The effectiveness of digital games on improving learners' English skills: a case study of female students at Tabuk university

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فعالية الألعاب الرقمية في تحسين مهارات المتعلمين في اللغة الإنجليزية : دراسة حالة للطالبات بجامعة تبوك

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ملخص البحث

تحلل هذه المقالة تأثير الألعاب الرقمية على تطوير مهارات اللغة الإنجليزية. ويبلغ عدد المتعلمات ١٥ طالبة في قســم اللغات والترجمة بجامعة تبوك بالمملكة العربية السعودية. تهدف هذه الورقة إلى اكتشاف ما إذا كانت الألعاب الرقمية يمكن أن يكون لها تأثير إيجابي على اكتســاب الطلاب للغة الإنجليزية وتقدمهم. في العصر التكنولوجي اليوم ، يشارك الجيل الأصغر سنا بشكل كبير في استخدام التطبيقات الرقمية تهدف هذه الورقة إلى تسليط الضوء على بعض التطبيقات الرقمية من خلال استطلاع آراء ١٥ طالبا من جامعة تبوك حول كيفية تأثير هذه الألعاب الرقمية على إجادتهم للغة الإنجليزية. وتشـــير النتائج إلى أنه من بين هؤلاء الطلاب ال ١٥، حســنت الألعاب الرقمية دقة وطلاقة لغتهم الإنجليزية. لم تســاعد هذه الألعاب على توســيع المفردات وتحســين النطق فحســب ، بل عززت أيضــا مهارات الاتصال لديهم على نطاق أوسع .

الكلمات الافتتاحية الالعاب الرقمية ,العاب الفيديو , الطلاقة , اللغة الإنجليزية كلغة مكتسبه . المهارات اللغوية , الثقة , الحافز

Abstract

This article analyses the impact of digital games on the development of English language skills. The study population is 15 female learners in the Department of Languages and Translation at Tabuk University, Saudi Arabia. This paper aims to discover whether digital games can have a positive impact on students' English language acquisition and progress. In today's technological era, the younger generation is very engaged with the use of digital applications. Although the pivotal role that technology plays in people's lives today is sometimes criticised, digital applications play a significant role in our lives today. As a result, some studies have investigated how digital applications can be used to improve language learners' skills in the target language. This paper aims to highlight some of the benefits of digital applications by surveying 15 students from Tabuk university about how such digital games have impacted their English proficiency. The results indicate that among these 15 students, digital games improved the accuracy and fluency of their English language; these games not only helped to widen vocabulary and improve pronunciation but also enhanced their communication skills more broadly. From these results, this study concludes that digital games can have a significant impact on English language acquisition. As a medium, digital games are familiar to young people and thus instil a sense of confidence which is pivotal to learning a foreign language. Moreover, for language learners, digital games can be far less intimidating than speaking in class; allowing learners to practice the target language without feeling anxious about their performance or comparing their progress to that of their classmates.

KEYWORDS: digital games, video games, influence, English, second-language acquisition, language skills, improvement, confidence, motivation.

Introduction

1.1 English language

The position that the English language holds as a lingua franca means that people around the world are keen to learn it. English continues to dominate in many aspects of life today, whether this is in science, information technology (IT), diplomacy or many aspects of business. Learning English can open doors to many aspects of life and means, in today's globalised economy, that people can be more adaptable to visiting, working or living in different regions. Moreover, globalisation also means that a great deal of English-language entertainment, including films, television shows and news is shared around the world, so speaking English gives people more access to what they want to know, listen to and experience.

1.2 Technology

The rapid development of technology in the last 30 years has ushered in new human experiences across multiple domains, including higher education. The education field has been quick to adopt various forms of technology to enhance students' learning. According to Ilomaki and Kankaanranta (2008), digital applications are increasingly widely used to facilitate the learning process, as well as for leisure and entertainment. Technology has had a powerful impact across diverse social and cultural contexts, not only increasing young people's cultural awareness but also improving the language skills of young people who use digital applications.

1.3 Digital games

The entrancing power of video games has been apparent since they first came to mainstream prominence in the 1980s. Some video game characters have even become cultural icons due to the sheer number of players, both young and old. As video games have become more popular, they are now an integral part of

people's leisure time. Shaffer et al. (2005) put forward that both children and adults have become accustomed to the virtual world, 'becoming' different characters as they take part in video games. Gaming has opened up a new world where people can learn new skills and experience a different kind of life, while its storytelling capabilities and engaging graphics mean it is often the entertainment of choice and an escape from the busy world we live in. As fields including the education sector realised that this powerful medium could be used to engage learners, digital gaming technology has been increasingly adopted for teaching and learning. This paper will investigate the impact that digital games have on English language acquisition among 15 participants from Tabuk University.

Research Question

Q1: Do digital games help players to improve their English language skills?

Literature Review

In the educational setting, games can be defined as a learning technique. For English as a Foreign Language (EFL) learners, the animated graphics and audio content presented in digital games offer them an ideal way to extend their vocabulary and become more familiar with the language (Liu et al., 2013). Huyen and Nga (2003) suggest that games offer learners the chance to apply English in a real communicative context, while Derakhshan and Khatir (2015) add that digital games can also provide a collaborative learning environment in which students can work together.

Scholars including Vasileiadou and Makrina (2017) state that indicate the use of digital games can have a positive impact on learning the vocabulary of the target language. Peterson's (2013) Netherlands-based study looked at how computer games were used in kindergarten-level language teaching, concluding that this had a positive impact on vocabulary acquisition.

Rankin's (2008) study investigated Massive Multiple Online Role-Playing Games (MMORPGs), in which players adopt the role of a character in a different world. The study found that the interactional and personal functions of language were improved by MMORPGs' capacity to allow an international community of players to communicate, with non-native speakers interacting with native speakers, thus improving language acquisition.

There are two independent systems in second language performance, 'the learned system' and 'the acquired system'; in the learned system (learning) knowledge of the language is derived from a conscious process, while the acquired system (acquisition) requires meaningful interaction or natural communication in the target language (Krashen, 1988).

Meanwhile, language is often best learned in a rich environment where there are ample opportunities to explore different ideas and objects (Goodman & Goodman, 2014). Digital language games provide just such an environment, with the opportunity for learners to communicate using interesting and authentic forms of the target grammar. Derakhshan and Khatir (2015) support this perspective, arguing that for learning new vocabulary, language games achieve better outcomes than traditional strategies. In a Turkish study on young learners using computer games in internet cafes for language learning, Turgut and Irgin's (2009) qualitative research found that game playing promoted young learners' language learning and vocabulary skills, in particular. Turgut and Irgin's phenomenological study used a mixture of observational work and semi-structured interviews to collect the research data.

Video games provides a broad range of stimuli that help involve players in the language they are exposed to; including discourse, narratives and context as well as visual cues and voice acting, all of which enhance the learning process when combined with linguistic resources. Incidental learning is also activated when playing digital games because the context of the game enables players to fill the gaps in their language knowledge without resorting to a dictionary as they can make an 'educated guess' about a missing word.

According to Willis and Willis (2013), language games allow EFL learners greater opportunities to use the language as they work with other learners in groups or with partners, with a consequent positive impact on fluency. Reinders and Wattana (2011) claim that in their target language, the EFL learner must be able to produce 'comprehensible output' in addition to getting 'comprehensible input' for language acquisition to be effective. It can be argued the large English vocabulary and opportunities to practise the language with other players in certain video games perfectly match these requirements.

Research Methodology

To answer the research question '*Do digital games help players to improve their English language skills?*', the researcher devised a questionnaire survey to elicit data from the participants. The participants were all female since the sample was chosen from the female section of Tabuk University in Saudi Arabia. The participants were all Saudi nationals, their native language was Arabic and their ages ranged from 20-23 years. They had similar educational backgrounds and language proficiency. The questionnaire survey was designed to elicit their opinions about whether using digital games benefited their English proficiency; it included 10 questions about the use of video games and the impact that these had on language acquisition. In addition to asking the students about the amount of time they spent playing video games, the questionnaire survey asked questions about the influence that game playing had on their knowledge of the English language. Having collected the data, the researcher reviewed and analysed the answers before formulating the conclusions.

Discussion and results

In the digital era of today, computer games have become an important aspect of global culture and are also an important component of many people's leisure and social lives. As mentioned previously, digital games are an extremely powerful medium and teachers, researchers and learning resources designers are starting to consider how they could be used to support the learning process. In particular, although traditional and more serious classroom scenarios have their place; learning through play is valued by all learners, not just children.

Digital games facilitate greater communication than traditional learning methods, while their interactive nature is also an advantage. For non-native speakers, the facilitation of communication is especially important in increasing their language proficiency. Many digital games include a variety of systems that interact with the larger gameplay system and may also have huge internal lore, including complex characters. As mentioned in the literature review, these factors mean that large international communities build up around these games, with players creating communication platforms where they swap hints and share information about how to get past a difficult level. These online forums communicate in English as the lingua franca. When playing video games, the gamer develops certain skills to reach new levels in the game and Gee (2005) suggests that learning by doing, particularly when this involves entertainment, is more effective than merely acquiring facts without practising them. According to Derakhshan and Khatir (2015), many scholars highlight that games have a diverse learning value.

Question 1: *Do you have digital games on your phone? Why do you have them?*

All the participants answered yes to the question of whether they had digital games on their phones. Some advised that they just used games for fun and enjoyment, while others indicated that they downloaded games to meet people from different countries, suggesting that this was a good way to find international friends. One of the participants explained that when she was living in the United Kingdom (UK), she felt lonely due to the language barrier and began to play online games, which allowed her to form friendships with other players from around the world. Even though she is originally from Saudi Arabia, she prefers to communicate with native English speakers. It can therefore be suggested that digital games are not only used for fun and entertainment but also to make friends and develop a greater awareness of other international cultures.

Question 2: *How many hours do you spend playing games each day?*

Although the participants' answers varied, most advised that they played digital games for between two and four hours each day, while two of them spent around six hours playing games each day, especially if they were playing with a friend. The participants also indicated that the number of hours they spent playing games varied according to what else they had to do that day.

Question 3: *What option do you prefer while playing digital games, speaking or writing (typing)?*

Five of the participants answered that they preferred speaking as it is easier for them than writing and four answered that they did both, sometimes speaking and sometimes typing. The remaining six participants said that they used to prefer writing because they were embarrassed about their pronunciation and concerned that they could not express exactly what they wanted to say due to their limited vocabulary. However, now that their speaking skills have improved, these participants advised that the friendly gaming atmosphere means that they have the confidence to speak without hesitation. Clark (2000) suggests that video games and cartoons create a non-threatening atmosphere and engage learners' attention, which means that digital games can encourage the thinking process and discussion skills. Digital games can therefore be an effective

way of learning because they have high entertainment value, while players can openly engage in using the language since there is no evaluation or pressure involved.

Question 4: *Based on the last questions; if you have chosen writing, do you think that your English writing has improved?*

All the participants agreed that their writing skills had improved through engaging with digital games since many games require players to type quickly. In certain games, players need to write (or type) faster before events happen; for example, in action games, players must interact quickly to have a better chance of winning.

Question 5: *If you have chosen speaking, do you think your English-speaking skills have improved?*

Of the three participants who speak English very well, one is a native English speaker because she spent most of her life in the UK, while the other two had studied at an English school in Saudi Arabia with an American curriculum and native English-speaking teachers. For these three students, it is imperative that they continue to speak to maintain fluency. The other 12 participants said that playing online games has improved their English. Some of them advised that they were hesitant in the beginning due to feeling self-conscious or embarrassed about their lack of vocabulary but added that listening to other players has not only allowed them to acquire new words but also improved their pronunciation. The impact on these learners' vocabulary is significant since Tuan (2011) advises that vocabulary is critical to the four English skills of speaking, reading, writing and listening.

Question 6: *If you have chosen writing, do you think your speaking skills have improved by listening to others when they are playing?*

For participants who preferred writing to speaking, they advised that their speaking and pronunciation have improved just by listening to others while they are playing. This was an interesting finding since listening is a pivotal skill when acquiring a new language as it allows learners to improve their pronunciation. Da Silva's (2014) article *Video Games as Opportunity for Informal English Language Learning: Theoretical Considerations* discusses how language students can use video games to increase their proficiency; highlighting two particular skills that digital games can cultivate, receptive skills (reading and listening) and expressive skills (writing and speaking). Video games can cultivate receptive language skills by giving players new vocabulary and immediately providing them with the proper context. Da Silva advises that this is done by stimulating the player's other senses and showing a character performing a corresponding action or illustrating relevant images.

Question 7: *If you have chosen speaking, do you think you think your writing skills have improved?*

Some participants said that even though they preferred speaking to writing because they feel they are better at it; their writing skills have been improved by playing digital games because reading the chat has allowed them to resolve common writing issues such as spelling mistakes.

Question 8: *Do you think digital games have affected your English skills? If so, in what way?*

All the participants answered yes to this question, advising that because they have been exposed to the English language in different ways and heard it spoken by original speakers, this has developed their skills. Digital games include a range of different modes that help language development, including reading, writing, speaking and interactions, as well as socialising in a foreign language. According to Derakhshan and Khatir (2015), digital games provide a real-life learning environment where students can collaborate with each other. One participant shared that digital games helped her to improve her speaking skills in many ways, citing the benefit of speaking up in front of people who she did not know and suggesting that she found this less embarrassing than owning up to mistakes in front of friends or classmates that she is familiar with. The same student advised that she felt more prepared to admit to errors in the online gaming environment and could thus learn from her mistakes. This assertion echoes the findings of Sugar (2002), who noted that an advantage associated with games is that they diminish students' anxiety toward language learning. This is perhaps particularly relevant in the Arabic culture, where one person may point out someone else's poor English to make themselves appear superior or more professional.

Tsai et al. (2012) also found that games can increase learners' confidence and motivation and allow them to overcome their learning problems. In the present study, another participant who reflected that her English-speaking skills were limited and relatively weak suggested that she was surprised by how much online games improved these skills; she had engaged in these games for entertainment purposes but found that her English improved, which was an unexpected bonus. This finding matches Hadfield's (1990)

thinking, who noted that games have a great advantage in that they not only spur motivation and reduce classroom stress but also allow students to learn without being conscious that they are learning.

This paper posits that games should not be seen just as a way of passing the time because they have multiple benefits. One participant shared that digital games have increased her desire to speak English and boosted her confidence, while another participant said that since she moved to an Arabic country where she communicates largely in Arabic, these games have helped her maintain her English language fluency and accent, adding that international online friendships are an unexpected bonus. One of this paper's participants indicated that socialising with fluent English speakers online has developed her reading and writing fluency and decreased her occasional pausing between words. Tsai et al. (2011) also assert that digital game use can develop learners' verbal capabilities, as well as their social skills. One participant commented, "I acquired more vocab from online games than I learned in school over a long period of time", so it can be said that the diverse application of vocabulary in online games is a good way to acquire a lot of vocabulary in a short period.

Question 9: *Do you acquire new words, phrases or expressions?*

Most of the participants said yes to this question. According to Uzun (2009), in language learning, nothing can be conveyed without vocabulary, so the acquisition of vocabulary has always been one of the most critical issues for both teachers and learners of foreign languages.

One of the participants shared some of the phrases she has learnt, including "back me up", "save me", "over here", "can you hear me?" and "let's team". She suggested that playing games has taught her many everyday phrases that she was previously unfamiliar with, giving her more options to use when speaking or writing. Another participant indicated that online games not only allowed her to acquire new everyday words but also to use these in a full sentence, commenting: "in other words, it has given me the opportunity to practice using them and not only use them for educational purposes." The same participant advised that she was bored when being taught words and phrases in school, but using them in a real-life context in gaming brought them alive and increased her motivation to learn. Another participant said that she had learnt expressions because of what happens in the game, adding that this has allowed her to explain her feelings in English and react accordingly, using expressions like "oh no" when something bad happens; "good game" when she wins; "better luck next time" when someone loses; "camper" and "teamer" when someone is playing unfair. Schmitt (2010) highlights that learners can practice all English skills well if they learn vocabulary and understand its connections with these skills.

One of this study's participants suggested that online games allow learners to connect words to objects, adding, "this is the best way to acquire new vocabulary". In Theodorsen's (2015) article *L2 Acquisition from Video Games With Minimal Exposure,* the author also describes the powerful interconnection between visuals and words, stating that video games connect language with visual and auditory cues inside the game world, as well as presenting an interactive 3D representation of an object. Theodorsen advises that this allows a player to associate a linguistic phenomenon through multiple senses, thus enhancing the learning of the word.

Question 10: *Do you form friendships with players that you play with? If yes, are they Arabic or English native speakers?*

Some participants advised that they had formed friendships but others said no. One of the students said that she had developed friendships as she wanted to talk to fluent native speakers to maintain her English. This participant advised that when she returned to Saudi Arabia after spending a long time living in an English-speaking country, she found it difficult to adjust as her Saudi relatives did not include her because her Arabic was poor; this led her to play games online for fun and she has developed friendships with players from all over the world. For this person, although her Arabic has improved and she has many Saudi friends, she still plays games for fun and to maintain her spoken English and native accent.

Conclusion

Based on the questionnaire data, it can be concluded that digital games allow learners to expand their vocabulary and acquire new language skills. Games also seem to make it easier for learners to remember a new language and also have a powerful impact on their self-esteem and confidence which are pivotal factors in language learning. Games can also increase learners' motivation as they stimulate interest and generate a drive to improve. This study found that the friendly, open atmosphere in the gaming environment encouraged players to express themselves more freely, without the sense that they were being evaluated for their progress. Games not only provide diverse material for learning and motivation but also encourage

people to learn and participate in activities that help them to acquire a new language. Many participants were surprised by the impact of playing digital games on their language acquisition as this had not been the driver of their engagement with the games.

Although some games are designed specifically for language learning purposes, even standard commercial games without supplementary language material can be a powerful tool for language learning. Another positive aspect of gaming for language acquisition is the international communities that spring up around certain games; since digital games are frequently multi-layered with complex narratives and characters with secrets and back stories, players come together to discuss these and share tips and tricks. Such communities motivate players to use the language, increasing their proficiency.

Adeng and Shah (2012) put forward that games lessen anxiety, build self-confidence and portray positive emotions and behaviours as they are unafraid of using the target language interactively. Mahali et al. (2016) also suggest that instructors should consider the adoption of digital games to enhance learners' English learning in the knowledge age. In conclusion, digital games can have positive impacts on learners and because they can diminish the anxiety and fear associated with learning a new language, scholars and teachers should consider integrating games into the English language teaching process.

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