

Chapter 5

Video Games and Indirect Learning: A Study of 12 Games That Can Teach

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ABSTRACT

As a result of rapid technological advancement, educators are turning to alternative pedagogy to instill valuable knowledge and transferable skills to their pupils. Esports and video games are being examined as a potential avenue. This research, backed by empirical data, explains how the content of particular games can indirectly teach players real-world skills and advanced academic concepts. Five different soft skills (responsibility, communication, teamwork, problem solving, leadership) and two core academic areas (mathematics, language arts) are examined using in-game elements of the following 12 video games/video game franchises as evidence to support claims of video games being a source of indirect education: Neopets; League of Legends; The Elder Scrolls V: Skyrim; Overwatch; Legend of Zelda: Breath of the Wild; Tetris; Portal; Fortnite; Assassin's Creed; World of Warcraft; No Man's Sky; and Spyro.

LEARNING WITH VIDEO GAMES

There is a lot of conversation in the industry about how esports and video games at large are beneficial in helping players learn and develop real-world skills (North America Scholastic Esports Federation, 2020), but few provide detailed examples to back up their claims. Video games, specifically when designed for entertainment purposes, have an ability to teach real-world concepts indirectly and intrinsically to players without being branded as “educational.” By playing through nearly any game title, players can indirectly learn valuable life skills and academic lessons through the lens of their digital games due to real-world parallels. In other words, learning from video games is like intentionally seasoning your vegetables to make them taste better. You are still getting the nutrients you need from the vegetables, but they are a little easier to swallow with some salt and pepper. The same is true with video games. Fundamental life lessons and skills are still being taught, but they are easier to learn and digest because the games

DOI: 10.4018/978-1-7998-7069-2.ch005

are fun and immersive. So then, how exactly *are* video games teaching all these lessons across multiple disciplines and soft skill areas? This chapter intends to fill in these gaps with empirical data based on independent field research conducted over the course of 15 years via video game immersion.

“Esports” and “video games” are terms that are often used interchangeably, but they mean different things. *Esports* are defined as a video game played competitively, while *video games* are simply games played electronically. The biggest contrast between esports and video gaming is the word “competition.” Esports are generally considered to be the competitive version of video gaming. Many who choose to join an esports team, either professionally or at a college or high school, are most often embarking on the journey to *compete* with and against other players for glory, or to become a professional player, similarly to traditional sports. However, there is also a large percentage of people who prefer to play video games in a more relaxed and casual setting, sometimes alone and sometimes with others. They are generally referred to as gamers rather than esports players due to the competitive element being taken out of the equation. There is a fine line between playing esports and playing video games, and the best way to remember the difference is to recognize the competitive nature of esports as compared to casual gaming as a pastime. In this context, esports is to the NBA as video games are to a pick-up game with friends at the local basketball court.

While most of this text exclusively highlights the many ways esports can help educate its players, this chapter goes into greater detail about how the content of the video games themselves can aid in educating. In this chapter, we examine the specific and nuanced ways different genres of video games, whether played competitively or casually, can teach organically with their contents. A non-exhaustive list of five different soft skills and two “common core” learning areas are examined using empirical data to demonstrate that video game play, at any level, across any genre, and on any platform (PC, console, etc.) can teach players valuable life skills and advanced academic concepts through indirect, entertainment-based interactions.

Soft Skills in Gaming

Responsibility
Communication
Teamwork
Problem Solving
Leadership

Core Academic Areas in Gaming

Mathematics and Economics
Language Arts

SOFT SKILLS IN GAMING

Soft skills are defined as non-technical skills that relate to how someone works and interacts with colleagues or team members. Specifically, soft skills include those that help us solve problems and manage our time efficiently (Society for Human Resource Management, 2020). According to hiring managers in

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