In-person and virtual storytime programs beyond early literacy development: a case study of the Mississauga Library during the COVID-19 pandemic Victoria Le

Abstract

Early literacy development is a fundamental aspect of a child's learning with implications for their future success in school and life. Storytimes have been a staple program offered by public libraries for years, but gaps exist in the current data about the impact and benefits that children and their parents/caregivers gain from attending the programs with a notable absence of research into how virtual storytime programs play a role.

This study investigates the impact of storytime programs on children and their parents and caregivers beyond and including early literacy development with a focus on how the COVID-19 pandemic influenced the program delivery and the response from the community. A case study of how the Mississauga Library pivoted from in-person to virtual storytime examines the challenges, opportunities, and response to the programs from library professionals and the community that they serve.

The research employs a mixed-methodology approach, analyzing qualitative and quantitative data using questionnaires targeting library patrons and program attendees, and one-on-one interviews with educators and Mississauga Library staff. This research provides insight into the effectiveness of and overall response to virtual storytime programming during the pandemic where there is currently limited data.

From these research findings, recommendations have been made for improvement in future library programming for both virtual and in-person storytime, for collaboration between education and library organisations and for investing in the training of library staff to better address the needs of their communities.

Keywords

Early literacy development, emergent literacy, literacy, public library, storytime, children, parents, caregivers, education, virtual programs, in-person programs, COVID-19, pandemic.

1 Introduction

The early literacy skills that children develop in their formative years from birth to 5 years old are critical in helping to build a rich vocabulary, improve reading comprehension, foster a love of reading and sets the foundation for successful lifelong learning. Storytime programs can provide children and their parents or caregivers with the tools to further develop their early literacy skills by offering thoughtful programming and coaching parents and caregivers on how to nurture their children's literacy skills at home.

Diamant-Cohen (2007) argues that early childhood programs in the library are vital for teaching children the basic skills required to prepare them for school and involving parents in the process. The implications for poor literacy skills extend beyond school as "at least 42% of Canadian adults lack the literacy skills needed to succeed in Canada today" and studies indicate that adults with poor literacy skills tend to be less successful in work, require more social assistance, and have poorer health which

then costs the country billions of dollars annually (Jamieson 2009, Canadian Children's Literacy Foundation 2020).

There are additional benefits beyond early literacy development for children and their parents or caregivers through participating in the storytime programs offered by public libraries. Children are provided with an environment where they can develop skills such as learning to sit and listen, interacting with other children, developing a longer attention span, following basic instructions, etc. and parents and caregivers are given the opportunity to learn how to further support their child's learning at home and create connections with other parents or caregivers that they meet in the program (Stagg Peterson et al. 2012).

In March of 2020, libraries around the world closed to the public due to the global COVID-19 pandemic. In-person storytime programs were indefinitely paused as library staff and library organisations pivoted to offer their communities virtual storytime programs. This research employs data collected from a questionnaire, one-on-one interviews with educators and library staff which make up a case study of how the Mississauga Library in Ontario, Canada quickly moved from in-person to virtual storytime program.

1.1 Rationale

The importance of literacy skills and the effects on a person's future success should not be understated as reflected in the data. There is currently limited data available about the impact of storytime programs on children and their parents or caregivers beyond and including early literacy skills development and even less research available on how the COVID-19 pandemic affected children's learning during the period when libraries switched from in-person to virtual programming. The pandemic created a unique scenario allowing for this research to explore how the Mississauga Library adapted to the changes, how the community responded and how people currently perceive the effectiveness of virtual storytime programs for children's early literacy development. The case study offers insight into how, why and what the organisation did to meet the needs of their patrons and stay connected with their communities, the challenges and opportunities that were encountered and contributes to the limited data that is currently available about virtual programming offered by public libraries.

A mixed-methodology approach to the research includes data from case study analysis, a questionnaire, organisation reports and one-on-one interviews with educators and library professionals. This study will further substantiate the need for in-person storytime programs by highlighting the positive impacts on early literacy development and other skills for both children and their parents and caregivers. The findings from the data provide valuable information about how storytime has impacted children and their parents and caregivers beyond early literacy development especially during the pandemic with the introduction of virtual storytime. This study goes on to include suggestions for future research and recommendations for how library organisations can contribute to the limited data on the topic at this time.

2 Aim & Objectives

2.1 Aim

The aim of this study is to further research the different ways that children and their parents and caregivers benefit from storytime programs in public libraries beyond early literacy development and the impact of the COVID-19 pandemic on these programs and children's learning. An exploratory case study was conducted to examine how the Mississauga Library in Ontario, Canada pivoted from inperson to virtual storytime programs to meet the needs of their communities during the pandemic and the challenges and opportunities that arose along the way.

2.2 Objectives

- To review existing research in order to further explore the ways that storytime programs in public libraries benefit children and their parents and caregivers including and beyond early literacy development.
- To identify how parents and caregivers and other library patrons currently perceive the importance of storytime programs (in-person and virtual) offered by the public library and its impact on a child's early literacy development.
- To investigate how the Mississauga Library in Ontario, Canada pivoted to offer virtual storytime programs for their patrons during the global pandemic and explore any challenges or opportunities that were addressed.
- To critically analyse any connections between storytime programs offered by public libraries, in-person or virtual, and the influence on a child's development and early literacy skills in order to provide recommendations and best practices for future storytime programs in public libraries.

3 Literature Review

3.1 Early Literacy Development

A child's early exposure to books and reading is a fundamental aspect of their early literacy development with implications for their future success in school and lifelong learning. According to Jamieson (2009), "the first three years of a child's life have enormous impact on the development of basic language and cognitive skills and lay the foundation for early literacy development", emphasising the importance of implementing positive experiences with books and reading during these formative years. The effects of poor literacy skills extend beyond childhood where "at least 42% of Canadian adults lack the literacy skills needed to succeed in Canada today" (Jamieson 2009) and studies have indicated that adults with poor literacy skills tend to be less successful in work, require more social assistance, have poorer health which then costs the country billions of dollars annually (Jamieson 2009, Canadian Children's Literacy Foundation 2020). These statistics and findings illustrate the serious implications of poor literacy and underscore the importance of understanding the connection between a child's early literacy development and storytime programs offered by public libraries to support children's preliteracy progress and create a strong foundation for future success in school and learning.

3.2 Storytime Programs in Public Libraries

Public library storytime programs play an important role in delivering positive early literacy experiences and providing parents and caregivers with the tools to support their child's development at home. Storytime programs are more than just fun and games for children and studies show that the playful language experiences aid in their understanding and later experimentation with the written language as children's early literacy is developed through social interactions (Herb 2001). Parents and caregivers play a critical role in a child's early literacy development and in 2004, the first edition of Every Child Ready to Read (ECRR) was introduced to increase the public library's impact on early literacy development by educating parents and caregivers on how to nurture their child's pre-reading skills at home (Every Child Ready to Read 2022). ECRR emphasises singing, talking, reading, writing and playing as the five simple practices to support early literacy and are practices that have been intentionally implemented into children's storytime programs in libraries around the world. When print motivation, phonological awareness, vocabulary development, print awareness and narrative awareness skills are developed in storytime programs, significant improvements can be seen in a child's early literacy development (Stagg Peterson et al. 2012).

Storytime programs in public libraries can offer children positive early literacy experiences, presenting

an environment where a foundation of social skills including taking turns, listening to others, playing with others, etc. can help enable them to be ready for learning in a formal school setting (Diamant-Cohen 2007). Cahill et al. (2022) elaborates to include that many parents and caregivers attend library storytime programs with their young children with the goal to develop skills that demonstrated school readiness behaviours such as following directions and taking turns.

Public libraries play an important role in supporting early literacy development in the communities that they serve by providing literacy-based programs such as storytime. The library staff delivering the storytime programs are in a unique position to create thoughtful programming aimed at fostering a love of reading and learning as well as guiding parents and caregivers to continue supporting their children's learning outside of the library.

Providing the training and resources necessary to help library staff provide patrons with fun and educational programs is critical in ensuring the success of the programs and the positive impact on children's development. Library staff act as models for parents and caregivers, provide exposure to new songs and books and reinforces the notion that parents and caregivers play a critical role in their child's early literacy development at home. Librarians and other influential adults in a child's life promote vocabulary, reading, and writing by speaking with children, reading interactively, and learning the alphabet. Libraries play a leading role in emergent literacy implementation for children and parents and caregivers. (Kelly and Hunt 2019 p. 472)

Guides like the ECRR direct the learning towards the parents and caregivers, with library staff as the role models for positive early literacy development, providing examples of songs, rhymes and age-appropriate books to use with their children. The Public Library Association (PLA) and the Association for Library Services to Children (ALSC) developed Every Child Ready to Read guide in 2004 with the purpose of emphasising the importance of parent and caregiver involvement in a child's early literacy development through coaching and modelling in programs offered by public libraries such as storytime.

Parents play a critical role in the success of children's early literacy development long after the storytime programs end in the libraries. Library staff empower parents and caregivers to continue the learning at home, modelling good reading practices, age-appropriate books, rhymes, songs, activities, giving them the confidence to continue the practice at home with positive impacts on their child's learning,

Helping parents understand which skills and capabilities children will need to become successful readers builds social capital. Such knowledge helps parents make judgements about what kinds of language and literacy experiences to look for in preschool and child-care settings... whether their child is making adequate progress in reading or needs additional instruction. In short, parent training ought to unlock the mystery of what it takes to ensure children's success in school. (Neuman and Celano 2012 p. 20)

Ghoting and Martin-Diaz (2006) state that parents and caregivers are able to determine when their children are in the best mindset to learn, they understand their child's moods and when they are most alert and receptive to learning and that is when parents can incorporate fun activities throughout the child's day to make their learning experiences informal and fun. By attending storytime programs offered by public libraries, both in- person and virtually, parents are making the conscious decision to be involved in their child's learning and that effort can make a meaningful difference in a child's success in education, school and lifelong learning.

3.3 COVID-19 and Storytime Programs

In 2020 the COVID-19 pandemic brought in-person storytime programming to a halt and many library systems quickly pivoted to offer virtual storytime to stay connected with their patrons and continue to offer virtual programming. As the pandemic persisted into the summer of 2020 many libraries continued to offer virtual storytime, investing in new video equipment and using video platforms and apps such as Facebook and YouTube to reach their patrons (Grassel 2020). Even with physical locations closed to the public, library staff worked hard to respond to and connect with their communities and offer essential services with 60% of Ontario library staff citing that they were working on developing virtual programming during the pandemic (Ontario Library Association 2020). At one point in the reopening process for libraries, Dobreva and Anghelescu (2022) identified the trend that 'Virtual Is Here to Stay,' suggesting that virtual library services will continue to be the preferred mode of access, even when in-person visits are permitted. With this shift to virtual storytime programming, it is worth investigating the impact of this change and its effectiveness in a child's early literacy development. There is currently limited data on this subject and this research will help to supplement the current information and bridge gaps in data about virtual storytime programs and their effectiveness in children's early literacy development.

In the move from in-person to virtual programming, library staff were forced to develop programs using virtual platforms and consider how these online storytime programs would offer different levels of engagement with their attendees. Due to the recent nature of the on-going pandemic and the relatively new practice of online library storytime programs, there is inadequate data and guidance for how to create these virtual programs. Some guides published in recent years compare platforms such as Facebook and YouTube for virtual programming that allows for varying levels of interaction with patrons (Eastman and Hargrove 2020). The study by Gaudreau et al. (2020) explores whether preschoolers can learn vocabulary and comprehend stories read to them over video chat and how viable the technological option is for reading to children during the pandemic. The study revealed that "children were more responsive to the prompts in the Live and Video chat conditions than the Prerecorded condition, suggesting that children recognised that these interactions were contingent with their responses, a feature that was lacking in the Prerecorded condition" (Gaudreau et al. 2020). This study provides a valuable look into a child's level of comprehension when they were read to in a virtual storytime and outlines the more effective modes of delivery when comparing live and prerecorded options.

3.4 COVID-19 and Education

Ontario schools were forced to close alongside public libraries during the beginning of the COVID-19 pandemic and several parallels can be found between the challenges that each organisation experienced with pivoting to virtual learning/programs and engaging viewers. Gallagher-Mackay et al. (2021) presented emerging research on the impacts of COVID-19 on education and the effects on children's learning that suggests that most families, educators and children prefer and benefit more from in-person learning and that the school closures led to learning losses and affected their academic success. The study provides a comprehensive timeline of the actions that schools took as a result of the COVID-19 closures and examines the gaps in the data about the impact on Ontario students and teachers and the effect on their education and mental health,

Teacher effectiveness is deeply shaped by the contexts in which they work. COVID- 19 has radically disrupted these contexts, with considerable impacts on teachers' work as well as their own health and well-being. Teachers have needed to dramatically change how they teach, with limited time or specific training provided. They are supporting students, many of whom are themselves under exceptional stress. (Gallagher-MacKay et al. 2021 p. 8)

The challenges that educators addressed with their move from in-person to remote teaching and the effects on their students during the period of virtual learning are comparable to the same challenges that library staff encountered during the pivot from in-person to virtual storytime programs to ensure that their patrons would still be able to access the valuable resource during the global COVID-19 pandemic closures.

3.5 Training and Resources for Library Staff

Supporting the library staff providing the storytime programs through offering professional development, training and resources specific to literacy-based programming and guiding parents and caregivers would help to improve the programs and create thoughtful storytimes to better serve the needs of their communities. Developing a successful training program guide for library staff may differ with staff levels and needs, complete with training checkpoints, goals and plans (Eastman and Hargrove 2021). Investing the time and effort into training library staff can produce positive results for the children attending the programs, their parents and caregivers and the communities that they serve. It benefits not only the child, but the entire family and ultimately the community at large. Well-trained and consistent presenters help us give our best to our community. Helping children develop pre-literacy skills, social engagement, and attention is a role with an investment. (Eastman and Hargrove 2021 p. 10)

Providing the training and resources necessary to help library staff provide patrons with fun and educational programs is critical in ensuring the success of the programs and the positive impact on children's development.

3.6 Gaps in the Literature

At the time of this study, the world remains in a state of global pandemic due to the COVID- 19 virus with limited research available about its effects on children and their learning and other skills development as lockdowns forced schools and libraries to pivot to offer virtual learning/programs. Information is slowly emerging about the implications of the pandemic on children's educational development, "more than a year into the COVID-19 pandemic, there are very little data on key processes or outcomes of pandemic schooling, at either the board or provincial level" (Gallagher-Mackay et al. 2021 p. 18). Even further, there is insufficient data available about how the pandemic closures have affected library storytime programs specifically. This research will further explore and contribute to the current existing information in understanding the connection between the storytime programs in public libraries and how they contribute to building a foundation for a child's early literacy development by expanding vocabulary, supporting reading comprehension, self-expression, communication skills, school readiness, etc.

3.7 Summary

Public libraries play an essential role in communities, and it is therefore crucial to explore the ways that library staff and programming initiatives can contribute to preliteracy skills and support parents and caregivers in preparing their children to become successful lifelong learners. Unfortunately, there is limited data about the effectiveness of virtual storytimes and children's early literacy development where it is generally agreed upon that the programs are valuable without the availability of studies to measure their impact on preschool and elementary school children and analyse their outcomes (Celano and Neuman 2001, Campana et al. 2016). This study will attempt to contribute knowledge towards filling the gap in the connection between storytime programs and children's early literacy development. The Mississauga Library case study offers an in-depth look into the steps taken by the organisation to pivot their programming structure by offering their patrons virtual storytimes during

the pandemic. It critically analyses any challenges, innovative ideas and successes along the way as well as best practices and recommendations for future virtual and in-person programming. The information gathered from the questionnaire data, organisation reports, case studies, semi-structured interviews with library and education professionals as well as parents and caregivers will provide insight into the value and impact of the virtual storytimes in relation to children's early literacy development and may influence the direction of storytime programming in the future.

4. Methodology

This research study employs a mixed-methodology approach that includes both qualitative and quantitative data using a questionnaire, semi-structured interviews with educators and library staff, and a case study analysis of how the Mississauga Library pivoted from in-person to virtual programs during the pandemic.

4.1 Mixed-Methodology Approach

The mixed-method approach to this research offers a more holistic view, allowing for quantitative data to complement the qualitative data collected and provide a more complete picture, "by combining quantitative and qualitative data, the researcher reaches a more comprehensive understanding of the topic and reduces the weaknesses of using either method on its own" (Bell and Waters 2018 p. 17). The exploratory case study of the Mississauga Library provides an in-depth look into how the organisation shifted to offer virtual storytimes during the pandemic, detailing what the organisation did and why. The mixed approach allows for both inductive and deductive reasoning around specific observations within the case study and interviews analysed alongside the quantitative data from the questionnaire, "case studies may be carried out to follow up and put flesh on the bones of a survey" (Bell and Waters 2018 p. 30).

Through the collection and analysis of both qualitative and quantitative data, findings can be confirmed and reinforced across both methods to provide a more comprehensive view of the entire study. The interviews with staff and educators provided rich data about the

different ways that storytimes can influence the development of a child's early literacy skills and how the move to virtual programs (and learning) impacted that development. The questionnaire data provided responses from 125 participants highlighting the opinions of program attendees about the skills that they and their children developed through storytime programs in addition to information about the opinions of library patrons relating to the importance of the availability of storytime programs in public libraries. The mixed- methodology research philosophy allows for a thorough analysis of the aims and objectives for this study by merging datasets, complementing strengths and overcoming weaknesses of a single design and providing a more complete view of how the Mississauga Library pivoted to offer virtual programming during the pandemic, the impact on children's early literacy skills and the response from the community.

4.2 Qualitative Data

The qualitative non-experimental design component of the research involved data collection through conducting one-on-one interviews and a comprehensive case study of the Mississauga Library. This inductive research paradigm provides the opportunity for in-depth responses from participants and allows for patterns and themes to emerge from the data collected. The qualitative research method as outlined by Pickard (2017), is the combination of the participant, the researcher as the research instrument and the technique for data collection. The opinions and experiences of the respondents became the critical element of the interviews and case study and presents a rich and detailed account of a complex situation. In this study, the complex situation in review was the period during the COVID-19 pandemic when the Mississauga Library pivoted to offer their patrons virtual storytime programs to stay connected with the community and to continue providing an important service. The flexibility

of the qualitative research method allowed for follow up questions within the interviews leading to unique and meaningful insights from the respondents that may not have otherwise been adequately captured using any other method. The collection and analysis of qualitative data from the interviews and case study were critical to the research in providing the detailed responses necessary to understand the complex situation that library staff faced during the pandemic.

4.2.1 Interviews

Interviews are used to gather information in a direct way from the respondents where the researcher employs probing questions to elicit the amount of information and level of detail desired in the response (Depoy and Gitlin 2016). One-on-one, semi-structured interviews with open-ended questions were conducted with 3 educators and 4 library professionals from the Mississauga Library. This method of data collection was instrumental in acquiring a detailed understanding of educator observations of children's virtual learning and the experiences of library staff during the pivot from inperson to virtual programs, as Pickard (2017 p. 196) states, "interviews are usually used when we are seeking qualitative, descriptive, in-depth data that is specific to the individual and when the nature of the data is too complicated to be asked and answered easily." The semi-structured interviews also permitted a level of flexibility for the researcher to ask follow-up questions based on the responses and for participants to ask for clarification or to elaborate on specific details.

4.2.2 Case Study

Case studies generally offer a large volume of information and requires an organised and methodical approach to collecting and analysing the data with the aim to "provide a holistic account of the case and in-depth knowledge of the specific through rich descriptions situated in context" (Pickard 2017 p. 102). This exploratory case study evaluates how the Mississauga Library responded to the COVID-19 pandemic by pivoting to offer their patrons virtual storytimes. Detailed information was gathered through the interview process with library staff that outlined the different steps taken to navigate the change from in-person to virtual programming and the various challenges and opportunities that arose as a result. The Mississauga Library also provided access to additional data in the form of statistics, internal standard operating procedures and training documents which were analysed along with the interview data to provide a comprehensive evaluation of how the library system managed the change from in-person to virtual programming and how the community responded. The case study research method allowed a flexibility in the interview process which ultimately provided a rich account of the experiences of staff as the Mississauga Library adapted to the challenges of providing programming to their patrons during the pandemic.

4.3 Quantitative Data

Quantitative data was collected for this study using a questionnaire to provide a representative sample of library patrons and storytime program attendees and their perception or experience of how storytime programs impact children's early literacy development and the importance of offering these programs in public libraries. Rudestam and Newton (2001) comment that quantitative data methods are effective when observing correlations between patterns and behaviours and expressing them through numbers and statistics. The results from the questionnaire provided additional insight into customer perceptions of the importance and impact of storytime programs offered by public libraries on children's early literacy development.

4.3.1 Questionnaire

Questionnaires offer the opportunity to reach a large number of respondents across a greater geographical area, anonymity and confidentiality can easily be accommodated for participants and the research method can be employed at a relatively low cost especially when using virtual survey platforms (Pickard 2017). Structured, close-ended questions were used to gather information from the 125 respondents about their perceptions of the importance and impact of in-person and virtual

storytimes offered by public libraries. This design allowed for the responses to be analysed statistically and contributed to the understanding of how storytime programs benefit children and their parents and caregivers in terms of early literacy development and beyond.

4.4 Data Collection

Qualitative data was collected through case study analysis of internal organisation documents, reports and statistics provided by the Mississauga Library in addition to the semi-structured interviews with library professionals and education professionals.

Quantitative data was collected from 125 respondents through a virtual questionnaire and analysed using the JISC Online Surveys platform. Concurrent data collection allowed for the information to be analysed, interpreted and integrated into the research as the study evolved.

4.4.1 Case Study Site Selection

The Mississauga Library in the City of Mississauga, Ontario, Canada was selected for the case study. Statistics Canada (2021) reports that The City of Mississauga has a population of 717,961 and with a total of 18 branches, the Mississauga Library is a close representation of the average number of locations (16) for a Canadian urban library system as reflected in the 2019 CULC Public Library Statistics Report (Canadian Urban Libraries Council 2019). A formal request to conduct research was submitted to Rona O'Banion, the director of the Mississauga Library, and permission was granted to access the organisation's reports, standard operating procedures, training documents, statistics, etc. as well as access to library staff for interviews.

4.4.2 Grey Literature

Grey literature was analysed as part of the study to provide supplementary information in the form of statistics, reports and evidence from sources including government websites, professional organisations and data from the Mississauga Library. Grey literature is described as material that is "produced by government departments or agencies, international agencies, local authorities, academic institutions, professional or scholarly associations, think tanks, charities, non-profit organisations, companies and other organisations" and can provide useful information that has not been officially published (Robert Gordon University 2022). Although grey literature can provide useful information, it is critical that researchers are mindful of bias, the quality of the information reported and consider that grey literature has not been formally published or subjected to peer review. For this study, the Mississauga Library allowed access to valuable data collected by the organisation such as program attendance statistics, virtual program viewership numbers and other library metrics in addition to documents created for staff use including program training guides, standard operating procedures and best practices for both in-person and virtual storytime programs.

4.4.3 Interviews

One-on-one, semi-structured interviews with open-ended questions were conducted with 3 educators and 4 library professionals from the Mississauga Library. Information was communicated to local public elementary schools, Early Childhood Educators (ECEs) from daycares and to teacher-librarians, to connect with educators who were willing to participate in the interview. A purposeful sample of library professionals included Mississauga Library staff that were involved with children's programming in branches, the programming committee for children, families and caregivers and programming development for the library system during the pandemic.

Participants were informed about the purpose and scope of the study and asked to complete the consent form which included permission for the researcher to record and automatically transcribe the interviews and the option for interviewees to participate anonymously where their names would be replaced with a respondent code. Interviews were conducted virtually on the Microsoft Teams

platform and lasted between 30-45 minutes. All participants consented to video recording and automatic transcription which helped reduce the time and effort spent on transcribing the interviews. Some of the educators requested that their names be replaced with a respondent code and all library professionals interviewed consented to having their names and information included in the study but for the purpose of simplicity, all names have been omitted from the quotes featured in this study.

All the library interviewees were female and gender balance was not attempted in the interview process. Table 1 features the interview respondent information tabulated to display data such as their name or respondent code and functional perspective. Table 2 presents the list of standard questions that educators and library professionals were asked in the interviews. The use of one-on-one, semi-structured interviews with open-ended questions allowed for a thorough discussion with the respondents and provided them with the space and flexibility to ask clarifying questions or elaborate on specific details or experiences.

Table 1. Interview respondent information.

Respondent Name/Code	Functional Perspective
Educator 1	Kindergarten Teacher
Educator 2	Early Childhood Educator
Educator 3	Teacher-Librarian
Lina Van Velzen	Mississauga Library – Branch Manager (and previously the temporary Manager of Program Development and Training 2020-2021)
Suzanne Main	Mississauga Library – Programming Coordinator for Children, Families and Caregivers
Basia Hnat	Mississauga Library – Branch Supervisor
Lillian Gretsinger	Mississauga Library – Librarian

Table 2. Interview questions for educators and library professionals.

Interview Questions - Educators	Interview Questions – Library Professionals
Please describe your position and your role in children's education.	8. Please describe your position within your library system and your role or involvement in children's
ciliaren s'education.	programming (in-person and/or virtual).
2. Please share your observations when education	
pivoted from in-person to virtual learning.	9. Describe the steps that your library system took to
3. Was there an impact on children's early literacy	pivot from in-person to virtual programming during the pandemic.
development?	partiternic.
	10. Why did your library system initiate these changes?
4. Challenges/opportunities that arose?	Challenges/opportunities that arose?
5. Can you describe any observed differences in children's educational development in learning during the pandemic?	11. As a library professional, how do you think children's programs such as storytimes impact children's early literacy development (birth-5 years old)?
6. How do you think library programs such as storytimes impact children's early literacy development?	12. If possible, please provide examples such as feedback from parents and caregivers.
	13. How do you think the COVID-19 pandemic has
7. What do you think can be done to improve in- person and virtual storytimes offered by public	influenced children's programming in public libraries?
libraries to better support early literacy	14. What do you think can be done to improve in-person
development?	and virtual storytimes offered by public libraries to better support early literacy development?
	better support early literacy development!

4.4.4 Questionnaire

A virtual questionnaire was created for the study using the JISC Online Surveys platform with the intention to reach library patrons as well as parents and caregivers with children that attended inperson and/or virtual storytime programs offered by public libraries. The questionnaire was piloted and then made available for a 3-week period with a total of 125 respondents that completed the survey to make up an adequate response level, "a good rule-of-thumb for new researchers is to aim for around 100 returned questionnaires... collecting more than 100 questionnaires is likely to make your research more robust and offer opportunities for generating a wider range of insights" (Rowley 2014 p. 317).

Respondents were invited to participate in the questionnaire using social media platforms such as Instagram, Twitter and Facebook and by forwarding the link to the researcher's family, friends and colleagues to distribute further.

The question formats included open-ended unstructured, structured, Likert scale, multiple choice and multiple answer questions that allowed respondents to "select all that apply." Respondents were also provided with the option to share additional details for each question in a "Other/Comments:" box. This combination of question types allowed for filtering based on the responses and enabled participants to provide details which the researcher could then use for qualitative and quantitative analysis in interpreting the strength of opinion in the scale questions and any additional information provided in the comments. The 125 responses to the questionnaire resulted in a sampling error of +/-9%. Respondent age, gender and geographic location were not collected or analysed as part of the study and a balance of these factors was not attempted.

JISC Online Surveys enables features such as "required questions" where participants are obligated to

provide a response in order to access the full questionnaire as well as the ability to apply "logic" to the questionnaire which redirects respondents to different sections of questions depending on their answers. Respondents were required to provide consent to participating in the questionnaire in order to move on to the other questions. The "logic" feature was used in the initial questions to filter responses from participants that did not use their public library. If the response was "no" to this question, then they were redirected and asked to specify the reason behind why they did not use their public library and the survey would end for these participants as they would not be able to provide accurate input about their in-person and virtual program attendance offered by the library.

Respondents that answered "yes" to using the library but "no" to taking their child to in- person and/or virtual storytime programs were redirected to the appropriate set of questions that applied to their situation. For example, if a library user did not have children or did not bring their children to storytime programs they would then be redirected to general questions about their perception of the importance of storytime programs offered by public libraries whereas if they had answered "yes" they would have then been asked supplementary questions about the in-person or virtual programming that they attended. Filtering questions provided a more accurate representation of the responses from program attendees and their experiences. A screen capture of one section of the questionnaire can be seen in Figure 1 and displays a sample of the questions asked if the respondent answered "yes" to having taken their child to participate in in-person programs at the library.

RG	UNIVERSITY ABERDEEN
	orary Storytime Programs & Early Literacy
33%	complete
	e created connections with other parents and caregivers, library staff, patrons, etc. as a result ying attended an <i>in-person</i> Storytime program offered by the public library.
0	Strongly Agree
0	Agree
0	Neither Agree nor Disagree
0	Strongly Disagree
	Other/Comment:
Ways that a	that <i>in-person</i> Storytime programs have benefitted me and my child include: (Please select all pply)
	Early literacy development.
	Develop my child's social skills.
	Prepares my child for school (sharing, listening, sitting, etc.)
	Foster a love of reading for my child.
	Free entertainment for my child.
	Reason to visit the library/explore the community.
	Opportunity to connect with other parents/caregivers.
	Exposure to new books/songs/rhymes that I can use at home with my child.
	I discovered other programs/services that my library provides.

Figure 1. Screen capture of the questionnaire and supplementary questions that respondents were asked if they selected "yes" to having participated in an in-person program at their public library.

4.5 Data Analysis

A "between-methods triangulation" of the data was applied in this study and involved the use of both quantitative and qualitative approaches where multiple sources of evidence provided greater validity in the findings to increase the credibility of the research.

A major strength of the mixed methods approach is triangulation — approaching aspects of a topic from different perspectives by using a range of methods and techniques in order to come to a better understanding of it. The use of different methods can also lead to confirmation of the findings from different sources of data (Bell and Waters 2018 p. 28).

Qualitative data from the Mississauga Library documents, interviews and comments from the openended questionnaire responses were analysed along with quantitative data as presented in the questionnaire.

The data gathered from the interviews with educators provided valuable context about how children were impacted by the switch to virtual learning based on their experiences and observations in their classrooms. The interviews with library staff were a critical component of the case study on how the Mississauga Library pivoted to offer virtual storytime programs during the pandemic and the challenges and opportunities that were encountered during the process. An inductive analysis of the interview transcripts was conducted through the application of coding and a thematic analysis of the common themes, topics, ideas and patterns that repeatedly emerged throughout the interview responses.

A statistical analysis of the quantitative questionnaire data was applied where the total of 125 responses resulted in a sampling error of +/- 9%. The questionnaire aimed at library patrons and parents and caregivers was shared with the researcher's family, friends, colleagues and by circulating the questionnaire link on social media platforms such as Instagram, Twitter and Facebook groups. Qualitative data was also gathered from the questionnaire as each question provided the respondent with an "Other/Comment" option where additional details or explanations could be included in their response.

4.5.1 Thematic Analysis

Thematic analysis applied to the qualitative data collected in the interviews and quantitative questionnaire data identified common themes, topics, ideas and patterns that repeatedly emerged.

Recurring themes that emerged throughout the interviews included:

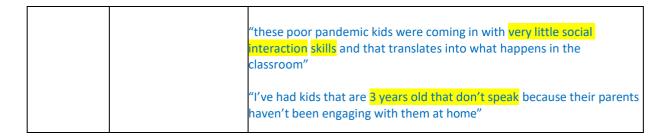
- 4.5.1.1 Teaching parents how to support their kids learning at home
- 4.5.1.2 Socialising children and parents/caregivers
- 4.5.1.3 Modelling how to deliver storytime for parents/caregivers
- 4.5.1.4 More to storytimes beyond early literacy development
- 4.5.1.5 Importance of fostering love of reading at an early age
- 4.5.1.6 COVID pandemic isolation, social distancing
- 4.5.1.7 Fear of the virus and crowded spaces impact on programs
- 4.5.1.8 Lack of accessibility (for virtual learning/programming) for both children/students and teachers/library staff
- 4.5.1.9 Libraries staying relevant during the pandemic
- 4.5.1.10 Gaps (in education, learning, abilities)
- 4.5.1.11 Staying connected with the community
- 4.5.1.12 Challenges with technology
- 4.5.1.13 Challenges with access to materials and supplies

- 4.5.1.14 Challenges with working from home
- 4.5.1.15 Innovation, creativity, and resilience during the pandemic

Each interview transcript was analysed, coded and recurring themes were highlighted and grouped together to allow the researcher to easily incorporate them into the study based on subject. Table 3 features a sample of how interview responses were organised thematically based on the recurring theme of "gaps in education, learning and abilities, etc." where educator responses are in blue, library professional responses are in black and recurring themes are highlighted in yellow.

Table 3. Sample of interview quotes coded and organised by recurring themes.

<u>Code</u>	<u>Theme</u>	Interview Quotes:
		"And we have seen that in this past year's grade ones, [they] certainly
		started grade one not where you would anticipate them to be starting
		overall."
		"there are larger gaps in their reading levels, even gaps within what they
		knew, within that reading level"
		"We needed to continue to offer what they weren't getting in person How many babies were born during the pandemic and how many babies
		missed out on those in-person connections that are so important for their cognitive development at that age for their brain development and interaction and social skills."
		"In virtual learning and then in terms of kindergarten coming into kindergarten, I would say the biggest gap that we have seen as in their social skills."
		"what was lacking were their social skills, their oral language, communication, their ability to communicate with their peer groups, their ability to follow instructions, their ability to share and problem solve."
		"Some kids have had no social interactions with other children their age, like they just want nothing to do with you. They just want their parents and have separation anxiety when they leave."
Gaps	Gaps in opportunities, in children's education, early literacy development, learning, skills and abilities, etc.	"There are two years' worth of kids who have never been to a library program, have never been to an early years program so there's going to be a huge socialisation piece that I think is going come up in the next year or two because there's some socialisation catch up to do"
		"Even if I managed to get a lot of my [students] to the targeted reading levels, that still meant that there were holes in their reading skills because I wasn't able to figure out a way to teach that virtually"
		"They're each like a slice of the same block of Swiss cheese, but each slice is different because the holes are different. And that's what it is like they all have gaps, but their gaps are different"
		"It's much harder for librarians to keep these kids focused and engaged because it almost looks like their brains are wired differently."



4.6 Limitations of the Research

There are several limitations to the research in this study including time constraints for completing the study, the small sample size of questionnaire respondents, the lack of current information about the on-going COVID-19 pandemic effects on children and their learning/early literacy development and researcher bias in interpreting the questionnaire and interview data. Additionally, the data gathered from the interviews and reports and statistics from the Mississauga Library for the case study research cannot be generalised, "case studies are not intended to produce generalizations, they are intended to allow for transferability of findings based on contextual applicability" (Pickard 2017 p. 109). This study does not consider the level of involvement of the parents at home in engaging with their children, socio-economic backgrounds, gender, age and education levels of the respondents. These limitations in the study present opportunities for future investigations and further exploration of the ways that storytime programs offered by public libraries impact children and their parents and caregivers including and beyond early literacy development and the effects of the global COVID-19 pandemic as libraries pivoted from in- person to virtual storytimes.

4.7 Summary

The mixed-methodology approach including qualitative and quantitative data through semistructured interviews, and a questionnaire provides a holistic view of virtual storytimes, their effectiveness in a child's early literacy development and how the Mississauga Library pivoted from inperson to virtual storytimes to meet the needs of their communities.

5 Findings & Discussion

The information gathered from the literature review highlighted the importance of establishing a strong foundation for early literacy development at a young age as this key skill is linked to a person's future success in education, career and social development (Denti and Guerin 2008, Jamieson 2009, Canadian Children's Literacy Foundation 2020). Storytime programs in public libraries not only offer literacy focused entertainment targeting children in order to develop their literacy skills but also offers other benefits to the children and their parents and caregivers such as school readiness preparation, social skills, parent-child bonding, and educating parents on how to support their child's literacy skills development at home, etc. (Diamant-Cohen 2007, Stagg Peterson et al. 2012, Jacobson 2017, Cahill et al. 2022, Every Child Ready to Read 2022). The data gathered from the questionnaire, interviews with educators and library staff provides valuable information about the importance of in-person and virtual storytime programs, the additional benefits from the programs beyond early literacy development and the challenges and opportunities that arose when the Mississauga Library pivoted from in-person to virtual programming during the pandemic.

5.1 Questionnaire Data

A questionnaire was created and disseminated to a target audience of library patrons and/or parents and caregivers with children that may have attended library programs. The questionnaire generated a total of 125 responses, resulting in a sampling error of +/- 9%.

The first question after the consent to participate revealed that 75.2% of respondents used their public

library. 62.8% of those respondents have participated in an in-person storytime program, 35.1% have participated in a virtual (live or pre-recorded) storytime and 26.5% of respondents have participated in both in-person and virtual storytime programs (Figure 2).

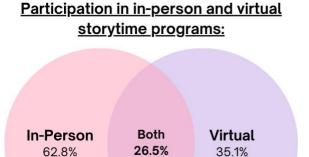


Figure 2. Number of respondents that participated in in-person storytimes, virtual storytimes and both, displayed as a percentage of those that responded "yes" to attending library storytime programs.

Some respondents answered "no" to participating in in-person storytime programs because they did not have children, their children have grown up or they felt that their children were "a little too young to participate." Other comments cited that the reasons that they have not participated were due to the pandemic, "would like to but haven't gotten the chance due to Covid," "planning to [attend] in the coming weeks now that [children under 4 years old] are able to get the vaccine," "my child was born during the pandemic," and "we would have... if it wasn't for Covid." Some of those that commented after answering "no" to having attended virtual storytime programs mentioned that they were mindful of their child's screentime, "I am trying to limit [my child's] TV exposure," and that they "did not know [virtual storytimes] existed, only that Covid closed everything down."

Through the use of "logic," the filtering feature of the JISC Online Surveys platform, respondents were redirected to the appropriate supplementary questions based on which type of program (in-person, virtual or both) that they have attended. A comparison of the responses can be viewed in Table 4.

Table 4. Comparison of responses to questions about in-person and virtual storytimes displayed as percentages with the highest response for each question highlighted.

I have created connections with other parents and caregivers, library staff, patrons, etc. as a result
of having attended the storytime program offered by the public library.

	In-Person	Virtual					
Strongly Agree	29.3%	9.1%					
Agree	43.1%	15.2%					
Neither Agree nor Disagree	15.5%	21.2%					
Disagree	10.3%	39.4%					
Strongly Disagree	1.7%	15.2%					

Storytime programs are an important part of what public libraries offer their communities.

	In-Person	Virtual
Strongly Agree	74.5%	41.3%
Agree	20.2%	27.2%
Neither Agree nor Disagree	4.3%	23.9%
Disagree	1.1%	4.3%
Strongly Disagree	0%	3.3%

Storytime programs offered by public libraries have a positive impact on children's early literacy development.

	In-Person	Virtual
Strongly Agree	68.8%	17.4%
Agree	25.8%	47.8%
Neither Agree nor Disagree	5.4%	26.1%
Disagree	0%	6.5%
Strongly Disagree	0%	2.2%

More in-person storytime program attendees felt that they were able to create connections with other parents and caregivers, library staff, patrons, etc. than those that attended virtual storytimes. When asked about how participants felt about storytimes being an important part of what the public library offers their communities, in-person attendee responses showed that 74.5% strongly agreed and 20.4% agreed whereas with virtual program attendees, only 41.3% strongly agreed and 27.2% agreed. Overall, a higher percentage of respondents felt that in-person storytimes had a positive impact on children's early literacy development (68.8% strongly agree, 25.8% agree) over the impacts of virtual storytimes (17.4% strongly agree, 47.8% agree).

When asked about the different ways that in-person and virtual storytimes benefitted parents and caregivers and their children, the responses showed that 74.6% felt that in- person storytimes benefitted their child's early literacy development compared to 59.4% for virtual storytimes and 83.1% felt that in-person storytimes helped develop their child's social skills compared to 31.3% of those for virtual storytimes (Figure 3). Overall, in-person storytimes received a higher positive response than virtual storytimes in almost every aspect when looking at the benefits and skills that respondents felt they acquired after attending the programs.

Ways that storytime programs have benefitted me and my child:

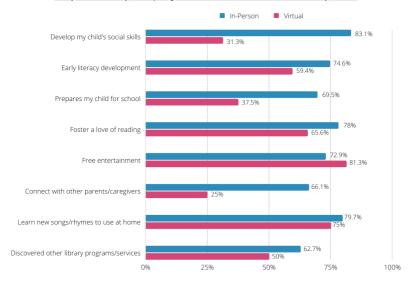


Figure 3. Bar graph with percentages featuring a comparison of the ways that in-person and virtual storytimes have benefitted respondents and their children.

Respondents that participated in virtual storytime programs were also asked about the sense of connection with their community during the pandemic as a result of attending the virtual programs and whether they would continue to use virtual programs even once libraries offered in-person storytimes again. Figure 4 reveals that 45.5% agreed that participating in the virtual storytimes allowed them and their children to feel connected with the library and the community during the pandemic and Figure 5 displays an almost even split between those that will continue to use virtual storytime programs (51.5%) and those that will not (48.5%).

Participating in the virtual Storytime(s) allowed me and my children to feel connected with the library and my community during the pandemic.

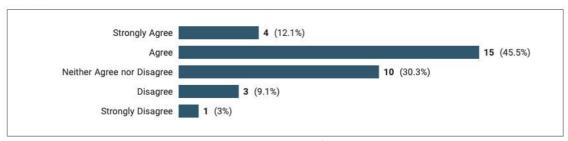


Figure 4. Responses to the question about the sense of connection with the library and community through participating in virtual storytimes during the pandemic.

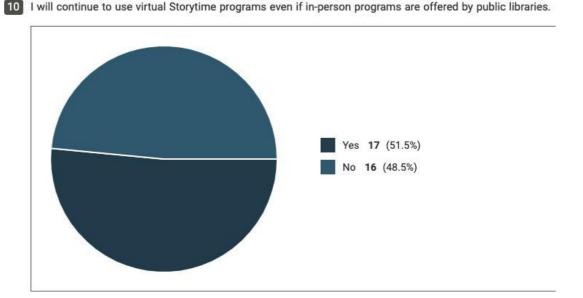


Figure 5. A pie graph displaying a close split between those that will continue to use virtual storytime programs and those that will not when in-person programs are offered by public libraries.

Additional comments indicated that some respondents saw the value in both in-person and virtual storytime options, "both have benefits for children and families, the methods are different, but the goals are the same," and "virtual storytimes were something that helped us stay connected during the pandemic, they served their purpose." Others felt that virtual programming was "vital during the pandemic," that it was "better than nothing but overall added to screentime," that it was a "good option for those who cannot commute" and that "recorded storytimes are great for families with odd

hours." Participants also shared frustrations related to virtual programming, "it didn't feel the same at all," "storytime cannot be replaced by virtual programming," that it was "hard to force [children] to pay attention to online storytime," and that virtual programming made them feel "more disconnected than before." Many expressed a preference for and positive experience with in-person programming, "a well-rounded literacy experience can only be achieved in person," "[in-person storytime] supports pleasure of reading, stories, language development and socialisation," "a great way for children to socialise and for parents to meet other caregivers," and that "in-person programs are vital to human development."

5.1.1 Discussion

The questionnaire data found that 75.2% of respondents used their public library, a close representation when compared to the 2019 Canadian Public Library Statistics which indicate that of the 770,200 people living in Mississauga, 550,063 residents are categorised as "active users" of the Mississauga Library making up approximately 70.7% of the population (Canadian Urban Libraries Council 2019). With 62.8% of participants having attended an in- person storytime program, 35.1% having attended virtually and 26.5% of respondents reporting attending both, it is clear that storytimes are an important library program utilised by many patrons. As the literature review has highlighted, storytime programs in public libraries provide an environment that nurtures the development of early literacy skills, school readiness and social skills, a love of reading and sets the foundation for lifelong learning (Herb 2001, Ghoting and Martin-Diaz 2006, Diamant-Cohen 2007, Stagg Peterson et al. 2012, Every Child Ready to Read 2022).

Libraries are evidently in a unique position to play a critical role in children's early literacy development and the respondent feedback reinforces that patrons believe that in-person storytime programs are an important part of what the public library offers the community with a total of 94.7% of participants agreeing or strongly agreeing with the statement.

Interestingly, 68.5% of respondents stated that they agreed or strongly agree with the same statement in the case of virtual storytime programs provided by the public libraries as a result of library closures due to the COVID-19 pandemic. Comments included that although virtual programming was "vital during the pandemic," they "didn't feel the same at all," that it was "hard to force [children] to pay attention to online storytime," and that "virtual storytimes were something that helped us stay connected during the pandemic, they served their purpose" suggesting that although virtual programming was a good alternative during the library closures, patrons still preferred in-person storytimes. This sentiment is also reflected in the responses to the statement "virtual storytimes have a positive impact on a child's early literacy development" with 8.7% of respondents disagreeing or strongly disagreeing whereas 0% disagreed or strongly disagreed with the same statement about the positive impact of in-person storytime programs on children's early literacy development.

Beyond early literacy development, storytime programs also enable children to improve and acquire other important skills including school readiness, social skills, independence, following rules, and fostering a love of reading (Ghoting and Martin-Diaz 2006, Diamant- Cohen 2007, Stagg Peterson et al. 2012). Storytime programs also allow for parents and caregivers to learn how to better support their children's early literacy development at home which is a critical component in the success of a child's learning, "if the primary adults in a child's life can learn more about the importance of early literacy and how to nurture pre-reading skills at home, the effect of library efforts can be multiplied many times" (Every Child Ready to Read 2022). 79.7% of in-person storytime attendees and 75% of virtual program attendees listed "learn new rhymes/books/songs to use with my child at home" as one of the ways that storytimes have benefitted them and their children, placing it as the second and third most selected option for in-person and virtual storytime programs respectively.

This awareness of the skills and benefits acquired from attending storytime programs that extend

beyond early literacy development is evident in the questionnaire when respondents were asked to select all the different ways that storytimes have benefitted them and their children (Figure 3). Surprisingly, "early literacy development" was not in the top 3 selected skills for both in-person (74.6%) and virtual storytime programs (59.4%). When presented with various options for skills and benefits acquired through in-person storytimes, 83.1% selected "develop my child's social skills," 79.7% "learn new songs/books/rhymes to use with my child at home" and 78% "foster a love of reading." Virtual storytime results showed that 81.3% selected "free entertainment for my child," 75% "learn new songs/books/rhymes to use with my child at home" and 65.6% "foster a love of reading." Figure 6 displays the top 3 selections for both in-person and virtual storytime program benefits in comparison with the "early literacy development" option. This information denotes that parents and caregivers understand and value the many other positive impacts of attending storytime programs, both in-person and virtually, for both them and their children beyond early literacy development.

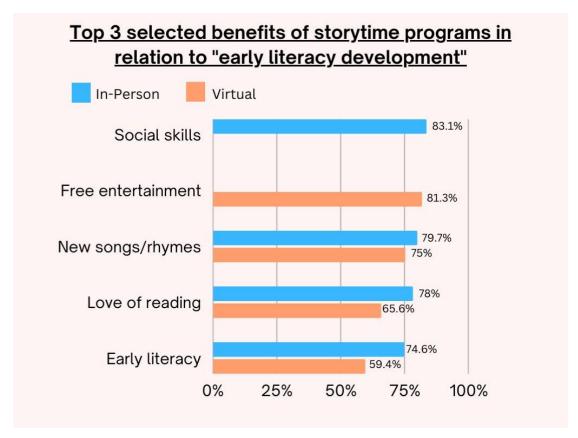


Figure 6. The top 3 skills/benefits of storytime programs selected for in-person and virtual programs in relation to the "early literacy development" option.

Limitations of the data include the small sample size of respondents resulting in a sampling error of +/-9% and that the questionnaire does not take into consideration the gender, socio-economic status, education levels, age and geographic location of respondents and that only adults proficient in English and that had access to the internet and a computer or other electronic device could complete the questionnaire. The data gathered from the questionnaire constitutes a small contribution to the existing research about the perception of the importance of storytime programs offered by public libraries, especially in the context of virtual programs.

These findings reinforce that parents and caregivers attend the storytimes for skills and benefits beyond just early literacy development for their children and how virtual storytime programs have been received by the library patrons, revealing that over half of attendees would continue to use the

online resource even when in-person programs are available to them again. The appreciation and positive view of in-person storytime programs is also reflected in the interview data with educators, library professionals and parents and caregivers as well as the program statistics recorded by the Mississauga Library with the return to in-person programming. The input about virtual programs, both positive and negative, provides valuable data about how the option kept people in the community connected to an important library resource during the pandemic lockdowns and also about how virtual programming can be improved to better serve the needs of the community.

5.2 Interview & Case Study Data

5.2.1 Interviews with Educators

Educators were interviewed to provide additional context for how children's education has been affected by virtual learning as there are many similarities with how the switch to virtual storytime programs affected attendees. The educators shared their experiences with the switch to virtual learning, challenges and opportunities that arose and any observations about the effects on the education and skills development for their students.

In March 2020, schools in Ontario were ordered to close due to the COVID-19 pandemic and would continue remain closed for a total of 20 weeks forcing educators to switch to remote learning during that period. The phased and staggered re-opening and subsequent closures of the schools amid pandemic waves led to what one educator described as "disruptive learning" causing "struggles in terms of the gaps that [students] have in their education and literacy." During the pivot to virtual learning, teachers were unprepared for the realities of remote teaching without access to the necessary tools, training and support, "overall the pivot was a challenge for everybody, teachers didn't know what we were doing, we didn't know how to provide education online... we literally had nothing" another educator added that "[teachers] were caught off guard without many of the technical skills and equipment needed in their home environments... it was the same for parents too."

When asked about the challenges and opportunities that arose from the pandemic and switch to virtual learning, educators highlighted the increased digital and media literacy as a positive opportunity from remote learning:

[Children] developed a lot of tech skills that one would not expect a kindergarten student to have... they could manage in a virtual environment – logging in and out, muting, turning the mic on and off, using the camera and chat features...

Educators were able to identify more challenges than opportunities as the sense of frustration and concern for children's education and social skills development could be felt in the interview responses,

The biggest gap we have seen is in their social skills... their oral language, ability to communicate with their peers, follow instructions, their ability to share and problem solve... We continue to see the struggles in their education and literacy and especially their social skills.

An Early Childhood Educator (ECE) working at a daycare commented that many of the children were lacking basic language skills, suffered from separation anxiety when parents would leave and had little to no social or communication skills,

I've had kids that are 3 years old that don't speak because their parents haven't been engaging with them at home because they are working and children that haven't had opportunities to

socialise with other kids and refuse to leave their parent's side.

Another educator noted, "I am far less worried about the content gaps than I am about the social gaps, the content is much more concrete... we can catch up on content. The social skills are much harder to address."

Educators were also asked about the ways that they felt library storytime programs impacted children's early literacy development and other skills or benefits that children and their parents or caregivers could acquire from attending the programs. All three educators that were interviewed expressed in some way that they felt that storytime programs were an asset to socialising children and preparing them for school and for providing parents/caregivers with a model of how to support children's early literacy development at home:

Storytimes can be a great way, not just for socialising children, but for providing adults and caregivers with the opportunity to see how to engage with their child in literacy. As an educator I would direct [parents] to go to the library, access the storytimes and resources at the library, especially dual language books.

Storytimes are a great opportunity for kids to interact with other children, it's a fun thing to do—going to the library is like an adventure and they look forward to it... [children] look forward to seeing their friends at the library and it motivates them to go... and parents are able to meet and connect with other parents.

I almost think [storytimes] are more important for parents than it is for the kids because story hour might be once a week, but those parents have those kids every day at home and are hopefully replicating that [storytime] experience with them at home.

The challenges of the pandemic and virtual learning were felt by both educators and students and were like the challenges experienced within the library systems as programs pivoted from inperson to virtual during the pandemic lockdown.

5.2.2 Interviews with Library Professionals

Four Mississauga Library staff members involved with children's programming and/or program training and development were interviewed as part of the case study to understand how they experienced the pivot from in-person to virtual storytime programs, how any challenges and opportunities were met and where improvements could be made to better support children's early literacy development.

When the libraries were ordered to close on March 14th 2020, the Mississauga Library assembled a team to begin offering virtual content for their community, first with pre- recorded videos and then with their first live storytime program on the Facebook platform on April 3rd 2020. The "Virtual Programming Team" started with a small group of 5 library staff which later grew to a rotation of around 20 people. The lockdown and closures were an isolating period for many, and library staff spoke of the need for libraries to find a way to connect with their community during this time, "we needed to let our patrons know that they can still reach out even though our doors are closed," and another library professional added:

We wanted to show our customers that we were dedicated to provide anything and everything we could to keep our customers informed and connected with the library... part of that [meant] that we had to find a creative way to connect with the children that were stuck at home during that period.

Each library staff member that was interviewed cited technology as a challenge during the pivot from in-person to virtual storytime programs during the closure, "the first challenge was technology and access to technology, not everyone has a Facebook account or has their own camera equipment at home," "internet connectivity was sometimes an issue, navigating Facebook and the tech that you had available at home."

Other challenges included finding space for a "studio" at home, working from home while caring for small children and the lack of access to materials for the programs, "working from home was a challenge, I have two small children... it was difficult to find the time and space." With the abrupt pivot to virtual storytimes there was an evident lack of training materials for staff and people had to learn on the fly, we all had to figure out how to use the technology, create the programs in our homes and navigate this new space together. We also had to quickly write up guides to teach people how to use Facebook live and other equipment and guidelines for the pre-recorded video content for our YouTube page.

The lack of access to materials was a prominent issue during the closures as not all staff had access to picture books, puppets, felt stories and other storytime props at home but the limited access to equipment also allowed for the opportunity for staff to get creative and step out of their comfort zones, "I had to attach my phone to my daughter's easel and my husband made me a felt board in the garage to use for my storytimes," "people stepped up to the challenge and were able to adapt and be innovative with their storytimes... it was a real opportunity for people to shine."

Additionally, issues with copyright accessibility contributed to the growing frustration during the pandemic closures as staff picture book resources were limited and not every publisher was allowing their books to be read aloud for virtual storytimes. At the beginning of the pandemic many publishers were loosening their copyright permissions to allow for read aloud narrations but as the pandemic went on publishers became less forgiving and the rules got stricter, and it became a real challenge when selecting stories to use for the programs.

When asked about the opportunities that arose out of the pandemic and virtual storytime programs, staff spoke of the creativity and innovation from the programmers, "the opportunity obviously was to get creative – how do I do this from home? How do I make it interesting? How do we continue to connect with the community and engage children during the closure?" Another opportunity was the ability for programmers to reach large numbers of viewers at a time, numbers that most library branches would not be able to accommodate in-person, "there were some [virtual] programs that had 300 people... at a branch you have limited space, you might only be able to have an audience of 40 in a small program room." The ability for people to tune in to the storytimes from around the world was another positive aspect mentioned in the interviews, "we had viewers from as far away as Japan, India, Dubai, Australia, Pakistan, Chile, across Canada and the United States. It was incredible to see the following that we had."

The drive and determination to ensure that the Mississauga Library was able to connect with patrons and offer storytime programs was fueled by the passionate belief that staff had in the positive impact of storytimes on children and their parents and caregivers, including and beyond early literacy development. Staff stated, "I am a true believer that [storytimes] are pure magic... when it comes to literacy, social skills, fostering a love of reading and bonding for parents and their children," "my experience with storytimes and children's librarianship has never just been about the book... it's about the full package: the social engagement, the resources..." and other library professionals adding:

Storytimes are important and impact children and their parents from a number of perspectives, it exposes children to culturally different songs and stories that they might not see at home... and gives

parents an example of how to read and sing to their kids. It's also an important outlet for new parents... just getting out of the house can decrease stress and provide them with a bit of a recharge. Libraries are also a great place for [parents] to meet other parents and caregivers and make connections for them and their kids.

Storytimes are about getting [children] excited about learning to read... this is one of the biggest and most important impacts of storytime for me as their first teachers. It's also important that we assist and teach the parents and caregivers the ways that they can promote early literacy at home... through our storytimes we offer tips, lead by example and hope that those examples will carry on outside of the library once they get home.

The pandemic and library closures revealed a lot about how people felt about the library and the services that they offered their communities, "I think people have discovered what those of us in the libraries have already known, that libraries are important, and that children's programming is important,"

The pandemic has made both staff and customers appreciate our in-person programming as well... the interaction with kids and parents and the immediate feedback during [in-person] storytimes is hard to replicate virtually.

[The pandemic] gave customers a greater appreciation for what we do, especially now that we're back to in-person programming... people crave community involvement now after having none for so long and it makes [the library] even more important... after having the programs online for so long, I think it created an urgency for people to get back into the libraries.

5.2.3 Reports, Documents & Statistics from the Mississauga Library

The Mississauga Library permitted access to valuable data collected by the organisation such as program attendance statistics, virtual program viewership numbers and other library metrics in addition to documents created for staff use including program training guides, standard operating procedures and best practices for both in-person and virtual storytime programs to be used in this study.

Circulation statistics collected by the Mississauga Library show that in July 2019, the year-to-date checkouts totaled approximately 2.8 million items (Figure 7). Figure 8 displays the circulation statistics for July 2022 with a year-to-date checkout total of 2 million. Virtual programming statistics collected by the Mississauga Library showed that the highest total views for a single virtual storytime program was in January 2021 with 13,037 views. These statistics also revealed that viewership was highest during the beginning of the pandemic when schools and daycare facilities were closed. The dips and peaks of the pandemic waves throughout 2020-2022 are reflected in the viewership numbers as restrictions were lifted, warmer weather allowed people to do outdoor activities and as COVID-19 infection numbers increased or declined and when new variants (such as the Omicron variant) emerged.

Additional programming statistics showed that with the return to in-person programs beginning in May 2022, the number of programs offered is approximately half the amount that were offered within the same quarter in 2019 and that the number of attendees were also approximately half when factors such as current library branch closures (due to renovations) are taken into account.

¹ Mississauga Library's Central and Port Credit branches were closed in 2022 due to renovations resulting in lower than usual circulation numbers as both locations were operating with limited collections and services within small, temporary pop-up locations in the area.

Mississauga Library Circulation Statistics Checkouts For July 2019

	Year		J.				
	Checkouts		% Diff	YTD Checkouts		YTD % Diff	
Location	2018	2019	2019	2018	2019	2019	
Branch	470,248	469,005	-0.3%	2,888,487	2,800,030	-3.1%	
Central Library	84,823	80,542	-5.0%	502,002	480,097	-4.4%	
Burnhamthorpe	31,486	32,368	2.8%	205,967	197,994	-3.9%	
Churchill Meadows	22,003	22,482	2.2%	132,233	129,050	-2.4%	
Clarkson	13,521	13,889	2.7%	92,495	88,723	-4.1%	
Cooksville	13,289	12,652	-4.8%	78,250	71,820	-8.2%	
Courtneypark	28,279	29,054	2.7%	168,438	164,574	-2.3%	
Erin Meadows	46,438	45,496	-2.0%	280,055	275,033	-1.8%	
Frank McKechnie	32,280	31,098	-3.7%	193,946	182,197	-6.1%	
Lakeview	11,836	12,704	7.3%	81,139	82,419	1.6%	
Lorne Park	17,957	17,914	-0.2%	114,606	111,571	-2.6%	
Malton	14,301	14,263	-0.3%	79,942	76,055	-4.9%	
Meadowvale	47,411	48,576	2.5%	280,220	276,739	-1.2%	
Mississauga Valley	20,685	19,929	-3.7%	123,979	124,271	0.2%	
Port Credit	16,079	15,783	-1.8%	108,230	106,238	-1.8%	
Sheridan	9,248	9,726	5.2%	60,902	60,159	-1.2%	
South Common	27,919	27,669	-0.9%	176,071	168,513	-4.3%	
Streetsville	16,113	18,257	13.3%	105,104	103,524	-1.5%	
Woodlands	16,580	16,603	0.1%	104,908	101,053	-3.7%	

Figure 7. Circulation statistics for the Mississauga Library, July 2019.

Mississauga Library Circulation Statistics Checkouts For July 2022

	Monthly Checkouts			Monthly Renewals			Monthly Circulations			YTD Circulations		
	Jul 2021	Jul 2022	% Diff	Jul 2021	Jul 2022	% Diff	Jul 2021	Jul 2022	% Diff	Jul 2021	Jul 2022	% Diff
Branch	258,899	217,062	-16.2%	0	154,147	N/A	258,899	371,209	43.4%	1,072,249	2,086,940	94.6%
Burnhamthorpe	20,641	19,344	-6.3%	0	12,553	N/A	20,641	31,897	54.5%	79,112	173,552	119.4%
Central	25,578	5,539	-78.3%	0	12,786	N/A	25,578	18,325	-28.4%	154,709	128,314	-17.1%
Churchill Meadows	14,834	11,183	-24.6%	0	8,237	N/A	14,834	19,420	30.9%	56,001	110,498	97.3%
Clarkson	6,179	7,408	19.9%	0	5,528	N/A	6,179	12,936	109.4%	26,203	75,553	188.3%
Cooksville	7,727	7,100	-8.1%	0	4,813	N/A	7,727	11,913	54.2%	28,062	63,695	127.0%
Courtneypark	19,483	13,671	-29.8%	0	9,784	N/A	19,483	23,455	20.4%	65,317	134,256	105.5%
Erin Meadows	30,194	26,145	-13.4%	0	17,234	N/A	30,194	43,379	43.7%	111,178	227,281	104.4%
Frank McKechnie	18,440	16,172	-12.3%	0	11,708	N/A	18,440	27,880	51.2%	63,311	161,282	154.7%
Lakeview	4,791	9,549	99.3%	0	5,801	N/A	4,791	15,350	220.4%	33,293	82,801	148.7%
Lorne Park	13,627	10,902	-20.0%	0	6,511	N/A	13,627	17,413	27.8%	55,001	100,500	82.7%
Malton	5,117	6,723	31.4%	0	4,333	N/A	5,117	11,056	116.1%	19,076	52,844	177.0%
Meadowvale	27,584	28,470	3.2%	0	17,789	N/A	27,584	46,259	67.7%	106,645	244,430	129.2%
Mississauga Valley	13,989	14,970	7.0%	0	9,469	N/A	13,989	24,439	74.7%	53,220	127,005	138.6%
Port Credit	3,305	2,596	-21.5%	0	2,512	N/A	3,305	5,108	54.6%	34,974	37,415	7.0%
Sheridan	4,825	3,854	-20.1%	0	2,273	N/A	4,825	6,127	27.0%	21,047	36,175	71.9%
South Common	15,475	13,007	-15.9%	0	8,421	N/A	15,475	21,428	38.5%	63,229	126,317	99.8%
Streetsville	13,286	9,646	-27.4%	0	6,892	N/A	13,286	16,538	24.5%	49,662	97,282	95.9%
Woodlands	13,824	10,783	-22.0%	0	7,503	N/A	13,824	18,286	32.3%	52,209	107,740	106.4%

Figure 8. Circulation statistics for the Mississauga Library, July 2022.

The City of Mississauga's 2019 Library Master Plan states that "the Mississauga Library System exists to provide Library services to meet the life-long informational, educational,

cultural and recreational needs for all citizens," and features several strategic priorities including "Investing in Our People" with a focus on training their staff to support different resources, customers, programs and services that are necessary to meet the needs of the community (City of Mississauga 2019 p. 3). The value of investing in training staff to encourage and support their growth and development in order to better address the needs of the community are also recurring points that were mentioned in the interviews with library professionals when asked about what could be done to improve both in-person and virtual storytime programs offered by public libraries.

The Mississauga Library provides their staff with training documents in addition to pre- recorded videos and hands-on training for the different types of in-person and virtual storytime programs in order to guide staff and support their learning and development. Appendix A, below, displays the "Program Guide" and "Preparation" sections for the in-person Preschool Storytime program aimed at children ages 3-5 years old. Virtual training guides for pre-recorded videos and live storytimes were recently created during the pandemic when it became necessary to pivot from in-person to virtual programming provisions.

Appendix A – Mississauga Library Training Guide for In-Person Preschool Storytime

Preschool Storytime

Program Guide

- Develop a love of books, stories, songs, music, rhymes for our customers.
- Develop important school readiness skills for children ages 3-5 years (ie. listening, gross motor, social and behavioural)
- Introduce parents and caregivers to songs, rhymes and other library resources that will help them encourage and support early literacy development for their child.
- Encourage a supportive environment for parents, caregivers and children to have meaningful interactions with one another. This includes opportunities to socialize and interact with program leader as well as one another.
- To have fun!

Preparation

- Scheduler and programmer(s) will decide on dates, times, location for programs.
- Book a program room for all sessions; include room set up instructions (ie. chairs, tables, rugs, mats, etc.)
- Book any equipment needed (laptop, projector, speakers, board book boxes, etc.)
- ☐ Prepare in-house posters using Storytime template, print and post.
- ☐ Promote through posters and Active Mississauga (to customers, parents and caregivers, teachers, schools, daycares etc.)

Leading up to program day

- ☐ Decide on a theme (or use a Theme Box). See: Resources: Themes
- ☐ Create an Outline See Storytimes Resources:
 - o Themes
 - o Every Child Ready to Read (ECRR)
 - o Outline Template
 - o Selecting Picture Books
 - o Songs & Rhymes
- ☐ Learn some basic criteria used in evaluating/choosing picture books. See: Resources: Selecting Picture Books



Last Reviewed: 2022-04-08 Page 3 of 8

5.2.4 Discussion

The educators that were interviewed in this study expressed a deep concern for the impact of the pandemic on children's education, literacy development and particularly social skills as a result of pivoting to virtual learning as a result of COVID-19 lockdowns and restrictions. Gallagher-Mackay et al. (2021) presented emerging research on the impacts of COVID-19 on education and the effects on children's learning that suggests that most families, educators and children prefer and benefit more from in-person learning and that the school closures lead to learning losses and affect their academic success. The observations shared by the educators along with the lack of available data about the impacts of the pandemic and remote learning on children's education, early literacy development and social skills are concerning. One educator likened the observed gaps in children's education and skills to "Swiss cheese,"

When you get back to in-person [education], you're able to see the gaps and it's like Swiss cheese. Each child is a slice from the same block of Swiss cheese, but each slice is different because the holes are different... and that's what it's like – they all have gaps, but their gaps are different and now it's a matter of trying to figure out what the gaps are, how to address them and meet [each child's] needs.

The literature review highlights studies which show that the early years of a child's life (birth-5 years old) have a significant impact on their development, their success in education and creates the foundation for lifelong learning (Jamieson 2009, Canadian Children's Literacy Foundation 2020). The reported effects of disrupted and virtual learning from educators' observations of their student's development hold serious and troubling implications for children's future successes in their education.

The challenges experienced during the pivot from in-person to virtual education and library storytime programs were described by both educators and library professionals as they navigated the new procedures and emerging pandemic situation alongside their students and library patrons. Both educators and library professionals cited that technology, accessibility of equipment, space and materials and the lack of in-person interactions and opportunities as significant challenges during this time. Santos (2020) found that although reaching and supporting students living in rural areas without access to or with limited access to the internet was one of their main challenges, many of their Texas library branches were able to navigate the COVID-19 pandemic closures and restrictions with innovation and creativity. This theme of creativity in times of difficulty was also apparent within the Mississauga Library as staff ingenuity and determination generated resourceful solutions to ensure that storytime programs would continue and reach their patrons during the pandemic as one library professional stated.

When the team was sharing what their 'in-home storytime studios' looked like, people had put together all kinds of contraptions. I was using a ladder, others had selfie-sticks taped to walls, people had to make storytime materials and props from scratch and get creative with what they had.

The educators that were interviewed for the study also highlighted the many positive impacts of storytime programs offered by public libraries including children's early literacy development, social skills and preparation for school. Research conducted by Diamant- Cohen (2007) showed that the storytime programs offered by public libraries can contribute to a child's positive experience with early literacy and provide an environment where foundation of social skills including taking turns, listening to others, playing with others, etc. can help enable them to be ready for learning in a formal school setting. Another study by Cahill et al. (2022) includes data showing that many parents and caregivers attend library storytime programs with their children with the intention to develop their child's school readiness behaviours including following directions and taking turns. Library staff expanded on the impacts of storytime programs by emphasising the added value of providing parents and caregivers with a model of how to support their child's early literacy development at home.

More people are realising the value in storytime programs and that the impacts extend beyond early literacy development as evidenced by the questionnaire data from library patrons where the reported top three skills/benefits gained through in-person storytimes were "develop my child's social skills, learn new songs/books/rhymes to use with my child at home and foster a love of reading" whereas the top three choices from virtual storytime attendees were "free entertainment for my child, learn new songs/books/rhymes to use with my child at home and foster a love of reading." Both educators and library staff brought up the importance of these skills but also stressed the significance of modelling the ways that parents and caregivers could continue to support their child's skills at home, "library staff members served as literacy models for the parents/caregivers. They enabled the parents to make reading with their children more engaging and more productive in terms of learning early literacy skills" (Stagg Peterson et al. 2012 p. 15).

Providing the training and resources necessary to help library staff provide patrons with fun and educational programs is critical in ensuring the success of the programs and the positive impact on children's development. Although the 2019 Library Master Plan for the City of Mississauga recognises that providing programmers with adequate training is an important element in libraries as the roles of library staff have evolved with new technology and as their roles have progressively become more complex, "the library staff training budget is 19% below the average of the other library systems" (City of Mississauga 2019 p. 33). One key consideration featured in the City of Mississauga's 2019 Library Master Plan is to "focus staff training on relationship-building and socially interactive skills which are essential to support the array of resources, customers, services and programs that are required to meet the community's needs," a practical goal that will benefit both staff and library patrons upon continued implementation (City of Mississauga 2019 p. 48).

Circulation and program attendance statistics reveal that while virtual program attendance has decreased over the pandemic years, in-person storytime attendance has nearly reached their prepandemic levels for the Mississauga Library. Just as Reid and Mesjar's (2022) research presented that there was a peak for digital eBooks and audiobooks during the pandemic period that eventually declined as people began to feel the effects of digital exhaustion, virtual storytime attendance also waned as the pandemic continued and children and adults were also required to learn and work remotely. While some saw the value in virtual storytime programs, "recorded storytimes are great for families with odd hours," many expressed that "it was not the same at all" and that they "felt more disconnected than before." The effects of virtual learning and virtual storytime programs on children and their parents and caregivers during the pandemic need to be further researched to understand possible negative impacts on their learning and mental wellbeing, "new research conducted during COVID-19 showed that approximately half of parents with children learning remotely had at least one child struggling with distance learning, which in turn was associated with higher parental stress" (Gallagher-Mackay et al. 2021 p. 9).

6 Future Research & Recommendations 6.1 Future research

Future research on the impact of storytime programs on children's early literacy skill development and the effects of virtual programming on those skills could focus on the long- term outcomes of virtual vs. in-person programming skills attainment by seeking to measure performance such as word recognition, reading comprehension and test scores. It could also evaluate any delays in children's social development as a consequence of virtual learning as mentioned by several educators, library professionals and parents and caregivers throughout the study and investigate the ways that public libraries can assist their local education institutions to support their learning and social development.

6.2 Recommendations

Maintain, improve and seek new partnerships and connections between libraries, schools and other organisations such as daycares, youth centres, EarlyON Centres, Ontario Library Association, Every Child Ready to Read, etc.

Improve virtual storytime programs based on the input and needs of the community and continually re-evaluate the value of the virtual storytime option as libraries return to in-person programs.

Target library non-users to reach more potential storytime attendees as well as library users that are still hesitant to return due to the COVID-19 pandemic health concerns by reacquainting them with the library and the programs and resources available to them through effective promotion and use of social media platforms.

Invest in professional development of library staff through storytime program training, shadowing opportunities, attending workshops and/or conferences related to children's programming and providing resources for staff to deliver exceptional programs and ultimately serve their community better.

7 Conclusion

This study was a small contribution to the current research about the different ways that children and their parents and caregivers benefit from storytime programs in public libraries beyond early literacy development and the impact of the COVID-19 pandemic on these programs and children's learning. The exploratory case study of the Mississauga Library examined the effects of the pivot from in-person to virtual storytime programs and the challenges and opportunities that arose along the way. This research has contributed to the current lack of information about the effects of the COVID-19 pandemic and how virtual programs will affect children and their potential success in learning, leaving many opportunities for future studies to further explore the subject topic.

Traditional in-person storytime programs offered by public libraries have long been viewed as an important resource for children to help develop their early literacy skills, prepare them for school, foster a love of reading and setting the foundation for successful lifelong learning. These storytime programs can provide children and their parents or caregivers with the tools to further develop their early literacy skills by offering thoughtful programming and coaching parents and caregivers on how to nurture their children's literacy skills at home. When the COVID-19 pandemic forced libraries to close, library staff pivoted to offer virtual storytime programs in order to stay connected with their communities and continue to offer this important resource to their patrons. The pandemic generated a new appreciation for in person storytimes for both library staff and patrons, but it also highlighted the value and potential of virtual storytimes in both its delivery and capability of reaching more people than ever before. Supporting the library staff that provide the storytime programs through offering professional development, training and resources specific to literacy-based programming and guiding parents and caregivers would help to improve the programs and create thoughtful storytimes to better serve the needs of their communities. It is imperative that additional research is conducted to explore the ways that the pandemic has affected children's learning and early literacy development and further understand how in-person and virtual programs can be improved to better serve the needs of the community.

References

BELL, J. and WATERS, S., 2018. Doing your research project: a guide for first-time researchers. 7th ed. London: Open University Press.

CAHILL, M. et al., 2022. Supporting School Readiness Through Librarian-Child Interactions in Public Library Storytimes: An Analysis of Assessment Scores and Influential Factors. Early Childhood Education Journal, 50, pp. 11-19.

CAMPANA, K. et al., 2016. Early Literacy in Library Storytimes: A Study of Measures of Effectiveness. The Library Quarterly, 86(4), pp. 369-388.

CANADIAN CHILDREN'S LITERACY FOUNDATION, 2020. Early Literacy Matters Roundtable 2020. [online]. Canada: Canadian Children's Literacy Foundation. Available from: https://childrensliteracy.ca/cclf/media/PDFs/Early-Literacy-Matters-roundtable-report-EN-June-2020.pdf [Accessed 21 March 2022].

CANADIAN URBAN LIBRARIES COUNCIL, 2019. 2019 Canadian Public Library Statistics. [online]. Bloomfield, Ontario: Canadian Urban Libraries Council. Available from: https://culc.ca/wp-content/uploads/2021/03/2019-CULC-Public-Library-Statistics.pdf [Accessed 5 September 2022].

CELANO, D. and NEUMAN, S. B., 2001. The Role of Public Libraries in Children's Literacy Development. [online]. Pennsylvania: Pennsylvania Library Association. Available from: https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.611.4915&rep=rep1&type=pdf [Accessed 22 March 2022].

CITY OF MISSISSAUGA, 2019. 2019 Library Master Plan. Ontario: City of Mississauga.

DENTI, L. and GUERIN, G., 2008. Effective Practice for Adolescents with Reading and Literacy Challenges. UK: Taylor and Francis.

DEPOY, E. and GITLIN, L. N., 2016. Introduction to Research: Understanding and Applying Multiple Strategies. 5th ed. St. Louis, Missouri: Elsevier.

DIAMANT-COHEN, B. 2007. First day of class: the public library's role in "school readiness". Children and Libraries, (Spring), pp. 40-48.

DOBREVA, M. and ANGHELESCU, H., 2022. Libraries and COVID-19: Opportunities for innovation. International Federation of Library Associations and Institutions, 48(1), pp. 3-8.

EASTMAN, J. and HARGROVE, L., 2020. More Than a Story Engaging Young Learners Virtually. Children and Libraries, 18(3), pp. 24-25.

EASTMAN, J. and HARGROVE, L., 2021. Investing in Storytime Training. Children and Libraries, 19(3), pp. 9-10.

EVERY CHILD READY TO READ, 2022. Overview of Every Child Ready to Read @ Your Library, 1st Edition. [online]. Chicago: American Library Association. Available from: http://everychildreadytoread.org/overview-of-every-child-ready-to-read-your-library-1st-edition/ [Accessed 20 March 2022].

GALLAGHER-MACKAY, K. et al., 2021. COVID-19 and Education Disruption in Ontario: Emerging Evidence on Impacts. Science Briefs of the Ontario COVID-19 Science Advisory Table, 2(34), pp. 1-36.

GAUDREAU, C. et al., 2020. Preschoolers Benefit Equally From Video Chat, Pseudo- Contingent Video, and Live Book Reading: Implications for Storytime During the Coronavirus Pandemic and Beyond. Frontiers in Psychology, 11(2158), pp. 1-17.

GHOTING, S. N. and MARTIN-DIAZ, P., 2006. Early Literacy Storytimes @ your library: Partnering with Caregivers for Success. Chicago: American Library Association.

GRASSEL, A., 2020. Programming in Time of Pandemic The Year Libraries Went Touchless. Children and Libraries, 18(3), pp. 3-4.

HERB, S., 2001. Preschool Education Through Public Libraries. School Library Media Research: Research Journal of the American Association of School Librarians, 4, pp. 1-28.

JACOBSON, L., 2017. A Story About Storytime. School Library Journal, 63(7), pp. 22-25.

JAMIESON, D. G., 2009. National Strategy for Early Literacy. [online]. Ontario: Canadian Language and Literacy Research Network. Available from: https://www.strongstart.ca/wp-content/uploads/National-Strategy-for-Early-Literacy.pdf [Accessed 20 March 2022].

KELLY, L. and HUNT, C., 2019. Caregivers' Motivations for Attending Emergent Literacy Programming in Public Libraries: Qualitative Analysis of Three Case Studies. Public Library Quarterly, 39(5), pp. 471-485.

NEUMAN, S. B. and CELANO, D. C., 2012. Don't level the playing field: tip it to the underdogs. American Educator, 36(3), pp. 20-21.

ONTARIO LIBRARY ASSOCIATION, 2020. Ontario Public Library Response to COVID-19. [online]. Ontario: Ontario Library Association. Available from: https://accessola.com/wp-content/uploads/2020/08/2020-06-PLResponsetoCOVID-19-SurveyReport.pdf [Accessed 30 March 2022].

PICKARD, A. J., 2017. Research Methods in Information. 2nd ed. London: Facet Publishing.

REID, P. H. and MESJAR, L., 2022. Bloody amazing really: voices from Scotland's public libraries in lockdown. Journal of Documentation, pp. 1-23.

ROBERT GORDON UNIVERSITY, 2022. Grey Literature. [online]. Scotland, UK: Robert Gordon University. Available from: https://library.rgu.ac.uk/greyliterature [Accessed 5 September 2022].

ROWLEY, J., 2014. Designing and using research questionnaires. Management Research Review, 37(3), pp. 308-330.

RUDESTAM, K. E., and NEWTON, R. R., 2001. Surviving your dissertation: a comprehensive guide to content and process. 2nd ed. Thousand Oaks, California: Sage.

SANTOS, M. C., 2020. Libraries Respond to COVID-19. Texas Library Journal, 96(2), pp. 66-73.

STAGG PETERSON, S. et al., 2012. Preschool Early Literacy Programs in Ontario Public Libraries. Partnership: The Canadian Journal of Library and Information Practice and Research, 7(2), pp. 1-22.

STATISTICS CANADA, 2022. Population and dwelling counts: Census metropolitan areas, census agglomerations and census subdivisions (municipalities). [online]. Ottawa, Ontario: Statistics Canada. Available From:

https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=9810000301&geocode=A00053521 [Accessed 5 September 2022]

Acknowledgements

I would firstly like to thank my dissertation supervisor, Professor Peter Reid, for his thoughtful wisdom, sense of humour and guidance throughout the entire research process.

I would like to express my gratitude to the Mississauga Library for allowing me to access their data for the case study and for connecting me with the wonderful library staff that I had the pleasure of interviewing. A big thank you to the educators that also participated in the interviews and to all the respondents that completed the questionnaire. Without your invaluable feedback, this research would not have been possible.

I am incredibly fortunate to have been surrounded by kind, hard-working and inspiring people throughout my life. Thank you to my parents, Kim and Tan, for teaching me to be fearless. To my husband, Winston, for the endless support and love. To our rescue puppy, Skeena, for all the cuddles and keeping my feet warm. To my chiropractor, Dr. Sarah Hampton, for fixing my back after countless hours spent sitting at a computer. Thanks to Waychhin, Tifanne, Brian, Susan, Karen, Lien, Shari, Madhu and the rest of my friends, family and colleagues for their encouraging words and most importantly, for keeping me sane this past year.