"May Be a Picture of a Dog and a Book": The Inaccessibility of Public Libraries' Social Media Feeds
« Peut être une image d'un chien ou d'un livre » : l'inaccessibilité des flux de médias sociaux des bibliothèques publiques

Heather Hill et Kevin Oswald

Résumé de l'article

Cet article explore l'accessibilité des flux de médias sociaux des bibliothèques publiques de l'Ontario. Les médias sociaux jouent un rôle important dans la façon dont les bibliothèques publiques communiquent avec leurs communautés. Cet engagement des usagers en dehors des sites Web gérés par les bibliothèques soulève des questions sur l'accessibilité pour les personnes en situation de handicap. Compte tenu de l'utilisation croissante des médias sociaux comme moyen de communication, quel est le degré d'accessibilité des flux de médias sociaux des bibliothèques publiques de l'Ontario? Le texte alternatif utilisé pour décrire une image dans les messages de médias sociaux des bibliothèques publiques de l'Ontario est d'un intérêt particulier. Les résultats montrent un manque de textes alternatifs dans les flux de médias sociaux. Les auteurs proposent des suggestions pour créer de bons textes alternatifs afin de créer un environnement plus équitable.

"May Be a Picture of a Dog and a Book": The Inaccessibility of Public Libraries' Social Media Feeds

« Peut être une image d'un chien ou d'un livre » : l'inaccessibilité des flux de médias sociaux des bibliothèques publiques

Heather Hill
Associate Professor
Western University
hhill6@uwo.ca

Kevin Oswald
PhD Student
Western University
koswald@uwo.ca

Abstract / Résumé

This article investigates the accessibility of Ontario public libraries' social media feeds. Social media plays an important role in how public libraries engage with their communities. This patron engagement outside of library-maintained websites raises questions around accessibility for persons with disabilities. Given the increasing usage of social media as a communication mechanism, how accessible are Ontario public libraries' social media feeds? Of specific interest here is the use of alternative (alt) text to describe images in Ontario public libraries' social media posts. Findings indicate a dearth of alt text in social media feeds. The authors make suggestions for creating good alt text in order to create a more equitable environment.

Cet article explore l'accessibilité des flux de médias sociaux des bibliothèques publiques de l'Ontario. Les médias sociaux jouent un rôle important dans la façon dont les bibliothèques publiques communiquent avec leurs communautés. Cet engagement des usagers en dehors des sites Web gérés par les bibliothèques soulève des

questions sur l'accessibilité pour les personnes en situation de handicap. Compte tenu de l'utilisation croissante des médias sociaux comme moyen de communication, quel est le degré d'accessibilité des flux de médias sociaux des bibliothèques publiques de l'Ontario? Le texte alternatif utilisé pour décrire une image dans les messages de médias sociaux des bibliothèques publiques de l'Ontario est d'un intérêt particulier. Les résultats montrent un manque de textes alternatifs dans les flux de médias sociaux. Les auteurs proposent des suggestions pour créer de bons textes alternatifs afin de créer un environnement plus équitable.

Keywords / Mots-clés

public libraries, social media, accessibility, screen reader, disability

bibliothèques publiques, médias sociaux, accessibilité, lecteur d'écran, handicap

Introduction

Social media plays an important role in how public libraries engage with their communities. As Kent (2019) articulated, "Social media increasingly overlaps with more traditional media and is an established part of popular culture" (p. 266). Public libraries share a wide variety of information including general announcements, information on library resources and services, information about library events, and pictures of those events (Koulouris et al., 2021). This method of engagement allows libraries to reach out to their community members and develop a sense of community (Rossman & Young, 2015; Vassilakaki & Garoufallou, 2015). Since the start of the COVID-19 pandemic, libraries have significantly increased their social media profiles in lieu of patrons having access to the physical space of the library (Ćirić & Ćirić, 2021; Goek, 2021; Haicéid, 2020). This increase in online profiles created outside of library-maintained websites raises questions around accessibility for persons with disabilities.

Accessibility legislation in Canadian provinces focuses on the accessibility of official communications and websites. This legislation creates a baseline level of accessibility. It is the least an organization needs to do to work towards creating an accessible environment. Even with such legislation, research has shown that library websites vary in their accessibility (Brobst, 2009; Conway, 2011; Conway et al., 2012; Hill, 2013; Liu et al., 2017; Maatta Smith, 2014; Oud, 2012; Yi, 2015). Accessibility is not just an issue on library websites. WebAIM, an organization dedicated to website accessibility, found that of the top one million home pages on the internet, 96.8% had detectable accessibility errors in their 2022 report, a slight improvement from 97.4% in 2021 (WebAIM, 2022). If websites have such challenges in their accessibility, what is the state of the accessibility of social media feeds?

A simple way to create a more accessible social media feed is to include alternative (alt) text for images that are shared. Alt text is descriptive text about an image that describes who is in the image or what is happening in the image in order to provide context for those who cannot see it. Adding alt text to images is important for allowing people who

use screen readers to understand the image. Gleason et al. (2019) found that as images have begun to dominate, social media is becoming less accessible. For example, they found that over 25% of Twitter contains visual media, but only around 0.1% of images include appropriate alt text.

This study examines the following question: Given the increasing dominance of images in social media posts, how accessible are Ontario public library social media feeds? Of specific interest is the use of alt text in Ontario public libraries' social media posts. The goals of this research are to ascertain the likelihood that an Ontario public library will make their social media feeds accessible with alt text, to analyze the alt text used by libraries, and to make recommendations for appropriate use of alt text in social media posts.

Literature Review

Libraries and Accessibility

Much of the library and information science (LIS) research concerning accessibility focuses on the online environment (Gibson et al., 2021; Hill, 2013). This literature has primarily focused on library websites with some consideration of databases. Library websites vary in their accessibility (Brobst, 2009; Conway, 2011; Conway et al., 2012; Hill, 2013; Liu et al., 2017; Maatta Smith, 2014; Oud, 2012; Yi, 2015). A small portion of the literature explores how accessibility is discussed on library websites and in databases (Cassner et al., 2011; Gabel et al., 2016; Graves & German, 2018; Hill, 2020; Power & LeBeau, 2009). The authors did not find any works that examine the accessibility of library social media posts.

Libraries and Social Media

In LIS the social media literature tends to cluster around library type: public, academic or special libraries (Cavanagh, 2016). Questions tend to focus on why and how libraries use social media (Cavanagh, 2016). Works about public library use of social media tend to focus on understanding the use and benefits of social media, the attitudes and experiences of library staff who use social media, and the impact of social media on the identity and organizational practices of the library (Choi & Harper, 2020).

Social Media and Accessibility

Much of the research on accessibility and social media focuses on persons with visual disabilities. Research specifically about alt text usage has found that a lack of consistent use of alt text has led some blind and low-vision users to leave Twitter because of the lack of accessibility (Morris et al., 2016; Whitney & Kolar, 2020). In a study of blind users' web use, a lack of alt text for images was one of the top complaints (Lazar et al., 2007). A combination of issues has led to this dearth of alt text. When asked why they did not use alt text, content creators mentioned not remembering to add it, not having

time to add it, or not knowing what to include when writing descriptions (Gleason et al., 2019).

Social media companies have made efforts to help improve the accessibility of social media postings. For example, YouTube has provided optional captions since 2006 and Facebook has been adding automatic descriptions on images since 2016 (Kent, 2019). Even with these actions from social media platforms, Gleason et al. (2019) noted that social media in general is becoming increasingly inaccessible. In a study of LinkedIn, Wild (2016) found that it was "not an accessible social network and is unlikely to provide the same functionality to people with disabilities using the system as those provided to the general public" (p. 129). Instagram was found not to be accessible to those with either visual or hearing disabilities in a study looking at the social media posts of a music festival that claimed to be a "festival for all" (Dinis et al., 2020). Ellcessor (2016) noted a variety of failures of the automatic captioning technology YouTube uses. Even the concept of "accessible" as a designation can be problematic. Ellcessor (2016) stated, "one cannot declare that a technology 'is accessible.' Instead, one might say that a technology 'is accessible' to some degree, for some people, in particular circumstances" (p. 12).

Even though there are challenges to the accessibility of social media, Gleason et al. (2020) found that

> access to social media platforms is critical for people with vision impairments to both communicate with friends and colleagues, and to participate in public discourse. People with vision impairments interact with social media features to the same extent as sighted users. (p. 1)

Several themes in the literature form the nexus of this project. Public libraries use social media in a wide variety of ways to connect with their communities, but it is unclear whether they create social media content in an accessible way. People with disabilities use social media just as much as anyone else, but they are frustrated and sometimes leave platforms due to inaccessibility. The social media literature shows some gaps in accessibility of user-generated content on social media. However, the existing research does not examine the accessibility of public library social media feeds. This research project aims to fill that gap by examining alt text usage in Ontario public library social media feeds.

Methodology

Public libraries use a variety of social media platforms, but this study focuses on Facebook, Twitter, and Instagram, which are the ones libraries use most often (Koulouris et al., 2021; The Global Statistics, 2022). Each of these platforms provides a mechanism for adding alt text to images. See the Appendix for resources that explain how to add alt text through each platform and through the social media manager Hootsuite.

The Ontario Public Library Statistics (OPLS) published by the Ontario Ministry of Tourism, Culture, and Sport (2020) include information about the social media platforms that individual public libraries use. Social media data were collected from the most recent OPLS, published in 2020. Of 301 libraries that participated in the OPLS, 277 used Facebook, 190 used Instagram, and 147 used Twitter.

A spreadsheet of libraries was created for each platform and a random number generator was used to obtain a sample of 30 for each platform. This process created a more varied sample than would be possible using a single list of libraries for all three platforms. Using the random sampling method, a library selected for Facebook analysis may or may not also be included in either of the subsequent Instagram or Twitter analyses. In total, 76 unique libraries were captured in this sampling technique. Library systems that serve populations greater than 250,000 people were also included as a targeted sample. These nine library systems serve almost 7.3 million residents, accounting for 52% of the total residential population of Ontario (Ontario Ministry of Tourism, Culture and Sport, 2020). Given the size of these systems, it is important to review their alt text usage.

In February 2022, the 10 most recent posts on each library's social media feed, or the previous 24 months if there were few recent posts, were analyzed to determine whether they included alt text. Approximately 900 posts with images were analyzed, divided evenly among Facebook, Twitter, and Instagram. In some instances, although a library system had a social media presence on a specific platform, it had not been active enough over the last 24 months for 10 posts with images to be reviewed. In these outlier cases, to maintain integrity of the sample, as many posts as possible were reviewed.

To determine the existence of alt text, two Mozilla Firefox browser extensions were used: Alt or Not and Image Block. Alt or Not helps users determine whether images include alt text on Twitter. It also prompts users when an image they are posting to Twitter does not contain alt text. Image Block prevents images from displaying on webpages and instead shows any existing alt text. If these extensions were to fail, it would be possible to review the image HTML code for the presence of alt text. While both extensions are highly rated, random samples of HTML code were used to ensure alt text was not being missed by the tools. In all cases, the results of the HTML code review reflected the browser extension findings.

Findings

The study's findings are rather bleak. Of the 76 libraries in the initial data set and the nine systems serving populations greater than 250,000, only two libraries regularly used alt text and five more libraries had at least one instance of alt text. Toronto Public Library and Kingston-Frontenac Public Library were the only two systems that regularly added alt text to their social media posts.

In the original sample of 10 recent tweets with images from 30 random Ontario public libraries, no libraries were found to consistently use alt text. Of the 260 tweets that were

reviewed, only eight tweets from five different libraries contained at least one post with alt text. Elgin County was the only library to have more than one image with alt text. In the additional sample of library systems serving populations of more than 250,000 residents, eight of the nine systems did not generate alt text in their tweets. Toronto Public Library was the only library to include alt text in their tweets.

The omission of alt text on Twitter had varying degrees of severity. In some cases, an entire tweet consisted only of an image that included textual information. For example, one post celebrated a local author's newest publication. The author's name and book title were not mentioned in the text of the tweet, and the accompanying image that contained that information did not include alt text. Without alt text, the image is meaningless to those who rely on screen-reader or text-to-speech technology. In other cases, a library would accompany their text-based tweet with a graphic image that displayed similar information. For example, a tweet from a local library providing details of COVID-19 vaccination pop-up events in their city repeated information from the text of the tweet within the accompanying graphic. In these cases, although the message of the tweet is accessible, an alt text user could still miss context because they would not know whether the graphic provided additional information.

In contrast, in a tweet marketing their after-school club, Toronto Public Library (TPL) included an image with the alt text description: "A girl holding a cone of paper on top of a table. Partially seen: other kids sitting at the table and holding paper shapes." Several other posts by TPL included curated book collections, including one for Black History Month that included the alt text: "Three Book Covers: My Mother's Daughter by Perditia Felicien, No Crystal Stair by Mairuth Sarsfield, and Ties that Tether by Jane Igharo." A user who depends on alt text would miss significant information, meaning, and context without this detailed alt text.

Given that Facebook and Instagram are owned by the same company, have cross-sharing abilities, and offer the same internal mechanism for creating alt text, these two platforms are presented together. As with the Twitter findings, no libraries in the initial sample provided alt text to the images in their Instagram posts. For Facebook, only one library in the initial sample, Kingston-Frontenac Public Library, regularly included alt text. Of the libraries serving populations greater than 250,000, only Toronto Public Library regularly added alt text to both their Facebook and Instagram posts.

Unlike on Twitter, however, Facebook and Instagram include automatic, computer-generated alt text if the user does not include it. Unfortunately, the quality of the computer-generated alt text varies. If an image includes text that is clear and easy to read, the computer-generated alt text includes no loss of content for someone using a screen reader. However, if the text is not arranged in a way the software can understand or if the text is in a non-standard font, the software creates garbled alt text. For example, one library posted about a postponed program. The post included an image of the original program poster with a banner across it that said, "POSTPONED UNTIL FRIDAY." The alt text, however, said, "frincess Day Come become a real princess! UNTIL POSTPONED FRIDAY nair done by Rapunzel NEXT Make your own enchanted

rose 'Kiss a frog' to find your prince, Tea Party!" There was no text accompanying the image that would help clarify the information for someone who could not see the image. Many images on social media are informative but not vital to understanding the post, but often the context or content of images is necessary. As a specific example, the text of an Instagram post included some information about a contest for teens and then directed viewers to the image of a poster for the full information. The computer-generated alt text, however, simply stated, "may be an image of text." A user who accessed the post with a screen reader would not get the full contest eligibility or details.

For images with no text, the computer-generated alt text attempts to describe what is in the picture. For example, the computer-generated alt text might say something like, "May be a picture of a dog and a book." Compare this with the following alt text from Toronto Public Library:

> A girl sits at a table, creating colourful artwork on a piece of paper. There are markers and a glue stick on the table. A woman sits next to the girl with another child on her lap, also working on some art.

The first is unhelpful to the point that it might as well not be there, while the second provides information about who is in the picture and what is happening in a way that would not only allow those using screen readers to understand what was in the picture but also provide reassurance that important context is not left out.

Creating Good Alt Text

Léonie Watson (2011), an expert in accessible web standards, noted that, "A good alt text can conjure up wonderfully stimulating mental images. A friendly smile is the same in print, photo or wax crayon. Whether you listen to an image or see it, the emotional response is the key factor" (para. 9). While many factors go into creating quality alt text that describes, contextualizes, and elicits stimulating mental images, the first step is simply to commit to providing alt text in social media posts beyond what is automatically generated by some platforms. As shown, automatically generated alt text is often devoid of context and contains uncertain language, like the use of "may be," that does not serve the needs of those using screen readers.

The use of alt text on websites is required as part of the Accessibility for Ontarians with Disabilities Act (AODA; Government of Ontario, 2012). As part of their support package, the Ontario government calls for the inclusion of alt text as a way to make a website more accessible, describing alt text as

> a short explanation of the image content. The description of the image should reflect the information on the page. The same image can be used for multiple purposes, but it should always have different alt text that reflects the content displayed on the page. (Kovac, 2018, "Ways to Make Your Website More Accessible: Alternative (Alt) Text for Images" section)

In this definition, AODA surfaces perhaps the most substantial consideration for writing high quality alt text: context. A single image can be contextualized in infinite ways, and it is the responsibility of those writing alt text to ensure that an image is represented accurately within the context of the content. Figure 1 shows an example of how different contexts can result in different choices for alt text.

Figure 1

British Library Atrium Alt Text Example

Alt text with no context:
The British Library.

Alt text on a page about library use:
Patrons using every study table in the British Library atrium.

Alt text on a page about library architecture:
Six stories of archived books overlook a large number of study tables in the British Library atrium.

Note. Figure 1 alt text adapted from a Harvard University (n.d.) overview of contextual alt text.

Additional facets of high-quality alt text include a commitment to accuracy and equivalency in image descriptions. Alt text should not include information that is not part

of the image. Descriptions should also remain short and descriptive without sacrificing accuracy. However, with a commitment to avoiding redundancy, images should typically be described within a single short sentence (WebAIM, 2022; Harvard University, n.d.). While writing alt text, AODA recommends that individuals "try thinking about how you would explain an image to a person who cannot see it. What elements of the image do you most want users to know about?" (Kovac, 2018, "Ways to Make Your Website More Accessible: Alternative (Alt) Text for Images" section). While numerous best practices exist, focusing on descriptions that prioritize meaning and context are great first steps to creating high-quality alt text.

While there are certainly important guiding principles, there are also dissenting opinions on what is considered high-quality alt text. For example, WebAIM (n.d.) and Harvard (n.d.) both recommend not including phrases like "image of" or "graphic of" as part of alt text. However, in a survey completed by WebAIM (2009), respondents who use screen reader technology overwhelmingly preferred an image of the White House to be described as "Photo of the White House" instead of "The White House." WebAIM (2009) acknowledged this potential tension and clarified that, "This should not be interpreted to mean that users prefer that all images be identified [...] The results here refer to photographs only" ("The Identification of Photographs" section). Consider how the image is best described to capture context, meaning, and emotion. Importantly, both options outlined here are better than omitting alt text entirely. For more detailed information on creating accessible social media content, the authors highly recommend [Accessible Social](#), a website created by social media strategist Alexa Heinrich.

Discussion

As libraries and other organizations adopt new methods for engaging with their communities, they need to consider how to make that engagement accessible to the broadest community possible. Only two library systems were found regularly to add alt text to their social media posts. The goal of this research is not to call out libraries that do not provide this information, but to call attention to the need for alt text to provide more equitable service. Adding alt text to social media posts is a significant yet easy-to-add feature that would make Ontario public library content more accessible.

On social media platforms like Twitter, no alt text can mean no context and no content in the case of posts that consist only of an image. On Instagram and Facebook, it can mean no context, no content, or even garbled content. The automatically generated captions created by Facebook and Instagram provide some attempt at contextualization, but they should not be used as an alt text solution. The quality and clarity of such computer-generated alt text is widely variable but, in this sample, was often unusable.

It should be noted that Ontario public libraries are likely already familiar with alt text because it is used in their websites. Adding alt text to social media posts is the next step in working towards creating a more equitable environment. While this study does not consider whether people are more likely to visit their public libraries' social media feeds

or websites, there are over 33 million social media users in Canada who spend over 1.5 hours on social media every day on average (Canada Social Media Statistics, 2022). Knowing that most Canadians are likely to seek information about library services via social media, public libraries must ensure accessibility for all users. Each of the platforms sampled in this study include simple steps for including alt text. Additionally, popular social media management tools such as Hootsuite provide a variety of tools for inclusive design. Hootsuite integrates over 20 social media platforms into their offering, including Twitter, Facebook, and Instagram, and has tips for creating accessible social media feeds (Sehl, 2020).

This study has shown the lack of alt text used in Ontario public library social media feeds, identified the importance of this alt text, and provided some guidance on creating informative, contextual alt text. While this research was limited to still images, future research will likely branch into examining video feeds on such platforms as YouTube and TikTok and even the use of moving images (GIFs) in social media feeds. YouTube is among the most viewed websites globally and ranks as the second most viewed site in Canada, below only Google (Summerfield, 2021). Additionally, Summerfield (2021) noted that TikTok has quickly become the most used social media platform among Canadian youth, with a staggering 77% of Canadians between 7 and 17 accessing the app daily. As users change their social media behaviours and preferences, inclusive design must remain a priority.

Conclusion

This research began with the premise of analyzing the quality of alt text used in public library social media feeds. The research questions focused on ascertaining the likelihood of alt text usage and then analyzing that alt text to make recommendations for improvement. While gaps were expected, the dearth of alt text was surprising. As social media becomes a larger part of how public libraries engage with their communities, making sure that engagement is accessible is vital.

Gibson et al. (2021) stated that "we exist in a time where we are constantly confronted by the importance and value of human-centered and humane, respectful, compassionate information and data systems and services. Libraries are constantly innovating and reinventing themselves" ("Discussion" section). Changes such as prioritizing inclusive social media feeds that use alt text are part of that innovation that prioritizes humane, compassionate design. A focus on adding good alt text to social media feeds is a step towards creating a more equitable environment.

References

Brobst, J. (2009). Evaluating the accessibility of Florida's public library home pages. *Libri, 59*(2), 88–103.

Cassner, M., Maxey-Harris, C., & Anaya, T. (2011). Differently able: A review of academic library websites for people with disabilities. *Behavioral & Social Sciences Librarian, 30*(1), 33–51.

Cavanagh, M. F. (2016). Micro-blogging practices in Canadian public libraries: A national snapshot. *Journal of Librarianship and Information Science, 48*(3), 247–259.

Choi, N., & Harper, L. M. (2020). Public libraries and the social web: A review and analysis of the existing literature. *Journal of Documentation, 76*(1), 197–211.

Ćirić, J., & Ćirić, A. (2021). The impact of the CoVID-19 pandemic on digital library usage: A public library case study. *Journal of Web Librarianship, 15*(2).

Conway, V. (2011). Website accessibility in western Australian public libraries. *Australian Library Journal, 60*(2), 103–112.

Conway, V., Brown, J., Hollier, S., & Nicholl, C. (2012). Website accessibility: A comparative analysis of Australian national and state/territory library websites. *Australian Library Journal, 61*(3), 170–188.

Dinis, M. G., Eusébio, C., & Breda, Z. (2020). Assessing social media accessibility: The case of the Rock in Rio Lisboa music festival. *International Journal of Event and Festival Management*, *11*(1), 26–46.

Ellcessor, E. (2016). *Restricted access: Media, disability, and the politics of participation*. NYU Press.

Gabel, S. L., Reid, D., Pearson, H, Ruiz, L., & Hume-Dawson, R. (2016). Disability and diversity on CSU websites: A critical discourse study. *Journal of Diversity in Higher Education, 9*(1), 64–80.

Gibson, A., Bowen K., & Hanson, D. (2021). We need to talk about how we talk about disability: A critical quasi-systematic review. *In the Library With the Lead Pipe*.

Gleason, C., Carrington, P., Cassidy, C., Ringel Morris, M., Kitani, K. M., and Bingham, J. P. (2019). "It's almost like they're trying to hide it": How user-provided image descriptions have failed to make Twitter accessible. In *Proceedings of the World Wide Web Conference WWW 2019* (549–559). ACM.

Gleason, C., Pavel, A., McCamey, E., Low, C., Carrington, P., Kitani, K., Bigham, J. (2020). Twitter A11y: A browser extension to make Twitter images accessible. In *CHI '20: Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (1–12). ACM.

The Global Statistics. (2022). Canada social media statistics 2022 | most popular platforms.

Goek, S. S. (2021). Public libraries respond to COVID-19. *Public Libraries, 60*(1), 21–32.

Government of Ontario. (2012). Accessibility for Ontarians with Disabilities Act.

Graves, S. J., & German, E. (2018). Evidence of our values: Disability inclusion on library instruction websites. *Portal: Libraries and the Academy, 18*(3), 559–574.

Haicéid, M. (2020). Public libraries and COVID-19: Tour of Europe. *National Authorities on Public Libraries in Europe Forum*.

Harvard University (n.d.). Write good alt text to describe images. *Digital Accessibility.*

Hill, H. (2013). Disability and accessibility in the library and information science literature: A content analysis. *Library and Information Science Research, 35*(2), 137–142.

Hill, H. (2020). Ontario public library websites and the framing of disability. *Partnership: The Canadian Journal of Library and Information Practice and Research, 15*(2), 1–17.

Kent, M. (2019). Social media and disability: It's complicated. In K. Ellis (Ed.), *The Routledge companion to disability and media* (264–274). Routledge.

Koulouris, A., Vraimaki, E., & Koloniari, M. (2021). COVID-19 and library social media use. *Reference Services Review, 49*(1), 19–38.

Kovac, L. (2018, June 11). Ways to make your website more accessible. *Accessibility for Ontarians with Disabilities Act*.

Lazar, J., Allen, A., Kleinman, K., & Malarkey, C. (2007). What frustrates screen reader users on the web: A study of 100 blind users. *International Journal of Human-Computer Interaction, 22*(3), 247–269.

Liu, Y. Q., Bielefield, A., & McKay, P. (2017). Are urban public libraries websites accessible to Americans with Disabilities? *Universal Access in the Information Society, 18*(1), 191–206.

Maatta Smith, S. L. (2014). Web accessibility assessment of urban public library websites. *Public Library Quarterly, 33*(3), 187–204.

Morris, M. R., Zolyomi, A., Yao, C., Bahram, S., Bingham, J. P., & Kane, S. K. (2016). "With most of it being pictures now, I rarely use it": Understanding Twitter's evolving accessibility to blind users. In *CHI '16: Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (5506–5516). ACM.

Ontario Ministry of Tourism, Culture and Sport. (2020). Ontario public library statistics.

Oud, J. (2012). How well do Ontario library web sites meet new accessibility requirements? *Partnership: The Canadian Journal of Library & Information Practice & Research, 7*(1), 1–17.

Power, R., & LeBeau, C. (2009). How well do academic library web sites address the needs of database users with visual disabilities? *The Reference Librarian, 50*(1), 55–72.

Rossman, D., & Young, S. W. H. (2015). Social media optimization: Making library content shareable and engaging. *Library Hi Tech, 33*(4), 526–544.

Sehl, K. (2020). Inclusive design for social media: Tips for creating accessible channels. *Hootsuite*.

Summerfield, P. (2021, August 13). TikTok is the most popular social app with Canada's youth. *Media in Canada*.

Vassilakaki, E., & Garoufallou, E. (2015). The impact of Twitter on libraries: A critical review of the literature. *The Electronic Library, 33*(4), 795–809.

Watson, L. (2011, June 3). Text descriptions and emotion rich images. *Tink*.

WebAIM. (n.d.). Alternative text.

WebAIM. (2009). Survey of preferences of screen readers users.

WebAIM. (2022). *The WebAIM million: The 2022 report on the accessibility of the top 1,000,000 home pages*.

Whitney, G., & Kolar, I. (2020). Am I missing something? Experiences of using social media by blind and partially sighted users. *Universal Access in the Information Society, 19*, 461–469.

Wild, G. (2016). Social media and accessibility. In F. F.-H. Nah & C.-H. Tan (Eds.), *HCI in business, government, and organizations: eCommerce and innovation* (129–140). Springer.

Yi, Y. J. (2015). Compliance of Section 508 in public library systems with the largest percentage of underserved populations. *Government Information Quarterly, 32*(1), 75–81.

Appendix

How to Add Alt Text

Facebook
Facebook. (n.d.). *[How do I edit the alternative text for a photo on Facebook?](#)* Retrieved November 9, 2022.

Instagram
Instagram. (n.d.). *[How do I edit the alternative text for a photo on Instagram?](#)*Instagram Help Center. Retrieved November 9, 2022.

Twitter
Twitter. (n.d.). *[How to make images accessible for people](#)*. Twitter Help Center. Retrieved November 9, 2022.

Hootsuite
Hootsuite. (2022, September 22). *[Work with images](#)*. Hootsuite Help Center. Retrieved November 9, 2022.