Case Studies

Academic Libraries

College Students:
The Middle of the Bell Curve

I
f individuals age thirty-five and under are classified as "native gamers," then today's college students are situated in the middle of the proverbial bell curve. They are not the early adopters (now in their thirties), and they are not the youngest gamers, the ones who merit the early childhood (EC) rating for video games. They have been exposed to video games their entire lives and have grown up with them in a way that no other generation before them has. Video games, to them, are like electricity—always there when needed (especially these days, thanks to ubiquitous WiFi and cell phones).

This description is examined in a study conducted by Steve Jones, professor at the University of Illinois at Chicago and senior research fellow for the Pew Internet & American Life Project.[1] His study surveyed, via a paper-based method, students at twenty-seven universities in the United States, while students at twenty-five institutions were targeted with an online survey. In-person observations and interviews were also conducted at ten universities.[2] Jones and his research assistants found that 70 percent of the respondents reported playing games "at least once in a while," while 65 percent considered themselves to be "regular" or "occasional" game players.

Although these numbers surprised the researchers—who were expecting higher percentages of those who played games once in a while or regularly—one statistic was stunning. Jones and his colleagues found that every single student respondent had played a video, computer, or online game at some point in his or her life.[3] In addition, only 2 percent of the respondents cited "a lack of resources or access to games" as a factor in non-play (which further highlights how games transcend socioeconomic

barriers). Even more stunning was the finding that only one-half of 1 percent cited unfamiliarity with any game. According to Jones, this is a statistical anomaly in Pew's studies, which traditionally have a margin of error of plus or minus 3 to 5 percent.

Let the Games Begin
www.pewinternet.org/PPF/r/93/report_display.asp

"The Gaming Landscape: College Students, Gaming & Learning," by Steve Jones
http://gaminglibraries.org/2005symposium/presentations/stevejones.pdf

Gaming Symposium 02: Steve Jones
http://theshiftedlibrarian.com/archives/2005/12/05/gaming_symposium_02_steve_jones.html

This data clearly shows just how ingrained gaming is for this generation. Even for those who do not play video games often, they have a frame of reference about games and gaming that other generations simply do not. To at least some degree, they understand the language, symbols, and lessons of video games as knowledge currency, and they can discuss them with their peers in a way that members of older generations cannot.

One further note about Jones's research—for reasons difficult for "older" people to understand (I'm not sure I understand it myself)—the survey respondents did not consider playing games on cell phones to be "gaming," which most likely affected the way they answered the questions. It is quite possible the seemingly low 65 to 70 percent range is indeed low, in part, because generations define

gaming differently. Once professionals in the library field recognize that Jones's survey further supports what Beck and Wade and Johnson have proposed, librarians can begin the discussion of how libraries need to adapt or add services for this generation.

Z. Smith Reynolds Library at Wake Forest University

In 2005, staff members at Wake Forest University's Z. Smith Reynolds Library were directed to create and implement a gaming program in a very short period of time (approximately four months). Lynn Sutton, the library's director, had learned about other academic libraries considering offering gaming services, so she brought the idea back to her staff. "When I first heard another academic library director say [the library] had sponsored a Game Night, I was immediately entranced with the idea. I came home and said what all staff [members] hate to hear from their director, 'They are doing XYZ at institution ABC, why can't we do that?'"[4]

In June, Sutton directed her staff to put together a plan for a gaming program. "My rationale for doing it was to keep the library relevant in the eyes of the students. We guessed that our gamers were not the students who came to the library during orientation and took a tour. We wanted a way to draw them into the building and maybe they would look around and realize there were people here who could help them in other ways than sponsoring gaming events."[5]

H. David "Giz" Womack, an information-technology specialist and the training manager at the Z. Smith Reynolds Library, spearheaded the library's gaming-event project. With no monies budgeted for it, Womack and his team had to get creative. They realized that many gamers already on campus had equipment, so Womack and his team decided to focus on providing space, refreshments, and LCD projectors. Staff members settled on the name *Get Game@ZSR* and scheduled the library's first gaming event for Friday, September 16, 2005, in the library's atrium.

To publicize the event, Womack sent out messages via e-mail to the student body, advertised the open-play game night on the student Web portal and on the university's Web portal, put up fliers around campus, and asked the resident technology advisors (RTAs) in the residence halls to help spread the news through word of mouth. Womack noted, "The student involvement helps give us more gaming credibility among the students."[6]

On the day of the event, as the start time approached, library staff members and the RTAs began by setting up the projectors and refreshments. Students were allowed to bring their equipment, regardless of platform (Xbox, GameCube, or PlayStation) as well as their games and con-

trollers. Students brought games like *Halo 2* and *Madden 2006* (football), and during tournaments, the library used only student-owned copies of *Halo 2* on student-owned Xbox machines. The only real problem with the setup was that too many devices were plugged in during the first event, which caused a fuse to blow, which, in turn, caused a brief break in the gaming! (Like gamers, though, the library's team learned from the experience, and it has not happened again.)

Womack estimates the library spent a grand total of $425 (plus staff time, of course) on the first open-play game night. When the library hosted a *Halo 2* tournament the following February, costs were pared down to $172 (plus staff time), because staff members had, by then, become much more proactive about finding alternate forms of funding. Not only were they were able to get food supplied at no cost, they were also able to get a trophy donated for the event! Noted Womack, "All tournaments need a big trophy!"

He also explained, "Our users' feedback from the gamers who attended was uniformly positive; in fact, in the weeks following the event, they asked when we would be hosting the next one."[7]

As I have found (when soliciting feedback from librarians and library staff at *any* type of library that offers gaming) to be typical, staff members are often surprised at the lack of negative feedback. At Wake Forest University's Z. Smith Reynolds Library, the library staff received no feedback from members of the university administration either way. "We only got a few raised eyebrows from [them], along with their silent assent," stated Sutton. Although some library staff members originally were skeptical, they became less so "once they had seen the positive feedback [the library] received from the events," she added.[8]

Even though students ask for more gaming events, the staff of the Z. Smith Reynolds Library continues to hold game nights once a semester, preferring not to increase the number in order to maintain the high level of interest. Womack plans to continue the model of hosting an open-play game night during the fall semester and a tournament night during the spring semester, though he reports he's going to explore the option of collaborating with other Atlantic Coast Conference (ACC) schools to hold a regional gaming tournament.

Although Womack hopes to be able to purchase gaming consoles for the library in the future, a follow-up survey of attendees showed that 100 percent of them did not mind bringing their own equipment. They liked both the open-play nights and the tournaments and indicated a preference for three-hour-long events on Friday nights.

When asked why the library should be offering gaming space and services, Womack echoed some of the same reasons Mindy Null cited in support of gaming in school libraries: "The library needs to gain credibility with our students and demonstrate our relevance in the fast-paced

digital world, without sacrificing the dignity of the institution. I do think we've met that goal. Not only do we encourage students to come to the library who might otherwise not take advantage of our services, but we also learn more about our users and how to best serve them while also establishing the library as the place to be!"[9]

And Sutton added: "Overall, I think it has been very beneficial to our image and reputation with the students. Last spring, we kept the entire library open twenty-four hours during exams for the first time and fed the students each night at 1:00 A.M. Along with the two gaming events, that sealed the deal. We are hot!"[10]

Womack also believes any academic library can replicate what his library has done to connect with students. "You can do it on a budget. We were able to use for free old university-owned LCD projectors on their way to the landfill as well as to solicit donations for refreshments. As the Nike slogan says, 'Just Do It!' It is good to try new things!"[11]

More information about the Z. Smith Reynolds Library's Get Game@ZSR service is available online (http://zsr.wfu.edu/about/news.html#get_game), and Sutton and Womack also coauthored the article, "Got Game," in the March 2006 issue of *College & Research Libraries News*.[12]

"Get Game@ZSR: The How and Why of Game Nights in Libraries," by H. David "Giz" Womack
www.infotoday.com/cil2006/presentations/
D105_Womack.pps

Get Game@ZSR
http://zsr.wfu.edu/about/news.html#get_game

"Meet the Gamers," by Kurt Squire and Constance Steinkuehler
www.libraryjournal.com/article/CA516033.html

University of Illinois, Urbana-Champaign (UIUC) Library

Assistant engineering librarian Christopher Paul Hamb has also helped spearhead a "gaming in the library" initiative on his campus at the University of Illinois, Urbana-Champaign (UIUC). Rather than offering an open-play night, Hamb and his colleagues instead decided to offer a *Dance Dance Revolution* tournament. Hamb explained how the UIUC library structured its gaming offering:

> We decided to do a single elimination *DDR* tournament using *DDR* Extreme for the PS2. We limited the number of players to sixteen because

the game night was only for three hours, and we didn't want the tournament to take more than half of that time. Players could register for the tournament in advance on our website. We had thirteen people sign up but only ten showed up for the game night. The other six players signed up once they arrived. Over half of our players were from the *DDR* Illini student group. They also represented our top three winners.

> Although some of us at the library play *DDR*, none of us had any experience running a tournament. I contacted the president of the *DDR* club ahead of time, and he was very helpful in assisting me with the tournament rules. During the tournament, the *DDR* Illini members were more than willing to help with setup of the console. Gift certificates to EB Games were given to the top four winners. We had the tournament in a large room with the game projected onto a large screen on the wall. There was plenty of water and Mountain Dew for all.[13]

The library staff promoted the event via the usual outlets (word of mouth and fliers around campus), but staff members circulated information about it through innovative means too—fliers on the *DDR* machine in the student arcade, on the library's blogs, on MySpace, and in Facebook. At the peak of the tournament, approximately sixty students attended, a surprising turnout, given that the event was held just two weeks before the end of the spring 2006 semester.

According to Hamb, "Although the *DDR* tournament was the highlight of our game night, there were plenty of other things to do. We also had another PS2, an Xbox, an Xbox 360, and a GameCube set up at different places in the library, where people could play games from our collection or bring in their own. We also encouraged people to bring in their own systems and connect them to one of the twenty or so [televisions] in our media viewing area. The library has one copy of *Guitar Hero*, and three students brought in extra guitars so a mini-*Guitar Hero* tournament was started."[14] (See figure 17.)

Once again, student reaction about the library offering gaming program was uniformly positive. What's interesting about the way the UIUC Library gaming program started, however, is initially it was designed to promote circulation of the library's collection of video games. (That's right—the UIUC Libraries are collecting and circulating video games for students, staff, and faculty to check out.) Hamb noted:

> Feedback from the students has been great, especially the gamers. Many are surprised but very excited that we are doing this. Most librar-

ians have been very supportive. The only real complaints have been [about] budgetary issues. Some librarians are concerned that the money could have been better used.

My colleague, David Ward, and myself have been primarily responsible for our initial collection development. We met with the manager of our [local] EB Games to see what the best-selling games were in our area. We purchased the top ten or so games for the four major consoles. We also purchased a couple of games that had just come out that week that we knew would be top sellers. After we purchased the games, they were given to our catalogers to be put in our OPAC.

We haven't really looked at our circulation figures. . . . Even so, almost half of our games are currently checked out. I think the fall semester will be a more accurate prediction of how much the collection will circulate.

We have received very little backlash so far. A couple of faculty members were upset after they saw some of the titles in our collection. They deemed them very offensive. We basically told them that we won't censor the games just like we don't censor our books. Beyond that, no one has voiced that [he or she is] strongly against what we are doing. We are getting several "why are you doing this" [type of questions] from faculty, staff, and students. We tell them that gaming is a large part of our culture, and it is a service that should be provided to our students. We also inform them of the research value in gaming and how we can better serve the university community by providing games. The game-research group on campus is doing all types of interesting things with games, and they're very happy to know that they will be able to get the games from the library.[15]

In addition to the gaming efforts, the staff members at the UIUC Library have plans to create the largest historical archive of video games in the world (see figure 18). Although Stanford University has already started a similar collection, Hamb and his colleagues are convinced theirs will be better. "The gaming initiative is a very hot topic in the library right now and is growing every day. We have librarians from many different departments working on it. I'm an engineering librarian, but we have people from undergrad, acquisitions, preservation, cataloging, and others all working on it in some way or the other. Our strongest support is coming from people very 'high up' in the library, including the university librarian and an associate university librarian."[16]

CISAT Library at James Madison University (JMU)

When a librarian came to Dean Ralph Alberico at the CISAT Library at James Madison University (Harrisonburg, Virginia) and asked him whether or not he thought the library's staff needed to address the issue of students using the library's computers to play online games, Alberico saw an opportunity. As a result, he and Health and Human Services Librarian Jennifer McCabe decided to use McCabe's proposal for an online tutorial (prompted by an associate dean at one of the JMU colleges) as the basis for an Institute of Museum and Library Services (IMLS) grant to create a series of games to develop, teach, and

Figure 17:
UIUC students participating in the library's gaming event. According to librarian Christopher Paul Hamb, the library owns one copy of *Guitar Hero,* but students have brought in extra guitars so they could engage in a mini-tournament.

Figure 18:
With Stanford University having already started a video game archive, staff members at the UIUC Library are engaging in that fine, old tradition of collegiate competition; UIUC's library staff plans to amass "the largest historical archive of video games in the world." (www.library.uiuc.edu/gaming)

assess the health-literacy and information-literacy skills of JMU students.

JMU was awarded the grant in September 2005, and McCabe, so far, has spent 20 to 40 percent of her time each month working on it. Although she estimates that she and her colleagues will have a finished product in mid-to-late 2007, McCabe hoped to have a beta version playable during the fall 2006 semester (see figure 19).

Prior to publication of this issue, McCabe and her team members were designing the graphic elements; they were beginning to work out the logic in the game; and they were writing some scenario narratives. (The concept of the game, the game world, and many of the in-game activities had already been defined.) In regard to content, players of the game will encounter core competencies in the three basic areas of healthy literacy. The game will also emphasize two of the Association of College and Research Libraries' (ACRL) Information Literacy Competency Standards. McCabe explained the game's concept:

> This game is aimed primarily at health science, nursing, and social work students. I hope it will be useful for most pre-clinical health science students, as well as some psychology, kinesiology, and even communications sciences and disorders (speech pathology and audiology) students, since healthy literacy is something all health and human services students need to know about. It is aimed at undergraduate students of all grade levels.
>
> In a nutshell, my goal is to create a game that will educate students about the components of health literacy (communication skills, information-seeking skills, and cultural competence) in such a way that they will be prepared for the diversity of literacy levels and beliefs that will inform their patients' health decision making. I want players of this game to understand that many factors contribute to decision making: reading level, religion, cultural beliefs and practices, communication skills, etc. . . . Success in handling these situations will depend on developing specific skills and building collaborative relationships, and the game will emphasize these points.[17]

Because JMU librarians had already developed a number of other online tutorials for specific departments, McCabe was confident this type of service was already "in our suite of offerings" and would be readily accepted by her colleagues. Still, she didn't fool herself into thinking that some on campus simply will not "get it." She noted, "I expect to get some skepticism from teaching faculty who have not followed the gaming conversations, and probably some students, too. I am fairly certain, however,

to receive support from the teaching faculty in my liaison departments, because by and large they are an open-minded group." She added, "Most people thought it was pretty cool. Our organization tries to encourage creativity and innovation, and we are very supportive of each other, so the reaction has been quite positive. . . ."[18]

In "Meet the Gamers," Squire and Steinkuehler explain how gaming assesses competencies by default. "One core competency in gaming communities is the ability to negotiate multiple, competing information spaces that span different media and official/unofficial channels. Judging the quality of information does not simply come down to ascertaining what is official and what is not; it involves understanding what the information will be used for, its strengths and drawbacks in terms of reliability, and the kind of valid conclusions one can draw from it."[19]

This is exactly the type of learning McCabe hopes to be able to evaluate with JMU's games. A major component of the IMLS grant is the follow-up assessment piece, which will determine if this approach is more effective than traditional text-based approaches when teaching students. If the research about surgeons and video games holds true, then McCabe and her colleagues will most certainly be creating a valuable tool that can be used at health-services institutions around the world.

> At this point, I think it's very important that two things be established: concrete assessment data to prove that people do learn specific things through gameplay, and that fun is a motivating factor. I feel so lucky to be in this profession, and at my institution specifically because I am really "standing on the shoulders of giants," so much of the hard work of establishing information-literacy competency standards and usability standards has already been done. Now I think we are at the point where we can address student motivation.[20]

Figure 19:
You can learn about the JMU grant and read the grant's narrative, game description, and more at www.lib.jmu.edu/org/games.

When asked why she believes libraries should invest in gaming, McCabe asserted that gaming is an opportunity for librarians to lead by example and prove our expertise.

> I think it has been safely established that gameplay is a meaningful activity for a significant portion of the college-student population. Using what we know about information-seeking behavior and applying it to this new milieu is an exercise in flexibility. . . .
>
> I also think that librarians are uniquely positioned to try innovative instructional approaches. Because the teaching we do is different from the teaching that full-time instructional faculty [members] do, it is easier for us to experiment. For this reason, I think librarians can expose full-time teaching faculty to some things they might never have the time or energy to try otherwise.[21]

Another benefit of collaborative gaming in libraries is the broad network of partnerships a library can form. At JMU, McCabe has taken a leadership role within the community and is working with faculty in the psychology, communications, and instructional-design departments among others. The entire experience has given her a new lens through which to view libraries and library services.

> Going through the process of designing this game has given me a lot of insight into library instruction and other services the library provides. It has also allowed me to think about what makes something fun, what role fun can play in creating successful educational experiences, and what motivates people in general. Ten years ago I would never have imagined myself doing something like this, and it may be the hardest thing I have tried (professionally); but I am having my own kind of fun with it.[22]

Graduate School of Library and Information Science at Dominican University

As the idea of gaming begins to take hold in higher education, library schools have not been unaffected by the discussion. At the Graduate School of Library and Information Science at Dominican University in River Forest, Illinois (a suburb west of Chicago), Assistant Professor Kate Williams has started this gaming and libraries discussion with her "Introduction to Library and Information Science" classes.[23]

During the spring 2006 semester, the combination of a photo—of a mother and son gaming at the public library, which appeared in her then-hometown newspaper—and the frequency of gaming discussions among her students taking the course prompted Williams to take the class on a field trip. Instead of taking them to a museum or even to a library, she took them to a local arcade in order to let them try gaming firsthand. Describing her motivation, she highlighted some of the same reasons that librarians (presented in the previous case studies) are pursuing the intersection of gaming and libraries: "Talking about gaming was part of talking about the digital age. And gaming is a big focus for young people, so librarians need to be knowledgeable. I wanted them to have fun learning about the digital age—learning should be fun—and to decide for themselves if, when, and how gaming belongs in libraries."[24]

Despite some students' unfamiliarity with gaming and the fact that the class was playing two first-person shooter games (*Counterstrike* and *Diablo*), the field trip was a success and helped illustrate to Williams and her students how motivating the fun nature of gaming can be.

> On our gaming field trip, almost nobody wanted to stop, although one student felt sick from all of the onscreen killing. The majority [was] in favor of gaming in libraries, as long as limited resources allow it. A couple of students are now exploring further into social and community informatics, the study of society's transition into the digital age. This is great because librarians cannot sit by as the digital world is created by others, when we are actually experts in the ***democratic*** construction and use of information resources.
>
> Gamers represent part of a new culture, related to hacker culture, which librarians have to know about and embrace in order to keep serving all of society.[25]

Williams doesn't think librarians should stop there, though. She sees many other roles and services librarians can provide at this intersection:

> I'd like to see an entire course on games. We would have more time for questions of literacy, of culture, of programming, and time to create new games. For example, a game would be a good way to encounter the catalog, or the library's databases, or even the collection itself. Let's build a holodeck where you can talk with Malcolm X. . . .
>
> Librarians need to make their own games—how about a game where you learn how to use a

library? And we need to set up library operations in various game worlds.[26]

This is very similar to what Squire and Steinkuehler presented in "Meet the Gamers"—that gaming could be a powerful tool for teaching how to use library resources.

The parallels to library users, especially under-graduates, [are] striking. After all, library sites offer multiple, and at times competing, information sources that users must navigate. What's the difference between EBSCO's Academic Search Premier and ProQuest's General Reference? Likewise, the whole issue of evaluating information found on the web, both its authenticity and its applicability, is a major component of library literacy efforts. Gamers grow up in a media land-scape with even more complex, shifting dynamics than their parents did, and they will be ex-pecting libraries to react to these changes.[27]

Clearly, there are myriad possibilities for gaming in academic libraries. What skills will librarians and informa-tion-science faculty need to teach in library schools in order to create librarians who can fulfill the potential of these possibilities and take gaming in libraries to the next level?

Talking Points

- Research shows that gaming is a common experience among college students, with almost every single one of them having at least played a video game of some kind at least once.
- Students do not mind bringing their own equipment to library game nights, and they are very willing to help, provide advice, and troubleshoot equipment problems.
- Gaming offers academic librarians the chance to be leaders within their communities and partner with a wide variety of collaborators.
- Gaming is an opportunity for academic libraries to build relationships with students and change their perceptions of the library.
- Library schools need to begin incorporating discus-sions about gaming and gaming services into classes.

Notes

1. Steve Jones, "Let the Games Begin: Gaming Technology and Entertainment among College Students," Pew Internet & American Life Project (July 6, 2003), www.pewinternet.org/PPF/r/93/report_display.asp (accessed August 24, 2006).
2. Ibid., 13.
3. Ibid., 2.
4. Lynn Sutton, response to e-mail questionnaire, July 13, 2006.
5. Ibid.
6. H. David "Giz" Womack, response to e-mail questionnaire, July 10, 2006.
7. Ibid.
8. Sutton, response to e-mail questionnaire, July 13, 2006.
9. Womack, response to e-mail questionnaire, July 10, 2006.
10. Sutton, response to e-mail questionnaire, July 13, 2006.
11. Womack, response to e-mail questionnaire, July 10, 2006.
12. Lynn Sutton and H. David Womack, "Got Game: Hosting Game Night in the Academic Library," *College & Research Libraries News* 67, no. 3 (March 2006).
13. Christopher Paul Hamb, response to e-mail questionnaire, May 17, 2006.
14. Ibid.
15. Ibid.
16. Ibid.
17. Jennifer McCabe, response to e-mail questionnaire, July 7, 2006.
18. Ibid.
19. Kurt Squire and Constance Steinkuehler, "Meet the Gamers," *Library Journal* (April 15, 2005), www.libraryjournal.com/article/CA516033.html (accessed August 22, 2006).
20. McCabe, response to e-mail questionnaire, July 7, 2006.
21. Ibid.
22. Ibid.
23. Kate Williams, response to e-mail questionnaire, July 5, 2006.
24. Ibid.
25. Ibid.
26. Ibid.
27. Squire and Steinkuehler, "Meet the Gamers."