

# Play your way to the top: Gaming in libraries

By Matthew Cole

## Introduction

Video games have come a long way since Atari's suite of arcade games was released on a home console. Children of the first video game wave have become adults themselves, and according to some counts, this population of first-wave gamers accounts for approximately 56 million members of the North American workforce (Beck & Wade, 2004). This is important for various reasons. First, it shows that people who play video games are not destined to be anti-social, brain-dead, basement hermits; in fact, they will enter the workforce proving to be as successful and resourceful as their non-gaming counterparts. Secondly, it shows that people who play video games as children and teenagers continue to do so as adults. Finally, it means that the type of people who are currently researching the effects of gaming have changed from those

who have rarely or never played a video game to people who have either played video games for a significant portion of their lives, or had many friends who did. These new researchers are uncovering deeper levels of impact and influence than their predecessors because people who engage in an activity understand it better than those who do not.

It is important to recognize that video games facilitate learning rather than. General perception of video gaming ranges between those who classify it as solely recreational and those who recognize the educational potential of video games. Both ends of this spectrum touch on core principles of public libraries information and entertainment. Therefore, this article will look at how video games can fit into the mandate and societal expectations of a public library.

# Libraries Need Video Games

A 2008 study conducted by OCLC sought to find the public's primary motivation for funding public libraries. The researchers concluded it is not standard usage statistics or

## Ask the Experts

Every time you can change a reluctant patron's perception of the library for the better, the library benefits – maybe not today, maybe not tomorrow, but soon, and for the rest of that patron's life. You cannot put a value on that moment of conversion, and no survey can capture it. We've found that gaming events make those moments happen for a wide range of people and convert indifference into enthusiasm  
(Levine, 2009)

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of the value they place in literature, but rather, “the catalyst that energizes these adults to actually vote in favour of financial support for libraries... [is] the library's ability to help people achieve their potential” (Levine, 2009). Of course, some of this transformative power can be found in books, but in a society that is increasingly

surrounded by multimedia technology, we as librarians have to recognize the necessity of helping people find their strengths and weaknesses in the digital realm as well as the printed page. It is pertinent to note that gamers are a new wave of world inhabitants: “like the boomers, these people are so numerous that, by pure volume, they are worth business attention” (Beck & Wade 2004, pg.2). Serving gamers as teenagers encourages these patrons to continue to frequent the library throughout adulthood.

## Games & Learning

From recent research, it is becoming clear that video games can and do prepare people for adulthood. They can help youth reinforce and apply the standardized knowledge they are taught at school, develop resourceful thinking, and learn how to socialize with a wide variety of people in a diversity of settings. Ultimately, gaming can be an all-encompassing experience that takes the learning teens absorb at school and provides a platform for them to apply the breadth of their knowledge in an ever evolving environment. Yes, standardized education is important, as it is the springboard from which innovation is launched, but it is the unique gaming experience that helps make trailblazers from memorizers.

In an article for *Computers in Libraries*, Brian Myers, a reference librarian at the Wilmette Public Library, very poignantly stated the reason why technology, including video games, is essential for promoting literacy: “Bridging the literacy gap will require that we re-evaluate our perspectives and reinvent our practices to better prepare our youth for fully participatory lives in the years ahead” (2009). Nearly all video games involve some element of reading. Remember that people who don’t read to begin with aren’t going to be reading any less if they are playing a video game; if anything they may “accidentally” be reading more due to the text that occurs within the games they play, as minimal as it may be. As well, reading occurs when skimming through a gaming magazine, or surfing an internet site where gamers can go to find tips, tricks, and cheat codes. In addition to traditional textual literacy, video games, by their very nature, improve people’s technological literacy. Video games, specifically RPG’s, are neither solely textual narrative, nor solely electronic methods of recreation. For example, in *Baldur’s Gate*, a popular role-playing game (RPG), the gamers’ activity involves many features that stimulate different kinds of literacy; “the game invites various kinds of participation (reading,

listening, watching, playing). It incorporates static parameters and structures, as well as space for inventive manipulation” (Carr, Buckingham, Burn & Schott, 2006). Clearly, video games can touch on many of facets that traditional schooling addresses and it is arguable that because teens are more receptive to video games what they can learn in that format may have a greater impact for them personally.

## Epistemic gaming

The structure of modern schools originated in the industrial revolution; yet we are living in a post-industrial world. It is necessary to learn standardized skills such as spelling and arithmetic, but in terms of being able to survive and succeed in the modern job market, these standardized skills need to be applied in innovative ways. From fielding customer phone calls to reading x-rays it is now the norm to outsource job that require only standardized skills. The best jobs demand high-level and innovative thinking and the standardized testing that our school systems continue to rely on no longer reward graduates in the global economy (Shaffer, 2008 Pg 3-4). This is where epistemic games come in to play. They are the conduit through which students can

apply the skills they learn in school to real world scenarios that will force them to think quickly, deeply, and innovatively.

### Ask the Experts

While recognizing the literacy and learning benefits of some video games, we felt that by placing our teens in the role of media designers and developers—by giving them an opportunity to design and create their own original games and interactive media—we might achieve learning benefits that were less ambiguous and more consistent with a model that recognizes teens as knowledge generators, not just consumers.

(Myers, 2009)

*Brian Myers sponsors the Teen Advisory Board and other teen-oriented programs at Wilmette Public Library (Ill.). He also teaches Java programming and game design at Northwestern University's Center for Talent Development.*

The root of epistemology is the theory of the method by which knowledge is acquired. Epistemic games mimic real world scenarios, and players have to think like the professionals from these fields to enjoy and succeed in the game (Shaffer, 2008 Pg 38). While it does not count as job experience playing epistemic games forces gamers to think like the professionals they are mimicking. Thus, playing a flight simulator game will not make you able to fly a plane,

but it will increase your peripheral knowledge of what it takes to become a pilot. In addition to the classic *Flight Simulator* there are a plethora of these type of epistemic games available: *Microsoft Train Simulator*, *Police Simulator*, *Farming Simulator 2011*, and *Cities in Motion*, a game that challenges players to build the perfect public transportation system (CBS Interactive, 2011). If a person plays an hour of video games a day over the course of their four years in high school they will have approximately 1460 hours of simulated experience by the time they graduate. “With epistemic games...young people don’t have to wait to begin their education for innovation until college, or graduate school, or their entry into the work force. In these games, learning to think like professionals prepares them for creative thinking from an early age” (Shaffer, 2008, pg. 15).

Motivated libraries can take their programs one step further, by offering teenagers a chance to not only play video games, but to make them. At the Wilmette Public Library, Brian Myers started a program that is now in its fifth year, where teens design their own games using a variety of programs.

### Social Literacy

To become fully functioning adults, youth need more than academic and professional education.

Another aspect of learning that cannot be underestimated is the need for young people to learn to work together. A long-standing stereotype of gamers is that of the anti-social geek, alone in the darkness of their parents' basement. First of all, as many gamers can attest, gamers enjoy gathering in the same physical space to play together in a virtual space. Providing a public space for teens to do this, like in a library for example, can help break the negative stereotypes around video games, and at the same time, educate youth about the importance of community, "playing videogames together can offer opportunities for positive civic experiences for youth and can foster connections to the community"(Levine, 2009)

- **Ask a video game or electronics store to host the program for you. GameCrazy does this for schools, libraries, churches, and so on.**
- **Ask members of the community to share their equipment.**
- **You may get a discount for purchasing things as a package rather than separately.**
- **Watch for sales on heavy-duty pads.**
- **Purchase used games or refurbished consoles (used pads not recommended).**
- **Purchase a setup for a library consortium or system to share.**
- **Request funding from the Friends of the Library, local businesses, or other donors.**
- **Write a grant.**

Figure 1 (Saxton, 2007)

Another stereotype that video game critics refer to is the ubiquitous violence that supposedly creates anti-social, violent individuals. However, Beck and Wade's 2004 study found two useful points for deconstructing these assumptions. Firstly, that "Juvenile murder charges dropped by about two-thirds from 1993 to the end of the decade and show no sign of going back up." (Beck & Wade, 2004, pg. 54). Secondly, that the enjoyment in gaming is not ultimately about the *specific* game being played. Rather it is the "deep structure of the activity" (Beck & Wade, 2004, pg. 52); it is the playing of games with others in *general* that rewards gamers. Players enjoyment from playing something like *Gears of War* is not necessarily due to homicidal tendencies, but more so from the fact that it is a game they can play with their friends, increasing comradery and acting as a social catalyst. So, when choosing video games keep in mind the number of players the game will support in general play, the more four player games the library has, the more people will interact when playing them. As well look for games that can be played online. Although this forum may need slightly more monitoring than a game played in the isolation of a single room the benefits of being connected to the internet means that people can play with hundreds, thousands, even millions of different people. The breadth of socializing that the internet provides goes far beyond what the physical location of the library can support.

# Libraries *Can* Afford Gaming

Even when there is support for gaming in the library, cost is always an issue. However, there are several working strategies being practiced to help mitigate, recover, or avoid the financial burden associated with video game hardware. Some general principles for saving money on games are listed in Figure 1, which was published in 2007 by YALSA.

Often gaming programs begin by borrowing video game equipment from the patrons and their families; sometimes generous library technicians and librarians volunteer their own equipment to get programs off the ground. If these programs are successful in garnering attendance increases and positive feedback, the likelihood of the library being able to allocate funds to buy its own equipment increases (Levine, 2006).

A way of mitigating the cost of video game hardware can be found at the public library in St. Mary's, Ontario. When *Rock Band* tournaments are held at the library, there is an entrance fee of \$2 (Thorpe, 2011). Obviously, such an entrance fee will not recover the entire cost of the equipment, but even a small price tag is income. Of course, this strategy only works in an area where teenagers have some financial flexibility and where there is a large population of teenagers who have enough desire to play that they willing to both show up and to pay up.

Finally the best way of avoiding hardware costs is by teaming up with local video game outlets and retailers. Partnerships are a great resource for libraries, and this helps overcome the hurdle that can arise with the divide between extremely knowledgeable teenagers and out-of-touch library staff. On the other side of the coin, the retailers get free advertising and a loyal customer base.

## Programming ideas for gaming

Not all librarians are avid gamers and the popularity of games can change as quickly as the weather. Of course one can check out any gaming magazines the library subscribes to, as well turning to the following websites and blogs:

Websites:

- <http://www.gamespot.com/>
- <http://www.gamespy.com/>
- <http://www.gamerankings.com/>

Blogs:

- <http://wonderlandblog.com/>
- <http://majornelson.com/>
- <http://www.thatvideogameblog.com/>

When thinking about programming ideas, it is important to keep the age range and interests of

your teens in mind. As mentioned previously, it is always preferable to purchase multi-player over single player games to ensure that many people can play at once. In addition to tying video games into related reading material or current events, there is no end to pairing gaming with traditional literacy skills. Here are some clever ideas published in a 2010 article in *School Library Journal*:

- Invite the participants to write their own fan fiction
- Create custom characters for the game
- Decide what the sequel should look like (Higgins, 2010)

As always, whenever you are hosting a program for teenagers having food available is highly recommend. You just have to make sure the participants wash their hands before taking their

turn, gaming is fun, but not with greasy controllers!

#### **Ask the Experts**

It is advisable to form a gaming teen advisory board, after all who knows what teens want more than teens do? Invite your most game-obsessed teens to be part of the advisory board and encourage them to bring their friends (Saxton, 2007)

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# Resources

## Game making programs:

### *Free & Open source software:*

#### **Alice**

Alice is an innovative 3D programming environment that makes it easy to create an animation for telling a story, playing an interactive game, or a video to share on the web.

<http://www.alice.org/>

#### **Scratch**

This program is created and hosted by MIT and aims to make it easy to create your own interactive stories, animations, games, music, and art -- and share your creations on the web.

<http://scratch.mit.edu/>

#### **Greenfoot**

Greenfoot is a combination framework for creating two-dimensional grid assignments in Java and an integrated development environment suitable for novice programmers.

<http://www.greenfoot.org/index.html>

#### **Squeak (Etoys)**

Squeak offers a range of programs to help people get animated web content and programming off the ground. The appeal factor is a little juvenile, but it is a great resource for beginners.

<http://www.squeakland.org/>

### *Proprietary software:*

#### **Game Maker**

Using easy to learn drag-and-drop actions, you can create professional looking games within very little time. The basic download is free, but to maximize your use of this software you will have to upgrade to the pro edition (\$25 USD)

<http://www.yoyogames.com/gamemaker>



## **Lists of epistemic games:**

- This website is set up to address the concept of epistemic games in its entirety; the content is intelligent, professional, and written by experts: <http://epistemicgames.org/eg/category/games/>
- This is a list of all the Simulation Games mentioned on *Gamespot*. Simulation games are the typical kind of epistemic game, putting players directly into the role of a professional be it a farmer, a pilot, or a race car driver.:  
<http://www.gamespot.com/games.html?platform=&category=Simulations&type=games&mode=top&sort=views&sortdir=asc>
- The following academic essay expounds the qualities of constructionist games, and equivalent term for epistemic gaming. There are no easy-access lists, but the three page essay is loaded with game titles and descriptions.  
<http://ccl.northwestern.edu/papers/2010/Holbert%20Constructionism.pdf>

## **Games that Encourage Physical Activity:**

### **Youth expended calories in specific Wii games:**

*Gold's Gym Cardio Workout* 7.3 Kcal/minute

*Your Shape* 6.9 Kcal/minute

*EA Sports Active* 5.4 Kcal/minute

*Just Dance* 5.3 Kcal/minute.

### **Wii Sports:**

*Baseball* 2.7 Kcal/minute

*Boxing* 4.3 Kcal/minute

*Tennis* 2.7 Kcal/minute

*Bowling* 2.2 Kcal/minute

*Golf* 1.6 Kcal/minute

(Retrieved from: [http://www.lcsun-news.com/las\\_cruces-healthy\\_u/ci\\_17984535](http://www.lcsun-news.com/las_cruces-healthy_u/ci_17984535))

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