Exposure to Target Language Vocabulary through Novel Extracts and Computer Game Cutscenes

Mehmet Emre Altınbaş

Necmettin Erbakan University, Konya, Turkey

Abstract

Following Richards's (2015) ideas of using movie clips, videos, and games as valuable technological tools for language learning, the present study was conducted to investigate the effectiveness of using novel extracts and computer game cutscenes based on the same story to develop the vocabulary knowledge of English as a foreign language (EFL) learners. The study employed a quasi-experimental design with a control group and an experimental group. Initially, both groups studied a target vocabulary list of 20 words and their definitions. The participants were asked to complete a multiple-choice definition matching test after studying the list to find out whether their levels of vocabulary knowledge were comparable prior to the applications. For the experimental group, a second vocabulary test equivalent to the first one was conducted after they read a novel extract including the target vocabulary items, and a third test was carried out after they watched two computer game cutscenes that were based on the same events as the novel extract to understand whether seeing the target vocabulary items in these contexts repetitively would result in a significant increase in their target vocabulary knowledge. For the control group, the second and the third vocabulary tests were undertaken immediately after the first one to investigate whether mere exposure to equivalent vocabulary tests without the interventions would lead to a significant increase in their target vocabulary knowledge. The findings of the study indicated that the scores of the participants in the experimental group increased descriptively on the second test and significantly on the third test, whereas the scores of the participants in the control group decreased significantly on the second test and descriptively on the third test. The study provides practical and academic implications based on the findings.

Keywords: *Vocabulary Learning, Novels, Computer Games, Cutscenes, Technology*

Introduction

Literature has been used as a means for learning and teaching foreign languages for centuries. Today, it is still regarded by many as a valuable language learning and teaching tool. Hall (2016) suggests that using literature in teaching English can provide several benefits such as improved vocabulary knowledge and enhanced linguistic knowledge (p. 456). Lazar (1993) states that literature should be used with learners for a number of reasons including its motivating nature, authenticity, and general educational value. Similarly, Collie and Slater (1987) noted that language teachers should use literature with learners for its authenticity, and for personal, cultural, and language development.

Novels have been a specific focus in the use of literature in language learning and teaching. In her paper, Lazar (1990) discusses the features of novels that offer opportunities for language learners, analyzes potential problems that can be faced by students and teachers while using novels as language learning materials, and suggests ways of addressing these problems. She states that novels can contribute to language learning by serving as a basis for a number of educational activities, increasing motivation, allowing for a sense of achievement, and exploring another culture, all of which can, in turn, help learners improve their target language knowledge and skills. Similar findings were noted with regard to the use of novels in language learning and teaching in more recent studies. From the perspective of learners and instructors, Siaj and Farrah (2018) investigated whether novels could provide advantages for language learners in terms of the motivation, language development, and cultural enrichment of English learners; they found that students and instructors had mostly positive attitudes towards using novels in class. In a similar study, Zengin et al. (2019) delved into opinions of English instructors on the use of literature in language learning from instructors' perspectives and found that instructors believe in the potential of literary sources, including novels, to improve language learning and cultural understanding of English learners. In another study on the use of novels in learning English, Faraj (2021) probed into the effectiveness of novels based on the opinions of learners and found that novels were thought to have a contributing effect to language learning, especially in terms of enhancing creativity, meeting individual needs, and improving target language knowledge. Similar findings were also evident in the study by Yalmiadi et al. (2021), who suggested benefits of novels for learning vocabulary, improving language skills, and developing thinking skills of English learners.

Some studies have highlighted the role of novels in enhancing motivation by providing learners with the opportunity to enjoy literature and get exposed to a target language via course assignments or extensive reading. Examining the out-of-class reading strategies implemented by English learners when they were at secondary school, Pickard (1996) found that reading novels, newspapers, and magazines were the most commonly used out-of-class learning activities; the novels that were used by learners included the works of popular authors such as Stephen King, Roald Dahl, Jeffrey Archer, James Clavell, and John Le Carré. Vandrick (1997) underlined the advantages of reading novels as part of long-term assignments for ESL learners with the guidance and encouragement of the teacher; these advantages include experiencing the pleasure of browsing novels at a bookstore, responding personally to a novel both in a written and spoken way, relating to personal emotions while reading the novel, conveying individual sentiments by expressing

feelings about certain characters and events, and discovering the relationship between a novel and a reader. Shazu (2014) also highlighted the role of novels in providing students with an opportunity to enjoy literature as well as improving their target language knowledge and skills.

In addition to being used as part of assignments and extensive reading materials, novels have also been investigated with regard to their use in language lessons. Ganesan et al. (2016) conducted a study to investigate whether novels can improve target language skills and target culture knowledge. The researchers carried out the study with 50 students by running a project that included writing, reading, listening, and speaking activities related to Jane Austen's *Pride and Prejudice*. A pre-test and post-test design was applied to assess the target language knowledge and skills development of learners prior to and following the project. The findings of the study revealed that the use of novel-based activities enhanced the target language knowledge and skills of learners. A similar study was conducted with Japanese high school EFL learners by Fisher et al. (2012), who investigated incidental vocabulary learning by reading simplified English novels via books, e-books, and e-books with vocabulary learning support. The researchers implemented a crossover design to investigate vocabulary gains as a result of reading novels in these three modes. The findings of the study revealed a small amount of vocabulary acquisition regardless of the reading modes that were utilized. Nation (2014) also highlighted the role of novels and repetition in vocabulary learning in his study where he explored the use of 25 novels in learning and retaining the most frequent 9000 words.

Regarding the use of novels in learning English, there is a specific focus on using graphic novels, in which stories are told not only in text but also with images. In her paper, Hecke (2011) illustrates how graphic novels can be utilized to attain the goals of foreign language teaching by developing intercultural communicative competence and increasing reading motivation. As part of the study, university students gave English reading classes to high school students as part of a reading project. As a result of the project, the researcher found that graphic novels can improve the effectiveness of EFL by developing both linguistic and intercultural competence. In their case study based on multiliteracies theory using interviews and journals, Pishol and Kaur (2015) probed into the perceptions of an ESL teacher and students regarding the use of a graphic novel (*the Fruitcake Special*) in reading classes. They found that both the teacher and the students found using a graphic novel beneficial for learning English in enabling active learning, developing presentation skills, and improved participation in in-class activities. In a similar qualitative case study, Brenna (2013) investigated the connection between comprehension strategies and graphic novels in a five-week project that aimed to improve the reading strategies of grade four ESL speakers. As a result of data collection through observation, discussions, group-activities, and questionnaires, it was found that students could apply form-specific strategies (such as locating narration and identifying time changes through explorations of visual information) and general comprehension strategies (such as reading for meaning, summarizing, and making inferences based on content) while reading texts. Additionally, the students' preference for graphic novels increased throughout the study which highlighted the benefits of using these materials in lessons for the development of reading strategies and other literary competencies.

Carrying the use of visual elements in language teaching through novels one step further, Bao (2006) dwelled on films based on novels as language learning and teaching materials. The researcher stated that films and novels have specific advantages over one another, with the former being more direct and intelligible, having both images and sound, and the latter being more in-depth and detailed. It was suggested that films could enhance language teaching by creating numerous opportunities for in-class activities such as comprehension, discussion, role-play, providing language learners an exposure to authentic language use, and by offering a view of English language and culture.

In his article about using technology in language teaching, Richards (2015) notes videos and movie clips as valuable tools for language learning. He highlights videos and movie clips as authentic materials that can help the development of skills and comprehension. Richards also supports the use of digital games, since they provide engaging materials for language learning, which support motivation. Books, videos, movie clips, and digital games may seem distinct from one another, but one can find a number of common grounds among these authentic materials, which can all be utilized for language learning. For example, readers often follow a storyline and are exposed to countless dialogues in books. This is also applicable to movie clips and videos, where the audience is usually exposed to a storyline with a number of dialogues involving characters. Just like books, videos, and movie clips, learners playing digital games also follow a storyline and are exposed to several monologues and dialogues within the game involving in-game characters. The existence of a storyline and dialogues between characters can provide learners a valuable opportunity to be exposed to authentic use of the target language.

Similar to novels and movies, some computer games possess storylines to be read and scenes to be listened to and watched as part of their content, such as *World of Warcraft (WoW)*. With such content computer games provide an opportunity for language learners to improve their target language knowledge and skills. In his literature review, Peterson (2010) suggested that massively multiplayer online computer games present a motivating context for language learners to engage with target language. In a mixed-methods study, Hitosugi et al. (2014) found that game-mediated activities had a positive effect on learner affect, and language learners preferred activities through games rather than conventional ones. Several researchers specifically investigated *WoW* and its effects on language learning and found that it provides several benefits for learning a language, such as learning and practicing target language skills, having authentic interactions with other players, improved cooperation and collaboration with other players, and an increased motivation for language learning (Thorne, 2008; Rama et al., 2012; Zheng et al., 2012).

It can be concluded from the studies in the literature that novels and audiovisual works based on novels can be beneficial for learning a language. Similar to movies based on novels, there are computer games whose stories are based on novels or there are novels based on computer games. These computer games usually have several cutscenes that can be utilized as audiovisual materials to support novel-based language learning materials just like movies. Cutscenes are in-game cinematic scenes that are used in computer games prior to, during, or following gameplay sequences for purposes such as introducing a story, describing a situation, or showing a conversation between characters. Frequently involving monologues or dialogues, subtitles, and

visual elements, cutscenes typically require a player to read, listen, and watch to understand what happened, is happening, or is going to happen in a computer game story.

Drawing on the findings in the literature, the present study aimed to investigate the effects of reading novel extracts and watching computer game cutscenes that are based on the same story on the vocabulary knowledge of EFL learners. The research question that was employed in the study was:

Can EFL learners improve their target language vocabulary knowledge by reading novel extracts and watching computer game cutscenes based on the same story?

Methodology

The study was carried out as a quasi-experiment with a control group and an experimental group. The participants were selected through convenience and purposive sampling on a voluntary basis, and they took part in the control group or in the experimental group randomly.

The participants in the experimental group studied a target vocabulary list, read a novel extract that included the target vocabulary items, and watched a computer game cutscene that involved the same target vocabulary items. Each of these three steps was followed by a multiple-choice vocabulary definition-matching test created by the researcher.

The participants in the control group, on the other hand, only studied the target vocabulary list, and then the same three vocabulary tests were carried out with them. The test scores were evaluated to find out whether the two groups were comparable to each other, and to understand whether there were significant gains in the test scores. The rationale behind having a control group was to understand whether mere exposure to similar input and tests without the interventions could result in significant gains.

Participants

EFL learner groups of university students familiar to the researcher with a predicted average level of B1 intermediate based on The Common European Framework of Reference for Languages (CEFR) were informed about the study via emails, and they were invited to take part in the study through an informed consent form. These learners were invited on the basis of the expectation that they would have similar vocabulary knowledge and reading-listening proficiency levels, and that an average learner in these groups would be able to deal with the tasks that were required as part of the study. University students aged 18 or above were invited to take part considering that the content of the novel and the computer game would be appropriate for their age. In total, 52 learners participated in the study, and they were assigned to the control group (n=26) or in the experimental group (n=26) randomly.

According to the self-identifications of the participants based on CEFR self-assessment grids, both groups had an average reading and listening proficiency level of B1 intermediate, although there were some students with higher or lower proficiency levels in each group. In addition, a Mann-Whitney U test comparing the first vocabulary test scores of the participants in the control group and the experimental group after both groups had studied the target vocabulary list indicated that there was no significant difference (U = 266.5, p = 0.187). Therefore, it was concluded that the two groups were comparable to each other in terms of their vocabulary knowledge.

Materials and Procedure

The study was conducted online via *Google Forms*. The main instrument in the study that were used by both groups at the beginning was the target vocabulary list based on the novel extract and the computer game cutscenes. The vocabulary list was created by selecting six adjectives, seven nouns, and seven verbs that were in common in the novel extract and the computer game cutscenes. The vocabulary items were selected among words with B1 or higher level according to *English Vocabulary Profile* tool of CEFR. The vocabulary list (see Appendix A) consisted of the target words and their definitions in *English Vocabulary Profile*. At the beginning of the study, both groups were asked to study the target 20-word vocabulary list for five minutes.

The first step was followed by the first vocabulary test of 20 multiple-choice questions consisting of all the words in the target vocabulary list (See sample question). At the start of the test, the participants were instructed to choose the correct option according to the definition in each question. The questions required the participants to choose from four definitions. If the target vocabulary item being asked was a verb, then the incorrect options were chosen randomly among the definitions of the other six verbs of the list. The same was applied to target adjectives and target nouns. The 20 vocabulary items were asked in a random order. The participants were given 10 minutes to complete the test. Until this point, both the control group and the experimental group followed the same steps.

Sample question:

Having or showing the ability to make good judgments, based on a deep understanding and experience of life.

a. convinced

b. talented

c. wise

d. special

After the first vocabulary test, the participants in the experimental group read a 1116-word extract from chapter nine of *World of Warcraft: Arthas: Rise of the Lich King* by Christie Golden (2009), which included the target vocabulary items and matched the content of the cutscenes used in the study. The novel was selected because it was based on the story of *Warcraft III: Reign of Chaos* (Blizzard Entertainment, 2002), whose cutscenes were used in the study. The participants were given 10 minutes to read the extract. After reading, they had the second vocabulary test.

The participants in the control group, on the other hand, did not read the novel extract. They had the second vocabulary test immediately after the first test. The second vocabulary test was identical to the first vocabulary test in that it included the same 20 vocabulary items and their definitions. The difference was that the questions were randomly listed again to create a different question order for the test, and the incorrect options were randomly chosen again to create a different list of options for each question.

Finally, following the second vocabulary test, the participants in the experimental group watched cutscenes of two game chapters: *Jaina's Meeting* and *Ravages of the Plague* in the *Scourge of LordAeron* from the computer game *Warcraft III: Reign of Chaos*. These chapters were selected since they were based on the same story as the novel extracts and the dialogues in them

were exactly the same as the extract from the novel, and they included the same target vocabulary items. The cutscenes also included subtitles which provided an opportunity for the participants to read the dialogues while listening. After watching the cutscenes, the participants in the experimental group had the third vocabulary test, which was created the same way as the second test.

In contrast, the participants in the control group did not watch the cutscenes. They did the third test after completing the second test. Similar to the second vocabulary test, the third test was created to have the same vocabulary items as the other tests with a different question order and randomly assigned incorrect options.

As part of the instrument development process, the tests were created to make them as clear as possible for the test takers, and to make them as representative as possible for the scope of the current study considering face validity and content validity. The vocabulary tests were created in an effort to learn about the level of target vocabulary knowledge of the participants. The test consisted of vocabulary definition-matching questions. Any test-taker who could choose the correct definition of a target word from four options was considered to have knowledge of that word. To increase the effectiveness of the assessment, the distractors in each question were chosen from the same parts of speech as the word-in-question. Each question involved the definition of a target word, one option being correct, and three incorrect options. The questions and the tests were created with an effort to make them as straightforward as possible. No pilot testing was conducted prior to the study. Therefore, the reliability of the tests were assessed via internal-consistency (Cronbach's alpha) and test-retest reliability through the scores of the participants using Pearson's correlation. Considering that the three tests were equivalent variants of each other, the test-retest reliability was assessed by checking whether the second test and the third test correlated significantly with the first test.

Data Analysis

Each correct answer in the vocabulary tests had one point value, and all the vocabulary tests were scored out of 20. First of all, the first vocabulary tests were compared to understand whether there was a significant difference between the two groups. Then the first test and the second test, and the first test and the third test were compared with each other based on each group to find out whether there were significant differences in the test scores. By using SPSS, the scores were analyzed via non-parametric tests of Man-Whitney U and Wilcoxon Signed-Rank Test due to the fact that the scores of the first vocabulary test and the third vocabulary test of the experimental group were not normally distributed. Following the analysis, any significant outcome was subject to effect size analysis via Pearson's r (Cohen, 1988).

Results

The first point of inquiry in findings was the reliability scores. The results showed that there were significant correlations (Pearson's) between the first test and the second test ($r = .704$, $n = 52$, $p < 0.05$), and between the first test and the third test ($r = .706$, $n = 52$, $p < 0.05$) (see Table 1).

Table 1

Findings Related to Reliability (Pearson Correlation)

	Test 1	Test 2	Test 3
Correlation with Test 1	-	$r = .704$, $n = 52$, $p < 0.05$	$r = .706$, $n = 52$, $p < 0.05$

Following this, an internal consistency analysis was carried out through Cronbach's alpha (See Table 2). The results indicated acceptable reliability for the first test ($\alpha = 0.725$), the second test ($\alpha = 0.719$), and the third test ($\alpha = 0.819$).

Table 2

Findings Related to Reliability (Internal Consistency)

	Test 1	Test 2	Test 3
Cronbach's alpha	$\alpha = 0.725$	$\alpha = 0.719$	$\alpha = 0.819$

Based on these results, it was concluded that the instruments displayed an adequate level of reliability.

According to a descriptive analysis of the test scores, the mean score of the participants in the control group was 15.38 on the first vocabulary test, 14.42 on the second vocabulary test, and 15 on the third vocabulary test.

The mean scores of the participants in the experimental group was 15.61 on the first vocabulary test, 16.38 on the second vocabulary test, and 16.96 on the third vocabulary test (see Figure 1).

Kolmogorov-Smirnov normality test indicated that the first test scores and the third test scores of the experimental group were not normally distributed ($p < 0.05$), whereas the other tests conducted with the control and the experimental groups were normally distributed ($p > 0.05$). As a result of this, non-parametric tests were used as part of the following analysis.

Figure 1

Mean Scores of the Groups on the Tests
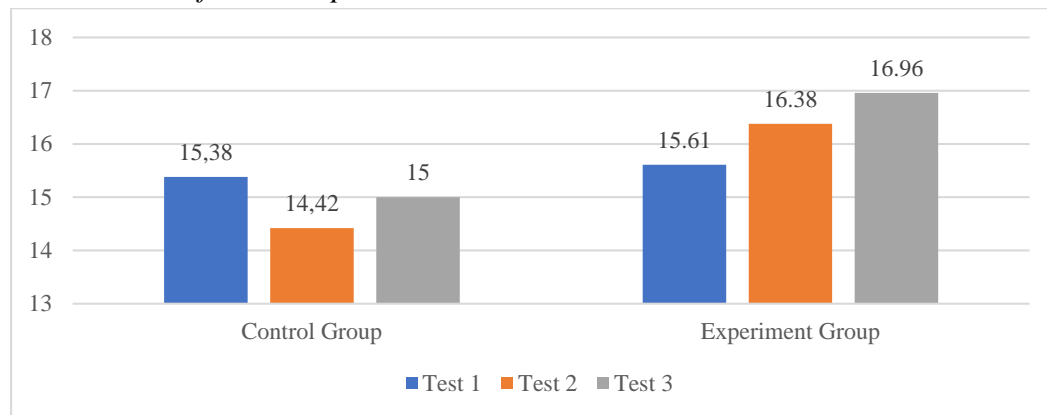
Following the descriptive analysis, the scores of the participants in the control group and the experimental group on the first vocabulary test were compared with each other through Mann-

Whitney U Test to understand whether there was a significant difference. The findings of the analysis showed that there was no significant difference between the groups on the first test (U = 266.5, p = 0.187). Therefore, it was concluded that the participants in the control group and the experimental group were comparable to each other with regard to their knowledge of the target vocabulary items at this stage.

After the comparison of the two groups based on the first vocabulary test, the scores of the participants on the first test was compared with the second and the third test for each group via Wilcoxon Signed-Rank Test to understand whether there were significant gain scores (See Table 3).

The comparison of the first test scores (15.38) and the second test scores (14.42) of the control group indicated a significant decrease from the first test to the second test (Z = 2.371, p = 0.018). The comparison of the first test scores (15.38) and the third test scores (15) of the control group also indicated a decrease from the first test to the third test (Z = 0.722, p = 0.470), but it was not statistically significant.

For the experimental group, the first test scores (15.61) and the second test scores (16.38) indicated a descriptive increase from the first test to the second test, which was not statistically significant (Z = 1.574, p = 0.116), but the first test scores and the third test scores (16.96) of the experimental group indicated a significant increase from the first test to the third test (Z = 2.559, p = 0.010).

Table 3

Comparison of the First Test Scores of the Groups with the Second and Third Test Scores

	Control Group	Experimental Group
Test 1 Mean	15.38	15.61
Test 2 Mean	14.42	16.38
Test 1/2 Z & p values	Z = 2.371, p = 0.018*	Z = 1.574, p = 0.116
Test 3 Mean	15	16.96
Test 1/3 Z & p values	Z = 0.722, p = 0.470	Z = 2.559, p = 0.010*

When the comparisons were completed, the significant increase in the scores of the participants in the experimental group from the first test to the third test was analyzed in terms of effect size. The analysis indicated that the intervention had a medium effect size of r = 0.44.

Discussion

As a result of the findings, the research question "Can EFL learners improve their target language vocabulary knowledge by reading novel extracts and watching computer game cutscenes based on the same story?", was answered positively. The findings suggest that the test scores of the participants in the experimental group displayed a descriptive increase after reading the novel extract, and a significant increase after watching the computer game cutscene based on the same story. On the contrary, the test scores of the participants in the control group showed a significant decrease on the second test, and a descriptive decrease on the third test. Therefore, it was concluded

that reading a novel extract and watching computer game cutscenes based on the same story had a significant positive effect on the target vocabulary knowledge of EFL learners.

First of all, the findings corroborate the ideas of Richards (2015) on the advantages of integrating technology into language learning. In addition, the findings of the study were in line with Lazar's (1990) argument that the use of novels could improve target language knowledge and skills of language learners, in that the use of novels along with computer game cutscenes resulted in an increase in the vocabulary knowledge of the participants. The findings can also be related to the findings of Vandrick's (1997) suggestions that novels can help learners experience the pleasure of reading and express their feelings regarding features of a novel, which may contribute to vocabulary retention.

Using audio-visual elements through computer game cutscenes along with novels can enhance the opportunities of learners to enjoy reading a story as well as watching and listening to it, and to express their feelings about a story by getting exposed to it through different means. This may provide motivation and assist memorization. Although the study did not bear a long-term extensive feature, its findings were relevant to the findings of Pickard (1996) given that it was conducted by using a novel extract as part of an online activity. Similar applications as the one carried out within the framework of the present paper can be carried out regularly through the guidance of a language teacher or by learners themselves to learn vocabulary items extensively.

Regarding in-class use, the applications in the present study can be related to the findings of Ganesan et al. (2016), who found that the use of novels as part of in-class projects could improve the target language knowledge and skills of learners. Present findings, which indicated an improvement in vocabulary knowledge, corroborate the findings of the aforementioned study. The findings were further in accordance with the findings of Fisher et al. (2012) and Nation (2014) in terms of the role of novels in increasing vocabulary knowledge of language learners.

Present findings also bear resemblances to the studies on graphic novels and language learning given that both the applications in the present study and graphic novels support written texts via visual elements, with the former using motion pictures and the latter using still pictures. In this sense, the findings support the findings of Hecke (2011) related to the use of graphic novels in improving linguistic competence of learners. The present applications also bear similarities to the study of Pishol and Kaur (2015) and Brenna (2013) in that they involve reading practice based on a novel although no data were collected with regard to its effectiveness in improving reading skills through the opinions of the participants. The findings of the present study were in line with the findings of Bao (2006), who found that films based on movies could improve language teaching through an exposure to authentic language use and also with the findings of Yalmiadi et al. (2021), who suggested benefits of novels for vocabulary development.

Implications for Language Teaching

The findings of this study discovered that reading novels and watching computer game cutscenes based on similar stories and vocabulary in a coordinated way can help learners increase their vocabulary knowledge. There are numerous computer games based on novels or vice versa, such as the ones that were used as part of the present study. From a practical point of view, these novels and computer game stories can be utilized by students extensively to improve their vocabulary

knowledge and to practice reading and listening skills by getting exposed to the same content both via written texts and audiovisual elements. Students can be guided by a language teacher throughout this process to make it much more fruitful. Also, they can play story-based computer games rather than just watching these scenes to make the process more interactive.

Apart from being used extensively, novel extracts and computer game cutscenes can also be used in language classes. They can be used repetitively to first read and then listen to (or vice versa) the same story entirely via two different media, or consecutively by reading one part of the story via a novel extract while listening to the other part through a cutscene. The potential repetition of several vocabulary items considering the fact that the two materials are based on the same story can provide a unique advantage for vocabulary learning just as it did as part of the present study.

Another advantage might be that the use of two different media for the same story can increase the attention of learners with different learning styles and interests. Some learners may prefer to learn vocabulary items via reading books while others may favor watching videos. Using both of these means in lessons can increase the motivation of both learner types, and thus, their engagement with the materials and the activities.

An interesting fact in the findings was that the control group experienced a decrease rather than an increase in their scores from the first test to the second test and from the first test to the third test. There might be several reasons behind this result. One potential cause might be boredom. Due to getting exposed to a similar test three times without additional content, the participants might have lost their focus to a certain extent. On the other hand, the exposure to similar content via two different means, novel extracts and game cutscenes in this case, might have increased the motivation of learners in the experimental group to be exposed to the similar content. The results suggest that getting exposed to similar content via different means can enable students to demonstrate a better performance in terms of language learning.

Further Research

From an academic point of view, the findings of the study can be furthered in a number of ways. A further research study can be carried out with more participants to increase the generalizability. The study included a short-term vocabulary learning activity as a treatment procedure with the use of the novel extract and two computer game cutscenes, and the effectiveness of this procedure was assessed through a 20-item multiple choice vocabulary definition matching task on target vocabulary items. The number of activities and the period of time can be increased as part of further investigation to test the effectiveness of novels and cutscenes on long-term vocabulary learning. The vocabulary tests can be correlated with other existing vocabulary tests and external criteria to ensure construct and criterion validity. In addition, different types of vocabulary questions can be added to potentially increase the vocabulary knowledge of the participants more effectively. Furthermore, the study employed an experimental design with a quantitative approach. The opinions of the participants regarding the effectiveness of using novel extracts and computer game cutscenes in an effort to learn vocabulary items can be gathered via an interview as part of a further research study to delve into the issue more profoundly from a qualitative perspective.

Another important possibility for using novel extracts and cutscenes is the opportunity for learners to practice their reading and listening skills in addition to learning vocabulary items. Although the study did not have a specific focus on improving the target language reading and listening competence of the participants, the use of novel extracts and computer game cutscenes can potentially be used to practice these important additional skills. A further research study can be conducted to investigate the effectiveness of these materials in improving the reading and listening competence of learners by using reading and listening tests in a longitudinal design. Additionally, the opinions of participants can be gathered via open-ended survey questions or interviews to add a qualitative dimension. The incorporation of other reading materials such as comic books or other audio-visual materials such as movies and TV series with novel extracts and computer game cutscenes can also be investigated in a future research study.

Conclusions

The present quasi-experimental study was conducted to find out about whether reading novel extracts and watching computer game cutscenes based on the same story could help English learners improve their target vocabulary knowledge. The findings indicate that being exposed to the target vocabulary items of a story in two contexts can help English learners increase their target vocabulary knowledge. This is in line with Richards' (2015) ideas in that the integration of a technological tool into a traditional learning activity resulted in a significantly positive outcome for language learning. Based on the findings, it can be stated that novel extracts and computer game cutscenes whose stories are in line with each other can be used together as part of English lessons or extensive reading and listening activities to provide learners an opportunity to enhance their target vocabulary knowledge by getting exposed to similar vocabulary items in two different media. Additionally, further research studies can be carried out to investigate the matter more profoundly by using more detailed vocabulary tests, implementing a longitudinal design, incorporating qualitative means of data collection and analysis, and exploring the opportunities for practicing reading and listening skills in addition to increasing vocabulary knowledge.

References

Bao, B. (2008). The Differences Between Novels and Films--Enhance Literature Teaching by Using Films. *Online Submission, 5*(7), 58-61.

Blizzard Entertainment (2002). *Warcraft III: Reign of Chaos.*

Brenna, B. (2013). How graphic novels support reading comprehension strategy development in children. *Literacy, 47*(2), 88-94. https://doi.org/10.1111/j.1741-4369.2011.00655.x

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences.* Lawrence Earlbaum.

Collie, J., & Slater, S. (1987). *Literature in the language classroom: A resource book of ideas and activities.* Cambridge University Press.

Faraj, S. G. M. (2021). Teaching novels in an English language classroom: A qualitative Study. *UKH Journal of Social Sciences, 5*(1), 90-97. https://doi.org/10.25079/ukhjss.v5n1y2021.pp90-97

Fisher, T., Sharples, M., Pemberton, R., Ogata, H., Uosaki, N., Edmonds, P., & Tschorn, P. (2012). Incidental second language vocabulary learning from reading novels: A comparison of three mobile modes. *International Journal of Mobile and Blended Learning (IJMBL), 4*(4), 47-61. https://doi.org/10.4018/jmbl.2012100104

Ganesan, S., Durgadevi, M., Ahila, A., & Kannan, T. R. (2016). Use of Novels to Teach ESL to the Technical Students in the Engineering Colleges—A Study. *Indian Journal of Science and Technology, 9*(16), 1-4. https://doi.org/10.17485/ijst%2F2016%2Fv9i16%2F132752

Golden, C. (2009). *World of Warcraft: Arthas: Rise of the Lich King.* Simon and Schuster

Hall, G. (2016). Using literature in ELT. In G. Hall, *The Routledge handbook of English language teaching* (pp. 474-488). Routledge.

Hecke, C. (2011). Graphic novels as a teaching tool in high school and university English as a foreign language (EFL) classrooms. *Amerikastudien/American Studies,* 653-668.

Hitosugi, C. I., Schmidt, M., & Hayashi, K. (2014). Digital game-based learning (DGBL) in the L2 classroom: The impact of the UN's off-the-shelf videogame, Food Force, on learner affect and vocabulary retention. *Calico Journal, 31*(1), 19-39. http://dx.doi.org/10.11139/cj.31.1.19-39

Lazar, G. (1990). Using novels in the language-learning classroom. *ELT Journal, 44*(3), 204-214. https://doi.org/10.1093/ELT%2F44.3.204

Lazar, G. (1993). *Literature and language teaching: A guide for teachers and trainers.* Ernst Klett Sprachen.

Nation, P. (2014). How much input do you need to learn the most frequent 9,000 words? *Reading in a Foreign Language, 26*(2), 1-16. https://doi.org/10.26686/wgtn.12543437.v1

Peterson, M. (2010). Massively multiplayer online role-playing games as arenas for second language learning. *Computer Assisted Language Learning, 23*(5), 429-439. http://doi.org/10.1080/09588221.2010.520673

Pickard, N. (1996). Out-of-class language learning strategies. *ELT Journal, 50*(2), 150-159. https://doi.org/10.1093/elt/50.2.150

Pishol, S., & Kaur, S. (2015). Teacher and Students' Perceptions of Reading a Graphic Novel Using the Multiliteracies Approach in an ESL Classroom. *Malaysian Journal of Learning and Instruction, 12*(1), 21-47. http://doi.org/10.32890/mjli2015.12.2

Rama, P. S., Black, R. W., Van Es, E., & Warschauer, M. (2012). Affordances for second language learning in World of Warcraft. ReCALL: *The Journal of EUROCALL, 24*(3), 322-338. http://dx.doi.org/10.1017/S0958344012000171

Richards, J. C. (2015). Technology in language teaching today. Indonesian *JELT, 10*(1), 18-32. https://doi.org/10.25170/ijelt.v10i1.1506

Shazu, R. I. (2014). Use of literature in language teaching and learning: A critical assessment. *Journal of Education and Practice, 5*(7), 29-35.

Siaj, R., & Farrah, M. (2018). Using Novels in the Language Classroom at Hebron University. *Journal of Creative Practices in Language Learning and Teaching (CPLT), 6*(2), 44-59. http://dspace.hebron.edu/xmlui/handle/123456789/173

Thorne, S. L. (2008). Transcultural communication in open Internet environments and massively multiplayer online games. *Mediating Discourse Online*, 305327. https://doi.org/10.1075/aals.3.17tho

Vandrick, S. (1997). Reading and responding to novels in the university ESL classroom. *The Journal of the Imagination in Language Learning, 4*, 104-107.

Yalmiadi, Y., Yanti, R., Indrayadi, T., & Rahmat, W. (2021). Diagnosing Effect of English Novels on Augmenting EFL Learners' Language Skills and Competencies. *Journal Polingua: Scientific Journal of Linguistics, Literature and Language Education, 10*(2), 31-41. https://doi.org/10.30630/polingua.v10i2.177

Zengin, B., Başal, A., & Yükselir, C. (2019). Investigation into the perceptions of English teachers and instructors on the use of literature in English language teaching. *The Reading Matrix: An International Online Journal, 19*(1), 155-166.

Zheng, D., Newgarden, K., & Young, M. F. (2012). Multimodal analysis of language learning in World of Warcraft play: Languaging as values-realizing. *ReCALL, 24*(3), 339-360. http://doi.org/10.1017/S0958344012000183

Appendix A: Target Vocabulary List

wise: Having or showing the ability to make good judgments, based on a deep understanding and experience of life.

nonsense: An idea, something said or written, or behavior that is silly or stupid.

waste: To use too much of something or use something badly when there is a limited amount of it.

master: A person who is very skilled in a particular job or activity.

nature: Someone's character.

rely on: To trust someone or something or to expect him, her, or it to behave in a particular way.

fool: A stupid person.

convinced: Completely certain about something.

plague: A serious disease that spreads quickly and kills a lot of people.

magical: With special powers.

strong: Very likely to happen.

investigate: To try to discover all the facts about something, especially a crime or accident.

matter: A subject or situation that you need to think about, discuss, or deal with.

arrange: To make the necessary plans and preparations for something to happen.

special: Different from normal things, or used for a particular purpose.

wait: To not do something until something else happens.

blade: The flat, sharp, metal part of a knife, tool, or weapon.

take care of: To deal with something.

talented: Showing natural ability in a particular area.

get underway: To begin.