BOOK REVIEW

A Review of Good Video Games and Good Learning

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INTRODUCTION

As reflected in the title Good Video Games & Good Learning, James Gee links artfully-constructed video games with their potential in the traditional classroom setting. He asserts that for a game to be effective, game designers, scholars, school administrators and teachers need be in full accord as to how the games would best be integrated into school curriculum. Over the course of ten essays, Gee relays a multitude of positive experiences wherein students experience firsthand the ways in which video games enrich classroom learning and real-life encounters.

SUBSTANCE

The brain has often been likened to a computer or even a blank slate—tabula rasa. Gee proposes that the brain is similar to a well-constructed video game because humans seem to learn best when they use their imagination to integrate various experiences into complex simulations (Gee, 2007a; Gee, 2009b). In other words, a little visualization may increase overall efficacy and provide player-learners with an arsenal of strategies that may later be engaged at will to reach specific goals and objectives. For many years, popular children’s television programs such as Barney, Mr. Roger’s Neighborhood, The Magic School Bus, and Dragon Tales have encouraged the use of imagination and have attempted to simulate “imagination” in
television programs. These instances served as predecessors to video games. Considering the popularity and continued parent approval of these and other educational television shows, Gee’s statement is timely and well-founded. And, his thesis is clear: video games are effective tools for accomplishing tangible and defined objectives.

In several places in his collection, Gee explains that a game should “distribute intelligence.” The act of distributing intelligence occurs as the skills and knowledge of the players join somewhat seamlessly with the skills of the virtual characters. Gee explains that the sharing of knowledge in this manner “offloads the cognitive burden from the learner… and allows the player to act, with some degree of effectiveness before being really competent” (Gee, 2007a, p. 27).

Both Gee and Clark suggest that the mind works by storing records of experiences and constructing intricate patterns of connections among those experiences (Clark, 1989; Gee, 1992). The mind is a network of connections; different pictures held within the mind wait to be placed on the mind’s blank slate. As new technologies emerge with the capacity to capture the human mind through digital technology and networks, we are able to externalize some of the mind’s functions. If one chooses to expand upon these tools and incorporate video games into exercises which increase the scope of broad-spectrum skills, cognition in our classrooms is directly affected and improved. Today’s students are, to use futurist Marc Prensky’s apt term, digital natives, and are therefore more comfortable using computers than many of their digital immigrant teachers (Prensky, 2006). Following Gee’s line of thinking, we must expound our curriculum in order to sustain motivation and allow our students to speak their native tongue, as it were, by allowing educational immersion in video games. Still, his thesis is more nuanced than that. In his introduction, Gee writes, “I don’t want to give kids video games in schools, I want to give them worlds that make words meaningful, whether these worlds are virtual, real, or a mixture of the two” (Gee, 2007a, p. 4).

Gee succinctly states that “good video games are thinking tools” (Gee, 2007a, p. 17). He demonstrates (anecdotally) how the experience of playing video games is amplified when the learning “drug” is potent and present in large amounts. Throughout the text, Gee provides many quotable, videogame flag-waving assertions, and he consistently shows how thin the existing research is in denying the value of video games in education. In many ways, Good Video Games & Good Learning seems a call to action, which may well be needed in gaming research. Still, the hard facts are conspicuously absent. Gee writes the checks for video games (and big checks at that), but he seems to rely on other scholars to foot the pedagogical bill. The result is inspiring, but not nourishing enough for educators or grant-writers seeking substantive research-based explanations for why good video games, in fact, result in good learning.

**HIGHLIGHTS**

Some of Gee’s most compelling and timeless insights are revealed as he explores principles of learning (Gee, 2007a; Gee, 2007b). He purports that today’s video games effectively employ principles of learning, while also emphasizing the average classroom leaves much to be desired. Video games allow player-learners to actively customize the environment to suit their learning preferences. Good video games also allow player-learners to integrate their knowledge with the knowledge of characters within the game. This high level of interactivity is motivating for learner. To illustrate his point, he briefly describes games such as Rise of Nations and Deus Ex which provide the learner opportunities to customize the game. Assuming many 21st century educators have adopted constructivist methods, Gee poses questions these educators might ask themselves, calling on a variety of learning preferences: visual, auditory, reading/writing preference, and kinesthetic/tactile strategies. Gee’s ideas of “good” video games efficiently incorporate each of these methods and more. For example, one of the latest series
of games, *Guitar Hero World Tour*, engenders music appreciation, hand-eye coordination and development of cooperative skills with peers (both face-to-face and online). Traditional classroom instruction would presumably benefit from student expertise in these regions.

Comprehension necessitates more than simply storing general concepts in one’s head or applying abstract rules to experience. Instead, Gee suggests that comprehension should be centered around an experience that requires an individual to act in a way that requires some form of action (i.e. through simulation, imagination, or exploration) in order to meet a goal or bring about a framework (scaffolding) which helps facilitate situated actions. He supports this claim by suggesting that teachers provide students with proper tools and carefully scaffold situations which will guide students to the same knowledge that is understood by scientists, mathematicians, historians, etc. In this manner, students develop a deeper appreciation for the discipline and may exceed their teachers’ expectations. Gee explains that when video games present well-crafted problems in an optimal environment, player-learners are often able to transfer that knowledge to other situations later in the game. He argues that mastery and transfer of knowledge simply does not occur in today’s classrooms. Instead, students retain just enough of the material to pass high-stakes assessments. Gee says “games are pleasantly frustrating”, a phrase which one would not use in conjunction with our traditional classrooms (Gee, 2007a, p. 131). Our students need to be challenged, yet are too often intimidated by the form in which challenges are delivered in the traditional classroom environment. Video games offer stratified levels which give the student a greater payoff than those efforts which end up in wholesale failure and frustration. Good video games provide guidance to students, and concurrently, supply a sense of ownership and self-pride in accomplishments.

Another intriguing insight from the text relates specifically to the learning environment. Gee celebrates the “fish tank” and “sandbox” environments, and suggests that good learning occurs best within a safe environment that is a simplified version of a complex system (Gee, 2009a). These environments offer learners self-assurance and confidence that would not otherwise be found. If a student is thrown into an environment that contains too many variables and the stakes are too high, learning is impeded. Gee again mentions games such as *Rise of Nations* and *System Shock 2* which have fish tank and sandbox environments. He encourages schools to recreate such environments because they facilitate learning for “At Risk” students in particular. His notion that we need to “move beyond ‘learning about’ and move toward ‘learning to’” portrays a future where students strive to succeed (Gee, 2007a, p. 172). Children and teens are within their comfort zone in videogame play; Gee smartly suggests they would feel more comfortable about setting goals in a virtual setting than in a traditional classroom setting.

Another crucial aspect of the text is when Gee introduces the meaningless question of whether video games are good or bad for children. Quoting his own research, Gee plainly states: “Technologies have effects- and different ones- only as they are situated within specific contexts” (Gee, 2007a, p. 15). Gee often situates himself as a blanket supporter for understanding all media in a context, but he just as often plays the role of drawing distinctions between video games and other narrative forms such as films or novels. This is most evident in his brief but effective discussion on the invalidity of assertions regarding violence spawned from video games. He emphasizes context and the importance of teaching children how to consume all narratives, be they in books, film, or games - critically and reflectively. With the potential violence resulting from video games, Gee calls on the reader to imagine more possibilities, as opposed to censorship. “I would not ban games”, he says, “but mandate lots and lots of them” (Gee, 2007a, p. 16). He then rattles off a dozen game player roles that quickly convince the reader that the possibilities are endless: Astronaut, Community Activist, Craftsman, etc. Gee frequently invokes the positive social impact of video games, as
well as the possibilities - both economic and educational. He continues to wax philosophic with aplomb, likening video gaming to the Wild West and outer space. Still, between his gift for lingual arabesques and his wide-angle lens, which pans and scans the fields of education, linguistics, psychology and sociology, Gee, a bit of a cowboy himself, gives the impression he may have a pretty good shot.

ANALYSIS

Good Video Games & Good Learning offers a holistic perspective on the use of commercial-off-the-shelf video games in schools. Gee artfully conveys a plethora of applications of different game genres for use in educational settings, particularly real-time strategy (e.g., Age of Mythology), construction and management (e.g., The Sims, Rollercoaster Tycoon), and turn-based strategy (e.g., Civilizations III). While the text provides a remarkable account of how these video games can be used as learning tools, the text falls short of providing evidence to substantiate the use of these video games in educational settings. That is, very little research is provided to support their use. This has two clear important implications to the field. First, since Gee reviewed a vast quantity of research in constructing this text, it reflects the status quo of the field, which can be likened to an immense void. Second, it makes a call to professionals for continued research in this emerging field to provide evidence to support the use of commercial-off-the-shelf games as educational tools.

Gee is trained as a linguist, which aids his ability to paint with words. He also dons the hat of a philosopher in fits and starts, daring to plunge into a discussion of ‘soul’ vis-à-vis a poem by Emily Dickinson. Gee’s literary bravado will undoubtedly gain some readers and lose others. On occasion, he steps unusually far out of the proverbial X-Box; at one point he alludes to his “special experience of going back into time and living for several years in the Middle Ages” (Gee, 2007a, p. 8). Although he may be alluding to his experience of a video game, he does not produce an explanation, and he leaves his readers in awe of his creative assertions on the one hand, but a bit hungry for scholastic validity on the other.

The text may be useful to an educator and anyone else invested in educational reform. Analogous to his previous work (Gee, 2003), Gee convincingly supports the argument that video games are a new form of literacy. By literacy, Gee means any “technology that allows people to ‘decode’ meanings and produce meanings by using symbols” (Gee, 2007, p. 135). Video games require player-learners to produce (write) and consume (read) in a virtual world by action and reaction, which is a timeless observation from an educator’s perspective. Educators can harness this new form of literacy to strengthen traditional forms of literacy (e.g., reading and writing) as well explore the budding literacy of video games and popular culture (e.g., texting).

Gee also takes great care in explaining the importance of what he calls “affinity spaces” (Gee, 2007a; Gee, 2007b). He suggests we abandon the idea of belonging to a learning “community” because of its connotative weaknesses. Instead, we should determine the boundaries of these “affinity spaces” and then identify the interactions of the people and things within that environment. The spaces may include actual classrooms or geographic locations as well as virtual spaces via the Internet. Once we have identified the interactions, we can then define the “community” of learners if we so choose. This sounds radical, but if he means we cannot put something inside a box until we build the box, then his argument is sound.

FINAL REMARKS

Good Video Games & Good Learning has clear implications for the future of education and gaming. Gee delivers a steady stream of inspiring speeches, but fails to provide the scientific research to back up his assertions. Too often, he falls back on his personal opinions, failing
to provide clear reasons as to how he arrived at said opinions. This partly a limitation of the text, but is also a limitation of the emerging field as a whole. Still, in observing his son, his own research and other sources, he makes a compelling case for incorporating video games into schools. Across this collection of essays, Gee makes it clear that if developed and executed properly, with input from scholars, game developers and educators; students have nothing to lose and much to gain from the inclusion of good video games.

REFERENCES


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