Chapter LXXIV
Artists in the Medium

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ABSTRACT

This chapter discusses emerging trends in games and learning. It argues for an approach that examines games as a new medium. With the increased attention being given to games, critiques about the instructional efficacy of games will emerge, and that educators must truly take advantage of the unique capacities of the medium, as well as keep in mind the new forms of learning supported by games. It continues to outline key trends, such as emerging game genres, new forms of productive play, and embedded game assessments. By targeting what kinds of design advances occur in contemporary entertainment games, perhaps games can be designed that will become integrated into educational systems.

"Artists in various fields are always the first to discover how to enable one medium or to release the power of another."
                                    –Marshall McLuhan

Video games are "hot" in education. After decades of more or less being ignored by educators (other than to cast their derision upon them), video games are being taken seriously as a medium for learning.

Hopefully, the reader has found convincing reasons for this attention within the pages of this volume. For me, the reason to attend to games is as simple as the McLuhan quote which opened this article: If we look across the last 30 years of technology in education, we see that games have consistently paved the way for innovations, whether it was the relatively simple arcade and computer games of the 70s and 80s that inspired drill and practice and adventure games (and one

could also argue innovations such as goal-based scenarios), or the networked multi-player games of the early 90s that suggested work on knowledge building communities, or today's games that meld interactive fiction, real-time simulation, user creation with tools, and robust persistent worlds that educators are trying to leverage for learning.

Fundamentally, video games are the entertainment medium of the computer. They are one of the only form of digital content that people consistently pay for. They envelop digital toys (*The Sims)*, virtual life (*Nintendogs, Neopets)*, virtual communities (*Habbo Hotel*), and simulated worlds (*Second Life*). Most of these are not games in any classic sense, but the games industry (development and publishing) have subsumed these products so that they are treated with the interpretive frame of "games". As of this writing, this trend shows no signs of abating. Indeed, looking at a list of currently popular game software, we see interactive music titles (*Guitar Hero*), test prep software (*My Word Coach*), in addition to massively multiplayer games like *World of Warcraft*. For these reasons, I believe that educators ignore current developments in games at their own peril.

So what does the future of educational games hold? Anyone following the industry closely can spot this question as a land mine. For example, while announcing the PlayStation 2 at the 2000 Game Developer's Conference, Sony's Phil Harrison proudly announced how "games on little disks" were going to be a thing of the past as early as this decade (cited at Harrison, 2000). Games were predicted to be more and more like "interactive movies," and anyone who would have bet on *Brain Age, Wii Sports*, or *Nintendogs* as "killer apps" would have been seen as crazy. Five years ago, everyone thought that *Star Wars Galaxies* or *The Sims* were going to break MMOs wide open. When these titles flopped, people had just about to leave the genre for dead, before *World of Warcraft* shook up the PC industry, the ripples of which are still being felt across the industry.

With these caveats in mind, I will start with first a warning—a few potential challenges that the field faces before it can reach stability. Next, I turn to trends already evident in today's industry—with an eye toward what they mean for education.

THE IMPENDING BACKLASH TOWARD GAMES

I believe that within the next 12-18 months there will be a backlash of sorts against games. Some of the criticism is certainly welcome. Much of the field (particularly the field of "serious games") has organized as an industry, rather than academic field, and as such is geared toward generating business opportunities and profits rather than meaningful learning. Meaningful learning certainly *can* occur from such situations; it is only to say that primary activities surrounding "serious gaming" has been to promote business. Healthy criticism as to whether there are solid learning principles behind these designs, whether they embody good instructional design practices, and perhaps most importantly, what the ideologies are underlying these materials—whose interests are being served by them—is critical. So a first backlash may be that critics will look at the field, and wonder where there is any meaningful learning going on within games, and those operating within this commercial space will need answers better than "but commercial game developers worked on them!" for the field to survive. Indeed, an unfortunate side effect of the (mostly deserved) attention to game designers may be a fetishizing of their skills and devaluing of more traditional instructional design and learning sciences skills within certain circles.

From an academic perspective, we might anticipate a second criticism—that game scholars need to generate more careful and empirically backed claims about games and learning. Some will

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