РОЗДІЛ 10. ІНФОРМАЦІЙНО-КОМУНІКАЦІЙНІ ТЕХНОЛОГІЇ В ОСВІТІ

THE USEFULNESS OF VIDEO GAMES IN FOREIGN LANGUAGE DEVELOPMENT
КОРИСТЬ ВІДЕОІГОР У РОЗВИТКУ ІНОЗЕМНОЇ МОВИ

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We are surrounded by different information technologies which can serve as tools for language learning. Investigation on video games and the effect of playing has been conducted by a number of researchers. The outbreak of information technology, and the popularity of video games that are designed for education purposes, are starting to play a meaningful role in the promotion of effective learning.

The positive and negative effects of video games have been a popular research area of researchers. In the literature we can found statements for and against the practicality of computer games in encouraging language learning. The positive side of using video games shows us that various social and cognitive skills can be developed. The negative side of the frequent use of computer games shows that it can cause addictions and can also cause negative psycho-social tendencies.

This research is based on the usefulness of video games in education. Playing the proper games may help students to learn a lot and improve their passive and active skills. Different types of video games have been made for students to develop interest for studying

Games are interactive; there is a connection between the player and the game. The player reacts to the gameplay and the game reacts to the gamer's activity. The games let the players feel that actions are co-decided and the world they are in is co-created by themselves, not only by the game designers. Actions and decisions depend on each player, so the path the game takes also differs. V

Video games can be fun and rewarding and with the help of it students can be motivated to learn a language by using the proper tools and games. The game's immediate feedback based on the player's action also helps maintain motivation.

Key words: computer games, video games, gamification, language learning, influence.

В останні роки відеоігри стали важливою частиною розваг як для дітей, так і для дорослих. Розваги набули нової форми з появою комп'ютерних та відеоігор і більший акцент почав ставиться на розвиток аудіо- та візуальних навичок. Дедалі більше людей починають вибирати цю форму відпочинку, і дедалі більше персонажів відеоігор стали частиною наших днів. Популярність відеоігор почала конкурувати з популярністю фільмів, казок та інших форм гри.

У формулюванні Джуула, відеоігри – це набір систем, заснованих на сукупності правил, з якими з часом гравця буде пов'язувати якась емоційна прив'язаність. Багато дослідників формулюють свої погляди на відеоігри так, що в їх баченні самі ігри є частиною набору систем, заснованих на правилах, із використанням різних навичок.

Туров класифікує відеоігри таким чином: бойовики, пригодницькі, веселі, стратегічні, спортивні та розвиваючі.

Наступне дослідження має на меті пролити світло на користь відеоігор. Учасники дослідження були вибрані випадковим чином. Учасники заповнили онлайн-опитувальник, що складається з 8 частин. Перші запитання стосувались відеоігор та часу, витраченого на них. Ці запитання супроводжувались питаннями, які намагалися розкрити те, які навички були використані або набуті під час гри. Нарешті, остання частина опитувальника намагалася знайти відповіді на те, які мовні навички вони потребували або засвоїли під час гри у відеоігри.

Загальні результати добре показують, що більшості респондентів відеоігри допомагали розвивати або набувати мовних навичок. Респонденти мали змогу назвати навички, які вони набули або розвинули під час гри. Серед цих навичок більше підкреслювались навички читання та перекладу. Крім того, результати добре показують, що розвиток словникового запасу все ще був на першому плані. Звичайно, ми не можемо нехтувати тим фактом, що гравці використовували як письмові, так і усні форми спілкування, коли вони грали в онлайн-форматі.

Ключові слова: комп'ютерні ігри, відеоігри, гейміфікація, вивчення мови, вплив.

Introduction. Over the past few decades, video games have become important part of children's play and adult's leisure time. Entertainment via technology took on different forms, from audible to visual manifestations, with video games following those trends of leisure enjoyment after the birth of the computer. In the past few decades, more and more people, especially children, started playing video games and many video games characters became cultural icons. The technology of video gaming has advanced far enough to be compared to movies, cartoons and books in their capacity to tell an engaging story, to be well presented and directed.

The definition of gaming. What is a video game? Based on the definition of Juul "a game is a rule-based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels emotionally attached to the outcome, and the consequences of the activity are negotiable" [6].

Longman Dictionary of Language Teaching and Applied Linguistics defined video games as "an

organized activity that usually has the following properties: a particular task or objective, a set of rules, a competition between players, and a communication between players by spoken or written language [7].

Based on the study of J. Turow video games can be divided into the following genres [8]:

− *action games;*
− *adventure games;*
− *casual games;*
− *simulation games;*
− *strategy games;*
− *sport games*;
− *edutainment games.*

Action games are fast-paced gameplay with a focus on movement, combat, hand-eye coordination, and reaction time. The most played action games are GTA, Legend of Zelda, Batman etc.

Adventure games tell the story of its character or characters on a literal adventure. An adventure video game is usually plot-driven. This serves to focus the player on the singular task of his or her adventure. Popular adventure games are.

Casual games are fun, simple gameplay that is easy to understand. Simple user interface, operated with a mobile phone tap-and-swipe interface or a one-button mouse interface. Under casual games we think of:

a) puzzle games – Bejewelled series;
b) hidden object games – Mystery Case Files series;
c) arcade games – Plants vs. Zombies;
d) strategy games – Cake Mania series;
e) trivia games – Bookworm Adventures series;
f) card or board games – Mah-jong.

Simulation games – a game in which participants are provided with a simulated environment in which to play. A type of digital game that presents the player with a simulation focused on a real-life scenario.

Strategy games – games that make you think. They make you use your brain thing and it hurts. There are various types of strategy games, sub-genres, such as real-time strategy and turn-based strategy. Strategy is an element that can be found in many non-strategy games, referring to any time where it requires you to think about a tactic. A game in which the players' decision-making skills have a high significance in determining the outcome, such as chess, checkers or go.

Sport games – A sports game is a video game genre that simulates the practice of sports. Most sports have been recreated with a game, including team sports, track and field, extreme sports and combat sports. Some games emphasize actually playing the sport (such as the Madden NFL series), whilst others emphasize strategy and sport management

Edutainment games – Edutainment video games (a portmanteau of Education and Entertainment) are video games that have an educational goal as part of the game's mechanics, but using an entertaining form of gameplay, sometimes using licensed video game characters. Typical Edutainment games teach the player skills such as typing, math, language, geography, and history, among others, but can also be used to develop social skills such as teamwork and sharing.

If video games are well designed and serve educational purposes, the games can be an effective tool for teachers. Number of research confirmed that video games in general have positive influence on social and cognitive development of children, including positive effect on academic achievements, cognitive abilities, motivation, attention, and concentration [5].

With the help of video games different abilities of the student are forced to be used while playing and mastering the game itself. Throughout this process players not just only play, but they also have the opportunity to acquire a language. These games stimulate senses, include strategic thinking and develop motivation for learning. Gamers think, analyze and plan to achieve goals. As an education tool, video games are enjoyable, straightforward, adaptive and gratifying.

One of the main reasons why researchers began to investigate the effectiveness of this new area is defined by Johnson. Johnson clarifies, that *a language learning game must be able to distinguish between all of the possible variability in the language to provide useful feedback* [4].

Data collection and the questionnaire. To collect data for the study, the participants were selected random. Each participant was sent a hyperlink leading to the online survey. The sharing and spreading of the hyperlink was controlled by the researcher. The questionnaire was conducted in English. The questionnaire was divided in to 8 sections. The first two sections ask for background information of the participants. The concept of gaming and gaming frequency were investigated in the following ones. This was followed by a question related to the skills the questioners acquired through video games. This question was based on their personal beliefs. The following question was a multiple choice question, questioners had the opportunity to choose from given alternatives. With the help of this question we have tried gathering information of the type of skills the participants acquired while playing video games. Finally, the questionnaire gathered information about the skills of language needed in gaming and learned from gaming. All questions were mandatory. The questions are presented below section by section.

1) Age.
2) Gender.
3) Do you play or have you ever played English video games on a computer, console, web browser or mobile device?

4) If you play or have sometimes played computer games (other than educational ones), which of the following options describes your gaming the best?

5) Which of the following statements describes you the best?

6) What kind of areas of language have you learned or what have you improved in when gaming in English?

7) Have the skills you have acquired through video games benefited you at school or in your studies?

8) Have the skills you have acquired through video games benefited you elsewhere outside games and studies?

Results. The first section will examine the background details of the participants. The data was analyzed using both quantitative and qualitative methods.

Of the 36 respondents who answered question one regarding respondent's gender 10 (27.8%) were male and 26 (72.2%) were female. As the results reflect more women filled out the questionnaire then men. Further on these results can serve as a basic of another study to analyze the gender distribution in more detail and showing the connection towards video games of both men and women.

Table 1

Gender Distribution

	Number	**Percentage**
Male	10	27,8%
Female	26	72,2%

The second question shows us the age distribution of the participants. From the data we can see that age of the participants is various and it reflects on the fact that the participants are already familiar with English or they have been in connection with it in some kind of form (fig. 1).

The following section will go through the gaming habits of the participants. The aim of this part was to see how many participants play games and the frequency of their gaming habits.

Only 5.6% of all respondents claimed to have no experience in digital games in English. The majority, 94.4% of the respondents have some form of experience with games

In Question 4 the frequency of the participants' gaming sessions was surveyed. The results of playing games on a computer, game console or a handheld device were mixed, as the results show most of the participants play at least once a week or even every day. The following question was in close connection with the previous one, however in this question the duration of playing time/day was asked. The results show similarity to the gaming frequency of the participants. Those who play day by day they spend more than two hours gaming, while it is interesting that those who don't play on a daily basis they also spend more than 3-4 hours when they decide to choose this form of relaxation. There is no big difference in playing time between those who spend more than an hour – 53% or those who spend hours playing games – 47%. These numbers are in close connection and reflect on the results of the frequency of gaming habit. The frequency of their gaming habit shows that 70,6% of the participants play almost every day (fig. 2, 3).

The following question asked the respondents to name specific language skills they had needed while playing. The respondents were given several options and they had the possibility to choose more than one option. As the results show reading comprehension skills (28) and listening comprehension skills (23) are the two most widely chosen options. 11 answers were picked for oral conversation skills which was the least chosen option. It is interesting to denote that those
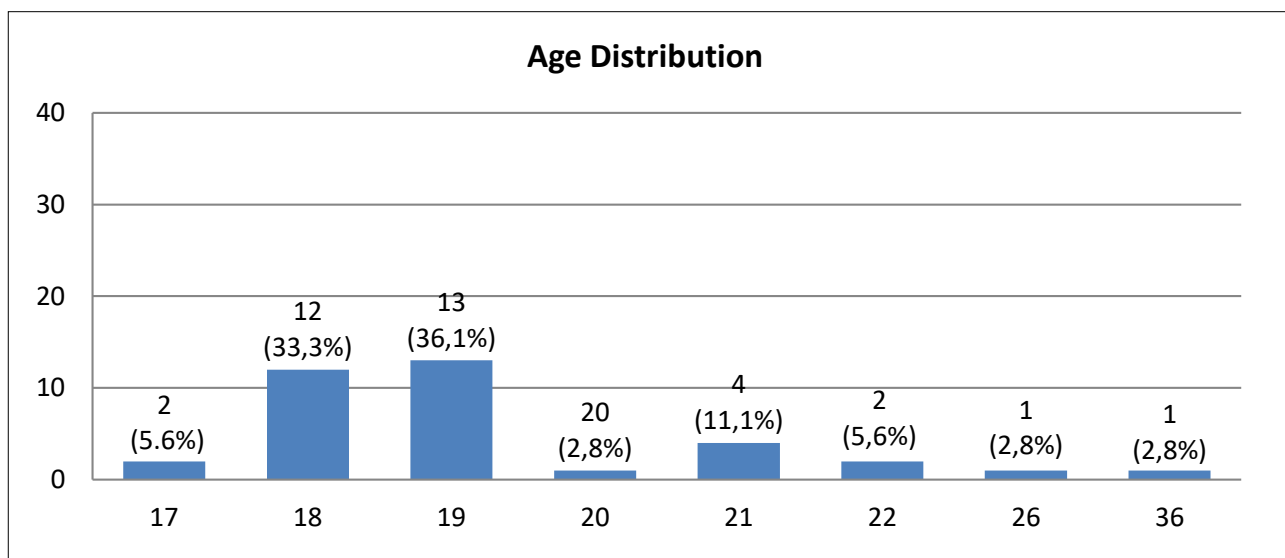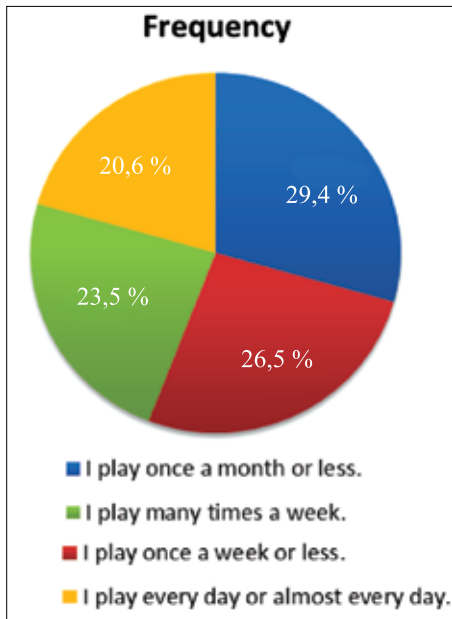

Fig. 1. Age distribution
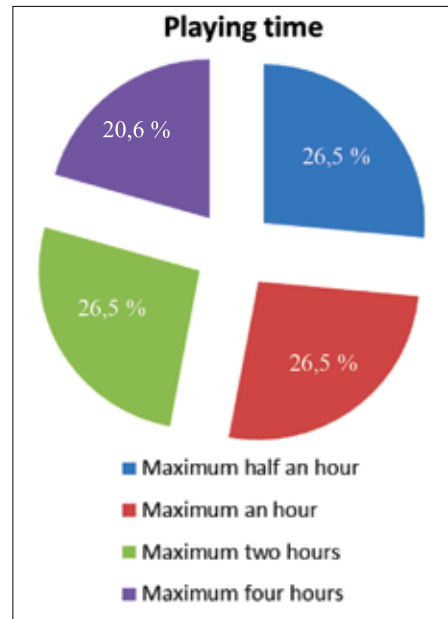
Fig. 2. Frequency of gaming sessions
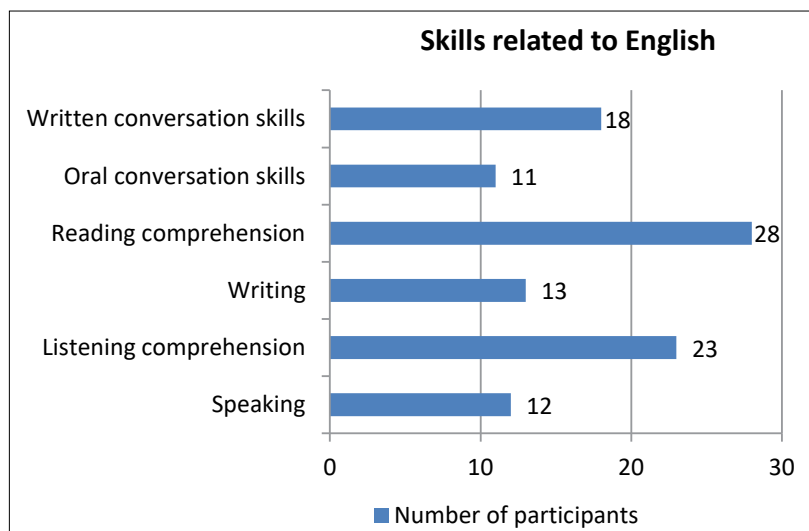

Fig. 3. Playing time/day

Fig. 4. Skills related to English

skills are the most dominant skills which are passive language skills (reading and listening). This reflects that most of the games are based and built up in a way that these are the prioritized language skills. While on the other hand the active language skills (speaking and writing) seem to be less used by the gamers. However, we cannot go pass the fact that the usage of these skills highly depend on the game type. Online games mostly require active passive skills because participants have to chat and speak to each other while offline games are mostly based on passive language skills where most of the games are story based, therefore the focus is on the reading and translating skills (fig. 4).

Question 5 asked the respondents about the usefulness of playing games concerning their English studies. As seen from the results more than 95%

percent of the respondents believe that playing video games helped improving their English language skills in some form. 45,7% of the respondents state that playing video games had a significant help in their English language studies (fig. 5).

The following question would like to specify what skills had been learnt or improved by playing video games – *What kind of areas of language have you learned or what have you improved in when gaming in English?* The respondents had the possibility to choose from several options, they could choose more than one option. From the collected data it became clear that vocabulary, phrases and slang language were the most improved language area. Apart from vocabulary development other important skills were improved which help developing English language

skills – reading skills (54,3%), pronunciation skills (48,6%) and translations skills (48,6%) were chosen widely by the respondents. An interesting fact shows that many respondents believe that playing video games helped developing their conversations skill (45,7%). Language history, culture-related issues and grammatical knowledge were believed to have improved the least (fig. 6).

The last two questions asked the respondents about the experienced benefit of playing video games in- and off school environment regarding their English performance. 48,6% of the respondents stated that playing video games had an effect on their English language skills. Only 2,9% believed that it did not have any influence at all. 28,6% said that the benefit

of playing video games had been great. If we look at the positive replies it is clear that more than 97% of the respondents claim that playing video games had some kind of positive effect on their English language skills and they have managed to utilize in their school studies.

If we compare the results gathered for these questions we will see that to some extent the respondents have benefited of their gathered skills in- and both out of school environment. 57,1% claimed that they have experienced positive effects of playing video games off-school use. It seems that the English used on the Internet and learnt through video games had made the respondents more confident in using English in real world context (fig. 7, 8).
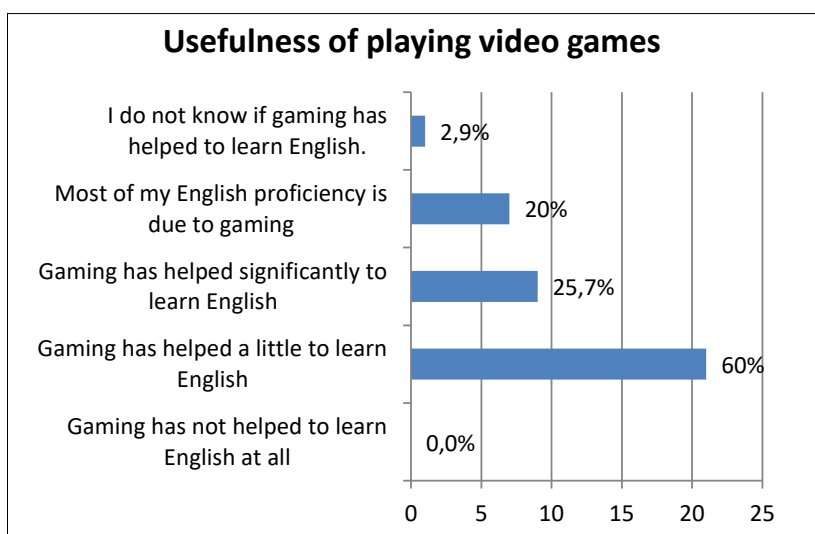

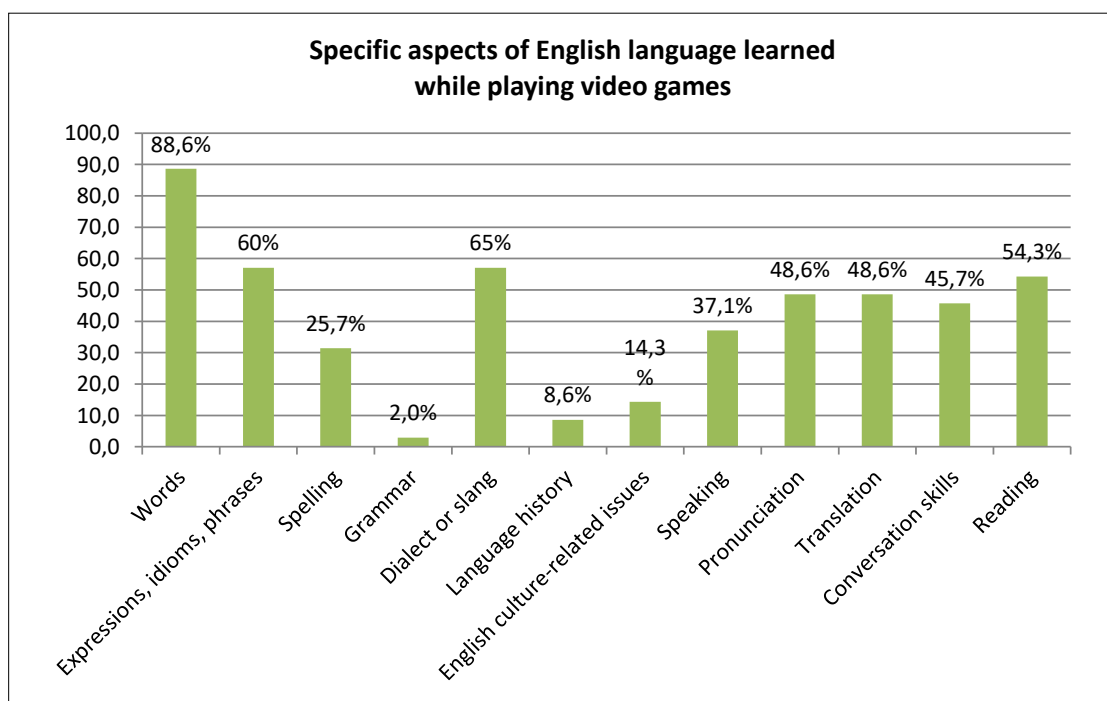**Fig. 5. Usefulness of playing video games**
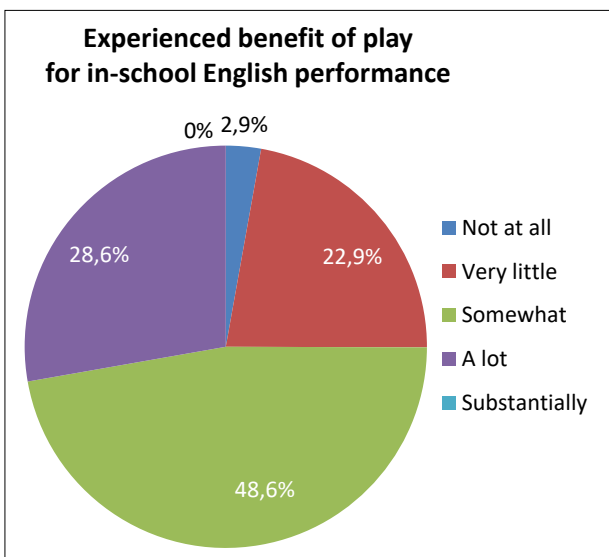

Fig. 6. Specific aspects of English language learned

**Experienced benefit of play
for in-school English performance**

0% 2,9%

28,6%

22,9%

48,6%

- Not at all
- Very little
- Somewhat
- A lot
- Substantially

**Fig. 7. Experienced benefit of play for in-school
English performance**

**Experienced benefit of play
for English skills in off-school use**

5,7%

20%

37,1%

37,1%

- Not at all
- A little
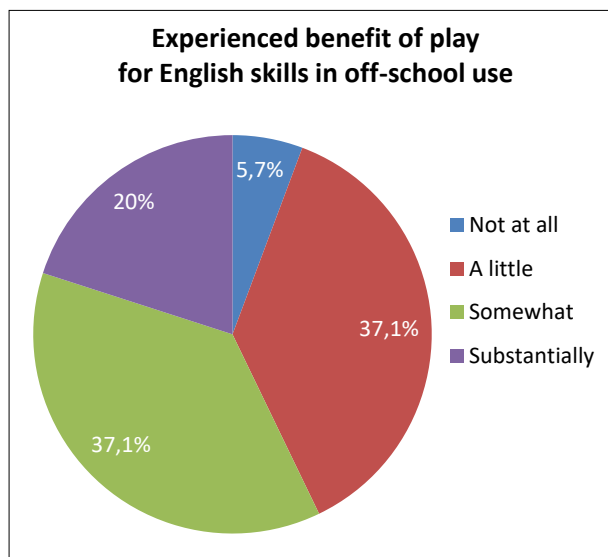- Somewhat
- Substantially

**Fig. 8. Experienced benefit of play for English skills
in off-school use**

Conclusions. The current study has analysed the view on whether video games are beneficial for English learning. As seen from the results more than 95% percent of the respondents believe that playing video games helped improving their English language skills in some form. Participants were able to identify different language skills which they have gained or developed through playing video games. Vocabulary-related areas of language learning seem to benefit the most from playing games. Reading skills (54,3%), pronunciation skills (48,6%) and translations skills (48,6%) were chosen widely by the respondents too. Based on these numbers we can see that reading skills and vocabulary development are the two most required areas of language development. Nevertheless, we cannot go past the fact that during online games oral and written form of communication is required by the players. Apart from language skills the frequency of gaming habits were measured as well. The frequency of their gaming habit shows that 70,6% of the participants play almost every day.

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