Power Up: Games and Gaming in Library and Information Science Curricula in the United States

Aaron J. Elkins, *School of Library & Information Studies, Texas Woman's University*
aelkins3@twu.edu,
Jonathan M. Hollister, School of Library, Archives, & Information Studies, Pusan National University
hollisterjm@pusan.ac.kr (Corresponding Author)

Gaming provides a number of social and educational benefits, and while games are present to an extent in American libraries, content related to supporting games and gaming in libraries is largely lacking in library programs in the United States. The researchers used a survey to determine factors that affected LIS educators' inclinations to include or exclude content related to gaming in their curricula. LIS educators who included gaming-related content tended to have had more experience with gaming, higher preferences for multiple genres of games, more teaching experience, and a position title indicating tenure. LIS educators who excluded gaming-related content tended to have less experience with gaming, lower preferences for multiple genres of games, less teaching experience, and a position title indicating untenured status. LIS educators who currently excluded gaming from their curricula but had an interest in including it indicated that professional development materials and experiences, such as conference workshops, course modules, or best practices guidebooks might encourage them to do so.

Keywords: andragogy, curriculum, gaming, pedagogy, surveys

Games have become an important part of American society. The video-game industry contributed $30.4 billion US to the economy in 2016 and supports over 220,000 jobs in the United States alone (ESA, 2018). In 2018, video-game sales grew to over $43.4 billion in the United States (ESA, 2019). Over 150 million people in the United States play video games, with 60% of the population playing every day (ESA, 2018). In addition to their recreational use, video games can facilitate learning through play, regardless of their educational or recreational focus, by challenging players to use and develop a wide variety of twenty-first-century literacies (Gee, 2009).

Given their mass appeal, games (like other forms of media) have an established place in libraries. Libraries in the United States have supported games and other recreational media since the mid-nineteenth century, with about 77% of public libraries (as of 2009) supporting games and gaming of some sort in their collections and programs (Nicholson,

KEY POINTS:

- Games provide various social and educational benefits and are common in American libraries, yet library and information science programs may not adequately prepare librarians to support games and gaming.
- LIS educators that included gaming-related content in their curricula had more experience with teaching and playing games, higher overall preferences for a wider variety of game genres, and positions with titles indicating tenure.
- Administrative support for pre-tenured faculty, access to professional development resources, and meaningful hands-on experiences with games and gaming may help LIS educators to better understand their value and potential applications, and to incorporate them into their curricula.

2009, 2013). Despite their common inclusion in libraries, most Library and Information Science (LIS) degree programs do not address games and gaming. Previous research from the authors found that just a few American Library Association (ALA)–accredited degree programs in the United States offer courses focused on games and gaming (Hollister & Elkins, 2017). This gap in the LIS curriculum suggests that new librarians are underprepared to understand and support games and gaming when they enter the workforce.

The goals of this research project were to explore and describe factors that may promote or inhibit the inclusion of games and gaming in the LIS curriculum and determine how to better support LIS educators who are interested in using and applying games and gaming in their courses. Therefore, the guiding research questions for this study were the following:

1. How do Library and Information Science (LIS) programs in the United States address gaming in their curricula?
2. What demographic factors, if any, promote or inhibit the inclusion of games and gaming in LIS programs in the United States?
3. What experiential factors, if any, promote or inhibit the inclusion of games and gaming in LIS programs in the United States?

Examples of demographic and experiential factors that may promote or inhibit the use or inclusion of games and gaming in LIS curricula are discussed within the literature review below.

Why games in libraries?

Research from multiple academic disciplines has shown that games encourage players to develop useful skills that are critical for both personal and professional success in the twenty-first century, such as digital literacy, problem solving, communication, critical thinking, and more. The

informal and organic environments of online games lead to incidental learning of these twenty-first-century skills (Galarneau & Zibit, 2011). Players in online games work together and apply scientific thinking to create effective strategies; some develop tools such as add-ons or modifications to help them more effectively perform or explore (Gee, 2012). Telling stories, helping other players, and using evidence to solve problems and overcome challenges within a game engage a variety of literacy skills (Steinkuehler, 2007). Information literacy skills are required for success in online games due to the sheer amount of information that needs to be organized, analyzed, and applied as players advance through the game (Martin, 2011). Online games also have potential for media literacy instruction because the combination of play and learning creates an environment in which learners create and analyze messages, skills that may be transferable to the world outside of the game (Hobbs & Rowe, 2011). The cognitive self-efficacy and inquiry strategies that players develop within games can be leveraged by librarians to further develop information literacy skills in real life (Moline, 2010).

The educational benefits of recreational gaming are not limited to just online or digital games. Tabletop gaming programs in school libraries can be connected with curriculum content areas and can help students develop pro-social and critical thinking skills and build community (Copeland, Henderson, Mayer, & Nicholson, 2013). Tabletop gaming also helps youth develop agency, build comprehension skills, develop positive habits, and become more involved in the library (Alvarez, 2017). Digital or video games, live action games, and literature can also be used together to create library programs that explore literary concepts and develop various literacy skills (Powell, 2013). Gaming and using technology also help promote a lifelong love of both learning and reading (Mashriqi, 2011).

Nicholson (2010) argues that meaningful library gaming programs provide fun and engaging ways to connect with the other resources within library collections. Library gaming programs also help learners to develop valuable life, academic, and gaming skills and allow library staff members to positively engage with reluctant or disinterested students (Brown & Kasper, 2013). Gee (2012) states that socioeconomically disadvantaged youth are falling behind in twenty-first-century skills because they do not have a comparable level of access to digital media that more advantaged children have, and he goes on to argue that libraries should provide access to digital media and support the mentoring needed for such children to fully connect with these important literacies. Library gaming programs can thus serve as a gateway to other resources in the library, which may help reluctant or uninterested library users to pursue their passions or explore different paths, and provide opportunities to develop literacies that were otherwise not accessible.

Despite the many potential benefits of including games and gaming in the library, there are still challenges to overcome. Swiatek and Gorsse

(2016) caution that bringing games and gaming programs into the library requires thoughtful planning of gaming activities, development and enforcement of management and use policies, staff training, and knowledge management. Brown and Kasper (2013) note that while many benefits of gaming can be observed, actual assessment of literacy and learning development through gaming programs still needs improvement. We hope that realizing the goals of this research may ultimately help LIS educators better prepare their students to effectively include games and gaming in classrooms and libraries, and by integrating gaming-related content they may have the opportunity to further develop the skills that games offer to game players.

Demographics and preferences of game players

Gaming is a cultural fixture in the United States across almost all demographic categories. Most (72%) persons who play games are 18 years old or older, with an average age of 34 (36 years for women, 32 for men). Sixty percent (49% of women and 72% of men) of young American adults between the ages of 18 and 29 and 53% of adults between the ages of 30 and 49 play often or sometimes (Brown, 2017). For American adults over the age of 50, 27% of men and 30% of women play video games often or sometimes (Brown, 2017). Forty-six percent of all American game players are women (ESA, 2019). Adult women (18 years and up) are the largest portion (33%) of the gaming population; boys under the age of 18 make up just 17% of the gaming population (ESA, 2018). A recent survey from the Pew Research Center reports similar trends. Overall, 39% of adult women and 47% of adult men often or sometimes play video games in the U.S. (Brown, 2017). Additionally, 48% of Hispanic adults, 44% of Black adults, and 41% of white adults in the U.S. often or sometimes play video games; other races and ethnicities were not reported (Brown, 2017). The ESA does not report on the race or ethnicity of American game players, so another point of comparison cannot be included.

According to the 2018 Association for Library and Information Science Education (ALISE) Statistical Report, 50.6% of full-time faculty members identify as female and 49.4% identify as male (Pribesh & Navuluri, 2018). Six percent of full-time LIS faculty are between the ages of 25 and 34, with the remaining 94% of full-time faculty being over the age of 35 (Pribesh & Navuluri, 2018). The overwhelming majority of full-time faculty members are thus above the average age of game players. Considering race and ethnicity, full-time LIS faculty members are less diverse when compared with game players. Three percent of full-time faculty identify as Hispanic of any race, 0% as American Indian or Alaskan Native, 14% as Asian, 5% as Black or African American, 61% as white, 1% as two or more races, 3% as international, and 13% as unknown race or ethnicity (Pribesh & Navuluri, 2018). While games are popular across all ages and demographic categories, it is unclear whether the demographic factors of

age, gender, and race and/or ethnicity of LIS educators are related to the inclusion or exclusion of games in LIS curricula. To explore the potential influence of these demographic factors with LIS faculty and the inclusion or exclusion of gaming and games in their curricula, questionnaire items 2, 3, and 4 asked respondents to share their age, race and/or ethnicity, and gender identity (see Appendix for the survey questionnaire).

While many people play games, they do not all identify themselves as "gamers." Shaw (2011) found that individuals who identified as women, transgender, or genderqueer were less likely to identify as gamers than men; some individuals do not prefer or wish to be identified as a gamer due to negative stigmas and stereotypes. To explore this issue as a potential demographic factor, item 5 in the questionnaire asked respondents whether they identify as a gamer or if they prefer some other terminology.

According to the ESA (2018), most households (64%) have at least one person (two on average) who plays at least three hours a week or more regularly. Forty-one percent of households play games on personal computers, 36% on smartphones, 36% on game consoles, 24% on wireless devices, 14% on handheld consoles, and 8% with virtual reality headsets. According to Brown (2017), puzzle and strategy games are the most popular with American adults (at 62%), though puzzle games are more popular with women (72%) than men (52%). Adventure (49%), shooter (42%), role-playing (39%), team sport or racing games (33%), or simulations (32%) are also popular game types for American adults. The most frequent game-playing Americans (56%) play with other people; 42% play with friends, 19% with family, 17% with parents, and 16% with their spouses (ESA, 2018). It is unclear whether experience with or preferences for different game formats and types of games, or the frequency of gaming and game-related activities of LIS educators, are associated with the inclusion or exclusion of gaming in LIS curricula. To that end, questionnaire items 17 through 23 addressed these potential experiential factors.

Games in LIS education and the workplace

Library and Information Science as an academic field of study and as a professional practice evolves as the needs of communities change and as new media and technology are developed and made more accessible. This growth requires LIS educators, librarians, and other information professionals to adapt to these trends by continually developing new skills and learning new knowledge to better serve their respective communities. Without familiarity or an understanding of the value of new media and technologies, LIS educators and information professionals may be reluctant or unprepared to make changes. Adult learning theory, or andragogy, suggests that adult learners become more interested in learning a new topic when the relevance of these topics is linked with their own interests or they are able to understand the value of learning new topics (Taylor & Kroth, 2009). Martin and Martinez (2016) found that when pre-service

librarians were able to explore and understand the educational potential of all types of games during their coursework, they came to see gaming as an integral part of the both the library and the curricula.

LIS educators may have had no previous exposure to games and gaming during their MLS degree program. In a previous study (Hollister & Elkins, 2017), we found that the curricula of ALA-accredited programs very rarely include courses, based on their titles and descriptions, that address games and gaming in the library context. At the time, only three ALA-accredited programs had courses with content specifically related to gaming. The content offered comprised one special topics course on developing game and gaming programs in libraries, one course on the consumption of games and other media, three game-design courses, and one narrative-structure course that included games and other interactive media as vectors for narrative. Game-related content was mentioned in three other course descriptions, but the use of games and gaming in the courses was not described in detail. Seven out of the nine game- or gaming-related courses were special topics courses, suggesting that they might not be regularly offered or included in the standard curriculum. Questionnaire items 9 through 16 addressed potential experiential factors regarding LIS educators' educational and work experiences, number of years teaching and working as a librarian, and whether games and gaming were a part of those experiences.

Kenny and Gunter (2011) argue that in order to encourage teachers to use games in their classrooms, higher-education programs must work to overcome negative perceptions of games, focus on showing the educational values of games, prepare future educators to build support for gaming from their administrators, along with other proactive approaches. Other factors related to LIS educators' places of work and/or position title or rank may also have an effect on whether games are integrated into the curriculum. It is assumed that LIS educators at ALA-accredited programs adhere to the curricular standards established by that body. Many ALA-accredited programs are also iSchools, and departments or colleges that are iSchools may have more diverse curricula as their foci may not be primarily on librarianship (on iSchools, see https://ischools.org/about/). Questionnaire items 6 (position title), 7 (ALA accreditation status of institution), and 8 (iSchool membership) partially addressed these factors. Items 24 through 27 in the questionnaire asked whether LIS educators use games in their courses, how and what types of games are integrated in the courses, as well as what resources were most helpful for integrating games into the course. Items 28 and 29 of the questionnaire focused on understanding why LIS educators did not use games (such as difficulty of introducing new classes, lack of institutional support, etc.) and identifying what types of resources they would prefer to help learn more about games and how to integrate them into their courses.

Method

This research sought to identify demographic and experiential factors that might encourage or discourage the inclusion of games and gaming in the LIS curricula, by asking LIS educators about their use or non-use of content related to games and gaming in their courses, as well as other potential barriers to expanding or updating LIS curricula. For the purposes of this study, we operationalize LIS educators as individuals employed at ALA-accredited programs in the United States who teach or have taught at the graduate level. Accordingly, LIS educators as a group includes teaching assistants, teaching faculty, lecturers, adjunct faculty, tenure-track or tenured faculty, as well as faculty emeriti. We anticipated a potential curricular difference between traditional LIS programs and those that identify as iSchools, and we acknowledge that some LIS programs in the United States do not have ALA accreditation. As a result, the survey is equipped to compare iSchools and traditional LIS schools, accredited or otherwise, for any potential epistemological, pedagogical, and/or andragogical differences as they may relate to the topic of games and gaming in libraries.

Informed by the previous studies reviewed above, the survey questions explored respondents' preferences and experience levels with games as part of their personal and professional lives, as well as their own experiences with games as LIS students. For respondents who had not incorporated games or gaming in their curricula, the survey asked about potential barriers, as well as the types of resources that would help them integrate gaming-related content into their courses and curricula. The survey questions were pre-tested by five volunteer academics familiar with LIS education in the United States. Following pre-testing, the survey design and questions were submitted to and approved by the Institutional Review Board of Texas Woman's University. The questionnaire employed for this study is included in the Appendix.

The survey used a purposive sampling of LIS educators from LIS programs based in the United States. It was distributed via appropriate professional and academic listservs, social media, and professional networking sites, such as Facebook, Twitter, the JESSE and Association for Library and Information Science Education (ALISE) listservs, the ALA Games & Gaming Round Table (GameRT) pages on Facebook, and ALA-Connect. Participation was incentivized using a random lottery drawing for an Amazon gift card. Survey Monkey (www.surveymonkey.com) was used to facilitate and store the survey data. The data collection period ranged from February 2018 to June 2018.

Participation in the survey was voluntary following an informed consent process, and anonymous in nature; respondents were also allowed to skip questions if they desired. In order to separate responses from potentially personally identifiable information, email addresses of respondents were collected in a separate linked survey to register for the Amazon gift card lottery and to recruit respondents for follow-up interviews for the

next phase of this research project. The separate linked survey also invited respondents to voluntarily share any syllabi, assignment descriptions, or curricular materials that could serve as examples of games and gaming in their courses. The survey responses and findings will inform the design of the interview questions for the next phase of this research project.

Limitations

Low response rates are not uncommon in survey research, and with only 24 complete and valid questionnaire submissions, the response rate for this survey is low. The availability of gaming-related courses outside of LIS programs fell outside the scope of this research. The results of this research are not generalizable due to the limited sample size and narrow scope. With 41.7% of the respondents not including games or gaming within their curricula, there does not seem to be a large self-selection bias within the sample. The low level of participation may be due to negative perceptions of games in higher education (Kenny & Gunter, 2011) or the lack of awareness of the educational potential of games and gaming in LIS curricula. Further research in this area as well as the development of educational resources to encourage LIS educators to consider and include games and gaming in their courses may work to reduce negative perceptions and increase awareness of the educational potential of games and gaming in LIS curricula.

Sample demographics

Descriptions of the respondents' demographic and experiential characteristics are included below.

Race, ethnicity, age, and gender

During the data collection period, 38 individuals participated or at least initiated the survey, with 24 complete and valid responses comprising our total sample. The average age of respondents was 46.27 years, with a median age of 39.5 years, a mode of 39 years, and a range of 28 to 74 years of age ($n = 22$; two respondents did not report their age). Sixteen of the respondents (66.67%) identified themselves as white, three respondents (12.50%) as Asian, two respondents (8.33%) as Black, one respondent (4.17%) as bi- or multiracial, one as Hispanic or Latino, and one as racially Black and ethnically Hispanic. For gender identification, 16 of the respondents (66.67%) identified as female and eight (33.33%) as male.

Titles, experience, and credentials

Of the sample, 62.5% ($n = 15$) respondents did not consider themselves to be gamers, while 29.17% ($n = 7$) did and 8.33% ($n = 2$) preferred other terminology: One respondent preferred "I play video games," and the other stated "I love to play games, but a gamer to me refers to a specific RPG group of enthusiasts."

By title, assistant professors comprised the largest group at 25% ($n = 6$) of respondents. The others were 20.83% ($n = 5$) lecturers; 20.83% ($n = 5$) were associate professors; 8.33% ($n = 2$ each) adjunct professors/

instructors, full professors, and faculty emeriti, both of whom still teach; 4.17% were teaching assistants and another 4.17% were lead instructors (n = 1 each). The amount of teaching experience ranged from 2 to 26 years, with a mean of 10.1875 years and a median and mode of 7 years.

Seventy-five percent (n = 18) of the respondents had or were working toward an MLS or MLIS degree, and the remaining 25% of respondents (n = 6) did not hold an MLS or MLIS degree. Additionally, 75% (n = 18) of the respondents had work experience as a librarian or other type of information professional, while 25% never had (n = 6). For those with experience as a librarian or information professional, their years of work experience ranged from less than one year ("< 1" as specified by the respondent) to 15 years, with a mean of approximately 7.486 years and median of 5 years (using 0.75 years for the aforementioned respondent).

Findings

The findings below are organized to address the three guiding research questions listed above.

Gaming in LIS programs in the United States

Of the 24 total respondents, 41.7% (n = 10) reported that they neither used nor discussed content related to gaming in their courses (described as gaming-exclusive LIS educators for the remainder of the paper). When asked why they do not integrate gaming into their curriculum, 50% (n = 5) indicated they had no interest in doing so; 50% said their students had not expressed interest in such content; 50% were unsure how gaming related to their coursework; 40% (n = 4) were unsure how to integrate content related to gaming into their coursework; 30% (n = 3) were interested in integrating content related to gaming into their courses but did not feel knowledgeable enough to do so; 30% indicated that content related to gaming was not suitable to their courses; 20% (n = 2) said that it was difficult to change the content of courses; and 20% said it was difficult to get a special topics course. When gaming-exclusive respondents were asked what might encourage them to incorporate games, 40% said relevant course modules focused on gaming, 40% indicated a best-practices guidebook, 30% suggested relevant conference sessions or other types of professional development, 30% said assignment materials, and 10% (n = 1) wanted a relevant textbook.

The other 58.3% (n = 14) of respondents reported that they did use or discuss content related to gaming in their courses (referred to as gaming-inclusive LIS educators for the remainder of the paper). When asked what had encouraged them to do so, 57.1% (n = 8) cited their personal experience with gaming; 33.3% (n = 5) were inspired by conference sessions or other types of professional development; 21.4% (n = 3) were encouraged to incorporate gaming-related content by textbooks; and 13.3% (n = 2) cited best-practices guidebooks as their reason for incorporating gaming-related content.

Demographics and gaming in the LIS curriculum

For gender identity, 70% ($n = 7$) of gaming-exclusive LIS educators identified as female and 30% ($n = 3$) identified as male. Of the gaming-inclusive LIS educators, 64.3% ($n = 9$) identified as female and 35.7% ($n = 5$) identified as male. Gaming-exclusive LIS educators had a mean age of 43 and a median age of 39. Gaming-inclusive LIS educators had a mean age of 49 and a median age of 42. Describing their race/ethnicity, 30% ($n = 3$) of the gaming-exclusive LIS educators identified as Asian, 10% ($n = 1$) of the respondents identified as Black, 10% identified as Black with Hispanic ethnicity, and 50% ($n = 5$) identified as white. Of the gaming-inclusive LIS educators, 7.1% ($n = 1$) identified as Hispanic/Latinx, 7.1% as two or more races, and 85.7% ($n = 12$) as white.

LIS experience and gaming in the LIS curriculum

Of the gaming-exclusive respondents, 70% ($n = 7$) said they had earned an MLS and 30% ($n = 3$) had not; of the seven who earned an MLS, 85.7% ($n = 6$) said they had not encountered course content related to gaming while completing their MLS, and 14.3% ($n = 1$) had. Of the gaming-inclusive respondents, 78.6% ($n = 11$) said they had earned an MLS and 21.4% ($n = 3$) had not; of the 11 that had earned an MLS, 63.6% ($n = 7$) said they had not encountered course content related to gaming while completing their MLS, and 36.4% ($n = 4$) had.

Of the gaming-exclusive respondents, 80% ($n = 8$) had worked as an information professional and 20% ($n = 2$) had not; of the eight who had worked as information professionals, none had used games or gaming as part of their work. Of the gaming-inclusive respondents, 71.4% ($n = 10$) had worked as an information professional and 28.6% ($n = 4$) had not; of the 10 who had worked as information professionals, 10% ($n = 1$) had used games or gaming as part of their work and 90% ($n = 9$) had not.

When describing their current position title, 30% ($n = 3$) of the gaming-exclusive respondents said they were an assistant professor, 20% ($n = 2$) said they were an associate professor, and 10% (n = 1 each) said they were a full professor, teaching assistant, lead instructor, adjunct, or lecturer. Of the gaming-inclusive respondents, 21.4% ($n = 3$ each) said they were either an assistant professor or an associate professor, 7.1% ($n = 1$ each) said they were a full professor, professor emerita still teaching, professor emerita working as an adjunct, or adjunct, and 28.6% ($n = 4$) said they were a lecturer. Gaming-exclusive respondents reported an average of 7.95 and a median of 6.75 years of experience teaching LIS content. Gaming-inclusive respondents reported an average of 11.57 and a median of 8.5 years of experience teaching LIS content.

Of the gaming-exclusive respondents, 80% ($n = 8$) worked at ALA-accredited institutions, 10% ($n = 1$) worked at a formerly ALA-accredited institution, and 10% worked at an institution that was never ALA-accredited; 50% ($n = 5$) of the respondents worked at an iSchool, and 50%

did not. Of the gaming-inclusive respondents, 85.7% ($n = 12$) worked at ALA-accredited institutions, 7.1% ($n = 1$) worked at an institution that was never ALA-accredited, and 7.1% ($n = 1$) did not provide an answer; 64.3% ($n = 5$) of these respondents worked at an iSchool and 21.4% ($n = 3$) did not, and 7.1% ($n = 1$) did not know whether the institution was an iSchool.

Gaming experience, enjoyment, and gaming in the LIS curriculum

In terms of gaming activity and identity, 50% ($n = 5$) of gaming-exclusive respondents reported gaming daily, 10% (n = 1 each) gamed either several times a week or several times a year, and 30% ($n = 3$) gamed occasionally; additionally, 20% ($n = 2$) of gaming-exclusive respondents considered themselves to be gamers and 80% ($n = 8$) did not. Of the gaming-inclusive respondents, 35.7% ($n = 5$) reported gaming daily, 28.6% ($n = 4$) gamed several times a week, 7.1% ($n = 1$) gamed several times a month, 21.4% ($n = 3$) gamed several times a year, and 14.3% ($n = 2$) gamed occasionally; additionally, 35.7% ($n = 5$) of gaming-inclusive respondents consider themselves to be gamers, 14.3% ($n = 2$) preferred a term other than gamer, and 50% ($n = 7$) did not consider themselves to be gamers.

Respondents rated their overall enjoyment of digital and analog games on a five-point Likert scale, where 1 was "do not enjoy" and 5 was "greatly enjoy." Gaming-exclusive respondents had a mean of 3.7 and a median of 4 for enjoyment of digital games and a mean of 3.67 and a median of 3 for enjoyment of analog games. Gaming-inclusive respondents had a mean of 3.5 and a median of 4 for enjoyment of digital games and a mean of 3.4 and a median of 4 for enjoyment of analog games.

Respondents were asked about their enjoyment levels of specific genres or types of games within the digital and analog realms; Table 1 presents the mean and median values of gaming-exclusive and gaming-inclusive faculty preferences for different genres or types of digital games.

Table 2 presents the mean and median values of gaming-exclusive and gaming-inclusive faculty preferences for different genres or types of analog games.

Discussion

Although there is not a large difference between the numbers of gaming-inclusive or gaming-exclusive LIS educators regarding their ALA accreditation, more gaming-inclusive LIS educators work at iSchools than at strictly ALA-accredited programs. While institutions with iSchools membership and ALA-accredited programs are often overlapping, the broader scopes of iSchool curricula may allow LIS educators to be more receptive of including and using games and gaming in their courses. Institutions with iSchool membership may focus more broadly on information, media, and technology. While ALA-accredited programs and degrees can also address these topics, their focus is more on libraries and other information organizations.

Table 1: Digital games genre or type preferences

Genre or type of digital game	Gaming-exclusive respondents (*n* = 10)		Gaming-inclusive respondents (*n* = 14)	
	Mean preference	Median preference	Mean preference	Median preference
Digitized board games	1.7	1	3.2	2
First Person Shooter (FPS)	1.3	1	2.8	1.5
Incremental	1.6	1	3.2	1.5
Indie games	1.2	1	2.7	1
Interactive text games	1.1	1	2.1	1
Massively-Multiplayer Online RPGs	1.2	1	2.5	2
Matching	3	3	4.6	1
Multiplayer Online Battle Arenas (MOBA)	1	1	1.9	3.5
Playing card games	2.9	2.5	4.1	3
Puzzle games	3	3	4.4	2
Racing games	1.5	1	3.2	1
Real-Time Strategy games	1.5	1	3.1	2
Resource games	1.3	1	2.8	2
Role-playing games (RPGs)	1.5	1	2.9	2
Sandbox games	1.2	1	2.4	1.5
Simulation	1.5	1	2.9	1
Sports games	1.9	1	3.3	2
Tower defense	1.8	1	3.2	3.5
Word games	2.4	2.5	3.4	2

Note. Ratings are based on a Likert scale ranging from 1 (“do not enjoy”) to 5 (“greatly enjoy”)

The majority of LIS educators with MLS or similar degrees, both gaming-inclusive or gaming-exclusive, reported that they did not encounter games-specific coursework during their MLS program. A similar trend was identified for LIS educators with previous work experience as librarians or other information professionals, with most reporting no experience with gaming during their professional work. Lack of exposure to games and their value during coursework or in the professional workplace may contribute to LIS educators’ disinclination to include games and gaming in their own curricula; Martin and Martinez (2016) found that exposure to games during coursework helped pre-service librarians to understand the educational value and potential uses of games. Therefore, exposure to

Table 2: Analog game genre or type preferences

Genre or type of analog game	Gaming-exclusive respondents (n = 10)		Gaming-inclusive respondents (n = 14)	
	Mean preference	Median preference	Mean preference	Median preference
Board games	2.9	3	4	3
Deduction games	2.9	4	2.9	2
Dice games	2.9	4	3.3	3
Jigsaw puzzles	2.8	3	3.4	3
LARP	1.1	1	2.2	1
Other card games	1.6	1	3.8	4
Playing card games	3.3	4	4	4
RPG	1.2	1	3.5	3
Social interactive games	2.3	3	2.2	2
Tavern puzzle	1.9	1	4.6	4
Tile games	2.9	4	2.9	2.5
Trading card games	1.2	1	3.8	3
Word games	3.3	4	2.6	2

Note. Ratings are based on a Likert scale ranging from 1 ("do not enjoy") to 5 ("greatly enjoy")

games and gaming-related content during post-graduate coursework may be beneficial for LIS educators interested in using games in educational or professional contexts.

While about half of the LIS educators who did not use games in their curricula expressed no interest in doing so, the remaining gaming-exclusive LIS educators indicated several reasons for not doing so, including being unsure of how gaming related to their work, being unsure how to integrate gaming into the courses, and not being knowledgeable enough to do so. Two LIS educators also indicated that it was difficult to adjust current course content and/or that it was difficult to create a special topics course. These findings relate to the strategies that Kenny and Gunter (2011) suggest to support the use of games in higher education. The educational value of games and how to use them should be better promoted to LIS educators, and the lack of administrative support needed to change course content or to create new courses may be a confounding factor for LIS educators who want to include gaming-related content in their curricula.

Respondents who excluded games and gaming from their courses were typically younger and had less teaching experience than gaming-inclusive LIS educators. Their reasons for not including games in their courses may not be related to their teaching abilities: Due to the length of the tenure

process, LIS educators with tenure are more likely to be older and have more teaching experience. Only 30% of gaming-exclusive LIS educators had a position title indicating tenure, whereas 42.8% of gaming-inclusive educators had tenure. This suggests a possible effect of the tenure process on inclination to include gaming-related content, as untenured faculty may be less free to explore curriculum development and/or more focused on satisfying research publication expectations. Some gaming-exclusive respondents indicated difficulty in changing course materials or having the ability to teach special topics courses, perhaps indicative of a lack of administrative understanding and support, conditions described by Kenny and Gunter (2011). Better support for flexibility and creativity with teaching and course development for pre-tenure LIS educators may encourage more of them to consider including games and gaming in their courses.

Gaming-inclusive LIS educators were more likely than gaming-exclusive LIS educators to identify themselves as gamers or another related term. Shaw (2011) suggests that some individuals identify themselves as something besides "gamer." This trend was also observed in our sample to a small extent, with two gaming-inclusive respondents preferring alternative labels to gamers.

In terms of the amount of gaming, gaming-exclusive LIS educators reported gaming daily more frequently than gaming-inclusive LIS educators. Gaming-exclusive LIS educators also expressed higher enjoyment for both digital and analog gaming than did gaming-inclusive LIS educators, yet when looking at the preferences by genre or type of game, gaming-inclusive LIS educators on average indicated higher preferences for all categories of games than did the gaming-exclusive LIS educators. This disparity is more easily visualized in Figures 1 and 2, which provide an alternative perspective on the data presented in Tables 1 and 2. Figure 1 shows the comparison of digital game preferences between gaming-exclusive and gaming-inclusive LIS educators.

Figure 2 shows the comparison of analog game preferences between gaming-exclusive and gaming-inclusive LIS educators.

Without further data it is difficult to explain this apparent disconnect between the ratings of enjoyment and genre-preference for gaming-exclusive and gaming-inclusive LIS educators.

Reflective of Brown (2017), digital puzzle, matching, and card games were popular with both sets of respondents. Looking at the digital game preferences of gaming-exclusive LIS educators, their three highest preferences were for matching, playing card, and puzzle games; these are comparatively more casual types of games and may not offer much insights into the potential that gaming has to offer the LIS curriculum. Although they reported daily gaming less frequently, gaming-inclusive LIS educators reported more gaming frequency overall. Looking at the digital game preferences of gaming-inclusive LIS educators, they also preferred matching, playing card, and puzzle games but had higher overall preferences for a wider variety of game types. This broader exposure to different types of games may have

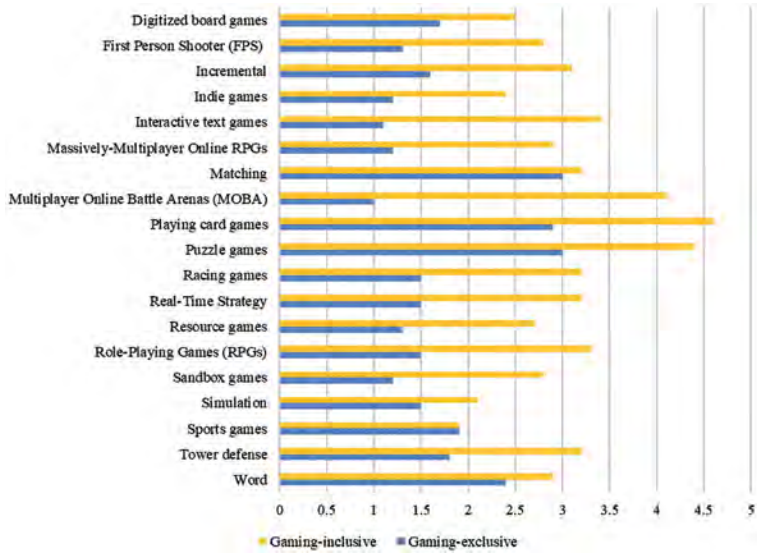

Figure 1: Comparison of gaming-inclusive and gaming-exclusive LIS educators' digital game preferences.

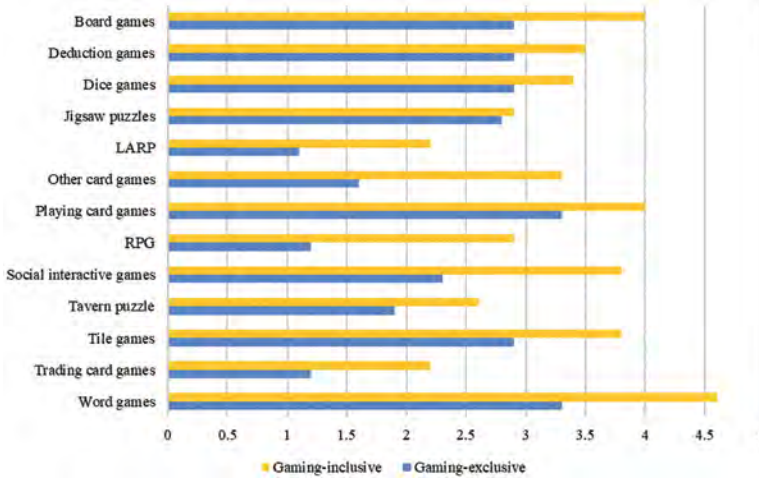

Figure 2: Comparison of gaming-inclusive and gaming-exclusive LIS educators' analog game preferences.

provided gaming-inclusive LIS educators with richer experience with the potential uses of gaming for the LIS curriculum, and in the survey they cited that experience as an impetus for them to include gaming in their teaching. Gaming-exclusive LIS educators who expressed an interest in including gaming as part of their curriculum may be receptive to professional development that includes gaming experience in an instructional context.

Access to and the availability of gaming-related courses in MLS programs and professional development or continuing education opportunities as well as administrative support and curricular flexibility may encourage more LIS educators to include games and gaming in their courses. Given the findings discussed above and the benefits associated with games and gaming noted in the literature review, the inclusion of games and gaming in the LIS curriculum is appropriate and will benefit both students and faculty by better preparing them for the present and future of libraries.

Furthermore, LIS educators who are more receptive to and knowledgeable about games and gaming may find new ways to engage learners with games and other interactive media in their classrooms. Gamification, for example, creates opportunities to apply and embed various game mechanics and features, such as quests, puzzles, and achievements systems, within traditional learning environments and other settings. For further reading on this topic, Nicholson's (2015) approach to meaningful gamification provides a practical starting place. Relatedly, Aguilar, Holman, and Fishman (2014) describe the design, implementation, and results of using game-like elements in two undergraduate courses, one of which was an introductory information studies course.

Conclusions and future directions

The findings above present both opportunities and challenges for including games and gaming in LIS curricula. Some LIS educators already include gaming-related content in their courses, and some of those who do not are open to learning more about how to do so; lack of administrative support and constraints on pre-tenured faculty members may remain difficult challenges to overcome.

Rich experiences with gaming can inspire LIS educators to include it in the LIS curriculum: Adult learners want to know why they are learning and how it is applicable to their practice, and experiential learning is a powerful tool for teaching adult learners (Cercone, 2008). Providing LIS educators with meaningful professional development experiences that clearly convey the relevance of gaming to their practice and build upon their existing knowledge and experiences may inspire more of them to explore the potential that gaming has to offer their teaching.

Future work in this stream of research will include in-depth interviews with gaming-inclusive LIS educators to identify best practices as well as to better understand some of the barriers to including games and gaming in the LIS curricula. Additionally, and as supported by the responses above, the authors plan to explore and create evidence-based professional development materials and experiences, such as conference workshops, course modules, or best-practices guidebooks. These resources might be just the items needed to help power up LIS educators to include games in their courses and, in turn, better prepare their students to enter the workforce ready and able to support games and gaming in libraries and other information organizations.

Aaron J. Elkins is an assistant professor in the School of Library & Information Studies at Texas Woman's University. His research interests include school librarians' roles, specifically how pre-service candidates are prepared for their roles, what those roles are, how they are performed, and how that performance is evaluated, and how gaming may be used to foster twenty-first-century literacies.

Jonathan M. Hollister is an assistant professor in the School of Library, Archives, & Information Studies at Pusan National University. His research interests include the depictions and uses of digital and other critical literacies as well as social information behaviors in recreational popular media, such as online games, young adult literature, and graphic novels.

Acknowledgments

This work was supported by a 2-year Research Grant of Pusan National University.

References

Aguilar, S., Holman, C., & Fishman, B. (2014). Multiple paths, same goal: Exploring the motivational pathways of two distinct game-inspired university course designs. In A. Ochsner, J. Dietmeier, C. C. Williams, & C. Steinkuehler (Eds.), *GLS 10 Conference Proceedings* (pp. 26–33). Paper presented at Games+Learning+Society 10, Madison, WI, June 10–13. Retrieved from http://press.etc.cmu.edu/index.php/product/gls-10-0/

Alvarez, V. (2017). Engaging students in the library through tabletop gaming. *Knowledge Quest*, *45*(4), 40–48.

Brown, A. (2017, September 11). *Younger men play video games, but so do a diverse group of other Americans*. Pew Research Center. Retrieved from http://www.pewresearch.org/fact-tank/2017/09/11/younger-men-play-video-games-but-so-do-a-diverse-group-of-other-americans/

Brown, R. T., & Kasper, T. (2013). The fusion of literacy and games: A case study in assessing the goals of a library video game program. *Library Trends*, *61*(4), 755–778. https://doi.org/10.1353/lib.2013.0012

Cercone, K. (2008). Characteristics of adult learners with implications for online learning design. *AACE Journal*, *16*(2), 137–159.

Copeland, T., Henderson, B., Mayer, B., & Nicholson, S. (2013). Three different paths for tabletop gaming in school libraries. *Library Trends*, *61*(4), 825–835. https://doi.org/10.1353/lib.2013.0018

Entertainment Software Association (ESA). (2018). *2018 essential facts about the computer and video game industry* [report]. Retrieved from https://web.archive.org/web/20180828025412/http://www.theesa.com/about-esa/industry-facts

Entertainment Software Association (ESA). (2019). *2019 essential facts about the computer and video game industry* [report]. Retrieved from https://www.theesa.com/esa-research/2019-essential-facts-about-the-computer-and-video-game-industry/

Galarneau, L., & Zibit, M. (2011). Online games for 21st century skills. In *Gaming and simulation: Concepts, methodologies, tools, and applications* (vol. 3, pp. 1874–1900). Hershey, NY: Information Science Reference.

Gee, J. P. (2009). Games, learning, and 21st century survival skills. *Journal of Virtual Worlds Research*, *2*(1), 3–9. https://doi.org/10.4101/jvwr.v2i1.623

Gee, J. P. (2012). Digital games and libraries. *Knowledge Quest*, *41*(1), 60–64.

Hobbs, R., & Rowe, J. (2011). Creative remixing and digital learning: Developing an online media literacy learning tool for girls. In *Gaming and simulation: Concepts, methodologies, tools, and applications* (vol. 2, pp. 971–978). Hershey, NY: Information Science Reference.

Hollister, J. M., & Elkins, A. J. (2017). *Power up: Gaps in and opportunities for gaming in LIS curricula*. Poster presented at the 2017 ALISE Annual Conference, Atlanta, GA, January 17–20.

Kenny, R., & Gunter, G. (2011). Factors affecting adoption of video games in the classroom. *Journal of Interactive Learning Research, 22*(2), 259–276.
Martin, C. (2011). An information literacy perspective on learning and new media. *On the Horizon*, *19*, 268–275. https://doi.org/10.1108/10748121111179394
Martin, C., & Martinez, R. (2016). Games in classroom and practice in library and information science education. *On the Horizon*, *24*(1), 82–87. Retrieved from https://doi.org/10.1108/OTH-08-2015-0051
Mashriqi, K. (2011). Implementing technology and gaming lessons in a school library. *Knowledge Quest*, *40*(1), 24–28.
Moline, T. (2010). Video games as digital learning resources: Implication for teacher-librarians and for researchers. *School Libraries Worldwide*, *16*(2), 1–15.
Nicholson, S. (2009). Go back to start: Gathering baseline data about gaming in libraries. *Library Review*, *58*(3), 203–214. https://doi.org/10.1108/00242530910942054
Nicholson, S. (2010). *Everyone plays at the library: Creating great gaming experiences for all ages*. Medford, NJ: Information Today.
Nicholson, S. (2013). Playing in the past: A history of games, toys, and puzzles in North American libraries. *The Library Quarterly*, *83*(4), 341–361. https://doi.org/10.1086/671913
Nicholson, S. (2015). A RECIPE for Meaningful Gamification. In L. Wood & T. Reiners (Eds.), *Gamification in education and business* (pp. 1–20). New York, NY: Springer. Retrieved from http://scottnicholson.com/pubs/recipepreprint.pdf
Powell, A. (2013). Get in the game: Encouraging play and game creation to develop new literacies in the library. *Library Trends*, *61*(4), 836–848. https://doi.org/10.1353/lib.2013.0011
Pribesh, S., & Navuluri, K. (2018). *ALISE statistical report 2018*. Association for Library and Information Science Education. Retrieved from https://www.alise.org/statistical-reports-2
Shaw, A. (2011). Do you identify as a gamer? Gender, race, sexuality, and gamer identity. *New Media & Society*, *14*(1), 28–44. https://doi.org/10.1177/1461444811410394
Steinkuehler, C. (2007). Massively multiplayer online gaming as a constellation of literacy practices. *E-Learning*, *4*(3), 297–318. https://doi.org/10.1163/9789087903121_012
Swiatek, C., & Gorsse, M. (2016). Playing games at the library: Seriously? *Liber Quarterly, 26*(2), 83–101. https://doi.org/10.18352/lq.10161
Taylor, B., & Kroth, M. (2009). Andragogy's transition into the future: Meta-analysis of andragogy and its search for a measurable instrument. *Journal of Adult Education*, *38*(1), 1–11.

Appendix

Questionnaire

1. If after reading the information above you consent to participate in this study, please click the button below to access the questionnaire on Survey Monkey.
   - I have read the information and consent to participate in the study
   - I do not consent to participate in the survey
2. Age:
3. Race/Ethnicity:
   - African American
   - Asian American
   - Hawaiian and/or Pacific Islanders

- Middle Eastern American
- White
- Black
- Native American and/or Alaskan Native
- Two or more races/Multiracial
- Middle Eastern
- Asian
- Hispanic or Latino
- I identify as:

4. Gender Identity:
   - Male
   - Female
   - Trans
   - Non-binary
   - I identify as:
5. Do you consider yourself to be a gamer?
   - Yes
   - No
   - I prefer another term:
6. What is the title of the position in which you serve as an LIS educator?
   - Teaching Assistant
   - Lead Instructor
   - Adjunct Professor/Instructor
   - Lecturer
   - Assistant Professor
   - Associate Professor
   - Full Professor
   - Other (please specify):
7. Is the graduate library and information science degree offered by your department or school currently ALA-accredited?
   - Yes
   - Conditionally Accredited
   - Formerly Accredited
   - Never Accredited
8. Is your school or department an iSchools member?
   - Yes
   - No
   - I don't know
9. Years of experience in teaching LIS courses:
10. Do you have or are you working on completing an MLS degree?
    - Yes
    - No

11. While pursuing your LIS degree, did any of your instructors discuss games or gaming in the context of librarianship? Choose all that apply.
    - Instructor never discussed content related to gaming in any fashion
    - Instructor discussed gaming content related to programming and/or services for children
    - Instructor discussed gaming content related to programming and/or services for young adults
    - Instructor discussed gaming content related to programming and/or services for adults
    - Instructor discussed gaming content related to collection development
    - Instructor discussed gaming content related to cataloging
    - Instructor discussed gaming content related to preservation/archiving
    - Instructor discussed gaming content related to designing/developing games
    - Instructor discussed gaming content related to formats and genres of games
    - Instructor discussed gaming content related to gamification
    - Instructor gamified elements of the course
12. Were your experiences above in a course specifically about gaming in libraries?
    - Yes
    - No
    - I don't know
    - I don't remember
    - Doesn't apply
13. Have you ever worked as a librarian or other information professional?
    - Yes
    - No
14. For how many years have/did you work as a librarian or other information professional?
15. During your work as a librarian or information professional, prior to or while working as an LIS educator, did/do you use games or gaming in your programs, collections, and/or services?
    - Yes
    - No
16. How did you incorporate gaming into your work as a librarian or other information professional?

17. On a scale from 1 (Not at all experienced) to 5 (Extremely experienced) how experienced are you with the following gaming formats?
    - Digital games played on a computer (e.g. PC/Mac/Linux):
    - Digital games played on a console (e.g. Nintendo, Playstation, or Xbox):
    - Digital games played on a handheld console (e.g. Sony PSP, Nintendo Gameboy or Switch):
    - Digital games played on a mobile device (e.g. smartphone or tablet):
    - Analog games played using cards
    - Analog games played on a game board or other surface
    - Games that involve role-playing alone (e.g. Fallout: New Vegas, The Elder Scrolls: Skyrim):
    - Games that involve role-playing with other players (e.g. Dungeons and Dragons, Shadowrun)
18. Please rate the on a scale from 1 (I do not enjoy) to 5 (I greatly enjoy) how much you enjoy playing digital games (games that are played on a computer, gaming console, or mobile device)?
19. Please rate the following types of games on a scale from 1 (I do not prefer) to 5 (I highly prefer):
    - Puzzle Games (e.g. Myst, Portal)
    - Digitised Board Games (e.g. Risk, Monopoly, Life)
    - Playing Card Games (e.g. Poker, Euchre, Spades)
    - Simulation games (e.g. EuroTruck Simulator)
    - Incremental games (e.g. Cookie Clicker)
    - Role-Playing Games (e.g. Dungeons & Dragons, The Witcher)
    - Massively-Multiplayer Online Role-Playing Games (MMORPGs) (e.g. EverQuest. World of Warcraft, Lineage)
    - First Person Shooter (FPS) Games (e.g. Call of Duty, Counter-Strike, Overwatch)
    - Multiplayer Online Battle Arenas (MOBA) (e.g. League of Legends, DOTA, Heroes of the Storm)
    - Real-Time Strategy (RTS) Games (e.g. Starcraft, Warcraft, Command & Conquer)
    - Sports Games (e.g. Madden, FIFA)
    - Racing Games (e.g. Mario Kart, Forza, Need for Speed)
    - Indie Games (e.g. Never Alone; This War of Mine; Papers, Please)
    - Interactive Text Games (e.g. Depression Quest, Dwarf Fortress, Urban Dead)
    - Sandbox Games (e.g. Minecraft, The Universe Sandbox, Garry's Mod)
    - Resource Games (e.g. Stardew Valley, Don't Starve)
    - Tower Defense (e.g Plants vs. Zombies)
    - Matching Games (e.g. Bejeweled, Candy Crush)
    - Word Games (e.g. Words with Friends)

20. Please rate the on a scale from 1 (I do not enjoy) to 5 (I greatly enjoy) how much you enjoy playing analog games (games that are played with cards, game boards, or by role-playing)?

21. Please rate the following types of games on a scale from 1 (I do not prefer) to 5 (I highly prefer):
    - Tavern Puzzles (where you manipulate physical pieces to achieve your goal)
    - Board Games (e.g. Risk, Monopoly, Life)
    - Playing Card Games (e.g. Poker, Euchre, Spades)
    - Trading Card Games (e.g. Pokemon, Yu-Gi-Oh, Magic the Gathering)
    - Other Card Games (e.g. Cards Against Humanity, Exploding Kittens)
    - Role-Playing Games (e.g. Dungeons & Dragons)
    - Jigsaw Puzzles
    - Dice Games (e.g. Yahtzee)
    - Tile Games (e.g. Dominoes, Mahjong)
    - Deduction Games (e.g. Battleship, Guess Who)
    - Word games (e.g. Scrabble, Scattergories)
    - Social interactive games (e.g. Heads Up, Charades, Pictionary)
    - Live Action Role-Playing (e.g. Changeling, Dagorhir Battle games)

22. How often do you play games?
    - Daily
    - Not daily, but several times a week
    - Not weekly, but several times a month
    - Not monthly, but several times a year
    - Occasionally
    - Almost never
    - Never

23. How often do you participate or engage in gaming related activities, such as reading about games, researching games, participating in online gaming communities?
    - Daily
    - Not daily, but several times a week
    - Not weekly, but several times a month
    - Not monthly, but several times a year
    - Occasionally
    - Almost never
    - Never

24. As an LIS educator, do you use or discuss games and gaming in the content of your courses? Select all that apply:
    - I do not address, use, or allow content related to games in my courses

- I taught/teach a course specifically on games and gaming
- I have used games or game-like features (gamification) in my courses
- I have offered a lecture which focused on games and gaming
- I have course content related to games and gaming, but not as a primary focus point
- My students complete an assignment specifically about games
- My students can choose to focus on games in their own assignments
- Other (please specify):

25. In what context(s) do you use or discuss games and gaming in the content of your courses?
    - I discussed gaming content related to programming and/or services for children
    - I discussed gaming content related to programming and/or services for young adults
    - I discussed gaming content related to programming and/or services for adults
    - I discussed gaming content related to collection development
    - I discussed gaming content related to cataloging
    - I discussed gaming content related to preservation/archiving
    - I discussed gaming content related to designing/developing games
    - I discussed gaming content related to formats and genres of games
    - I discussed gaming content related to gamification
    - I gamified elements of the course
    - Other (please specify)
26. Which types of games did/do you use in your course? Select all that apply:
    - Puzzle Games (e.g. Jenga, Portal)
    - Board Games (e.g. Risk, Monopoly, Life)
    - Playing Card Games (e.g. Poker, Euchre, Spades)
    - Trading Card Games (e.g. Pokemon, Yu-Gi-Oh, Magic the Gathering)
    - Other Card Games (e.g. Cards Against Humanity, Exploding Kittens)
    - Role-Playing Games (e.g. Dungeons & Dragons, The Witcher)
    - Massively-Multiplayer Online Role-Playing Games (MMORPGs) (e.g. EverQuest. World of Warcraft, Lineage)
    - First Person Shooter (FPS) Games (e.g. Call of Duty, Counter-Strike, Overwatch)
    - Multiplayer Online Battle Arenas (MOBA) (e.g. League of Legends, DOTA, Heroes of the Storm)
    - Real-Time Strategy (RTS) Games (e.g. Starcraft, Warcraft, Command & Conquer)

- Sports Games (e.g. Madden, FIFA)
- Racing Games (e.g. Mario Kart, Forza, Need for Speed)
- Indie Games (e.g. Never Alone; This War of Mine; Papers, Please)
- Interactive Text Games (e.g. Depression Quest, Dwarf Fortress, Urban Dead)
- Sandbox Games (e.g. Minecraft, The Universe Sandbox, Garry's Mod)
- Other (please specify)

27. Which types of resources have you found to be most beneficial in fostering the integration of gaming into your LIS teaching? Choose all that apply:
    - Preexisting course modules
    - Personal experience with gaming
    - Textbooks
    - Preexisting assignment materials
    - Best practices guidebook
    - Conference sessions or other types of professional development
    - Other (please specify):

28. If you do not incorporate gaming into your curriculum, why not? Choose all that apply:
    - I have no interest in doing so
    - My students have not indicated any interest in gaming or topics related to gaming
    - I am interested, but do not feel knowledgeable enough to do so
    - Gaming is not suitable or relatable to the topics in the course I teach
    - I am not sure how topics related to gaming relate to my courses
    - I am not sure how to integrate gaming into my course due to the topic
    - It is difficult to change the contents of a course
    - It is difficult to set up a special topics course
    - Other (please specify):

29. Which types of resources would most encourage you to integrate gaming-related content into your LIS teaching? Choose all that apply:
    - Relevant course modules focused on gaming
    - Course development proposals
    - Relevant textbooks
    - Assignment materials
    - Best practices guidebook
    - Conference sessions or other types of professional development
    - Other (please specify)