Chapter 1

Why Gaming?

But They're Not Books!

Why games and gaming in libraries? This question is the most common response from librarians, parents, educators, and even teenagers when I talk to them about gaming in libraries. Why would libraries be interested in gaming, let alone be interested in creating services around an activity that millions of people are already doing at home?

Context will help answer these questions, as will examining some existing, readily accepted library services; but perhaps the easiest framework for responding to "Why?" is to avert the question and compare games to what libraries and librarians already know so well—books. As OCLC's 2005 *Perceptions of Libraries and Information Resources* report makes painfully clear, the library "brand" is books.[1] That is how library users (and non-users) think of libraries—books, more books, and still more books. Libraries have been—and always will be—about books. Librarians know books, we live books, we breathe books, we are books.

But what if librarians contemplate a titillating notion, an idea discussed in *Everything Bad Is Good for You: How Today's Popular Culture Is Actually Making Us Smarter* (Steven Johnson's 2005 best-selling book)? In Johnson's work, he makes many arguments for *why* games in general, but most intriguing, for the context of the library institution, is his "thought experiment," which provocatively asks: "What if video games had been invented and widely adopted first, before books?"

By default, librarians, parents, teachers, and others try to inspire children to read because of the benefits associated with this activity, and many of us often see video games as an impediment to this endeavor. But what would the world look like if instead we tried to inspire our children to play games based on underlying assumptions about the *benefits associated with them*? In such a world, Johnson imagines a debate about this new reading "frenzy" that might include the following arguments:

> Reading books chronically understimulates the senses. Unlike the longstanding tradition of gameplaying—which engages the child in a vivid, three-dimensional world filled with moving images and musical soundscapes, navigated and controlled with complex muscular movements—books are simply a barren string of words on the page. Only a small portion of the brain devoted to processing written language is activated during reading, while games engage the full range of the sensory and motor cortices.
>
> Books are also tragically isolating. While games have for many years engaged the young in complete social relationships with their peers, building and exploring worlds together, books force the child to sequester him or herself in a quiet space, shut off from interaction with other children. These new "libraries" that have arisen in recent years to facilitate reading activities are a frightening sight: dozens of young children, normally so vivacious and socially interactive, sitting alone in cubicles, reading silently, oblivious to their peers. . . .
>
> But perhaps the most dangerous property of these books is the fact that they follow a fixed linear path. You can't control their narratives in any fashion—you simply sit back and have the story dictated to you. For those of us raised on

> interactive narratives, this property may seem astonishing. Why would anyone want to embark on an adventure utterly choreographed by another person? But today's generation embarks on such adventures millions of times a day. This risks instilling a general passivity in our children making them feel as though they're powerless to change their circumstances. Reading is not an active, participatory process, it's a submissive one. The book readers of the younger generation are learning to "follow the plot" instead of learning to lead.[2]

What would library services in such a world consist of and look like? How does changing the question—from "Why gaming?" to "Why books?"—compel us to rethink our mental models about what a library is and what is appropriate for libraries to do. What happens when we realize we are equating video games with books as actual content?

What Is Content, Anyway?

"What kind of content do you have in your library?" If someone were to ask you that, what would you say? You may reply, "Books, music, movies, magazines, audiobooks," and the like. If librarians take the traditional view, it's easy enough to define "content" in libraries; but familiar to those of us within the library field are the cyclical debates about what is "good" content, what is "bad" content, and how we handle collection development.

For example, when I was at the Graduate School of Library and Information Science at the University of Illinois at Urbana-Champaign in 1992, I took Dr. Fred Schlipf's class on readers' advisory; in that class, we had to read a book in every genre. I remember debating in class whether a Harlequin romance novel was "literature" or "good reading." Schlipf taught us not to judge our patrons' choices, that reading is reading, and to each her own. This was not a new debate, but one—as popular culture became more . . . well, popular—that librarians had argued about for decades.

Why, then, do libraries offer romance novels, westerns, or fantasy novels? Why did librarians have this same debate about graphic novels, manga, and anime? Why did we have this same debate about circulating music, movies, and eventually computer software (are you lucky enough to remember the first time your library cataloged a book that came with a floppy disk in the back?)?

More to the point, why do we actually show movies in the library? Why do we let the local knitting group use a meeting room each month? Why do we host recreational programs for children and adults? Why do we offer public computers with productivity software and Internet access when more than 100 million homes already have computers?[3]

The same answers to these already settled questions help us answer the question of why libraries would offer gaming-related services. Just as librarians do not (or should not) judge patrons who read romance novels or westerns, we should not judge our patrons who choose to play video games as a form of recreation. And just as libraries offer multiple formats of content (music, movies, etc.), librarians and those who make decisions about library services need to keep an open mind and realize that video games have emerged as a legitimate format for millions of library users.

As for knitting groups, showing movies, and offering programs, libraries do all of these things because libraries are at the heart of many communities. In 1991, Professor Ray Oldenburg published his book *The Great Good Place*. In it, he proposed the idea of "third places" or "great good places." He noted the "First Place" as home and the "Second Place" as work. "Third Places," then, are those "public places on neutral ground where people can gather and interact. . . . They promote social equality by leveling the status of guests, provide a setting for grassroots politics, create habits of public association, and offer psychological support to individuals and communities."[4]

Surely there is no institution more illustrative of Third Place than libraries—institutions that provide all of these things and more, and, in most cases, they provide it an environment free of commercial advertising and the pressure to buy something: a place where people can gather to just *be*. When users walk in the door, those working in a library don't force them to read or to create a Word document or to watch a movie or to knit. Many users can do these things at home on their own time, so why do libraries offer the space in which to do them?

The answer: because libraries are actually offering something users cannot get at home. In some cases (such as knitting or movies), libraries are offering the chance for people to engage in these activities together, which adds social value to these activities. In other cases (such as computer hardware and Internet access or free tax-preparation programs), libraries offer services patrons simply cannot get elsewhere, either because they do not have the resources to afford it, or because the service is unique. Either way, the library is helping patrons achieve something they can't achieve individually. The same is true with gaming: it's clearly a beneficial offering—if only librarians can broaden our individual perspectives enough to view video games as *content* and *service*.

But How Can Video Games Be "Content?"

The world around us is changing, and within this change, library users and the Internet-using population in general are redefining "content." To be more comprehensive, librarians today may need to add the following to the list of content libraries provide:

- weblogs (commonly referred to as blogs);
- audiobooks;
- streaming music;
- databases;
- digital histories;
- podcasts;
- videocasts; and
- wikis.

Libraries now provide to patrons all of the above-listed formats and types of content, effectively blurring the lines and distinctions between content and container. Is the content of the digital audiobook (or audio e-book) any different than that of the same title provided in a CD or audiocassette format? It is the same narrative, the same linear progression of chapters, the same characters, and the same ending, even though the method of delivery—indeed, the experience itself—might be different.

When considered from this perspective, there are some fairly obvious similarities these "books" have with video games. After thirty years of mainstream popularity, video games have come a surprisingly long way, especially to nongamers who have not experienced some of the newer titles. Even the most violent video game has a narrative, while many fantasy and role-playing titles have very rich, detailed narratives that exist behind the action of the game. Whole worlds are created, characters are created with backstories, and completed tasks lead to a resolution that makes sense for those characters in that world. Even the most basic games have this in common with the most complex ones.

For example, there is a very strange, yet hypnotizing, game called *Katamari Damacy.* At its most basic level, the point of the game is to roll a ball over everyday items like paper clips, matches, and pushpins to attach them to the ball in order to make it grow to a certain diameter within a set amount of time. If you succeed, you move up a level and create a larger ball. Higher levels and larger diameters let you move on to picking up more interesting items, such as cars, people, and eventually, even buildings.

In so many ways, it is a very silly game—and yet it has a worldwide following and has spawned fan Web sites and a sequel. Remember, all you do is roll a ball around in different directions, trying to pick things up with it to make it a certain diameter before time runs out. Yet even this incredibly simplistic plot has a backstory, characters, and a narrative.

In the game, you are the prince, and the king has ordered you to create these giant balls because, when these balls reach a certain size, they shoot up into the sky and become stars. Ultimately, though, the narrative is about how the king became "The King of All Cosmos" and had a son, you, the Prince. The game is so popular that it has its own entry in Wikipedia.[5] The section about the story goes into great detail about the backstory, and even notes, "Later in life, after an argument concerning a strawberry shortcake, the future King of All Cosmos runs away from home. During this period of rebellion, he gets into fights with street punks who in one altercation slice off the front of his pompadour haircut."

Katamari Damacy by Nameco
http://katamari.namco.com

Katamari Damacy on Wikipedia
http://en.wikipedia.org/wiki/We_%E2%99%A5_Katamari

This is just one small piece of the story that explains why the prince must roll the ball around to make it bigger. If playing a video game only were about shooting, racing, or moving around, developers wouldn't bother with these elaborate stories or with creating characters and infusing the characters with pasts. Although a player (who is engaged in "gameplay") is operating in an open-ended experience, one that lets the player dictate what happens next based on his or her actions, there is still a linear progression of tasks—in essence, a story—through which the player must progress to reach the next level or to win the game.

So if there are stories, characters, and narrative, can we call video games "content"? The answer is yes, especially if you ask anyone under the age of thirty-five. The gaming generation will gladly tell you how they view games as content, how these games contain shared stories. The easiest way to understand this is to compare games to a previous generation's preferred medium—television.

Video Games and Learning

Video games still carry the stigma that television did for decades (and still does in some ways). Certainly not all television shows are educational or good. But this media channel has been around long enough that most of us simply accept there will be good and bad. In defense of the medium with which they grew up, baby boomers are likely to point to educational shows such as *Sesame Street* and *Mister Rogers' Neighborhood* as examples of "good" and "educational" content. And yet, these boomers' parents only saw them staring at a screen, being exposed to, and ultimately conditioned by, a popular culture that seemed deeply ingrained in their kids but foreign to them. The same is true with video games, except now it is the boomers who are worried about their children staring at screens.

"Cognitive Workouts"

When examining the potential benefits of gaming, Johnson says games can give us—and indeed, can teach us—critical-

thinking tools we will need in the new world emerging around us. In fact, he argues, ". . . there is another way to assess the social virtue of pop culture, one that looks at media as a kind of cognitive workout, not as a series of life lessons."[6] Almost no other media is as cognitively engaging as video games, and Johnson spends quite a bit of his book supporting this position.

> Far more than books or movies or music, games force you to make *decisions*. Novels may activate our imagination, and music may conjure up powerful emotions, but games force you to decide, to choose, to prioritize. All the intellectual benefits of gaming derive from this fundamental virtue, because learning how to think is ultimately about learning to make the right decisions: weighing evidence, analyzing situations, consulting your long-term goals, and then deciding. No other pop cultural form directly engages the brain's decision-making apparatus in the same way.[7]

In many ways, Johnson's book builds upon an earlier work by Professor James Paul Gee, *What Video Games Teach Us about Learning and Literacy*.[8] Gee's book came from the belief that video games represent new multimodal literacies, which offer positive benefits, especially for children and students. Johnson expanded this idea beyond just games to popular culture in general.

In contrast, Gee's book focuses strictly on video games in the context of education, learning, and schools. What Johnson considers "cognitive workouts," Gee views as "semiotic domains," a phrase he coined to mean "any set of practices that recruits one or more modalities (e.g., oral or written language, images, equations, symbols, sounds, gestures, graphs, artifacts, etc.) to communicate distinctive types of meanings." Throughout his book, Gee makes the argument that:

> . . . people playing video games are indeed . . . learning "content," albeit usually not the passive content of school-based facts. . . . The content of video games, when they are played actively and critically, is something like this: *They situate meaning in a multimodal space through embodied experiences to solve problems and reflect on the intricacies of the design of imagined worlds and the design of both real and imagined social relationships and identities in the modern world.* That's not at all bad—and people get wildly entertained to boot.[9]

Video games, therefore, offer a type of mental stimulation almost unmatched in any other medium. The role of imagination is combined with a virtual reality of split-second decisions, offering continual mental aerobics.

The benefits of such "cognitive workouts" are beginning to show up in research, to the point where Nintendo has introduced *Brain Age* for its Nintendo DS hand-held gaming device. Aimed at older adults and seniors, the game consists of a variety of puzzles the player must solve. Algorithms behind the games continually evaluate the "mental" age of the player, so winning means reducing your age in the game. The point is to give your brain a workout to keep it agile and young—like a virtual-fitness center for your mind—in order to ward off illnesses such as Alzheimer's disease. Expect to see more of these types of games as baby boomers move closer to retirement age.

The Most Traditional Service—Literacy

We now have evidence that not only supports the idea that gamers get "cognitive workouts" (gameplay that stimulates players and raises their competitive adrenaline levels), but it also turns out that games are actually quite good at helping young children learn to do things like ***read***, specifically because these games *embody content for them*. In 2001, my six-year old son, Brent, was *taught* to read in school, but he *learned* to read—and, more importantly, was self-motivated to *learn* how to read—by playing video games.

When he began playing them at age four, he would play until we told him it was time to stop. The first few times, he would bring up the options screen and ask which word in the list said *save*. Our answer was, "You tell us. Which one starts with the letter *s*?" He was motivated enough to save his game, so one of the first words he learned how to consistently spell correctly was *save*.

The bulk of teaching him to read still revolved around school, but the new words he learned the most quickly and remembered consistently were ones that helped him advance in his games. Although I learned to read, at least in part, thanks to *The Electric Company* on television (and can still recall the specific skits and lessons those on the show performed and taught), Brent learned to read from games.

Of course, there are also different kinds of literacy, and although games were a major catalyst for Brent to learn to read (and even to write, as he had to be able to write out his Christmas wish list legibly and look up "cheats" for the games he played on the Internet), he also learned many other powerful tools from video games.

By the age of ten, he had mastered other forms of literacy—audio, video, media, and information. It's easy to see how playing hours and hours of multimedia games would hone a child's skills for interacting within an audiovisual environment. It's almost *too* obvious. In fact, for nongamers, it is difficult to understand just how much information a young child is taking in, processing, and manipulating via multiple methods.

For example, when playing a seemingly simple driving game such as *Mario Kart: Double Dash*, the player has to process and react to an incredible amount of information displayed on the screen (see figure 4). There's an outline of the track (including moving icons indicating where each player is on the track at a particular moment); the speed at which the player's kart is traveling; how many laps he or she has completed; what special items have to be picked up for battling other players (each item has its own meaning and special powers); and what place he or she currently occupies in the pack (first, second, third, and so on).

All of this information is constantly changing, and the player must be aware of it while driving, steering, and watching what other players are doing on the course. In addition, there are audio cues and clues that play throughout the race to signal events, approaching weapons, and other information. Most adults have problems tracking all of this, and as a result, they tend to just drive and ignore all of the information on the screen. Younger players, on the other hand, are quite good at knowing ***exactly*** what is going on in the game, and they quickly learn how to harness all of this information in order to maximize their chances. It's not just multitasking—because the player is really *just playing the game*, driving the course. It's more like prioritizing streams of information and knowing what is important and when. Speaking from experience, it is fascinating (and a bit embarrassing) to watch when a young child tracks information on a screen better than an adult librarian.

In general, gamers are forced to read numbers, text, and images on the screen very quickly and in rapid succession. John Beck and Mitchell Wade believe this combination of print, graphical, audio, and visual information, in addition to the physical use of the controller, represents not just an important literacy, but also a valuable skill in the business world. In their book *Got Game*, the authors argue, "the game generation grew up in this world of immersion and instant response. . . . What gamers learned, among other things, was how to manipulate electronic information."[10] They then tie this skill specifically to the business world.

> The potential offered by a generation already used to thinking in these ways—really living in "dataspace," begging to handle more simultaneous data streams than their parents even imagined—is extremely promising. Cutting-edge analytic tools that look a lot more like video games than office suites have already helped serious decision makers produce real progress on problems that seem impossible to analyze (at least, without data that simply doesn't exist): global warming, terrorist threats, and long-term investments in infrastructure. . . .[11]

In the next chapter, I will look more closely at demographics and characteristics of the gaming generation and what their impact will be not just on our society or the business world, but also on libraries. The point so far is that although librarians, like most adults, tend to think of video games as staring at a screen, mindlessly playing games, the reality is quite different. In addition to reading and processing information, gamers have to make lightning-fast decisions *based on* what they are reading and processing. This behavior is far more interactive and experiential than reading a book for the summer-reading program or a textbook for school. It is not just a matter of reading some text and memorizing it long enough to pass the test. It is a style of learning in

Figure 4:
A typical, information-packed screen in *Mario Kart: Double Dash*

which the user must understand what is happening, the context, and the possibilities, and then act upon an immediate and deliberate assessment of all of that information. Gee calls this process the "probe, hypothesize, reprobe, rethink cycle":

> Playing a good video game . . . well requires the player to engage in the following four-step process:
>
> 1. The player must *probe* the virtual world (which involves looking around the current environment, clicking on something, or engaging in a certain action).
> 2. Based on reflection while probing and afterward, the player must form a *hypothesis* about what something (a text, object, artifact, event, or action) might mean in a usefully situated way.
> 3. The player *reprobes* the world with that hypothesis in mind, seeing what effect he or she gets.
> 4. The player treats this effect as *feedback* from the world and accepts or rethinks his or her original hypothesis.
>
> In fact, if you don't engage in this four-step process, you won't get very far in a good video game. . . . Some consider this four-step process to be the basis of expert reflective practice in any complex semiotic domain. . . . The child, through action and reflection, becomes a "self-teacher," "training" his or her own mental networks of associations (the patterns the mind stores).[12]

If this process sounds familiar, it should, because it is very similar to the "scientific method" many of us were taught in school. You probably haven't thought about it in years—maybe it has even been since you were back in school—but imagine going through this process subconsciously daily, even by the minute, as a gamer, constantly gathering data, evaluating it, and then acting on it. Just thinking about this might make your brain feel tired, and yet young gamers grow up with this as their norm.

Interestingly, it's not just children and teens who can benefit from gaming and learn in new ways. In 2004, researchers at the Beth Israel Deaconess Medical Center and the National Institute on Media and the Family at Iowa State University conducted a study to determine whether gaming skills could translate into improved surgical competencies in the operating room.

> Researchers found that doctors who spent at least three hours a week playing video games made about 37 percent fewer mistakes in laparoscopic surgery and performed the task 27 percent faster than their counterparts who did not play video games.
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> "I use the same hand-eye coordination to play video games as I use for surgery," said Dr. James "Butch" Rosser, 49, who demonstrated the results of his study Tuesday at Beth Israel Medical Center . . .
>
> "Yes, here we go!" said Rosser, sitting in front of a *Super Monkey Ball* game, which shoots a ball into a confined goal. "This is a nice, wholesome game. No blood and guts. But I need the same kind of skill to go into a body and sew two pieces of intestine together."[13]

So the next time you watch kids staring at a screen playing video games, look a little more closely. If you pay enough attention, you'll probably see a lot of learning going on, in addition to all of the hand-eye coordination skills they are practicing. You might even be watching a future doctor in training!

"Surgeons May Err Less by Playing Video Games," by Verena Dobnik
http://msnbc.msn.com/id/4685909

Entertainment Software Rating Board Game Rating & Descriptor Guide
www.esrb.org/ratings/ratings_guide.jsp

If my arguments have not yet convinced you there is more to gaming than meets the eye and that there are positive outcomes to gaming, the next chapter has myriad other reasons to help convince you why libraries need to pay attention to video games and begin offering services related to them.

A Few Words about the Scary Stuff—Violence in Video Games

Whenever I talk to nongamers about gaming in libraries, a substantial area of concern among parents and librarians lies in the violence portrayed in some video games. Like television and movies, video games have an age-appropriate rating system, which means that most video games receive a rating to help guide parents toward appropriate content for their children (see figure 5). Assigned by the Entertainment Software Rating Board (ESRB), the rating system begins with the "EC" rating, which stands for "Early Childhood." A rating of "EC" indicates a game suitable for ages three and older. It is very telling that the ESRB even has a designation for games aimed at children

as young as three years old; it helps illustrate the level of presence of video games for this age group as well as how video games are being developed and designed to engage and interact with young children in a way text simply cannot.

At the broadest end of the ESRB's spectrum are games rated "E" for "Everyone"; these are appropriate for anyone over the age of six and are games that even young children can play, although by no means does this imply that these are simplistic games that *only* children can play. One of the most popular games for the Nintendo systems is *Mario Kart*, an E-rated game that simulates an innocuous go-kart competition, but it's a game that actually is quite complex and engaging, even for adults. Games with any kind of fighting (especially more realistic fighting such as wrestling, karate, or boxing), strong language, or violence may be rated "T" for "Teen," for ages thirteen and older. In between is "E10+" for those titles that have a little more cartoon violence and mild language than regular "E" games. The overwhelming majority of games fall into these three categories of ratings.

At the other end of the scale are the games the media focus on, those rated "M" for "Mature" and that are appropriate for ages seventeen and up. There is even a very rarely used "AO" designation for games that are intended only for people over the age of eighteen. M- and AO-rated games are comparable to R- and NC-17–rated movies. Movie ratings suggest that parents not take their young children to R-rated movies, and the ESRB labels games M and AO to warn parents not to purchase them for younger children.

For those librarians thinking about gaming services, these are the titles—M- and AO-rated games—that can be scary, the ones librarians hear about in the media in what are, oftentimes, sensationalistic stories about video games and their detrimental affect on children.

A well-known example of an M-rated game is the *Grand Theft Auto* series, which is infamous for its violence and misogynistic scenes. Just as we know such titles will exist on television, in movies, and even in books, it should be expected this kind of market exists for adults. As librarians, we don't keep R-rated movies out of libraries, and we don't even have a ratings system for books to mark them as "R-rated" (even though we have plenty of titles in our stacks that would easily warrant such a designation). So to specifically focus only on video games developed for adults, when talking about gaming in libraries, is disingenuous at best. We already have comparable materials in other formats, but we also have a wide range of choices from which to

Figure 5:
Key to Entertainment Software Rating Board's Video Game Rating System (www.esrb.org/ratings/ratings_guide.jsp). According to the ESRB site, "ESRB ratings have two equal parts: rating symbols suggest age appropriateness for the game and content descriptors indicate elements in a game that may have triggered a particular rating and/or may be of interest or concern." (image courtesy of the ESRB)

choose that do not involve the extreme end of the rating spectrum.

In fact, what most librarians don't realize is that although everyone has heard of the *Grand Theft Auto* games, M-rated games comprised only 15 percent of the market in 2005 (down from 16 percent the previous year). Ask yourself how many E- or T-rated games you heard about in the media last year, and you will quickly realize how skewed coverage is of the video-game industry. The news media needs stories to tell, preferably controversial ones, and the 85 percent of E-, E10+, and T-rated games to which parents have no objections just don't make the evening news. This means that when you and your fellow library staff members are choosing games for your patrons to play, your starting point for selection encompasses 85 percent out of the thousands of titles available.

Two of the case studies presented in this issue will show libraries letting patrons play a particular M-rated game (called *Halo*), but for the purposes of this publication, I will be turning attention to that 85-percent "middle ground." In fact, I will specifically focus on a number of titles well suited to library use, due to the combination of their ratings, their types of gameplay, their networking capabilities, and the pure fun of playing them.

It is also important to recognize the surge of interest in "good" or "educational" games, especially for computers and on the Internet. In just the last few years, I have seen the appearance of titles that attempt to create simulations of real-life situations in order to teach social values. These include games about the Israeli-Palestinian conflict, *Peacemaker*; genocide in Rwanda, *Darfur Is Dying* and *Pax Warrior*; preventing hunger, *Food Force*; learning how to stage nonviolent demonstrations as protests, *A Force More Powerful*; divorce, *Earthquake in Zipland*; grassroots activism, *The Organizing Game*; homelessness, *Homelessness: It's No Game*; and immigrant farm workers, the upcoming *Squeezed*. (Note: None of the games listed in this paragraph have been rated by the Entertainment Software Rating Board.) How long until someone develops a professional, compelling game that teaches information literacy? My estimation, "Not long."

Talking Points

- Children learn a variety of literacies from video games much more proactively than baby boomers did from television, including print literacy.
- "Mature" games make up only 15 percent of the video-game market and are disproportionately represented in the news. The overwhelming majority of games released each year are rated appropriately for use in libraries. (Whether a game's gameplay lends itself to use in libraries depends on the individual title.)
- In reality, juvenile crime statistics dropped sharply (along with crime in general) at the very beginning of the period when the level of video-game violence was hitting critical mass. . . . Juvenile murder charges dropped by about two-thirds from 1993 to the end of the decade and show no signs of going back up. The rate of violence in schools hasn't increased either—it just gets more media coverage.[15]

Notes

1. Cathy De Rosa, et al., *Perceptions of Libraries and Information Resources* (Dublin, OH: Online Computer Library Center, 2005) www.oclc.org/reports/2005perceptions.htm (accessed August 18, 2006).
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3. U.S. Census Bureau, *Current Population Survey, 2005 Annual Social and Economic (ASEC) Supplement* (full report at www.census.gov/apsd/techdoc/cps/cpsmar05.pdf, May 16, 2006), statistic at www.census.gov/population/socdemo/hh-fam/cps2005/tabH1-all.csv (both URLs accessed August 18, 2006).
4. Ray Oldenburg, Project for Public Spaces, Resources, Placemaker Profiles, "Perspectives: Third Place," (2006), www.pps.org/info/placemakingtools/placemakers/roldenburg (accessed August 18, 2006).
5. "We ♥ Katamari," Wikipedia, English-language article on Katamari Damancy video game developed by Nameco Limited, http://en.wikipedia.org/wiki/We_%E2%99%A5_Katamari (accessed August 21, 2006).
6. Steve Johnson, *Everything Bad Is Good for You: How Today's Popular Culture Is Actually Making Us Smarter* (New York: Riverhead Books, 2005), 14.
7. Ibid., 41.
8. James Paul Gee, *What Video Games Teach Us about Learning and Literacy* (New York: Palgrave Macmillian, 2003).
9. Ibid., 48.
10. John Beck and Mitchell Wade, *Got Game: How a New Gamer Generation Is Reshaping Business Forever* (Boston: Harvard Business School Press, 2004), 33.
11. Ibid., 90–91.
12. James Paul Gee, *What Video Games Teach Us about Learning and Literacy* (New York: Palgrave Macmillian, 2003), 90.
13. Verena Dobnik, "Surgeons May Err Less by Playing Video Games," MSNBC (April 7, 2004, Associated Press), http://msnbc.msn.com/id/4685909 (accessed August 21, 2006).
14. Entertainment Software Association, "Top 10 Industry Facts," Facts & Research (2006), http://theesa.com/facts/top_10_facts.php (accessed August 16, 2006).
15. Beck and Wade, *Got Game*, 53–54.