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Reaching Seniors in the Digitalized Library

In a couple weeks, I will leave Philadelphia for a week and a half in Florida with my grandmother. I know that life there will be very different than it is here, living with my sister and her partner. Here, we are all on our laptops most of the time. We do schoolwork, play games, shop, and order groceries or delivery form the local pizza place – all online. In Florida, I know that I will be the only one on the computer. My grandmother will watch TV, read the newspaper, and do the crossword. When we need groceries, we will go out to the store; when we want delivery, we will use the phone to order it. My grandmother will coo over the most recent picture of one of her great-grandchildren someone emailed to her, but other than that she won't touch her computer. She'll tell me that the mouse is broken, or the printer's broken, and I'll try to figure out what she's doing wrong and show her how to "fix" it. If I bring my ereader along she'll call it a Nook, because in her mind, all ereaders are Nooks, not Kindles or Sony Readers or anything else.

Expectations of the future are clear: libraries are going digital. With a single exception, every class I've gone through at Drexel has included a discussion of ebooks. The very existence of a class in digital reference services shows us that technology has hit every aspect of librarianship and every aspect of libraries. How, then, can we serve those of our patrons who are less literate in technology? Specifically, how can we reach patrons like my grandmother, and others of her generation?

Survey Results

For this paper, I used the survey we were given and turned it into an online survey using FluidSurveys.com to get responses from librarians across the county. I thought it would be interesting to find trends this way, rather than basing the issues from which I would develop my paper from the opinions of a single librarian. I located respondents by posting a request for research help on the ALA GLBT-RT listserv and on the American Library Association, Library Alternatives, and Library Society of the World groups on LinkedIn. My survey was active between Wednesday, 21 November 2012 and Sunday, 2 December 2012 and yielded 30 complete responses. These respondents came from all across the county, from Los Angeles, California to Alachua, Florida, with an unusually high number of respondents from New Jersey. The population sizes of these libraries are spread from 500,000+ to 2-500-49,999, with the largest numbers of respondents at either end of the scale.

Population	Number of Respondents	Percentage
500,000+	7	23.33%
250,000-499,999	4	13.33%
100,000-249,999	3	10.00%
50,000-99,999	5	16.67%
25,000-49.999	2	6.67%
10,000-24,999	6	20.00%
2,500-4,999	2	6.67%
Don't Know	1	3.33%

Table 1. Number and Percentage of Survey Respondents by Population Served

Among the respondents, there were two main ideas about the role and future of libraries: those who still thought of the library as a place for education, and those who thought of the library as a community center. Ten librarians, or 33.33%, still saw education as the main role of the public library. Most of these came from libraries which serve larger populations.

Population	Number of Respondents	Percentage of Respondents with that Population
500,000+	2	28.57%
250,000-499,999	2	50.00%
100,000-249,999	3	100.00%
50,000-99,999	1	20.00%
10,000-24,999	1	16.67%
2,500-4,999	1	50.00%

Table 2. Number and Percentage of Survey Respondents who Indicated Education as the Role of Libraries by Population

While there was no specific question about providing technological help and/or training at the library, nine respondents, or 30%, mentioned that proving such services is part of what the library does. All of these respondents work in libraries with a service population of at least 50,000-99,000 and, surprisingly, only three of them also indicated education as a major role of the library.

Population	Number of Respondents	Percentage of Respondents with that Population
500,000+	3	42.86%
250,000-499,999	1	25.00%
100,000-249,999	1	33.33%
50,000-99,999	1	20.00%

Table 3. Number and Percentage of Survey Respondents who Mentioned Providing Technological Help or Training at the Library

Providing technological help and training may very well be an important function of the library in the near future. As a librarian from Gloucester, New Jersey who serves a population of 50,000-99,999 says, "The public library bridges the digital divide. I think this role will become more important, not less as technology continues to change. The public library is the only place where anyone can walk in and ask any question, and be helped from where they are to get to where they need to go." As libraries themselves

change, this is likely to become the case. Of my thirty respondents, nineteen, or 63.33%, indicated that they expect to see an increase in digital resources in their libraries. Additionally, eleven respondents, or 36.66%, indicated that they expect to see a decrease in print materials available at their libraries. Of those who did not indicate a change in this way, the dominant economic situation of the library's service population may be the cause. This is expressed by a librarian from Jersey City, New Jersey (service population 250,000-490,000) who says, "If the clientele of the public library changes - meaning, from a low- to middle-class base to inclusive of a large portion of higher incomes - then, the needs would change as to what the library system offers, in pleasing its patrons. Until that happens, books over ebooks seems to be the trend."

Population	Number of Respondents	Percentage of Respondents with that Population
500,000+	6	85.71%
250,000-499,999	1	25.00%
100,000-249,999	3	100.00%
50,000-99,999	4	80.00%
25,000-49.999	1	50.00%
10,000-24,999	3	50.00%
2,500-4,999	1	50.00%

Table 4. Number and Percentage of Survey Respondents who Predict an Increase in Digital Materials

Population	Number of Respondents	Percentage of Respondents with that Population
500,000+	3	42.86%
250,000-499,999	1	25.00%
100,000-249,999	3	100.00%
50,000-99,999	3	60.00%
2,500-4,999	1	50.00%

Table 5. Number and Percentage of Survey Respondents who Predict a Decrease in Print Materials

As libraries' holdings of digital materials increases and print materials decrease, libraries will have to take special care to ensure that they are still serving all of the patrons in their service populations, particularly those who are not technologically literate. This includes senior citizens, as indicated by two survey respondents. The first, a librarian in New Jersey whose library serves a population of 50,000-99,000 says, that the future of libraries "[w]ill require even more outreach to special populations such as seniors and those still offline." The other, a librarian from Oakmont, Pennsylvania whose library serves a population of 2,500-4,999, says that "More online which will frustrate our older patrons." According to the 2010 US Census 22.8% of Oakmont's population was age 65 or older with an additional 6.5% reaching 65 within the next five years, making this a significant population for Oakmont's public library (U. S. Census Bureau, n.d.-a). However, serving this population should also be a concern for other libraries. In Appleton, Wisconsin, whose library serves a population of 50,000-99,999 and whose librarian predicts both an increase in digital materials and a decrease in print materials, 11.4% of the population was age 65 or over as of 2010 with an additional 4.7% turning 65 within the next 5 years (U. S. Census Bureau, n.d.-b). In Clearwater, Florida, whose library serves a population of 100,000-249,999 and whose librarian also predicts both an

increase in digital materials and a decrease in print materials, 19.9% of the population was age 65 or over as of 2010 with an additional 6.7% turning 65 within the next 5 years (U. S. Census Bureau, n.d.-c). Clearly, this is a population whose needs need to be met in libraries across the county and across service population sizes.

Literature Review

In Western countries, the older a person is, the less likely it is that s/he uses technologies such as cell phones and computers (Abbey & Hyde, 2009, p. 226). According to the PEW Internet & American Life Project, only 53% of Americans age 65 or older (hereafter "seniors") use the internet, compared to 87% of all American adults (Zickhur & Madden, 2012, p. 2). Among seniors over 75, this number drops to 34% (ibid., p. 6). Of those seniors who use the internet, 70% do so on a typical day. This shows that "[o]nce they are given the tools and training needed to start using the internet, [seniors] become fervent users of the technology" (ibid., p. 5). However, this is only possible once those tools and training are achieved. Training in particular can be an issue; a study done in 2010 showed that 68% of seniors over the age of 75 felt that they would need help before they could start using the internet (ibid., p. 6).

With the rise of ebooks in both society and libraries, it is also important to look at seniors' use of ereaders. The numbers here are lower than those for internet use: 11% of all seniors and 5% of seniors over 75 have ereaders, compared to 18% of all American adults (ibid., p. 8). Tablet ownership is even lower: only 8% of seniors overall and 3% of seniors over 75 have tablets, compared to 18% of all American adults (ibid.). Unfortunately, no studies have been done on the learning curve of ereaders for seniors. I suspect there is some, however, based on my own grandmother's reaction to mine; while I taught her to read on it fairly quickly, she was confused enough by the buttons that I did

not even try to teach her the advanced features such as changing the font size, opting to do that for her myself.

Researchers from the UK conducted discussion groups during a 9-month computer training program to learn about why seniors felt they experienced problems with computers (Turner, Turner, & Van De Walle, 2007, p. 288). They found seven reasons why seniors felt they had trouble learning how to use a computer: alienation from the new technologies (ibid., p. 291), a lack of expertise with technology from previous experiences (ibid.), feeling pressured to learn it rather than wanting to themselves (ibid., p. 292), fear of doing something wrong and having bad consequences (ibid., p. 293), feeling too old because "[by] the time I will really know the computer I will be too old to bother with it "(ibid.), being too busy (ibid.), and not having a use for it (ibid., p. 293).

These findings are consistent with other research on the topic. A study published in 2001 found very similar challenges towards technology expressed by seniors, including overcoming fear, remembering what to do, difficulty understanding terminology, anxiety caused by having to find things that have disappeared, learning how to get to the things they need, and keeping up with new technology (Gietzelt, 2001, p. 142).[1] Decker (2010) found that computer terms and acronyms are harder for seniors to relate to than for younger people (p. 614), which could be another reason why seniors may feel they are too old to learn such technology. Studies cited in Abbey & Hyde (2009) show that many seniors do not find the internet relevant to their lives because they've lived so long without it (p. 228-9). Another study cited in Abbey & Hyde (2009) shows that some seniors are concerned about a lack of privacy on the internet (ibid., p. 233),

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[1] I found this information cited in another article before reading the article itself. I did not include it in the first place because technology has changed so much in the past 11 years that I am not positive that its findings would still be true today, but I included this because it is consistent with later studies.

which is another aspect of anxiety or fear as described above. Abbey & Hyde themselves studied the use of cell phones and email by 24 politically active seniors (ibid., p. 229), resulting in findings about their abilities and attitudes. The study found that of the 24 respondents who used email, both of those who abstained from using email for their political activities did so because they felt they didn't have the skills to do so (ibid., p. 234). Because they did use email for other communication, this indicates a lack of skill with navigating the internet or using listservs. Another respondent indicated that he had trouble sorting through all the information available to form a cohesive and accurate whole (ibid., p. 236).

According to the literature found by Abbey & Hyde (2009), the general consensus is that because younger Americans are more technologically literate, the age-related digital divide will repair itself with time (p. 226). However, this is not the case for the near future. Seniors who have trouble sifting through the information on the internet—or for that matter, in professional databases provided by libraries—will continue to need instruction in this area, as this problem exists throughout all ages of library patrons. In addition, a study on public libraries and the baby boomer generation shows while this population "the most technologically literate group of older adults that the public library has encountered thus far" (Decker, 2010, p. 611), many baby boomers who either have not been part of the workforce during the past few decades worked in professions which either did not use computers or used them minimally lack the expertise in technology mentioned by Turner, Turner and Van De Walle (2007).

Decker (2010) focuses on how to best serve the baby boomer generation in American public libraries. Many of her suggestions are ways to cope with the derogation

of seniors' bodies, including providing stools in the stacks for patrons to sit on and keeping a wheelchair on hand for patrons who tire too easily to browse comfortably (ibid., p. 614). Suggestions for serving patrons technologically also have to do with accommodating the limited abilities of many senior bodies, including enlarging fonts on the library's OPAC for those with reduced sight and buying larger keyboards for the library to accommodate arthritic hands (ibid., p. 612). However, she also suggests using new technologies to better serve homebound patrons, including expanding the selection of ebooks and creating virtual book clubs using video messaging software (ibid., p. 615). Ebooks, and by extension ereaders, would also aid non-homebound seniors who need larger print in order to read, since ereaders allow users to change the font size on their ebooks (ibid., p. 613). In order for these to even be an option, though, libraries must first teach their patrons how to use the technology.

In a study done with patrons at two Australian libraries, researchers found that adult library users prefer learning about technology in small classes with a maximum of six students per class and a face-to-face teacher. They also prefer multi-session courses where each class focuses on one topic and written guides from each session to bring home. Once the class is over, they would like to see individualized help for specific problems that they encounter and additional self-help aids available, now that they know enough to be able to follow them (Ruthven, 2010, p. 113). Many of the strategies listed here also help combat the problems seniors mention having with technology. Small class sizes provide teachers with the opportunity to pay individual attention to each learner, which can alleviate the seniors' anxieties about doing something wrong. Having written guides to take home helps the learners remember what to do when they get home, which

helps alleviate the fear of forgetting what to do. Having someone to go to with problems after the class is over helps the learners learn what to do when layouts change and things they used to understand disappear.

It is also important that classes take place in a space where seniors can interact with the technology they are learning to use. Research shows that people retain what they learn better when they are engaged with their learning—or in other words, "doing something" rather than listening to someone lecture or viewing a powerpoint (Decker, 2010, p. 612). This is especially important when working with technology, because learners will not gain the expertise needed to engage with technology without actually engaging with it. This also creates a supportive learning environment where seniors can struggle with the technology and observe others struggling with it, which creates an understanding that they are not alone. The encouragement they receive from both their fellow learners and their teachers helps relieve anxieties (Cassell, Bamdas, & Bryan, 2012, p. 13). Patience, encouragement, and respect from the teacher also help with this (ibid., p. 16).

Even if teachers are well-versed in the issues that seniors face when it comes to technology, they need to make sure to engage with the individual learners. Asking learners to describe their previous experiences and encouraging learners to mention any problems they have with the material will help them to tailor their teachers to meet their particular class's needs (Cassell, Bamdas, & Bryan, 2012, p. 16). In addition, understanding the learner's self-perceptions and prior skills allows the teacher to aid learners in building upon this prior experience, building self-confidence with early successes (Turner, Turner, & Van De Walle, 2007, p. 295).

All of the current research focuses on teaching computer skills, not other technological skills. Cassell (2012) mentions ebook clinics facilitated by library staff which use both visual and hands-on demonstrations to teach patrons how to download ebooks and use the library software on their devices, but she does not describe them further (p. 19). While we lack ereader-specific research, many of the strategies discussed here can also be used for teaching seniors about how to use ebooks and ereaders.

Conclusion

Seniors use the library more regularly than any other age group (Decker, 2010, p. 607). Since they also make up a significant part of a library's service population as a whole, libraries need to take care to include their needs as technology changes what kinds of materials are available at the library. Retaining as large a print collection as possible is not the solution; more and more health information is being published only digitally, and health is one of the major concerns for seniors (ibid., p. 613). Rather, to ensure that increasingly digital library collections are accessible for seniors, libraries must take the initiative to train seniors on how to use technology, both in and out of the library. This is beneficial both for the seniors and the libraries; seniors have access to a wider range of information than they do currently, and libraries retain valuable patrons.

References

Abbey, R., & Hyde, S. (2009). No country for older people? Age and the digital divide. *Journal of Information, Communication & Ethics in Society*, *7*(4), 225–242. doi:http://dx.doi.org/10.1108/14779960911004480

Cassell, M. A., Bamdas, J. A. M., & Bryan, V. C. (2012). ReVisioning the Public Library as an Oasis of Learning. *International Journal of Adult Vocational Education and Technology*, *3*(2), 10–22. doi:10.4018/javet.2012040102

Decker, E. N. (2010). Baby Boomers and the United States public library system. *Library Hi Tech*, *28*(4), 605–616. doi:http://dx.doi.org/10.1108/07378831011096268

Gietzelt, D. (2001). Computer and Internet use among a group of Sydney seniors: a pilot study. *Australian Academic & Research Libraries*, *32*(2), 137–152.

Ruthven, J. (2010). Training needs and preferences of adult public library clients in the use of online resources. *The Australian Library Journal*, *59*(3), 108–117.

Turner, P., Turner, S., & Van De Walle, G. (2007). How older people account for their experiences with interactive technology. *Behaviour & Information Technology*, *26*(4), 287–296.

U. S. Census Bureau. (n.d.-a). Profile of General Population and Housing Characteristics: 2010 - Oakmont borough, Pennsylvania. *American FactFinder*. Retrieved December 11, 2012, from http://factfinder2.census.gov

U. S. Census Bureau. (n.d.-b). Profile of General Population and Housing Characteristics: 2010 - Appleton city, Wisconsin. *American FactFinder*. Retrieved December 11, 2012, from http://factfinder2.census.gov

U. S. Census Bureau. (n.d.-c). Profile of General Population and Housing Characteristics: 2010 - Clearwater city, Florida. *American FactFinder*. Retrieved December 11, 2012, from http://factfinder2.census.gov

Zickhur, K., & Madden, M. (2012, June 6). Older adults and internet use. Pew Internet & American Life Project. Retrieved from http://www.pewinternet.org/~/media//Files/Reports/2012/PIP_Older_adults_and_internet_use.pdf