

# The Effect of Digital Game-Based Learning on Motivation for EFL

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**Abstract.** This paper elaborates the meaningful appearance and educational development of digital game-based learning and summarizes how digital game-based learning assists with learning strategies for English as a Foreign Language (EFL). Previous research highlights the importance of applications of digital games in classrooms and emphasize its essential functions for developing learning strategies. It is pointed out that digital game-based learning has its potential for young generations to improve their English learning and produce the further educational methods. Digital game-based learning is regarded as an instrumental and motivational subsystem to provide interactive learning contexts, increase learner's satisfactions and promote English proficiency if it can be utilized in an appropriate way. Based on its benefits, learner's attitudes to digital games cannot be ignored, and there shall be enough instructions and regulations of applying digital game-based learning. This paper concludes that digital game-based learning is expected to be more efficient to promote language competence and be more motivating for language acquisition.

**Keywords:** Digital Game-Based Learning, Motivation, Learning Strategy, Learning Context, Learning Method

## 1. Introduction

Digital games occupy a crucial domain for young generations, as some data released show that game players during eighteen to twenty-four ages account for around 60 percent with the reasons for leisure and release pressure [1]. With the merits of gamification and stress-relief function, digital game-based learning is thought as an interesting approach for English foreign language learning. English learning through digital games becomes an interesting trend for young generations. Learning strategies have been designed and developed to push forward successful language learning goals for non-English native speaking learners. Gradually abundant research appears to confirm the effect of digital game-based learning and expect it can be a more motivating approach to be suitable for different fields of languages. It seems possible to make digital games more serious with language learning, while learning new knowledge is ought to be related to motivations and its final objectives.

In addition, learners can study new things in English in an immersive setting, and tasks and purposes in digital games may be apparent and comprehensible for EFL to complete. Digital game-based learning can provide more opportunities to access functional information. On the other hand, learning processing in a digital environment is more interactive. Blez mentioned that there should be some other channels to stimulate learners' attitudes to acknowledge both language knowledge and cultural information due to some factors of force majeure causing not to study abroad for learning English [2]. Regarding the backgrounds of foreign language learning, language skills shall be consistent tightly with communication competences and social interactions, if learners desire to improve their English proficiency. In this way, digital game-based learning can create some platforms to know more types of English learning styles and interact to achieve their goals of English studying.

This study mainly focuses on the following questions: Firstly, how does digital game-based learning motivate English learning? Secondly, what can advantage of digital game-based learning provide for practical instructions? Thirdly, what should be noticed or warned in digital game-based learning? The text will begin with the definition of digital game-based learning with clarification of its development applied in educational approaches and practical studies. Then, advantages and

imperfections of digital game-based in practical classrooms are revealed with a summary of analysis of literature research experiments and previous studies. Lastly, how motivation and learning strategies affect mutually and what kind of suggestions can be come up for the further language education will be discussed.

As digital game-based learning is newly proposed and potential for the further education in language learning, this section will clarify its definitions and developmental objectives, applications in practical teaching settings and combinations with learning strategies. Digital game-based learning has been proposed as the importance of gamifications and attempted to apply for leading learner's reading comprehension and communication skills. The significance of this paper aims to use digital game-based learning to motivate learner's processing of English education and find beneficial functions of application with digital game-based learning. It is also aimed to utilize the strengths digital games into classroom instructions and after-class drills. It is also worthwhile to consider the relationships between games and language educations.

## **2. Definitions**

A game is thought as “a system in which players engage in an artificial conflict, defined by rules, which results in a quantifiable outcome” [3]. On the basis of definitions of games, game-based learning is given a definition as “any initiative that combines or mixes video games and education” [4]. Digital game-based learning is developed radically as “precisely about fun and engagement and the coming together of and serious learning and interactive entertainment into a newly emerging and highly exciting medium” [5]. Digital game-based learning in this study is defined as learning through digital games, which are designed for educational objectives and implementations. It is related to serious games which can assist with learning strategy and teaching methods, and it can provide useful constructive trends for the further language education.

## **3. Applications of digital game-based learning for English learning**

Game-based teaching and learning, as a matter of fact, is not new for educational practice. For instance, “word cards with pictures” is widely used in classroom settings to instruct English vocabulary. However, the designs of cards and material preparations are also limited with any reason. With decreasing the dullness of onefold methods of learning English, a digital game-based method has a new development and trend in teaching and learning. Digital games have been designed and produced for English learning to promoting speaking, listening, reading and enlarging vocabulary scales for EFL. For example, Nintendo games published lots of games relating to English educations such as Eiken Smart Strategy to help Japanese some students practice vocabulary learning and memorization for passing exams as well as make successful conversations with other online foreigners; At the same time, BaiCiZhan, as a mobile phone software of English vocabulary learning with picture-memory, is popularly utilized by Chinese university students to pass exams of TOEFL, IELTS and CET 4/6.

Some previous studies indicate the importance of the usage of digital game-based learning on student's motivation. Erhel and Jamet designed two types of instructions (learning instruction and entertainment instruction) in class on digital game-based learning and significant the motivation and engagement on students, which of results that learning can be acquired more with learning instruction while learning with entertainment instruction becomes beneficial [6]. Suaza, Salazar, Gamboa, and Trujillo pointed out the shortcomings of usual digital games and present an educational game named Tales of Etrya to assist students with strengthening vocabulary memory and learning motivation [7]. Ebrahimzadeh and Alavi examined the effect of commercial digital video games by designing three experimental groups with Readers, Players and Watchers. The outcomes of study show that learning motivation increase among three groups and the Watchers' motivation become higher than the Readers [8].

For the recent study, Wu, Zhang, and Wang used a meta-analysis method to discuss about the impact of digital game-based learning on English learning and search for main factors influencing vocabulary learning [9]. On the basis of the utility of meta-analysis about its unlimited, scientific and statistical traits, their data results extracting from released previous literature indicate that learning effect was significantly improved through using digital games to learn English vocabulary; meanwhile the effect size of the study prove that digital game-based learning have more successful result on vocabulary learning.

## **4. Discussions**

### **4.1. Advantages**

Digital game-based learning has the features of fun and motivation. Rankin proposed that the benefits of playing Massive Multiplayer Online Role Playing Games (MMORPGs) can active English learners, supply immersive learning environment as the context for Second Language Acquisition and create virtually social interactions during the gameplay stage [10]. Learning is not only engaged by the firm rules and enormous rote-memorizations, so motivation is a key point to mobilize learners to study and think [5]. As some research results mentioned above, learning method with support of digital gamifications is to engage learner's motivation in various domains in English learning. Appropriate learning strategies and motivations can be emphasized to bring more expectations and positive effects [12].

Language context is easy and convenient to be created in a game-based platform. English learners who are shy or introverted to communicate with others in real and social occasions, can be engaged to become more social and energetic with pretending their virtual performances. In this way, anxiety of making mistakes can be declined, and language productions such as writing or speaking are certainly improved more than repetitive drills.

Monitor and evaluation are efficient by using digital game modes. Both instructors and learners are able to check errors and correct themselves. In addition, some functions of digital games also include practice reminding and test analysis for game users.

### **4.2. Difficulties of implementations of digital game based learning**

Knowledge capacity seems blocked and fossilized through the over richness of game scenario, so learners may think it complicated to absorb too much information and new language knowledge at the same time [9]. Therefore, how to balance language contents and proper practice in games remain difficulties for practical operations in classrooms and for self-learning processing.

Considering learning gaps between advanced learners and low-proficiency learners, advanced learners may have higher enthusiasm on accepting new knowledge and desire to memorize and practice vocabulary with many different methods; on the contrary, low-proficiency learners find it tough to operate game-plays and not understandable to follow some instructions from games. Digital games may be not suitable for all types of English learners because of their ages, experiences of game playing and interests of games.

Lastly, some English vocabulary and chunks appeared in digital games may be unrelated to real conversation and too narrow to response in English in authentic manners. Moreover, there should be a burden of preparation for teachers in classroom instruction if they have to edit all teaching material in game modes.

### **4.3. Suggestions**

#### **4.3.1 Implications for individual attitudes from learners**

EFL who play games may prefer to use smartphones and digital games to learn English for extensive drills rather than acquire language knowledge. In this way, digital games may have less positive effect on learning attitudes for students. There remain some problems that students may

emphasize on their vocabulary drills by using digital games, which are totally similar with traditional ways of remembering English words [13].

Language learning seems difficult to be changed by the forms of teaching or learning, so learning shall be affected by some innovative strategies on the contrary. Prensky clarified the reasons about advantages of digital game-based learning are fitting into individual demands of young generations, containing some components of motivation, and adapting extensively to information and knowledge to be learned [5]. Thus, the research of learning in digital application shall always concentrate on changeable generations and connect with variety of educational purposes.

#### **4.3.2 Implications for learning strategy**

In the field of vocabulary learning, vocabulary knowledge seems being taught in teacher-centered classroom. Some vocabulary strategies in such classrooms are used universally as rote memorization, bilingual word lists and extensive reading. After class instructions, students may use some other channels to enlarge their vocabulary scales such as watching English videos, rewriting English words, searching in dictionaries, etc. Digital game-centered tools can integrate all methods and drills with different interesting games.

In the field of feedbacks and evaluations, traditional ways of English studying have a lack of interactions among knowledge inputs and outputs. Some encouraging words such as “Believe in yourself!”, “Do it best next time!” are shining in the screen of digital games after they win or even lose games. Learners can immediately understand which part should be improved and then correct on their own initiative. Rapid feedbacks are one of the crucial things for language learning, and they are simply set by digital game modes.

For self-learning, positive learners are considered as the importance of language improvement. English learners can follow some tips to finish task purposes and ask for help from friends and players. This approach can satisfy what they exactly need and make up for what kinds of knowledge they definitely have a lack of.

From these three perspectives mentioned above, digital game-based learning shall have a strong connection with meaningful learning strategies. It has positive impacts on fostering learning attitudes and arousing the interests of English studying.

In sum, a moderate knowledge contents and correct grammars should be given in digital games, which can better promote English vocabulary learning. Blending learning of both digital game practical methods and traditional practices are suitable for all English levels of learners. Moreover, it is necessary for learners to have the right inner attitudes toward digital games, which are pointed out to assist learning but not influencing forward progress.

## **5. Conclusion**

Digital game-based learning is regarded as an instrumental motivational subsystem. The functions in digital games can help with achieving needs and construct confidence for people who learn English as a foreign language. Game players as well as English learners can feel their own efficacy and perceive their competence of English proficiency. In learning situations, digital game-based learning can also increase user’s satisfactions of language acquisitions with sufficient interactions and regulations in virtual learning environments. All in all, digital game-based learning is more beneficial for motivation and self-learning if it can be led in an appropriate manner and correct feedbacks.

Regarding current studies and experimental research, digital game-based learning is a one of successful teaching and learning methods. However, self-regulations of learners remain a controversial problem due to individual demanding and personal affective factors. It is important to help students realize motivations and adapt to their learning strategies with digital games. Retaining eagerness of learning is one of main intentions of language educations.

Limitation of this study is that data about learning through educational games are not collected because there are still new studies about digital game-based learning. References about practical instructions with digital games are still progressively elaborated.

This study is not highlighting that digital game-based learning must replace the states of traditional methods such as rote-memorizations and teacher-centered instructions. It is expected that learning by digital games supported will be efficient to promote learner's memorization of unfamiliar vocabulary and offer motivations of language learning.

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