⊛ UTM

Exploring the Potential of Video Games in Enhancing Language Learning

Mohamad Farhan Mohd Tap, Norhanim Abdul Samat*, Tina Abdullah
Language Academy, Faculty of Social Sciences and Humanities,
81310 Universiti Teknologi Malaysia, UTM Johor Bahru, Johor, Malaysia

ABSTRACT

In the past few years, computer games have become popular as immersive language learning tools which help students to improve their language skills. This paper seeks to find out if video games can be used to improve language learning and to see the positive aspects of video games for this task. The participant for this research is based on 58 participants who had taken an English language class at a university in Johor; from which eight volunteers were selected for the interview. In our study, we used a mixed-method approach, and a survey was carried out by asking students questions about their general perceptions of the usage of video games for learning in the English language as well as getting to know challenges that students are facing while using these games to practice the language. Overall, they had a positive attitude towards video games in an educational environment. The findings highlight the significance of putting technology integration into education since online video games are a very convenient tool in stimulating their active participation learning English and communicative diversity.

Keywords: Video games, cooperative learning, technology integration, game-based language learning, immersive tools, mixed-method approach

INTRODUCTION

Technology has evolved teaching methods, enabling instructors to use distinct teaching methods and provide widely multiple sources of resources. The usage of ICT can create learning environments with a characteristic of group work giving learners a wider point of view. Videogames, for instance, can be used to enhance teaching and to make learning interesting, but some people often view them as merely for entertainment. However, there is a use of game-like strategies for nongaming activities called gamification (Nah *et al.* 2014).

It might be the case that conventional teachings do not equip students enough for a spontaneous, unplanned dialogue (Moffitt, 2016). Having said that, what creates routine learning games is monotonous, learners will play video games and find the situations they are in being interesting and realistic. Students can provide language practice in an environment full of support while playing video games; this will give them more confidence in speaking. Within the game, students must communicate with one another when they have a reason to cooperate.

Nowadays, students frequently lack the motivation to express themselves and show no interest in the subject matter. Video games can provide exciting situations, thus using them as a speaking practice tool could be advantageous. Akram *et al*., (2022) argue that the instructors use the lack of professional

---

**Correspondence to:* Norhanim Abdul Samat (email: norhanim@utm.my)

competence as an excuse for their unwillingness to use technology for this reason. Nonetheless, the students can practise speaking in a supportive setting through video games, which is a key component in boosting their confidence. Based on the research of Jabbari & Eslami (2018), the learners will be more engaged and communicative when they have a reason to cooperate, thus, they will be able to exchange ideas and engage in the in-game situations.

The use of games for developing language skills is not a new concept. Nevertheless, its ability to create speaking skills has been ignored by educators as it is hard for those who are not trained or unfamiliar with video games to use it. Alamri (2016) pointed out that although most teachers now think positively about the use of video games, they still find it difficult to implement them strategically in teaching, either because of time constraints, or the lack of technical ability or resources.

The purpose of this study is to investigate the types of video game genres suitable for developing speaking skills and to examine how students feel about using video games to improve their speaking. The objectives are to determine whether students view video games as helpful resources and whether incorporating them into the classroom might increase motivation to communicate in the English language. This study is guided by the following research questions.

1. What is the type of video game genre suitable for developing speaking skills?
2. What are students' perceptions of using video games for language learning, and do they find them beneficial for improving their speaking skills?

This research underlines the fact that it is very useful to use video games, particularly those that are focused on communication, to improve students' English-speaking skills in the classroom. Unlike the conventional methods, video games serve as a platform for students to practice speaking more fluently and confidently since they generate a comfortable, immersive English-speaking atmosphere (Rudis, Poštić & Al Jemely, 2022). According to Rankin et. al (2006), university students can take a break from their studies, have fun, and learn a new language while playing video games that are relevant and available, thus, lowering their stress. Prensky (2001) reckons this by highlighting that the "fun" aspect that involves the visual and cognitive appeal, aids in the enhancement of concentration, motivation, and focus.

LITERATURE REVIEW

The use of video games in the classroom has become increasingly important. They are becoming more widely acknowledged for their capacity to promote a range of educational goals, including as the growth of critical thinking, problem-solving abilities, and language acquisition. Students can be motivated, and learning can become more interesting by playing immersive and interactive video games (Pozo, Cabellos & Sánchez, 2022). Although it is becoming a trend to integrate video games into the education, still there is a lack of clear and actual data which states the validity of this tool's effectiveness in the classroom.

For the language learners, video games provide an extra opportunity for them to get sharper in speaking under improved scenarios (Al-Baqami, 2022). With the availability of situations in games, students would also have an opportunity to use the language they learn in real-time contexts - to help them prove their skills in impromptu and unplanned conversations (Rudis & Poštić, 2018). Moreover, Albaqami (2022) observed that playing video games helps players to identify different behaviour patterns in

themselves and other, which is fun and at the same time can be highly motivating to them or even boosts their speaking skills in the target language.

Additionally, video games are significant in the development of speaking skills since it gives the learners the situation and the purpose to communicate in the target language. According to Ebrahimzadeh and Alavi (2017), when the players have the same goals to achieve, they are more likely to communicate. This will hence make their speaking ability better as the Communicative Language Teaching approach points out that students can develop speaking skills better in an authentic situation and thus motivate meaningful interactions. Besides that, Alamri (2016) also claimed that video games in class can lower students' anxiety level.

Likewise, the language learning through game-based activities has been a part of education for a long time. Köroğlu and Kimsesiz (2023) said that the difficulty and the sense of achievement are the main reasons that the gaming users are motivated to play video games. This demonstrates that video games can boost learners' interest to be part of the activity as they can be viewed as enjoyable and difficult. Nevertheless, Dina & Ciornei (2013) claimed that this may lead to the diminishing of the possible educators' role in a classroom only to facilitate the learning without any obstacles. This is not true at all, as the teacher is still the main person in the controlling of the material that the students can effectively learn. In the words of Anderson and Reynolds (2008), the educators, besides to give the necessary resources according to the comprehension level of the learner, are also the ones who make the students think and analyse their mistakes.

A Previous study by Rankin (2006) also pointed out the motivational capacity of video games. She corrected that notion that role-playing fantasy games, aside from being a reason for players to speak and talk to each other, provide a context for language learners to discuss their goals and how to achieve them in the game. A role-playing game in this setting is a game in which the players act as the characters in a fictional world. She mentioned that this made them more precise when using the language because they had to communicate not only to talk but also to work together in order to accomplish a game mission or task.

The in-game task, which is in line with the Communicative Language Teaching approach, is like discussing a strategy to defeat an enemy or solving a puzzle, and thus, the interaction during gameplay is meaningful and purposeful as they speak intending to be understood. Besides, Alrajhi (2020) showed that learners are more excited and have a good time when playing video games in a comfortable environment. Besides that, even though research is mainly based on the improvement of speaking skills, it is also necessary to mention that video games are a flexible tool that can boost students' language acquisition in a more holistic way.

According to Moffitt (2016), the video games are commercialised worldwide with English being the main language, and at the same time, students are also required to read, understand, and make their decisions. There are many video games which are localized and give the users the language. Therefore, the educators can merely manipulate this to ensure that every learner's experience is maximized. Hence, this indirectly improves their decision-making ability. Similarly, Darihastining et.al (2019) also pointed out that video games are useful in enhancing language ability and students' thinking skills since they are utilizing the target language in an environment that needs the interaction of both the players' cognitive and oral skills.

Zhu (2012) in his research stated that the process of video games is the main reason why it is effective in reinforcing students' communicative abilities as it attracts their need to communicate through experience. The video games also assist the students to relax and to have fun with the language that they are using. The interest towards video games can make students excited to interact with their gaming

friends (Griffiths, 2002). Thus, the pressure for learners to communicate will be lessened which will in turn increase their motivation to communicate because they will still get a sense of achievement. Nevertheless, Thamarana (2014) highlighted that this method, will help students to be fluent, but it will ignore their accuracy in grammar. This is because they are trying to learn genuinely to communicate. After all, it is the only way for them to do it due to the requirements of the task. Thus, they will write understandable and comprehensible sentences but will be cut off from the grammatical correctness.

Another study by Frederik *et al*. (2010) showed other positive effects of using video games in language learning such as the fact that they are fun, challenging, and stimulating, and they offer a lot of learning potential that includes vocabulary, listening, and speaking practice altogether. Other strengths that they spoke about are video games' compatibility with the users' level of expertise while at the same time, still giving the feedback to the players. The video games with clear tasks or missions helped educators to note students' ability to communicate with each other in order to achieve the goals that were set. As said by Granic, Lobel, and Engels (2014), players tend to work more when they are aware of the meaningful goal they are working towards. Besides, Hwang (2015) said that the learners can practise the language speaking structure from the instructional interaction when playing the video games.

Video games also give learners an immersive experience, and immediate feedback to the students. Teachers, for the most part, believe that instant feedback is a good thing in teaching (Bani Hani, 2014). Learners should realize that they will be successful or achieve a particular task when carrying out an activity. Trophies, leaderboards, and achievements are the video game mechanics that can motivate students' concentration (Greipl *et al*., 2020). Just like in the speaking part, Köroğlu & Kimsesiz (2023) commented that digital games have an undeniable role in connecting players with each other to establish relationships and encourage interaction by sharing a common goal. Besides, students will be able to improve their pronunciation, vocabulary, and speech patterns through the use of digital systems such as mobile games (Hwang *et al.,* 2015).

The descriptions above have illustrated how video games are helpful in the case of teaching languages, and improving speaking skills. They introduce a tool into providing rich background knowledge of how to build a lifelike gaming environment that can host the students to practice the communication. Though it is fair to say that some of the studies can have a wider range of their scope and the target for the audience, the present study is able to discuss the use of video games in the classroom environment for students.

Videogames frequently present educators with time problems, and lack of technical expertise, which are among the main challenges in the inclusion of video games in their lessons. Teachers can gain a better knowledge of choices and benefits from learners' perceptions through students' listening to their views about video game usage for language acquisition and this information can be used to design and deliver game-based language learning activities. The study on the effective use of using video games among second language learners with speaking issues continues to be under researched despite the growing awareness of the use of video games in language instruction. We aim at exploring students' opinions on using video games as a tool to improve their English and examining the advantages of different types of the gaming genre.

METHODOLOGY

The mixed method design was utilized in this study where eight participants were chosen randomly for the interviews which served as the qualitative source of information while 58 participants filled out the questionnaire, which was the quantitative data. The 58 participants were those taking the third-level English course at the university. The questionnaire comprised ten 5-point Likert scale questions that seek to find out their opinion on the suitability of the game they played, and their general opinion and perception on using video games as a learning tool. The gathered responses were then calculated to find the patterns in video game efficacy and learners' perceptions of using them. Hence, this will help answer the question of video games' effectiveness in building speaking skills.

FINDINGS

The data are categorised into two key themes: the type of video games genre suitable for developing speaking skills and the players' perceptions on the role of video games in developing English speaking. The data analysis techniques required analysing the responses from the questionnaire and interview to identify patterns in the participants' perceptions.

Type of Video Games Genre Suitable for Developing Speaking Skills

Figure 1 below presents the type of video games genre suitable for developing speaking skills.
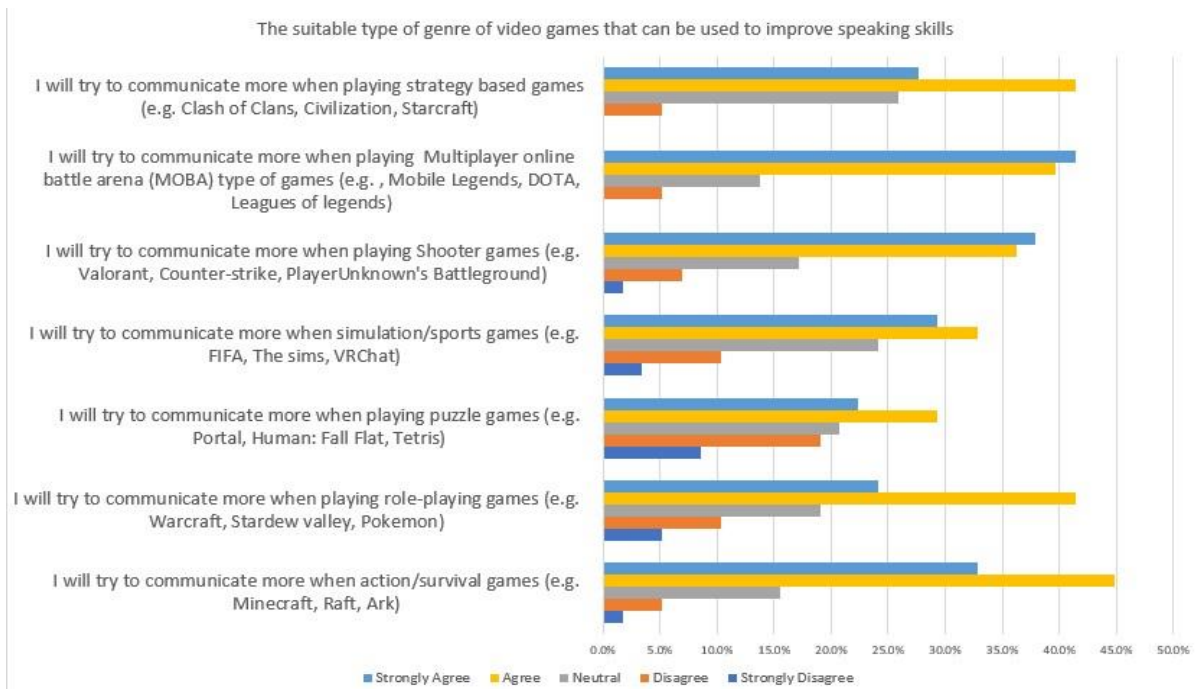

Figure 1 The possible genre that can be used to improve speaking skills

The perspectives of the participants regarding the best genre of video games to improve their speaking abilities are displayed in Figure 1 above. The highest percentage of agreement was seen with multiplayer online battle arena (MOBA) games, as 81.1% of respondents agreed or strongly agreed that playing these kinds of games would encourage more communication. Just 5.2% of respondents disagreed with the item, while 13.8% of respondents were neutral.

Following closely behind were action/survival games, with 77.6% of respondents agreeing or strongly agreeing that these games are useful for enhancing speaking skills. Just 6.9% of respondents were opposed to playing action survival games, while 15.5% of respondents remained neutral. Positive comments on shooter games were also given, with most participants thinking they were appropriate for language learning. Nonetheless, 1.7% strongly disagreed, 6.9% disagreed, and 16.2% expressed no opinion.

Many respondents had a positive opinion of strategy games with only 5.2% disagreeing that they were suitable for language learning. While the remaining respondents agreed or strongly agreed that they would communicate more when playing strategy-based games, 25.9% of them had no opinion. The response to role-playing games was mixed, with 65% of respondents saying they were good for enhancing speaking skills, 19% saying they had no opinion, and 15% opposing. Compared to the prior items, simulation games received less positive feedback with 62.1% of respondents agreeing that they are appropriate for use in the classroom, 24.1% expressed no view, and 13.7% disagreed. The least favourable response went to puzzle games, as 27.6% of respondents disagreed that they fit in communication-related activities. 51.7% said that playing puzzle games is an excellent approach to get better at speaking, compared to 20.7% who were neutral.

According to the findings, players find action-oriented games—such as shooter, action/survival, and MOBA games—to be more enjoyable and well-liked when it comes to enhancing their speaking skills. Gender is one element that may have an impact on this preference, as our observation found that male players tend to enjoy exploratory gameplay and female players typically prefer problem-solving games. The reason for puzzle games' lower acceptance could be related to its uncertainty and less well-liked gameplay in contrast to other lively and fast-paced games, which are thought to promote more player involvement.

In the interview, the players gave the highest scores to the multiplayer online battle arena (MOBA) games among all the game genres. This is most probably due to its strategical nature and the fact that it is a five-on-five game, thus both sides must cooperate with each other to defeat the enemy. It is thought that when teamwork is required throughout the gaming session, communication will be going on. Interviews were employed to evaluate the participants' reactions to MOBA games in the aspect of the skill development. Zainul, in an interview, said, "As the game is multiplayer, the players will team up to win". And they need to communicate with each other to achieve the success. All the players concurred that communication is a crucial factor in MOBA games.

The reason for this is that when the team is working well, the others will need instructions and information. Chang *et al*. (2021) mentioned that the game has many stages, for example, the improvement of skills, teamwork, and the avoidance of the disappointment of colleagues. The players will be able to use this as a constant motivation to improve their communication skills. Fahmi in an interview mentioned that "to play as a team, participants in multiplayer strategy games (MOBAs) must interact with one another. As they practise speaking while playing, this improves their speaking abilities." According to the statements we can conclude that playing a game itself can inspire players to interact verbally. As a result, this makes it a useful venue for speaking practice.

The shooter game is also positively perceived by the participants. The same reason that MOBA games are appreciated, shooter games are also highly team oriented. Hafiz in an interview said that the players should talk to each other in their team about their positioning in the game. Thus, it enhances their vocabulary and better usage of prepositions in communication. According to this statement, shooter games not only help in the development of speaking skills, but they are also a good platform to improve the English language skills in general.

According to Clyde & Thomas (2008), some video game elements combined with the appropriate learning objective and environment will help to improve their information literacy and acquire knowledge. In an interview, Azhar noted that shooter games frequently call for cooperation and coordination from players as communicating with friends via voice chat while playing can improve speech skills. According to his remark, one of the most important elements of playing shooter games is coordination. Although texting is an option in this game as well, most players choose to use voice chat because it is much more effective, rapid, and accurate.

Players will have to acquire the courage and confidence to raise their voices which will consequently lead to them speaking. This implies that the need to be in a team or have a clear goal in the game is a plus in making the students talk. As Mercier & Lubart (2023) stated, social contact between players is indispensable and shows that the main goal of shooter games is to defeat other players by teamwork. Hanis, in an interview said that shooter games need to be played together and in coordination with the other players to score, so they can improve their speaking abilities by working together and communicating.

The coordination of actions, the mutual exchange of information, and the creation of a strategy all hinge on the voice chat or text communication between team members. Besides that, there is the problem of data from the game observation, in which some players are not able to give the information in a short way. Shooter games can make players more careful in the way they communicate. This is because the fast-paced nature of the game means that players are always aware when playing.

The only action survival game that does not depend on strategy or competitiveness is the one that the respondents highly appreciated. Most of the survival games concentrate on the players either building a shelter or collecting the resources for the survival. In her interview, Hanis said that "action/survival games can provide cooperative gameplay." Even though action/survival games can be played separately, many of them have cooperative modes where players can work together to survive or achieve the goals. Talking to each other through voice chat or text while playing a cooperative game helps you to learn how to speak, express your ideas, coordinate actions, and solve problems together. These compromises develop the skills of effective communication, teamwork, and the ability to share information cooperatively. According to the statement above, action survival games can create a situation in which players can unleash themselves freely and provoke the deep interaction.

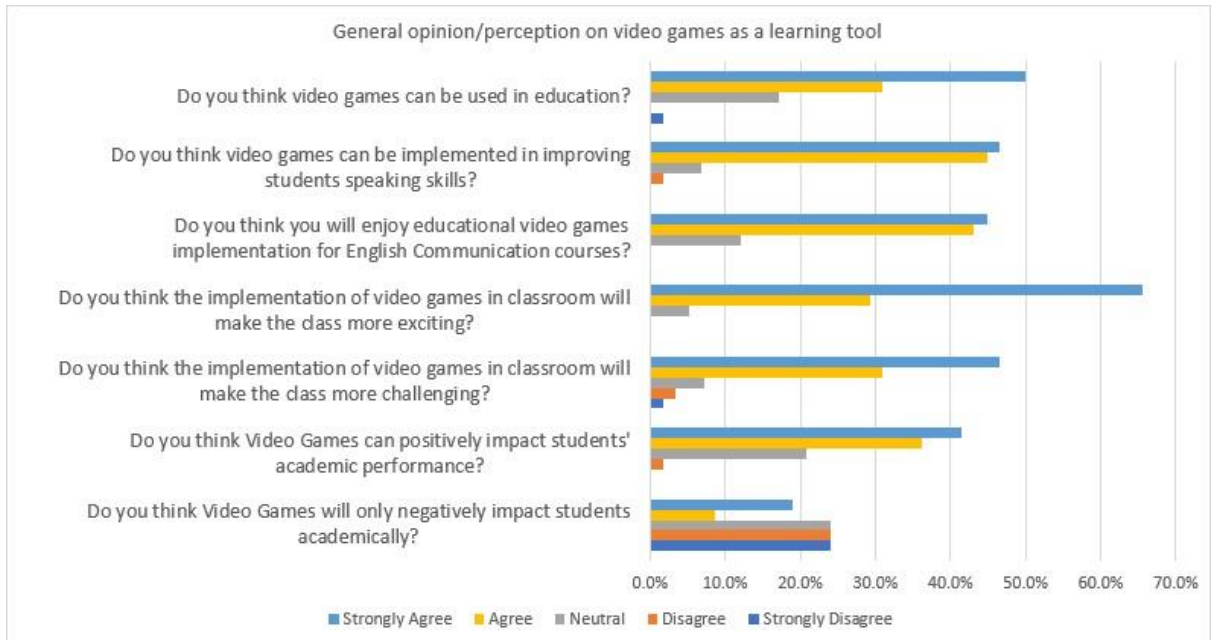**Players' Perceptions on the Role of Video Games to Improve Speaking Abilities**

Figure 2 General Opinion/perception of video games as a learning tool

According to the data gained from Figure 2, many of the items received positive responses from the respondents, suggesting that video games are usually viewed positively as educational tools. From the highest to lowest percentage of positive responses, the items are presented as follows. 94.8% of respondents agreed or strongly agreed with the fourth item, which asked if using video games in the classroom would make the learning process more entertaining. Only 5.2% of respondents gave a neutral response. Item 2, which addressed the prospect of using video games to help students become more proficient speakers, revealed that 91.4% of respondents agreed with the statement, while 6.9% were undecided and 1.7% disagreed.

With 77.6% of respondents agreeing or strongly agreeing, the fifth item in the survey asked whether using video games in the learning process would make the lesson more challenging. On the other hand, 17.2% of respondents had no opinion, and 5.1% disagreed with the statement. In response to the sixth question, which inquired about participants' opinions regarding the effect of video games on kids' academic achievement, 77.6% of participants agreed with the statement, 20.7% had no view, and 1.7% disagreed.

Many respondents gave favourable answers to item number 3, which asked if they would appreciate using video games in English communication courses. Of those who answered, 44.8% strongly agreed, 43.1% agreed, and 12.1% remained neutral. Regarding the first item, which asked respondents to rate their general opinion on whether video games can be used in the classroom, 50% strongly agreed, 31% agreed, 17.2% stayed neutral, and only 1.7% strongly disapproved. Participants' answers to the seventh item, which asked whether playing video games will exclusively have a bad academic influence, were mixed.

Of those who answered, 24.1% strongly disagreed, disagreed, and had a moderate attitude. primarily 8.6% agreed, and 19% strongly agreed.

Most of the data collected on video games as learning tools was positive. Several of the participants believe that video games can be used in the learning environment for the enhancement of speaking ability. The following paragraph talks about many of the respondents who thought that communicating through video games gives a small boost of confidence and comfort as compared to a direct or a severe interaction. According to Darihastining *et al*. (2019), the English-speaking environment video games can improve the language skills and varieties of the users, either by the online community or the in-game instructions. Majority of the people also expressed that they would love the implementation of video games itself. This is beneficial as interest can raise students' motivation to participate in the activity

CONCLUSION

The goal of the study was to gain insight into two primary areas of university students' use of video games to learn languages. The first two questions concern the type of video game genres suitable for developing speaking skills and the views of the students on using video games for language learners. According to the participants MOBA, shooter, and multiplayer online games caused the greatest positive changes in speech skills. Such group of games not only help them sharpen their speech abilities, but they also make them better at collaborating, discussing, and planning together. They clearly recognized that playing video games means working together as a team by pursuing common purposes, therefore the video games give them that opportunity to practice speaking and have some meaningful talks.

Even though there are many benefits for using video games in the classroom, we should not overlook the fact that their integration goes along with proper preparation and matches learning intentions. Keeping this in mind, educators will play an important role in achieving successful use of video games for foreign language learners by applying challenges and rewards of video games that involve learners in speaking practise.

In a nutshell, gaming can be beneficial for developing excellent speaking skills and interest in English when used in the classroom in an organized manner. These findings show that picking the right kind of game and continuing with the research as well as creating innovative educational materials since technology to improve language skills is critical.

ACKNOWLEDGEMENT

REFERENCES

Akram, H., Abdelrady, A. H., Al-Adwan, A. S., & Ramzan, M. (2022). Teachers' perceptions of technology integration in teaching-learning practices: A systematic review. *Frontiers in Psychology*, *13*, 920317.

Alamri, A. (2016). Should video games be included in the learning process. *International Journal of Education*, *8*(1), 23-33.

Alamri, W. A. (2018). Communicative language teaching: Possible alternative approaches to CLT and teaching contexts. *English Language Teaching*, *11*(10), 132-138.

Albaqami, R. (2022) The role of playing video games in mastering english as a foreign language among children in Saudi Arabia during the COVID-19 lockdown. *Open Journal of Modern Linguistics*, *12*, 238-264. Doi: 10.4236/ojml.2022.122019.

AlJemely, Y. (2022). Impact of Online Video Games on the Acquisition of the English Language

AlHosni, S. (2014). Speaking difficulties encountered by young EFL learners. *International Journal on Studies in English Language and Literature (IJSELL), 2*(6), *22-30.*

Alrajhi, A. S. (2020). English learners' perceptions of video games as a medium for learning and integration into the English curriculum. *Mextesol Journal*, *44*(4), n4.

Anderson, C. A., & Bushman, B. J. (2001). Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocial behavior: A meta-analytic review of the scientific literature. *Psychological Science*, *12*(5), 353-359.

Clyde, J., & Thomas, C. (2008). Building an information literacy first-person shooter. *Reference Services Review*, *36*(4), 366-380.

Chang, W. L., Chen, L. M., & Hsieh, Y. H. (2022). Online to offline social interaction on gaming motivations. *Kybernetes*, *51*(12), 3508-3525.

Darihastining, S., Sholihah, I. A., Putri, F. N. A., & Hidayah, A. W. (2019). Online game as media to improve students' speaking skill. I*SLLAC: Journal of Intensive Studies on Language, Literature, Art, and Culture*, *3*(2), 156-168.

Dina, A. T., & Ciornei, S. I. (2013). The advantages and disadvantages of computer-assisted language learning and teaching for foreign languages. *Procedia-Social and Behavioral Sciences, 76*, 248-252.

Ebrahimzadeh, M., & Sepideh, A. (2017). The effect of digital video games on EFL students' language learning motivation. *Teaching English with Technology, 17(2),* 87-112.

Frederik, D. G., Peter, M., & Jan, V. L. (2010, September). Uncharted waters? Exploring experts' opinions on the opportunities and limitations of serious games for foreign language learning. *Proceedings of the 3rd International Conference on Fun and Games*. 107-115.

Granic, I., Lobel, A., & Engels, R. C. (2014). The benefits of playing video games. *American psychologist*, *69*(1).

Hani, N. A. B. (2014). Benefits and barriers of computer-assisted language learning and teaching in the Arab world: Jordan as a model. *Theory and Practice in Language Studies*, 4(8), 1609.

Greipl, Simon; Moeller, Korbinian; Ninaus, Manuel (2020). Potential and limits of game-based learning. *Loughborough University. Journal contribution. https://hdl.handle.net/2134/13621973.v1*

Griffiths, Mark. (2002). The educational benefits of video games. *Education and Health*. 20. 47-51.

Hwang, W. Y., Shih, T. K., Ma, Z. H., Shadiev, R., & Chen, S. Y. (2016). Evaluating listening and speaking skills in a mobile game-based learning environment with situational contexts. *Computer Assisted Language Learning*, *29*(4), 639-657.

Jabbari, N., & Eslami, Z. R. (2019). Second language learning in the context of massively multiplayer online games: A scoping review. *ReCALL, 31*(1), 92-113.

Kinzie, Mable & Joseph, Dolly. (2008). Gender differences in game activity preferences of middle school children: Implications for educational game design. *Educational Technology Research & Development*. *56*, 643-663. 10.1007/s11423-007-9076-z.

Köroğlu, Z. Ç., & Kimsesiz, F. (2022). Use of game-based teaching and learning to foster intercultural communication in English language education. *Handbook of Research on Fostering Social Justice Through Intercultural and Multilingual Communication*, 139-161. https://doi.org/10.4018/978-1-6684-5083-3.ch008.

Mercier, M. & Lubart, T. (2023). Video games and creativity: The mediating role of psychological capital. *Journal of Creativity*, *33*(2).

Moffitt, Matthew. (2016). Role-playing games and second language application. *Senior Honors Theses and Projects*. 486. https://commons.emich.edu/honors/486.

Nah, F. F. H., Zeng, Q., Telaprolu, V. R., Ayyappa, A. P., & Eschenbrenner, B. (2014, June). Gamification of education: a review of literature. *International Conference on HCI in Business* (pp. 401-409). Springer, Cham.

Pozo, J., Cabellos, B. & Sanchez, D.L. (2022). Do teachers believe that video games can improve learning? *Heliyon, 8*(6).

Prensky, M. (2001). Chapter 5 Fun, Play and Games: What Makes Games Engaging in M. Prensky, *Digital Game-Based Learning*. McGraw-Hill.

Rankin, Yolanda & Gold, Rachel & Gooch, Bruce. (2006). Playing for keeps: Gaming as a language learning tool. *ACM SIGGRAPH 2006 Educators Program, Siggraph* '06. 44. 10.1145/1179295.1179340.

Rudis, D. & Poštić, S. (2018). Influence of video games on the acquisition of the English language. *Verbum*, *8*(8), 112.

Thamarana, S. (2015). A critical overview of communicative language teaching. *International Journal of English Language, Literature and Humanities*, *3*(5), 90-100.

Tinio, V. L. (2003). ICT in education. E-Primers for information economy, society, and policy. [Online]. From *http://www.eprimers.org/ict/page2.asp*.

Yolanda A. Rankin, Sana Tibi, Casey Kennington, and Na-eun Han. (2021). In-game social interactions to facilitate ESL students' morphological awareness, language and literacy skills. *Proc. ACM Hum.-Comput. Interact.* 5.https://doi.org/10.1145/3474706.

Zhu, D. (2012). Using games to improve students' communicative ability. *Journal of Language Teaching & Research, 3*(4).