



Chapter VII

Perspectives from Multiplayer Video Gamers

Jonathan B. Beedle, University of Southern Mississippi, USA

Vivian H. Wright, University of Alabama, USA

Abstract

The purpose of this study is to determine whether multiplayer video gamers perceive that playing video games can increase higher order thinking skills such as motivation, problem-solving, communication, and creativity. Multiplayer video gaming allows participants the opportunity to collectively discuss problems with other players, find solutions, and accomplish objectives. This study was used as a barometer to determine if multiplayer gamers perceived that playing multiplayer games had educational value. This research specifically sought to verify whether multiplayer video gamers perceived that higher-order thinking skills such as motivation, communication, problem solving, and creativity were increased by playing multiplayer video games. The bulk of respondents reported that they somewhat felt there was learning occurring in all of these areas.

Gaming and Learning

Approximately six billion people around the world play computer games (King, 2002), including hundreds of thousands of people who participate in multiplayer online games. Multiplayer gaming is a term used to describe multiplayer online games (consoles and personal computers), video arcade games, and network games (both intranet and Internet). Berger (2002) indicated that most people are surprised when they find out that the video games industry is a bigger business than the film industry. According to the Entertainment Software Association (2003), the video game industry generated \$6.9 billion in 2002 in the United States alone, which was up 8% from 2001. In 2000, video gaming was a \$17.7 billion global industry (Lange, 2002). In 2000, the computer and video gaming industry grew at more than twice the rate of the U.S. economy (IDSA, 2002).

Most likely, gaming will continue to experience such growth. As educators, we have a responsibility to research the use of games, specifically in areas of teaching and learning. Aldrich (2004) proposed that there must be extensive learning taking place during game playing as players learn by participating and practicing until they become successful against others playing the game. This success requires gamers to learn roles, understand direction, and comprehend the complex systems within the game's structure.

The computer's artificial intelligence (AI) works as a flexible rules-based organizational mechanism to keep the game challenging to the players by presenting problems that players must solve in groups instead of solo. Players are able to construct their own meaning, relationships, character skills, and appearance in many of today's video game titles. This allows the gamer the opportunity to create and experiment with different configurations and attributes while role-playing characters that might be unlike himself or herself or any other real-life people. Role-playing allows the gamer to immerse himself or herself in a character and allows for experimentation. Video games are increasingly using greater narratives and stories to envelop characters into the storyline. Where books and video games differ is that in many video games there are communities of users who develop programs to mod or add new content and stories to games.

Previous research on video games typically focuses on negative aspects surrounding video games like aggressive behavior (Gentile, Lynch, Linder, & Walsh, 2004), violence (Thompson, 2001), and addiction (Chiu, Lee, & Huang, 2004), even though Sherry (2001) performed a meta-analysis of the video gaming literature and found only a minute relationship between hostile behavior and violent video games.

It appears that limited research has been conducted concerning gaming and its educational potential. In 1999, the independent research firm MediaScope found only 16 studies involving video gaming (Thompson, 2002). Most of the research currently available tends to focus on the negative side of games (i.e., addiction) and not on the potential educational benefits of games. According to Griffiths and Davies (2002), online games may have a larger impact on education than traditional single player games. Many online games are role-playing adventures or other teamwork-related games that require cooperation from several participants to accomplish game objectives.

A study for the Pew Internet & American Life Project (Jones, 2003) found that although some instructors and professors believe students can learn from games, 69% of those surveyed indicated they had never had an educational experience in the classroom with video,

23 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/perspectives-multiplayer-video-gamers/18773

Related Content

Relationships Among Violent and Non-Violent Video Games, Anxiety, Self-Esteem, and Aggression in Female and Male Gamers

Cristina Cabras, Maria Laura Cubadda and Cristina Sechi (2019). *International Journal of Gaming and Computer-Mediated Simulations* (pp. 15-37).

www.irma-international.org/article/relationships-among-violent-and-non-violent-video-games-anxiety-self-esteem-and-aggression-in-female-and-male-gamers/242917

When People Get in the Way: Promoting Civic Thinking Through Epistemic Gameplay

Elizabeth Bagley and David Williamson Shaffer (2009). *International Journal of Gaming and Computer-Mediated Simulations* (pp. 36-52).

www.irma-international.org/article/when-people-get-way/2160

The Design of Immersive Virtual Learning Environments Utilizing Problem-Based Learning Templates

Donna Russell (2016). *Handbook of Research on Gaming Trends in P-12 Education* (pp. 105-123).

www.irma-international.org/chapter/the-design-of-immersive-virtual-learning-environments-utilizing-problem-based-learning-templates/139800

Strategies to Teach Game Development Across Age Groups

Lakshmi Prayaga, James W. Coffey and Karen Rasmussen (2011). *International Journal of Gaming and Computer-Mediated Simulations* (pp. 28-43).

www.irma-international.org/article/strategies-teach-game-development-across/54349

If the Gear Fits, Spin It Again!: Embodied Education, Design Components, and In-Play Assessments

Mina C. Johnson, David Birchfield and Colleen Megowan-Romanowicz (2019). *Exploring the Cognitive, Social, Cultural, and Psychological Aspects of Gaming and Simulations* (pp. 141-170).

www.irma-international.org/chapter/if-the-gear-fits-spin-it-again/218799