Chapter X
Double Play: How Video Games Mediate Physical Performance for Elite Athletes

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ABSTRACT

Just at the moment when gaming has achieved broad cultural acceptance, a new way of using commercial sport video games is emerging, which adds a new perspective on the educational and social value games may offer for learning. This research calls attention to how elite athletes are currently using commercial video games for training purposes and the potential the games may afford for all elite athletes who can play as their “second-self.”

INTRODUCTION

In March of 2005, a University of Wisconsin’s Men’s basketball player, with whom I was performing a naturalistic observation, announced to me that he better understood the offense of his opponent, the Minnesota Gophers, by playing a video game. On further explanation, Jake (name changed to protect player’s privacy) reported that before the scheduled Saturday game, he had played “virtually” as one of the Gophers against his own team, in the commercial video game Electronic Arts’ (EA) NCAA® Basketball 2005. Without any coaches, Jake had “whizzed” through a simulation he thought was very close to the real game he later played.

For a form of entertainment, the video game had an impressive ability to help Jake understand a component of the game. Indeed, there is a long list of research that is exploring the educational qualities and good learning principles inherent in good commercial video games (Gee, 2003; Squire, 2007). But how did such a simple form of entertainment help an elite athlete better understand his physical opponent? This is where my journey
investigating how and why athletes are using video games for physical training begins.

It is hoped that this paper will help those trying to grapple with how to teach someone a simple component to build higher-level intelligence. Anyone who has ever contemplated how a commercial video game can be used for learning will find something resonant in the research and anecdotes this paper offers from athletes using their sport game counterpart. For teachers trying to understand ways to teach students, in an American educational system where “Every Child Gets Left Behind” (only 52% of students in the United States 50 largest cities complete high school with a diploma); the video game may someday be widely accepted as a multimodal learning tool that can adapt to every student’s need. It is my hope that by presenting results from a survey and observational research with the Division I NCAA® University of Wisconsin Men’s soccer team, and anecdotes from interviews with other elite athletes, that we can then begin to understand how athletes are using games and the potential they may hold as learning tools.

BACKGROUND

While the emphasis in classical game theory has been on what constitutes play, sport video games deliberately blur the lines between a game and an experience, and between places of play (the “magic circle”) and places of everyday life (Salen & Zimmerman, 2003). The understanding of sport video games as immersive and realistic enough to be an effective simulation, runs in direct opposition to the theorization of play as open-ended, although kept intact by the acknowledgement that these simulations give players numerous choices and are fun. The use of video games for athletic training purposes supports the notion and model of game based learning environments (Squire, 2007).

The term “edutainment” has been suggested for video games that have an educational purpose as well as providing entertainment. But this term is still inadequate to define sport video games. As Resnick (1998) explains, when people think about “education” and “entertainment” they tend to think of them as services that someone else provides. Studios, directors and actors provide an individual with entertainment; schools and teachers provide education. Edutainment companies try to provide both. Sport video games are primarily thought to be strictly a form of entertainment. However, they potentially afford athletes a designed experience that provides an opportunity for usage as a tool for learning, while still being a form of entertainment.

The line is now blurred between entertainment and education, with athletes such as NASCAR® drivers and professional coaches starting to use commercial-off-the-shelf sport games as tools for training (Rosewater, 2004). As professional racecar driver, Carl Edwards explains, “A video game helps you get the rhythm down – helps you find a place where speed is made up and speed is lost.” Whenever he has to drive a track he regularly has trouble with – like Martinsville in Virginia or Bristol in Tennessee – he will spend a couple of hours in his trailer with the game.

Joe Paterno, the 82-year-old coach at Penn State is a great example of a coach using games with athletes. Every season he is reported to give incoming players a cartridge with the new seasons plays on it. Joe Paterno is known for his ability to teach and adapt to younger players. This level of adaptation and a willingness to teach is especially significant when one considers that Joe Paterno does not even use a computer.

While sports video game players are undoubtedly having fun while learning, they are far from passive recipients of either entertainment or educational services. In fact, a great deal of the training potential of these games derives from the fact that users play as both coach and player, making team decisions and executing individual player moves, play-after-play. In this way, they gain opportunities in the game, such as the abil-