Chapter 35
The Dynamics of Video Gaming:
Influences Affecting Game Play and Learning

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ABSTRACT

The idea of bridging literacies has been a topic of much research and theory, and educators continue to struggle to help students understand how their learning transcends the classroom walls. Contributing to the discussion, this chapter focuses on factors influencing video game learning, examining the decisions and game play of eight academically struggling eleventh-grade males. Data from two related qualitative studies suggest that direct and peripheral factors influenced students' game play. Findings from these two studies are important to the discussion of educational gaming because they can inform educators of students' struggles and successes in learning outside the classroom. Overall, the evaluation of students' video gaming can provide educators insight into the affordances of this digital literacy and issues affecting student learning outside the classroom.

INTRODUCTION

It comes as no surprise that students choose activities they find pleasurable (Csikszentmihalyi, 1990; Smith & Wilhelm, 2002) and that their personally relevant experiences beget meaningful learning (Dewey, 1916; Rousseau, 1911/2003). Part of the call to bridge students' literacies (Alvermann, 2002; Goodson & Norton-Meier, 2003; Hull, 2003; Norton-Meier, 2005; Smith & Wilhelm, 2002) is to sanction these personally relevant experiences and help students connect what they learn outside school to what they learn inside school. Doing so inherently involves recognizing the value of students' outside-of-school knowledge and the forces shaping text choice and perception. In other words, bridging the gap requires an understanding and an espousal of students' traditional and multimodal

literacies and how such multi-textual, multimodal learning can transcend the classroom walls.

This chapter provides a closer examination of video gaming, revealing some influences affecting students' game play and offering insight into some of the forces shaping student learning outside the classroom. Data emerging from my investigation of the literacies of eight adolescent male video gamers suggest that real and virtual factors influenced the participants' game choice and knowledge acquisition; membership (Moje, 2000), competence (Smith & Wilhelm, 2002) and *identity performance* (Goffman, 1959) motivated gamers to engage in specific video gaming activities. Understanding how these forces may affect game play is central to the discussion of educational gaming, as educators can become cognizant of students' struggles and successes in learning outside the classroom, gain awareness of undercurrents that may exist inside the classroom, and help students connect to their academic material with greater ease.

BACKGROUND

Video game playing is a complex activity. It is a digital literacy that involves the use of and interaction with real and virtual tools and images in accordance with the design of a video game program. Such interaction includes, but is not limited to, the use of semiotic tools, the understanding of changing images and their functions, the recognition and response to audio and visual cues, and the assumption of virtual identities.

Multimodality (Jewitt, 2003; Kress, 2003; Kress & Van Leeuwen, 2001), provides a context for the discussion of video gaming, literacy, and meaning making. Unlike traditional ways of defining literacy as reading or writing letters on a page, multimodality accounts for all the elements that are part of the meaning making process, extending the concept of "text" to include any mode—be it music, video, movement, image—and

valuing a wide variety of literacy experiences, including video game playing (Kress & Jewitt, 2003). Acknowledging multimodalities inherently validates students' digital literacies, such as video gaming, and reinforces how critical thinking is equally important in traditional and virtual learning environments (Leu, Castek, Henry, Coiro, & McMullan, 2004, p. 500).

The Great Video Game Debate

Though critics of video gaming may contemplate the negative effects of violent content (Anderson & Dill, 2000; Giumetti & Markey, 2007; Sheese & Graziano, 2005; Shibuya, Ihori, & Yukawa, 2008) and game addiction (Young, 2004), and suggest a relationship between gaming and poor academic performance (Anand, 2007), other research and theory on video gaming suggest that, for children and adolescents, video game playing can be motivating and rewarding (Chute & Miksad, 1997; Rosas et al., 2003; Smith & Wilhelm, 2002) and can have potential academic benefits (Alberti, 2008; Din & Calao, 2001; Gee, 2003; Greenfield, 1984; Lacasa, Méndez, & Martínez, 2008; Rosas et al., 2003). Some have suggested the benefits of frequent playing (Green & McNeese, 2008; Schrader & McCreery, 2008), proposing that video games can improve mental rotation and perceptual skills (Boot, Kramer, Simons, Fabiani, & Gratton, 2008; Cherney, 2008), and some have recommended ways in which games can be implemented in school (Charsky & Mims, 2008; Lacasa, Méndez, & Martínez, 2008). Further, extant research has addressed the relationship between gamers' personal interests and their game choice (Crawford, 2005; Malliet, 2006), and advocates (Gee, 2003; Prensky, 2001) have contended that most video games require players to be active, engaged learners who advance through experimentation, critical thinking, and practice.

This chapter looks outside this great debate and explores the forces affecting game play—from the media, to the social, to the self—revealing some

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