Regardless of the importance of other factors, knowing how long it takes for higher students to gain English language competency is crucial to the issue of how best to educate these students. The majority of respondents (78 out of 100) claim to have spent more than 20 years learning English, while 17 claim to have spent between 11 and 15 years. Meanwhile, only one respondent has studied English for 6 to 10 years, while two others have studied English for 1 to 5 years. It is reasonable to conclude that learning English is an integral part of their everyday lives, and that it is inescapable due to cultural influences and personal preferences. Speakers tend to converge downwards to simplify language and grammar in order to be courteous with a less capable audience, according to Giles (1973) in Speech Accommodation Theory. Thus, these 3 respondents may experience learning English only when they want to communicate with speakers that are not as proficient as them.

This question sought to discover out how much respondents believe they spent on a weekly basis when playing game-based learning. It's a good place to start for the researcher to gain a better understanding of the case. According to the pie chart above, 66 out of 100 respondents spend more than 1 hour each week playing game-based learning. Meanwhile, 26 respondents said they spent less than an hour playing game-based learning, and 8 said they never do. We've all seen pictures of higher education students engrossed in computer gaming. Attempts to investigate the instructional value of technology have been documented in educational literature over the last few decades through game-based learning (Li, 2017). As a result, it is not uncommon for higher education students to devote a significant portion of their time to game-based learning.

The participants were asked to describe their level of enjoyment in playing digital games as part of an investigation of their gaming experiences. More over three-quarters of respondents (76 out of 100) feel that game-based learning is enjoyable. The fact that students commit a significant amount of time to digital games is one of the most important factors contributing to the popularity and enjoyment of digital learning games (Papastergiou, 2009). In the meantime, only 18 people chose neutral and only 6 people disagreed with the statement.

Many of the 67 respondents say they prefer playing game-based learning because it helps them pass the time when they are bored. The second reason is that students engage in game-based learning since it is a fun recreational activity for them. This is the same reason

that Beck and Wade (2004) refer to this group of people as the "gamer generation" to explain how much time they spend playing digital games in their spare time. Furthermore, 47 respondents choose game-based learning since it allows them to improve their skills and knowledge. The enjoyable and informative aspects of game-based learning can encourage students to focus on their performance on the scoreboards, as well as their desire to learn new things (Erhel & Jamet, 2013). Playing video games is a social activity that 45 of the respondents enjoy. Finally, when they get together with a friend or online with a few of players, just 39 respondents chose to play game-based learning.

Depending on one's perspective, game-based learning may appear to be a hot, if not trendy, topic in higher education and the public sector at the moment. It is demonstrated by the fact that half of the respondents (50 out of 100) said they had used educational game-based learning for learning. In the meantime, 32 respondents frequently utilise game-based learning to learn. As a result, the students are already familiar with game-based learning. According to Sharma and Barrett (2000), in the case of a game-based learning project, it is assumed that a student is familiar with both the technical and content accessibility of a chosen game, leading to familiarity with game-based learning. Furthermore, the desire to introduce game-based learning game-based learning into higher education reflects a growing understanding of the importance of situated cognition in re-engaging students who have lost interest in traditional tools. However, a large number of students are still unfamiliar with the strategy. 13 respondents have heard of educational game-based learning but have never used it as a learning aid, while 5 have never heard of game-based learning being used for learning.

#### **Section Ii: Perceptions of Higher Education Students**

Table 2 Perceptions of higher education students

Table 2 Perceptions of higher education students				
No	Questions	Likert Scale		
		Disagree	Neutral	Agree
1	I feel comfortable	3	9	88
	with the idea of			
	employing games as			
	learning English			
	language tools.			
2	I believe that I will	3	10	87
	implement game-based			
	learning in my current or			
	future learning.			
3	Students enjoy	3	9	88
	game-based learning			
	because it is hands-on,			
	motivating, and engaging.			
4	Students	3	6	91
	nowadays are more			
	attracted to learn through			
	digital media or new			
	technology.			
5	Game-based	3	7	90
	learning is simple to set up			

	to help students learn in			
	the classroom.			
6	Game-based	3	6	91
	learning is another way to			
	keep students interested			
	in learning the English			
	language.			
7	Personalized	3	9	88
-	learning is possible with	-	_	
	game-based learning.			
8	Learning English	2	7	91
G	can be enhanced by	-	,	31
	using game-based			
	learning.			
9	Game-based	2	6	92
3	learning can allow the	2	O	32
	development of			
	relationships with			
	students.			
10	Game-based	3	8	89
10	learning can help students	J	J	33
	learn in a more cognitive			
	and collaborative way.			
11	Learning objectives	3	8	89
	that meet common core	3	G	03
	standards can be			
	promoted through game-			
	based learning.			
12	Game-based	3	6	91
	learning can be used as a	•	•	
	supplementary to			
	conventional instrument's			
	instruction.			
13	Game-based	3	10	87
	learning can help students	-		
	bridge the gap between			
	what they do at home and			
	what they do at university.			
14	Game-based	3	7	90
	learning can aid in the	•	•	
	development of			
	autonomous learning in			
	students.			
15	Game-based	3	6	91
13	learning can assist	J	Ü	J.
	students with			
	instructional planning and			
-				

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-				
	achieving instructional			
	goals.			
16	Students are	3	6	91
	motivated to study English			
	thanks to game-based			
	learning.			
17	Vocabulary	4	7	89
	learning can be enhanced			
	through game-based			
	learning.			
18	Listening skills can	3	7	90
	be improved through			
	game-based learning.		_	
19	Reading skills can	2	8	90
	benefit from game-based			
2.5	learning.	•	•	22
20	Writing skills can	2	9	89
	benefit from game-based			
24	learning.	2	•	00
21	Game-based	2	9	88
	learning			
	can improve speaking			
22	skills.	2	4.4	0.7
22	Grammar can be	2	11	87
	learned more effectively			
	through game-based			
23	learning.	52	36	12
23	Using games to teach grammar may cause	32	30	12
	students to lose focus			
	throughout the lesson.			
24	The use of a game-	51	36	13
24	based learning method	31	30	13
	can be time-consuming.			
25	Learning English	3	7	90
23	through game-based	J	,	50
	learning method is more			
	effective than			
	conventional methods			
	such as chalk and board			
	for educators and pen and			
	paper for students.			

The purpose of the study was to assess several aspects of higher education students' perceptions toward game-based learning. A considerable number of respondents believe that game-based learning can help students learn English. Similarly, the respondents think that using games as learning English language tools is a good idea, with 88 percent agreeing with the assertion. In addition, a comparable percentage (87 respondents) think that game-based

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learning will be used in their present or future learning because it is hands-on, motivating, and engaging. And, according to 91 percent of respondents, students today are more interested in learning through digital media or new technologies. The majority of respondents (90 out of 100) agreed that game-based learning is easy to set up in the classroom to assist students learn, and 91 said that game-based learning is another way to keep students interested in learning the English language. Only a small percentage of higher students (3 out of 100) disagree that game-based learning allows for customised learning.

In terms of the perceived effectiveness of game-based learning, the majority of the respondents (91%) agreed that learning English can be enhanced by using game-based learning because it allows for the development of relationships with students, and 89 of them believe that game-based learning can help students learn in a more cognitive and collaborative way while also meeting common core standards. Not only did 91 percent of respondents believe that game-based learning could be used as a supplement to traditional instrument instruction to help students form connections, but 87 percent also believed that it could help students bridge the gap between what they do at home and what they do at university. Furthermore, 90 respondents believe that game-based learning can help students acquire autonomy in their learning. In the poll, 91 of the respondents agreed that game-based learning had the ability to aid higher students with instructional planning and reaching instructional goals.

However, a relatively smaller proportion of the higher students (12 out of 100) agree that using games to teach grammar may cause students to lose focus throughout the lesson, and a considerable number (26 respondents) demonstrated neutral perceptions. Furthermore, a relatively bigger proportion of the higher students (51 respondents) disagree that the use of a game-based learning method can be time-consuming; however, it is worth noting that a considerable proportion (36 respondents) have neutral attitudes. Lastly, responses to the items inquiring about the effectiveness of game-based learning revealed that a predominant number of respondents (90 out of 100) agree that learning English through game-based learning methods is more effective than conventional methods such as chalk and board for educators and pen and paper for students.

#### **Qualitative Findings**

The qualitative analysis will be the second component, with interview questions serving as an instrument to supplement the data acquired through the quantitative approach. The following table shows further details about the respondents' personal thoughts on game-based learning

Respondent 1

Q1: What are your perceptions/views on the use of game-based learning methods being employed in learning the English language rather than by using traditional/conventional methods?

"For my perception, I think it is suitable to use game-based learning methods in learning English. First of all, it is better to move from traditional into modern ways to learn something. And nowadays it is a technological world so we cannot run from it especially for education purposes. Higher students especially have technology such as smartphones and laptops. Thus, it is easier for them to learn English by using game-based learning."

Q2: In what ways have game-based learning impacted your traditional/conventional learning of educational concepts?

"For me, game-based learning has an impact on my positive side. As for now I can

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confidently speak in English even though it isn't perfect yet. Unlike when I learn in a traditional way, it is hard for me to feel confident because I am a shy person. Whenever we need to speak in English in the classroom, I tend to be quiet because I am afraid they will judge me. But in the game, I don't have to worry because they don't know me."

Q3: Do you rather choose to learn the English language by game-based learning methods or traditional/conventional methods?

"I would rather choose to learn the English language by using game-based learning as I want to improve myself along with the new technology or new world."

Q4: Do you agree that game-based learning methods are different from traditional/conventional methods in learning foreign language education like English language? Why?

"I 100% agree with this statement because game-based learning methods are interesting and not boring unlike traditional methods. And also, after using it, my English improves and this is the evidence that game-based learning is effective in learning foreign languages like English."

Analysis of interview (Respondent 1)

Respondent 1 views game-based learning as a tool to help with the development of autonomy and new technology. The effectiveness of game-based learning methods, according to the respondent, can promote English language learning and is an interesting method that differs from typical or conventional instruments. Because the respondent is timid, a game-based learning method is best for him because it does not necessitate much face-to-face learning. Nonetheless, it was established that the fun provided by video games could assist students in continuing their language learning, especially English language learning, by providing a source of motivation (Ebrahimzadeh, & Alavi, 2016).

Respondent 2

Q1: What are your perceptions/views on the use of game-based learning methods being employed in learning the English language rather than by using traditional/conventional methods?

"I think the use of game-based learning methods in learning English language is one of the smart moves because students now tend to play a lot of games so if we use games to learn English, we may improve our language. For example, before, my English was bad but since I play games like PUBG and mobile legend, my English has improved a little bit because somehow, I have to interact with players outside Malaysia."

Q2: In what ways have game-based learning impacted your traditional/conventional learning of educational concepts?

"I cannot lie that a traditional or conventional method is somehow a good method. But when I insert the game-based learning method in the educational concepts, it impacts my listening, writing, speaking and reading skills. I improve a lot better than before I used game-based learning."

Q3: Do you rather choose to learn the English language by game-based learning methods or traditional/conventional methods?

"I will choose game-based learning because as I said my English improves a lot after using it compared to using traditional methods."

Q4: Do you agree that game-based learning methods are different from traditional/conventional methods in learning foreign language education like English language? Why?

"As for me, I agree that game-based learning methods are different from

traditional/conventional methods in learning foreign language education like English language because it is proven to improve the students English as I also experienced it."

Analysis of interview (Respondent 2)

Respondent 2, on the other hand, believes that game-based learning methods are superior than traditional or traditional methods for learning English. When adopting game-based learning methods, the respondent claims that his or her English improves dramatically. To enhance his or her English, the respondents played online games such as Player Unknown Battleground (PUBG) and Mobile Legend. "Massively multiplayer online role-playing games" includes those games (MMORPG). MMORPGs, according to Hennig (2013), are "a ludic, narrative, as well as a social room." Gamers create their graphic figures (avatars or virtual characters) in this genre of online games, customise them, and perform the "parts" that are assigned to each character. Prensky (2001) discovered a similarity between MMORPG elements and language learning environments. These fundamental features of MMOs, such as rules, objectives, results, and feedback, challenges (combats), interaction, and theme illustration, are very similar to the features of a successful (task-based) language teaching environment (Thomas, Reinders and Warschaue, 2013), and are thus extremely relevant to second language acquisition, such as English language learning.

Respondent 3

Q1: What are your perceptions/views on the use of game-based learning methods being employed in learning the English language rather than by using traditional/conventional methods?

"I can say that I am 50-50 about this idea. Yes, game-based learning methods somehow can improve the students because it is interesting but not all of them. There are students who don't like to play gaming stuff because of reasons like waste of time and cannot focus. Hence, for me I am not sure if game-based learning can be used in learning English language."

Q2: In what ways has game-based learning impacted your traditional/conventional learning of educational concepts?

"For me again, game-based learning didn't affect my traditional or conventional learning of educational concepts because I still prefer the traditional ways because I am comfortable that way."

Q3: Do you rather choose to learn the English language by game-based learning methods or traditional/conventional methods?

"Definitely I will prefer the traditional or conventional method because I have been learning English with that method since kindergarten until now, I am a 24 years old degree student. I am much more comfortable in that way."

Q4: Do you agree that game-based learning methods are different from traditional/conventional methods in learning foreign language education like English language? Why?

"I still agree that game-based learning methods are different. It has its own benefits or specialities. However, I also cannot deny that traditional or conventional methods are still applicable and preferable for some higher students as they are more familiar and have more experience learning English with it. A sudden change might affect their performance, I guess."

Analysis of interview (Respondent 3)

Respondent 3, on the other contrary, favours traditional or conventional methods to game-based learning. According to the respondent, not all higher students favour game-

based learning because it is a waste of time and some of them are unfamiliar with the strategy. It's been stated that digital games are anti-social, that they destroy your attention span, and that they aren't true, proven learning resources. Although no amount of available data exists to empirically validate or refute the effectiveness of games used for learning, observing a learner design, execute, and assess a project with classmates implies that those criticisms are based on outdated beliefs. In particular, the English language learning area is still heavily reliant on a coursebook paradigm based on levels and a well-defined syllabus.

#### **Discussion and Conclusion**

The aim of this study was to look into students' perceptions of the effectiveness of using game-based learning to learn English for students in higher education. This study, which focuses on higher education students' perceptions, is part of a broader scale analysis of gamebased learning. Educational gaming, often known as game-based learning, is a new paradigm of online learning that has been proven to be very effective in boosting learning and, in particular, motivating students. Students in higher education have shown a positive perception toward these methods over traditional instruments in a variety of contexts and settings. However, certain methodological shortcomings noted in many prior research, such as the single method design and the exclusion of in-service students, may have harmed the findings' reliability and generalizability. Furthermore, despite various possible impediments having been identified, relatively few studies have been undertaken in the higher education environment concentrating on the "gaming generation," namely young learners, and even fewer studies have shed light on resolutions. Despite the fact that studies completed in Malaysian higher universities that might be used to inform the construction of this gaming platform have clearly established the significant effectiveness of game-based learning in learning the English language, they are rare.

This study attempts to fill up these gaps in the literature by extending the research scope to higher education students from the Universiti Kebangsaan Malaysia (UKM) Faculty of Social Science and Human Resource (FSSK) and directing the subject to higher education students. Taking into account the methodological flaws in previous studies, a mixed methods approach was used to investigate 100 higher education students in order to provide a general framework of the students' perspective on game-based learning, which would help the project inform the development of the games and support their implementation in the learning English language context. The quantitative and qualitative analyses revealed that higher education students have a good perception toward game-based learning. Students showed a desire to incorporate game-based learning into their learning routines, and it was assumed that technology-assisted language learning was becoming popular among them. Students emphasised two aspects of game-based learning's perceived effectiveness: its potential for motivating students and teaching vocabulary and grammar.

This research has theoretical as well as practical implications. Theoretically, this research has helped to bridge the gap between education and practice by focusing on three elements of game-based learning that have received less attention, namely the English language environment, language learning, and higher education students. The answers to research question one confirm that higher students have a positive attitude toward game-based learning. More contextualised insights are provided in an attempt to measure the effectiveness of its execution. In order to answer research question two, it was determined that the integration of game-based learning was largely unexplored in the literature, and it was recommended through the interview.

On the practical side, this study first examines students' perceptions on the use of game-based learning methods in studying English for higher education, which may indicate their willingness to employ educational games to support their pedagogical practises. Furthermore, this study examined the differences between game-based learning and traditional learning methods in foreign language education, such as English language education, while also providing empirical data to produce games.

As summarised by Wedell (2009), much of the unsuccessful innovation in English language learning can be linked to the failure of a "in-depth analysis of the innovation context." The superordinate and sociocultural systems, in particular, can limit the possibility for innovation in the classroom (Kennedy, 1988). This may be seen in the English language context, where pedagogical imports of communicative language teaching in higher education have been met with strong opposition (Hu, 2002). Another potential pedagogical innovation in higher education, game-based learning, requires a deep and ethnomethodological understanding of the culture. The integration of games with syllabuses was considered to be crucial for acceptability by practitioners when considering exam-oriented and textbook-centered education in today's university. When building games, it is critical for the developer to consult the course book as well as the public assessment. Cooperation with in-service educators is one option, as they are more knowledgeable about both student requirements and contextual constraints. As a result, it will need to keep in touch with educators in the field in order to gather more empirical data on whether the product can improve students' academic performance and whether it can be applied in the classroom.

Furthermore, implementing a feedback system into the platform was suggested as a beneficial way to keep educators and parents informed about their kids' progress in the learning process. For example, the gaming platform might be linked to educators' mobile devices via applications, allowing them to monitor their children's performance on tests. Furthermore, the findings of this study show that game-based learning has the capacity to teach vocabulary and grammar. Given the importance of vocabulary learning for primary school students who are English beginners in the environment, the company's potential for teaching vocabulary is a component that the company might capitalise on while developing games. The lexical items employed in the games should, once again, correspond to the syllabus. Another key takeaway from this research is that the developer may need to create educator support materials, such as online courses, as part of the educators' professional development.

The findings have far-reaching implications for higher education, one of which is administrative and financial assistance. To purchase, upgrade, and maintain the equipment, a significant amount of funding is required. Inadequate hardware would limit students' ability to participate equally and would make game-based learning impossible in the long term. The necessity of a management model is another implication aimed at the university. While game-based learning has the potential to revolutionise traditional learning methods, it also has the potential to cause a slew of management challenges. It is necessary to take steps to rationalise its application and maximise the potential of game-based learning in the study of the English language.

Alternatively, given the quality of the information obtained, inferential statistics could be used to analyse the data, such as the relationship between different factors, such as students' learning or gaming experiences and their perceptions. The correlation coefficients might not only reflect the intensity and direction of the relationship between the variables, but they could also aid in determining the measurement process's reliability as well as the

data's validity (Robson & McCartan, 2016). If inferential statistical analysis is applied, higher students' perspectives can be studied in greater depth and extrapolated to a larger population. However, because this is a small-scale study with limited time to complete, the researchers elected to conduct solely descriptive statistical analysis, which may limit the findings' generalizability. However, this is an area where more research might be conducted. Furthermore, case studies where students are currently implementing game-based learning in an English language learning context would be beneficial, as this would be a more reliable and straightforward approach to determining both the effectiveness and pitfalls of game-based learning in relation to English education. The use of case studies would help to generalise more and more contextualised data for game-based learning implementation.

Further research should use observation or case studies as a research tool since they provide a better and clearer result that complements interviews and questionnaires. Future researchers can use the authenticity of the observations to analyse the conversations between students, as well as their gestures and body language, to determine how students use English to communicate their message more effectively and to raise awareness of the use of game-based learning among them.

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