

# Play is the Beginning of Knowledge<sup>1</sup>

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## Abstract

This paper seeks to explore the role of play in teacher education and ongoing professional development. Specifically, this paper examines the potential place of digital games in formal education, and how and why teachers need to play these games. Each new technology brings with it different forms of knowing and learning, as well as different things to know and learn. Digital games are a new technology. When considering linguistic literacy, we normally assume it to include an ability to speak, understand, read, *and* write. Literacy includes an ability to both consume and produce. Several reasons to advocate games literacy will be discussed in this paper, including advantages gained through new connections between learners and teachers that become possible as a result. Teachers must become literate in this new medium, and, if teachers are to become “games literate”, that must include actual first-hand game experience. Teachers must play games. This paper will explore ways that this can be accomplished.

*You can discover more about a person in an hour of play than in a year of conversation.*

Plato

*Anyone who makes a distinction between games and learning doesn't know the first thing about either.*

Marshall McLuhan

*We don't stop playing because we get old... we get old because we stop playing.*

George Bernard Shaw

*Games lubricate the body & the mind.*

Ben Franklin

*It should be noted that children at play are not playing about; their games should be seen as their most serious-minded activity.*

Michel de Montaigne

## Introduction

Although the preceding quotes (along with several others) may seem trite, they hold much wisdom, and remain as relevant today as they were when first uttered. This paper seeks to explore the role of play in teacher education and ongoing professional development. Specifically, this paper examines the potential place of digital games in formal education, and how and why teachers need to play these games. Media literacy has long been recognized as an important asset for today's teachers and yet achieving a level of comfort with technology that allows teachers to treat it as a tool rather than an event has been an elusive goal. Just as teachers begin to get comfortable with a new technology, things change again. Alan Kay said "Technology is anything that wasn't around when you were born." By that yardstick, what counts as 'technology' depends on one's age.

Digital games have been around for about thirty years and they show no signs of fading away. In fact they continue to increase in popularity, accounting for a multi-billion dollar industry (ESA, 2006). They are one of the chief leisure time activities of young people today, in many cases replacing television viewing. To people born after

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[1] Quote by George Dorsey, Anthropologist, 1868-1931

1975, games are as much a part of our culture as television was to the baby boomers. Games are a part of pop culture and they are increasingly being used for non-entertainment purposes by the military, medicine, health, social justice groups and advertising. Use in formal education has tended to lag behind but it too is increasing. There is tremendous potential in the medium of the video game in both formal and informal educational settings but although teachers are often interested in and curious about games (Becker & Jacobsen, 2005), they are also somewhat suspicious of inviting yet another new technology into their classrooms for which they feel inadequately prepared. One way to address the teacher's lack of experience is to provide opportunities for teachers to gain a level of games literacy by playing some of the games that have so captivated the attentions of their students.

Unfortunately, for anyone interested in actual first-hand experience playing video games, the "barriers to entry" are now quite high. Games are complex, they often have large learning curves, and if one does not already have them in the house, expensive. Games arcades still exist, but these hardly seem inviting to someone not already indoctrinated. Why should I learn about games if I have no interest in playing them? How do we get access to games? Which games are good to start with? Who will help me if I get lost or stuck? These are all legitimate questions and in the following paragraphs, this paper will begin to answer them.

## Modern Times

*... but we enjoyed playing games and were punished for them by men who played games themselves. However, grown-up games are known as 'business' and even though boys' games are much the same, they are punished for them by their elders. No one pities either the boys or the men, though surely we deserve pity, for I cannot believe that a good judge would approve of the beatings I received as a boy on the ground that my games delayed my progress in studying subjects which would enable me to play a less creditable game later in life.*

Saint Augustine (AD 354 - 430) in his *Confessions - Book I:10*

Henry Giroux (Giroux, 1999) warns that it is important for "educators to comprehend the challenging conditions of identity formation within electronically mediated cultures and how they are producing a new generation of youth that exists between the borders of a modernist world of certainty and order, informed by the culture of the West and its technology of print, and a postmodern world of hybridized identities, electronic technologies, local cultural practices, and publicized public spaces." (ibid. p95-96) Part of the problem is that "(for) many youths, meaning is en route, the media has become a substitute for experience, and what constitutes understanding is grounded in a decentered and diasporic world of difference, displacement, and exchanges." (ibid. p 104) "The emergence of the electronic media coupled with a diminishing faith in the power of human agency has undermined the traditional visions of schooling and the meaning of pedagogy." (p109) Giroux's sweeping diagnosis that youths feel apart from the world and a lack of agency may not be entirely accurate. Perhaps it is not today's youth who are displaced and feeling different, but the rest of us who are being left behind, and familiarity with games are part of that. One has only to look at the explosion of blogs and the fan communities surrounding some games to see that notions of personal agency and consumer/producers have changed quite dramatically in the last decade.

In his work on the "mental demands of modern life", Robert Kegan states that the majority of the demands of contemporary society (including higher education) are beyond adults' ways of making meaning. The mental demands of modern life require that adults have the capacity to reflect and become the authors of their roles, thoughts, feelings, and relationships. Unfortunately, many adults are unaware of and unable to meet these new ways of making meaning (Kegan, 1994). Media literacy in general and games literacy in particular can help to both exercise and expand this needed capacity.

## Games and Culture

*There are some things you learn best in calm, and some in storm.*

Willa Cather (1915)

Throughout history, play has been an integral part of our culture (Huizinga, 1950), and games have been used for teaching and learning for as long as we know. There are even some who suggest that games predate language, both in terms of cultural and individual development (Didow & Eckerman, 2001; Donald, 2001). Merlin Donald suggests that the progress of hominid cognition parallels the progress of game forms (Donald, 1991). If this is true, what does that say about our cultural development in light of the development of games such as *World of*

*Warcraft*, a massively multi-player game that has millions of subscribers and is capable of supporting hundreds of thousands of users simultaneously, or a game like *Everquest*, which, in 2004 had a gross domestic product that, would make it 77<sup>th</sup> in the world, roughly equivalent to that of Namibia (Castronova, Bartle, Book et al)? Also, if cognition and game complexity are indeed intertwined, then the growth in complexity and variety of digital games just in the last half dozen years suggests that human cognition is poised for a major leap forward. Today's digital games are neither trivial, nor frivolous, and schools can no longer disregard their existence.

Games in the form of sports enjoy special status in western society: sports personalities become icons and are seen as role models. Chess masters are often attributed celebrity status. So where does one draw the line? At some point it seems, we in western society at least are expected to stop all this nonsense and get down to work. Caillois (1961) claims that a game one is made to play stops being a game, and Huizinga suggests that play and seriousness are opposites, and yet the notion of Serious Games has been wholeheartedly adopted by military groups, health organizations, and a rapidly growing list of others as valuable learning technologies. Digital games are even entering the field of teacher training (eSchool News, 2006).

Digital games are rapidly becoming part of the social fabric in much the same way as television did; as did film, radio, even print. Does it not seem incongruous that these media and the popular culture they represent should remain largely absent from the classroom? "We often assume that stories told in one medium are intrinsically inferior to those told in another. Shakespeare and Jane Austin were once considered to be working in less legitimate formats than those used by Aeschylus and Homer. One hundred years after its invention, film art still occupies a marginal place in academic circles. The very activity of watching television is routinely dismissed as inferior to the act of reading, regardless of content." (Murray, 1998, p.273) What evidence do we have to suggest that books are, in and of themselves, superior to film or television? Many seem to be quite willing to use the same logic to discount the potential of games.

Part of the reason for *Sesame Street's* broad acceptance, enduring popularity, and lasting impact on the children who experience it has to do with the fact that the show's creators have always connected willingly with popular culture. Children readily accept the parodies on the other media artifacts to which they are routinely exposed. For the most part though, pop culture has remained on the periphery of most classrooms. This is not new as some forms of popular culture like comics have almost always been shunned in formal education. Digital games are still banned from many, perhaps even the majority of schools in Canada and this needs to change. A first step in the process might be to begin to allow discussions about games into the classroom.

## Media Literacy and School

*"In a culture like ours, long accustomed to splitting and dividing all things as a means of control, it is sometimes a bit of a shock to be reminded that, in operational and practical fact, the medium is the message. This is merely to say that the personal and social consequences of any medium - that is, of any extension of ourselves - result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new technology."*

Marshall McLuhan (1964, p.7)

McLuhan's now famous message reminds us that the medium inevitably affects the interpersonal dynamics of the society into which it is introduced and it could be concluded from that that media literacy is important. Since McLuhan's time, the advance of technology has been so profound that our (boomer generation) perspective of what constitutes 'technology' lags far behind that of our students. We grew up with television and the beginnings of personal computing and an Internet that still largely presents information in a linear fashion. Our students are growing up with cell-phones, texting, blogging, wiki's, open source, FaceBook, YouTube, MySpace, augmented reality games, machinima, and more. If we accept media as extensions of ourselves then we are bound to notice that our students' selves already extend far beyond our teachers' selves and perhaps we need to grow as teachers if we wish to remain relevant.

According to Patricia Aufderheide's 1993 Report of the National Leadership Conference on Media Literacy, "a media literate person can decode, evaluate, analyze and produce both print and electronic media." (Aufderheide, 1993, p. 1) Further, media have broad implications politically, commercially, and ideologically. Media help to construct reality, and consumers as well as producers of media negotiate meaning in media (ibid.). In

spite of what the detractors might say, it is becoming more and more difficult to deny that digital games have become an integral part of the popular and indeed all modern culture. An industry that accounts for approximately 20 billion dollars worth of revenue and whose average participants are now 33 years old (ESA, 2006) can not easily be dismissed as a passing fad. When a single online game boasts six million subscribers with projected revenue of one billion dollars (Ducheneaut, Yee, Nickell, & Moore, 2006), one can no longer claim these games are child's play. As a form of expression and communication, digital games are as much legitimate media as television, film, and theater.

## Playing Games

*"One of the most difficult tasks men can perform, however much others may despise it, is the invention of good games. And it cannot be done by men out of touch with their instinctive selves."*

- Carl Gustav Jung Laurens van der Post in *Jung and the Story of Our Time* (New York: Vintage Books, 1977), pp. 41

When considering linguistic literacy, we normally assume it to include an ability to speak, understand, read, and write. Literacy includes an ability to both consume and produce. Teachers must become literate in this new medium, and, if teachers are to become "games literate", that must include actual first-hand game experience. Thus, teachers must play games.

A recent report produced by the Federation of American Scientists suggests that "research on games in education should be a part of a coherent research program in learning science and technology" (Federation of American Scientists, 2006, p. 7) Further, "(s)chools of education and teacher professional development providers should create new training materials and make developing skills to support game-based learning an integral part of new and incumbent teacher training." and "Each major educational institution should develop and execute a strategy for changing instruction to reflect the kinds of innovations in games and other areas expected in the coming decade. Schools should redesign their instructional practices and formal learning environments to take advantage of technology-enabled exploration, interactivity, and collaboration encouraged by digital games and simulations." (ibid. p. 10)

These goals and pronouncements may well be correct, but they are likely to have little effect on today's pre- and in-service teachers. Systemic change is often slow, which leaves us with the question, "What can we do *right now* to help teachers learn about game-based learning?" The first step is games literacy. One does not need to become an avid gamer in order to understand how games can teach, why they are often so compelling, and how they might be used in the classroom. Benefits of games literacy are many. Raising comfort with technology through experience with one form of technology often transfers to an increased willingness to interact with other forms of technology as well. At the very least it can help forge connections to help teachers better understand their students' lived experience. New connections become possible when teachers can converse knowledgeably with their students about games. Harlan Ellison was a highly vocal critic of television in the 70s. "When I reviewed television, people said 'If you hate television so much, how come you've got a television set in your house?'. Stephen King even said 'You know, Harlan's got a big TV.'. Yes, that's right. I try to be courant. I try to know what it is I'm talking about. I am not like many people who give you an opinion based on some sort of idiot hearsay or some kind of gut feeling you cannot validate. When I give an opinion, I do my best to make sure it is based on information" (Ellison, 2007). Learning about digital games includes playing them, but does not require us to like them all. It is possible to discuss games even if the discussion centers on why we do *not* like a particular game. There are advantages gained through new connections between learners and teachers that become possible as a result of opinions based on personal experience as opposed to hearsay.

## Games Literacy Curriculum

What should be included in a games literacy agenda? A great place to start is with an overview of the current state of the art in gaming – what is possible in game technology; an introduction to some of the social aspects; how experience with games affects learners' sense of agency and desire for active participation in their own learning. What we see in the press is a very one-sided view. When it comes to modern digital games the landscape changes quite quickly and what was considered new just a few years ago may be seen as ubiquitous to gamers now.

For example, the multiplayer online game *World of Warcraft* (Blizzard Entertainment Inc., 2004) isn't even 3 years old, yet in January of 2007 Blizzard Entertainment announced that the game had over eight million subscribers<sup>2</sup>, while the very first persistent world online game, *Ultima Online* (ORIGIN Systems Inc., 1997) was released just ten years ago. The Wii, Nintendo<sup>®</sup>'s new game console released at the end of 2006 is likely to change the landscape of gaming yet again, so an overview of the latest releases in games and hardware is an essential element of games literacy. Given the propensity of some public figures to blame videogames for all that is currently wrong with our society (Minton, 2006), a summary and discussion of the negative press (media effects / violence debate; obesity) to which games tend to be subjected should also be a part of games literacy. A complete description of a games literacy description would be inappropriate here, but other important elements include:

- Introduction to the vocabulary: terminology; genres; consoles vs. handhelds vs. PC vs. mobile devices
- Overview of what games can and can't do in formal educational settings – current literature
- Places where games are being used in schools, including some specific examples, such as the use of *Dance Dance Revolution* (Konami Corporation, 2001) in Virginia school gym classes (Lash, 2006), or the use of *Making History* (Muzzy Lane Software, 2006) in an Oak Hill High School<sup>3</sup> Social Studies class in Converse, Indiana.
- Live demonstrations of some of the most popular games (*Sims*, *DDR*, *Animal Crossing*, *Brain Age*, etc.). While it is not necessary to become an avid gamer, it is necessary to have at least some first hand experience playing games.
- Explanation of Serious Games: what they are, their current place in media. Serious Games are digital games designed for purposes other than pure entertainment. This is a rapidly evolving area of game development, including games designed for learning as well as games for training, advertising, politics, social justice, health, etc.
- How games can connect to formal schooling: what games do or might have potential for in the classroom; how games literacy can be used even when games are not used directly in class. Many teachers have expressed an interest in the use of games to teach, but many also still struggle with outdated equipment, lack of access, and other policy issues. It is overly optimistic to assume that interest in the use of games will lead to sufficient systemic change to allow the use of modern commercial or serious games to become prevalent any time soon. In the mean time, teachers can still take advantage of the learning opportunities afforded by the medium in other ways. Games can be discussed in class much like literature or current events and examples can be drawn from games. Games can be used to inspire, as in the case of Tim Rylands' English class, where he uses the game *Myst* (Brøderbund Software Inc., 1993), and there are now numerous examples of school bands playing scores from popular games.

Finally when it comes to ways to provide opportunities for teachers to become games literate, short, informal, frequent sessions are likely to provide better exposure than highly organized professional development events, although the latter is also recommended. Peer groups or lunch and after school meetings can be organized by school faculty; perhaps even a game club could be encouraged: students can help teachers learn about the games they like best. Appropriate (all-audiences) games could be brought into school along with the consoles for informal demonstrations, or students can be allowed to give presentations on their favorite games. Clubs are another venue for opening up dialogue on games and gaming. The choice of games used as examples is important, but fortunately there are many games that could be considered “entry-level” games to choose from (such as: *Animal Crossing*, *Phoenix Wright*, *Mario Bros.*, *Katamary Damacy*). The author has facilitated numerous sessions from formal presentations to informal ‘play-sessions’ and the reaction has always been positive with most participants coming away from the session with a new perspective on games and gaming.

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[2] Press Release: World of Warcraft® Surpasses 8 Million Subscribers Worldwide  
<http://www.blizzard.com/press/070111.shtml>

[3] Dave McDivitt <http://www.davidmcdivitt.wordpress.com/>

## Conclusions

Video games may still be perceived as toys by many adults born before the 1970's, but it should by now be clear that they are not a passing fad. Videogames and game technology are powerful media for communication and expression, and because of their interactive nature they represent a truly new media. It is unlikely that most schools will be in a position to fully embrace digital game based learning in the classroom in the immediate future, but that does not mean we should remain unaware, nor that we must wait for fancy computers and school-wide high-speed Internet connections before becoming literate in this new medium, or including games in discussions or other school work. Teachers can and should be familiar with the medium of the video game and literacy can be furnished in short, simple sessions. Teachers who are familiar with games can use them in a variety of ways, building new bridges with their learners.

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