

# THE INFLUENCE OF COMPUTER GAMES ON SECOND LANGUAGE ACQUISITION

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**Abstract:** Nowadays, computer games are considered an integral part of most of teenagers' lives. Young people spend a great amount of their free time on computer games; therefore, there has risen a question, how can the English language teachers gain advantage from this phenomenon. The aim of this study is to find out how far computer games are considered useful in second language acquisition by young learners. I would like to know which types of computer games are the most educational for teenagers. In order to investigate this matter, I conducted a survey among young learners. The survey examined 102 students who play computer games or they used to play them in the past. In the questionnaire, I asked them ten questions about computer games and their influence on second language learning; for example, what kind of games they consider the most educational. Secondly, I inquired, which language skills do they practice the most while playing computer games; vocabulary, pronunciation, or others. The results from my survey, could be a useful tool for English language teachers. They may enrich their lessons with some elements of computer games' vocabulary or grammar structures.

**Keywords:** *computer games, second language acquisition, edutainment, CALL, CAL, e-learning.*

## INTRODUCTION

Together with the great development of our modern society, computers are becoming an inseparable part of people's everyday life. Obviously, computers are used for different reasons such as education, entertainment, business and communication with others. On the crossroads of these areas there are computer games which are extremely popular among

children and teenagers, who spend a lot of their time playing them. Consequently, the teachers should take advantage of this phenomenon and import some of the best elements from computer games to the language classroom.

In order to investigate to what extent computer games are useful for students in their learning process, a survey has been conducted. It concerned some crucial issues connected with

computers, computer games and their influence on children's second language acquisition. The questionnaires also asked about concrete skills which are mastered while playing computer games. The results of this research may be highly beneficial for English teachers, because they will give them some clues concerning the choice of computer games materials.

### **EDUTAINMENT**

The word edutainment is a neologism, created from two words, education and entertainment, which is used interchangeably with the word entertainment-education and it expresses the concept of passing down the knowledge by electronic equipment and at the same time using some elements of entertainment. Undoubtedly, it raises the motivation for learning and memorizing, it improves the efficacy of those processes and makes it possible, to acquire the language faster. A learner is learning while focusing his attention on good fun and amusement.

When it comes to learning and education, two completely different terms need to be compared and contrasted- acquisition and learning. Language acquisition concerns natural attainment of a language by a child, or by second language learner. The process is unconscious, and we are not aware of it. Language is acquired without any help from a teacher or school environment. Language learning is a formal process which is conscious. Moreover, the teacher, or the whole institution takes part in the process. Obviously, language acquisition is a more effective form, because it resembles the first language attainment by a child. Learning through computer games may be a part of second language acquisition; the player isn't consciously focusing on learning a language. He is enjoying his leisure time, at the same time, he is acquiring some new vocabulary, structures and he is becoming familiar with the pronunciation (Aghlara, & Tamjid, 2011, p. 555).

### **COMPUTERS AND LEARNING A LANGUAGE**

With the rapid growth of computers and their influence on our everyday life, English language teachers have been searching for various ways of connecting IT usefully with the curriculum. In the last decade, there have emerged various ways of implementing computers and the Internet into classrooms. E-learning courses consist of at least eighty per cent of lessons via the Internet. Usually the students do not have any meetings in an actual classroom. Blended learning diversifies typical classroom management with some part of the lessons happening at home via the Internet. Nevertheless, the majority of courses are traditional so they do not include any form of computer assistance; some of them are only web-facilitated, which means that they take place entirely in the classroom but some activities are assigned to be done with the help of the Internet. Obviously, learning via Internet has many advantages; it can boost the level of self-motivation and self-discipline as the students can manage their learning time, it can also be useful for the learners who live far away from a school. Nevertheless, there are some drawbacks which hinder this type of learning, it is very hard to measure and control "active participation" through the Internet, hence the teacher needs to express his exact expectations for his students. Moreover, the learners who participate in the e-learning courses may feel isolated and lonely, because of the lack of interactions with their peers in real life. Consequently, there might appear some problems with group work as the students do not know each other and do not have any knowledge of the weaknesses and strengths of their classmates. In order to prevent this situation, the teacher may encourage his learners to enrich their profile with some photos and personal information in order to facilitate the contact with other learners. He must also present detailed expectations towards the students while organizing group work. In addition to those problems, there may appear some

technical difficulties which may interfere the learning process (Maciaszczyk, 2011, p. 193).

Many theories have been formulated and many names describing the place of computers in our work, study and leisure activities. Simon Sergeant (1999, p. 75) names CAL (Computer-assisted learning) and CALL (Computer-assisted language learning). CALL may force some changes in curricula as it makes an attempt to introduce new technologies into schools. Nevertheless, such changes in the classroom require some organisational adjustments, but also transformation in teachers' attitudes toward the new methodologies (Bracamonte, 1999, p. 86). Sergeant (1999, p. 77) writes about some evaluation that he had been carrying out, he numbers observation and students' questionnaires which confirm that using computers in the classroom can be both enjoyable and educational at the same time. What is more, a large number of students claim that attainment of computing skills as well as English language is indispensable to exist in our modern world. Carol A. Chapelle (2001, p. 57) states that because of the enormous popularity of computers, they may be beneficial for language learners. Nevertheless, it should not happen without any guidance on the side of a teacher. Khurshid Ahmad, Grevill Gorbett, Margaret Rogers and Roland Sussex (1985) claim that computers "can make a useful contribution to teaching a wide spread of subjects, including languages, applying a very broad range of methodologies" (p. 4). They also highlight that a computer is a beneficial tool for language learning, as it can provide the learners with interactive learning, it can evaluate their responses. Obviously, computers will never replace the human teacher; however, they can be a useful device which may enhance the process of second language acquisition. They get the advantages from the fact that a computer does not tire, it is impartial, it can handle a very complex interaction, it can provide a learner with feedback, it has

a broad access to topics and themes.

It is believed that vocabulary and pronunciation can be enriched and broadened while playing computer games, as a student is provided with some authentic language. Learning English combined with playing computer games can have a positive effect on second language acquisition. It is characterised by high efficacy in transferring teaching materials and skills through linking learning with a good fun. It activates a couple of channels for the perception at the same time, which facilitates memorizing and acquiring second language. The acquisition of the second language by computer games is interactive, creative, it intensifies the level of motivation. Using this type of language acquisition should be combined with formal instruction, or other forms of formal learning. Moreover, it should be oriented towards specific language goals (Aghlara, & Tamjid, 2011).

#### PLACING THE PROJECT AMONG OTHER STUDIES

As computer games are becoming more and more popular among children and teenagers, their influence is more and more interesting for researchers. In the previous years, there have been some studies which have been investigating computers and their impact on second language acquisition.

Aleksandra Wach (2012) investigated the correlation between computer-mediated communication and the level of autonomy among the students. On the sample of 201 participants, she conducted two questionnaires which confirmed that the students were eager to use computer-mediated communication in order to practice their English. This study confirms the enormous potential of CMC as an innovative tool for increasing students' autonomy. Apart from communication, students spend a great amount of time playing computer games, there are some studies which confirm that it can be a useful tool for English language learners (Cordova, & Lepper, 1996).

Liss Sylvén and Pia Sundqvist (2012, p. 302) conducted a piece of research which consisted of a questionnaire, a language diary and three language tests. They were observing 86 children in the the ages between 11 and 12 and they examined the correlation between the frequency of gaming and second language acquisition. The results suggest that the more the players spend time gaming, the better their performance in second language was. Those who played the most often, scored the highest marks on the proficiency test. This study confirms the statement that playing computer games is an effective way of language attainment.

Jeremiah J. Shepherd, Renaldo J. Doe, Matthew Arnold, Nancy Cheek, Yun Zhu and Jijun Tang (2011, p. 290) express an opinion, that in the age of computers, drills and memorization are tedious and troublesome for children. They prepared an educational game, which can be useful for language learners. The game exposes the player to comprehensible second language input, which provides the children with an interesting, motivating, and relaxing setting. They are convinced that it should allow the player to acquire the language naturally. The name of the game is *Lost in the Middle Kingdom* and it also utilizes total immersion, it focuses on the language's culture to create a holistic experience.

In their research, Yıldız Turgut and Pelin Irgin (2009) were observing and doing interviews with ten Turkish students who were learning English but also were playing computer games in Internet Cafes. In their findings, they describe that children notice the improvement in learning new vocabulary. In order to understand some new words, the students developed some strategies such as looking it up in the dictionary, asking a friend for help or guessing the meaning from the context. What is more, the new vocabulary is used in the naturalistic setting and it gives the students some hope for using the new words in the future, because most of the games use the vocabulary repetitively. A typical classroom

sometimes fails to provide such conditions. The next very important aspect is motivation. The participants of the study admit that they are motivated to learn new vocabulary and grammar structures as it is vital for them to win the game. This gives them an opportunity to learn new structures without formal teaching. What is more, they are highly motivated to communicate in English as they communicate with other players online. In that moment, the communication becomes important not only in the virtual life but also in a real one.

## RESEARCH

A survey was conducted which concerned computer games and their influence on Second Language Acquisition. The questionnaire consisted of ten questions, some of them were closed and some of them were open. The questionnaire was only given to those people who play computer games now, or they used to play them in the past. Consequently, the topic of the survey is familiar enough to the participants.

The research question investigates if there is a connection between playing computer games and learning a second language. The researcher is trying to estimate to what extent computer games influence the process of second language acquisition. The research tool that was used was a questionnaire. It consisted of ten questions, nine out of ten were closed-ended questions and in the open-ended one, the students were asked to write some structures in English that they remember from playing computer games.

Participants. There were 102 participants who took part in the survey. The majority of them was men, there were 83 male participants. There were 19 women in the survey. As far as their age is concerned, there were 16% of students who were between 10 and 16 years old. 72% of them were between 17-24 years old. Only 12% of the participants were adult learners (25-35 years old). As it was mentioned before, the questionnaire was completed only by those students who used to play computer games in the past or they do it now.

The results of the study. The first question concerned the frequency of playing computer games. The answers are varied. 2% of people play twice a year, 11% of them play once a month, 8% of students play every weekend. Nevertheless, the majority of interviewed people play a couple of times a week (33%) and everyday (22%). The conclusion can be made, that people who took part in the survey are experienced players.

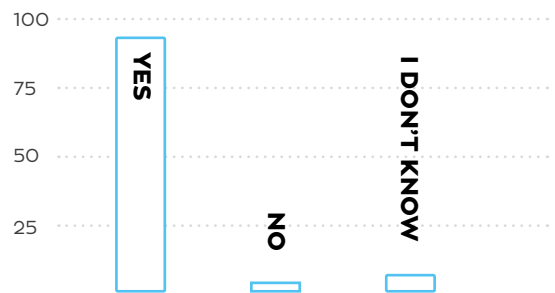
The next question investigated what kind of computer games do the learners prefer. The answers were diverse too. The type of game which gained the biggest number of votes is games of skill (20%), then there are strategic games (17%), adventurous (16%), fictional (15%), sports (12%), logic (9%), simulation games (8%), and only 3% of those questioned prefer educational games. The results suggest that educational games are not the most popular among the students, they prefer something more informal, disobliging and adventurous. Consequently, it would be beneficial to use those games in a more educational context.

The next question was quite simple; nevertheless, it was crucial for the whole study. The researcher asked if there was any English language in the computer games that they play. The outcomes of this question are unambiguous, 98% of those interviewed claim that there is some English language in their games. This is a huge opportunity to learn and improve one's language skills. Having established that English is a popular language in the computer games' world, the researcher asked in what form the language is transferred to the games' structure. The results are equally distributed; 23% of the participants state that English is expressed through instruction, also 23% claim that instructions are in English and the third 23% suggest that interface in their games is presented in English. The biggest percentage, which is 25%, points at dialogues which are in English. 6% of the interviewed chose the answer "other". When they were asked to specify them, they responded that other ways in which English is used are: "the whole universe of

a game (objects, commercials)", "communication with other players, the whole game and the name of the game (absolutely everything)". As we can see, most of the parts of the games are not translated in Polish, they are in English. Therefore, when the children play them, they immerse in the language.

The next question was the culmination of the study. The question was asked "Do you think that playing computer games helps you in your Second Language Acquisition?" Being aware of the fact that it is only students' subjective opinion, the answer to that question can be a significant indicator of how the students feel about computer games and their positive influence on their learning process. Moreover, the results from this question are almost unanimous. 93% of the players confirm that in their opinion playing computer games is highly influential for their language acquisition. 4% state that they do not know if there is a correlation between their language acquisition and the frequency of playing computer games. Only 3% of the participants said that playing computer games does not help in their learning process. Such a huge majority of votes suggests that playing computer games must have some kind of influence on the process of second language acquisition, in this case English language.

**Do you think that playing computer games helps you in your Second Language Acquisition?**



**Fig 1.** Bar graph illustrating answers to the question *Do you think that playing computer games helps you in your Second Language Acquisition?* Source: the author's original illustrations.

The following inquiry concerned establishing which particular skill do the players master during playing computer games. Despite the variety of answers, some of the answers gained the most votes. It seems that reading (38%) is the most developed skill while playing computer games. Taking into consideration that most of the games are created in English, students are obliged to read all those instructions, interfaces, dialogues with other players and other utterances in English. That is the skill which is mastered all the time while playing by them. The second position is occupied by vocabulary and grammar structures, with the score of 21%. The next skill which is often improved while playing computer games is listening (17%), it is mostly mastered during listening to orders and instructions in English. Regardless of the fact that not all of the words are understandable for the player, he/she needs to grasp the basic meaning of the sentence in order to communicate with other players or to understand the game. Because of that, the students pay attention to the listening and at the same time they acquire the language. Writing got 13% of the answers, those participants mostly concentrated on writing in English with other players from different countries. English is the language of communication for most of the players. The last one is speaking and pronunciation which got only 11% as most of the games don't include the option of speaking. Even if they include that option, it is hard to examine the quality of spoken utterance.

The next part of the survey wasn't actually a question, it was more like a challenge for the participants. They were asked to write one word or a structure which they have remembered since the last time they played computer games. The results were astonishing. Out of 102 participants only three people didn't write anything and one person wrote that he doesn't remember anything. The rest of the interviewed, wrote words and some interesting structures. Here is the list of the structures which had been written by the students. Seven out of them are written with faults, they are underlined.

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-, -, fuck, fuck, eternity, eternity, horse, horse, blue, Obfuscate, join, wild hunt, u wot m8, Hey cousin, let's go bowling!, rifle, Dandy!, We must give them no quarter, play, new, hostages, vivid, anticipated, War. War never changes, Vault, cooperation, wage, vitriolic, ascension, Nothing is true, everything is permitted, Going downtown, unleashed, pursuit breaker, Smoke, pass, carry, Game over, terrorist wins, Follow that damn train CJ, carried, cyka, tower, if I were you I would buy ring of wind, loading, Hi Kids! Do you like violince, apple, max, excellent, stone, fallout, stream, you lose, curve, The right man in the wrong place can make all the difference in the world, corner, equipment, Affirmative, chicken (wuss), marvelous fib, Bullet drop in this game depends of the type of a gun you use and it's muzzle velocity, fire in the hole, havoc, ancestor, augmented, looking for group, Tell me about it, truce, new game, you're fucking insane, insomnia, "Achievement Get!", Entropy, contribution, core, forward., vilified, teammate, Holy Graal, Multikill, Follow that damn train CJ, defusal, well played, achievement, This keep is no more, Chest, I fucked your mother, fortress, What a pompous ass, It's time to smell the ashes..., stallion, alphabet, fuck off, defalut, mice, star, movie, go, shoot, goal, spread, I smell black magic. :D, nigga

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As we can see the underlined words are misspelled, nevertheless students are familiar with them. Secondly, even while learning the vocabulary from a wordlist at school doesn't give the students the certainty that they will remember both the spelling and the pronunciation of the words. Looking at the list, there is a visible disadvantage of spending time in the virtual world. Many players remember the swearwords. Certainly, the creators of the games try their best not to include them in the game. However, the players spend a lot of time talking with each other, the results of those conversations cannot be censored by the game's creators. Another interesting conclusion can be made, there are some complex sentences written by the students. The fact that they are

able to write the whole sentence in the foreign language correctly means that the process of language attainment is in progress. They are able to remember even the long and difficult utterances such as: "The right man in the wrong place can make all the difference in the world", "Bullet drop in this game depends of the type of a gun you use and it's muzzle velocity", "if I were you I would buy ring of wind", "Nothing is true, everything is permitted" and others. Thirdly, some of the structures and words were new even for the researcher. "U WOT M8" is a shorthand for "You what, mate?". "Cyka" is a Russian word for bitch, "wuss" is a person who is physically weak and ineffectual, often it is a male person with low courage factor. "Stallion" is a two-door coupé, it can be seen in *Grand Theft Auto I*, *Grand Theft Auto III*, *Grand Theft Auto: Vice City*, *Grand Theft Auto: San Andreas*, *Grand Theft Auto: Liberty City Stories*, *Grand Theft Auto: Vice City Stories*, *Grand Theft Auto IV* and *Grand Theft Auto: Chinatown Wars*. It is a reference to English word "stallion" which stands for an uncastrated adult male horse.

The last question was a conclusion for the participants and a kind of reflection concerning transferring some of the words and structures from games into the classroom environment. The interviewed were asked to decide if they would like to take advantage of the language from the games during their formal teaching at school. The results are significant for the study, the majority of the players (67%) claim that they would like to use different elements from the games during their formal learning process. 24% of them said that they don't know, and only 9% confirmed that they wouldn't like that. Those results show, that students would like to incorporate some of the elements of the language used in the games into the classroom.

## CONCLUSIONS

The results of the study has given much interesting and significant data to researchers dealing with second language acquisition and also to English teachers. The starting point of the discussion is the

fact that young people are spending a lot of time playing computer games. It may be destructive for their interpersonal contacts as well as for their health. It would be extremely hard to change this tendency; therefore, the teachers should not think about changing it, but instead they should try to take advantage of it.

This study and its outcomes suggest that playing computer games is an advantage for students' second language acquisition. As was written before, the majority of them (93%) state that while playing computer games they learn English. This number is significant and it supports the conclusion concerning the beneficial influence of computer games over players' second language acquisition.

Secondly, it is worth mentioning that the vast majority of the participants (98%) claim that most of their games are conducted in English. Obviously, it is an enormous resource of authentic language for the learners. Not infrequently, the students are bored with the artificial language that is used in the classroom. Additionally, the language used in the computer games is more real-life and accessible for the learners.

The majority of participants highlight that they develop all of their skills while playing computer games. Nevertheless, reading seems to be the skill which is practised the most often (38%). The majority of English learners (67%) and computer games players would like to combine playing computer games with learning English in the classroom.

It seems that now is the time to combine activities popular among learners, which is playing computer games, with learning English in the classroom. English teachers need to remember that "technology is no longer part of the future and they should make an effort to become »literate« in its use and to incorporate it into the teaching/ learning process" (Bracamonte, 1999, p. 90). The idea presented above stands as a perfect solution of how to combine education with entertainment. Incorporating some elements of computer games into the classrooms may be beneficial for the learners. The language learning process becomes

more enjoyable and the stress linked with the learning process is drastically reduced. The results of this study is not only interesting information for both English language teachers and researchers, but also it may become a starting point for future

research. As this study has some limitations, which are imposed by the fact that it relied only on self-report data, there is an urgent need for more in-depth research.

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