# Научно-исследовательская работа Иностранный язык

What can playing computer games teach us about the world?

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### Introduction

For years video games have been criticised for making people more antisocial, overweight or depressed. But now researchers are finding that games can actually change us for the better and improve both our body and mind. So, what can we learn about the world by playing various video games?

## The aim of the research is

- to discuss if we can learn anything useful about the world by playing various video games.

#### The tasks are:

- to explore if we can learn something new about the world by playing video games
- to explore if we can learn any useful skills by playing video games
- to explore if we can improve our learning capabilities.

# - An overview of educational video games

There has been found a game which can teach about the ancient world. It is Assassin's creed. Ubisoft, the game developer, leaned it into AC's educational potential, with very cool results. They did a lot of research to recreate Ancient Egypt and Ancient Greece in AC and they released an educational discovery tour for each game that lets you look around the environment with no violence, enemies, or time constraints.

One can learn about the Olympic Games, and how Sparta trained its soldiers in Ancient Greece, with real historical figures acting as tour guides, or jump over to ancient Egypt to check out mummies and climb on the pyramids. There are also points of interest scattered around the map if you want to do some extra reading. Obviously, Assassin's Creed can't teach you everything you need to know about the ancient world - but the games do make that world come alive for people who are reluctant to learn.

Besides the latter there are games for children which can teach very useful skills, for example, Minecraft, the Education Edition of which features over 500 pre-made lesson plans for things like coding, history, English, and much more.

Another popular game is Roblox, which is a game creation platform with over 100 million monthly players that's especially popular among kids and teenagers. It's a way to create your own games and worlds, and check out what other players have made. Roblox is great for absolute beginners, and it lets kids

learn how to make a lot of different game genres, including a battle royale, an adventure game, and arcade games. Roblox also provides free resources and support for kids to learn coding and game design skills. The company also has instructions for teachers who might want to use it in class.

# Studies of the influence of video games on our cognitive capabilities

A new study shows for the first time that playing action video games improves not just the skills taught in the game, but learning capabilities more generally. "Prior research by our group and others has shown that action gamers excel at many tasks. In this new study, we show they excel because they are better learners," explained Daphne Bavelier, a research professor in brain and cognitive sciences at the University of Rochester. "And they become better learners," she said, "by playing fast-paced action games."

According to Bavelier, in order to sharpen its prediction skills, our brains constantly build models, or 'templates,' of the world. The better the template, the better the performance. And now we know playing action video games actually fosters better templates."

People who play action-based games make decisions 25 percent faster than others and are no less accurate. It was also found that the best gamers can make choices and act on them up to six times a second, four times faster than most people. Experienced gamers were shown to be able to pay attention to more than six things at once without getting confused, compared with the four that most people can normally keep in mind.

The effects are not always so positive, however. Indiana University researchers carried out brain scans on young men and found evidence that violent games can alter brain function after as little as a week of play. It affected regions in the brain associated with emotional control and caused more aggressive behaviour in the player. But Daphne Bavelier says that violent action games may actually have the strongest beneficial effect on the brain.

#### **Conclusion**

As we can see, there are good and bad things in video games. They can teach us a lot but they also can change us in a bad way. We believe we must control how much time we spend playing video games. We should remember that there are other things in life. We need to talk to our friends and family more and enjoy life off-line.

# **Sources of information**

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