Powering Digital Communities: How Public Libraries Can Foster Digital Inclusion and Digital Literacy in Ontario

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Abstract

In the digital age, many aspects of life increasingly rely on the use of technology. In response to this shift toward digitization, it is important to ensure that the people of Ontario not only have adequate access to digital tools, but also the skills to operate such equipment. However, several segments of Ontario's population, including seniors, low-income individuals, and those living in rural communities, face greater barriers to meaningful participation in the digital economy because of a lack of exposure to digital tools and digital literacy. Numerous institutions and community organizations in the province, including public libraries, are working to bridge the gap in terms of skills and access. As institutions that connect patrons to technologies and digital literacy programs taught by trained literacy professionals, libraries are a crucial resource for fostering a digitally inclusive environment that prepares Ontarians with the skills required to partake in the digital economy.

Keywords: Digital literacy, digital inclusion, public libraries, digital divide, policy

Introduction

Many facets of everyday life, from media consumption to accessing government services, involve the use of digital technology. However, certain demographics within Ontario's population lack adequate access to technological equipment and the skills required make use of such tools. A joint study by Statistics Canada and the Organization for Economic Co-operation and Development (OECD) measured Canadian adults' proficiency at digital problem solving in relation to other adults in OECD-affiliated countries (Statistics Canada, 2013). While over thirty-seven percent of adults in Ontario performed above the OECD average, thirteen percent measured below the rank of level one, meaning they were unable to perform basic tasks such as using a web browser or e-mail software (Statistics Canada, 2013). This study illustrates the existence of a digital divide in Ontario. A digital divide refers to a level of disparity between individuals' ability to both access and operate technological equipment (Huynh & Malli, 2018). In Ontario, individuals over the age of sixty-five, low-income individuals, and those residing in rural and remote communities are the most vulnerable to the effects of Ontario's digital divide (Huynh & Malli, 2018).

The provincial government is taking steps to mitigate the effects of the digital divide. In 2017, the Government of Ontario launched the Ontario Digital Service (ODS), to make government services simpler, more efficient, and accessible by harnessing digital technologies (Government of Ontario, 2017). Among the key priorities of the ODS is its commitment to make government services more digitally inclusive (Government of Ontario, 2017). The ODS defines the concept of digital inclusion as initiatives that allow "everyone [to] participate in, and benefit from, digital technologies in their lives" (Government of Ontario, 2017).

While the provincial government has not yet formally adopted a comprehensive strategy to foster digital inclusion in the province, Chief Digital and Data Officer and leader of the ODS, Hillary Hartley, began the process of drafting a digital inclusion framework in 2018 (Public Policy Forum, 2018). The government's proposal relies upon an already-established framework from the Institute of Museum and Library Services, which states that in order for an environment to be considered digitally inclusive, it must provide opportunities to access, adopt, and apply digital technologies (Public Policy Forum, 2018).

The public library system in Ontario is one such example of a government institution that embraces the principles of digital inclusion. Libraries contribute to digital inclusion by connecting patrons with access to digital infrastructures, such as broadband, as well as emerging technologies like 3D Printers. In addition to providing access to digital tools, libraries also provide digital literacy programs. Digital literacy refers to an individual's "ability to use technological tools to solve problems" (Huynh & Malli, 2018, p.4). In 2018, public libraries in Ontario hosted over 24,000 digital literacy training programs (Ontario Ministry of Heritage, Sport, Tourism, and Culture Industries, 2019). Libraries are also vital for advancing digital literacy skills because librarians are experts in digital literacy and care deeply about empowering patrons with these skills (Martzoukou & Elliot, 2016). A study of American

librarians from the state of North Carolina found that librarians considered teaching patrons about computer literacy “a very important aspect of their profession” (Martzoukou & Elliot, 2016, p. 105). Moreover, the American Library Association, which accredits library science degrees in North America, lists technological knowledge and skills as a key facet of librarianship (Martzoukou & Elliot, 2016). By promoting an environment that provides users with access to technology and digital training programs staffed by experts, libraries are a worthwhile resource for creating a more digitally inclusive Ontario.

Although public libraries can assist in repairing the effects caused by digital divides, budgetary restrictions threaten their ability to operate effectively. In April of 2019, the provincial government halved the budgets of Ontario Library Service-North and the Southern Ontario Library Service, which coordinate library services and provide training for library staff, for the 2019/2020 fiscal year (Ensing & Molnar, 2019). In the previously mentioned study of librarians from North Carolina, the most cited challenge of implementing digital literacy efforts was the lack of technological and financial resources (Martzoukou & Elliot, 2016). With library attendance continuing to grow each year, libraries in Ontario are struggling to balance budget concerns with providing services and programs that ensure digital inclusion (Ontario Library Association, 2019b).

Digital Literacy and The Economy

The prominence of technology is leading to changes in the composition of Canada’s job market. From 2010 to 2017, there has been a twenty-seven percent increase in jobs related to the digital economy (Statistics Canada, 2013). These jobs require not only familiarity with digital tools such as computer hardware and software, but also a high degree of digital literacy skills to operate, develop, and maintain such technologies (Statistics Canada, 2013). Public libraries are an increasingly important community hub for learning digital literacy skills. In 2018, approximately 100,000 Ontarians enrolled in digital literacy programs related to technology, social media, and computer literacy offered by public libraries, an increase of 3,555 attendees from the previous year (Ontario Ministry of Heritage, Sport, Tourism, and Culture Industries, 2018, 2019). While it is important that more patrons continue to attend digital literacy initiatives, it is equally important that these programs are providing the necessary skills required to meaningfully participate in the digital economy.

One effective digital literacy program is the wi-fi hotspot lending program offered by the New York Public Library. The program was implemented in 2015 in response to the insufficient provision of wi-fi by physical branches in order to meet the everyday needs of patrons (Strover, 2019). As such, the library decided to lend 10,000 cellular-enabled hotspot devices for a yearlong period to individuals without a home broadband connection (Strover, 2019). Additionally, library branches supplied training for patrons who were unfamiliar with the

devices (Strover, 2019). At the end of the loan period, participants completed a survey to assess the quality of the program (Strover, 2019). While eighty-seven percent of participants were familiar with using the internet prior to the study, approximately sixty-five percent of users reported they had greater confidence in their ability to use the internet after participating in this program (Strover, 2019). This was in part because the hotspots allowed the patrons to connect to the internet for longer periods of time, which allowed users to learn and practice new skills (Strover, 2019). Overall, Ontario libraries ought to consider successful programs like this when fashioning their own computer literacy programs.

Policy Recommendations

I. Encourage governments at the municipal and provincial level to prioritize increasing investment in public libraries.

With the launch of the ODS in 2017, the government claims to prioritize funding for government services that promote digital inclusion and literacy. Nonetheless, library staff ought to remain vigilant and continue to demonstrate their effectiveness and relevance in the hopes of securing government funding in the future. The 2019 *Advocacy Toolkit* report from the Ontario Library Association (OLA) details a set of best practices for library staff to follow when advocating for funding and when raising awareness regarding library-related issues (Ontario Library Association, 2019a). The OLA advises that municipal library staff should try to advance their best interests by cultivating and fostering relationships with relevant stakeholders such as Members of Provincial Parliament (MPPs) and city counsellors by participating in community activities like city council budget meetings (OLA, 2019). In addition, they suggest that local branches partake in coordinated efforts with other library branches to further bolster support for library-related causes. For instance, in November of 2019, the OLA and Federation of Ontario Public Libraries participated in the biannual event known as Library Day at Queen's Park, wherein representatives met with MPPs and key policymakers in order to bring awareness to library issues at the provincial level.

II. Libraries should work to formulate a strategy for increasing digital inclusion and literacy in their own branches. This should encompass efforts to improve access to technological equipment as well as the expansion of digital literacy programs.

Library branches, in addition to professional organizations like the OLA, should continue to consult with each other regarding best practices for fostering digital literacy and

inclusion in their respective branches. This could be achieved by exchanging knowledge in formal, professional settings, such as OLA's annual Super Conference and Digital Odyssey events, or informally, such as a meeting between colleagues of different branches.

In addition to participating in knowledge sharing activities with fellow professionals, library staff also ought to prioritize the use of metrics, both quantitative and qualitative, to assess the efficacy of their programming at instilling digital literacy skills. The OLA asserts that the use of metrics "adds weight to [a branch's] advocacy efforts, helping to demonstrate the real impact of library programming and services in [the] community" (Ontario Library Association, 2019a, p. 9).

The Markham Public Library's recent implementation of a digital literacy strategy provides a useful model for exemplifying the significance of metrics. In formulating their digital literacy strategy, the Markham Public Library began by tracking and documenting both the number and type of technology-related queries asked by patrons (Garza, 2019). Using the data collected, library staff at the branch were able to design and tailor programs to best suit the needs of their users and expand patrons' engagement with technologies at the branch (Garza, 2019). For instance, in the first quarter of 2018, the branches' 3D printers were booked 91 times, yet, by the same time the following year, there were 211 bookings in total (Garza, 2019). In addition, Markham's programs were successful at improving the skills of their patrons. According to surveys conducted following patrons' participation in programming events, "87% felt more confident when using digital services" and "89% intend to apply what they've learned" in the program in the future (Garza, 2019). The case of Markham Public Library illustrates how thoughtful consideration of data provided by patrons can be used to implement an effectual digital strategy.

In addition to harnessing the power of metrics, it is worthwhile to study successful programs from foreign library systems, such as New York Public Library's hotspot lending program, and consider how elements of programs like these can be incorporated into existing programs in Ontario.

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