Addressing Child Literacy Concerns in Windsor-Essex County Through a Place-and-Equity Based Cradle-to Career Approach

ST. CLAIR COLLEGE RESEARCH AND INNOVATION IN PARTNERSHIP WITH PROSPERUS WINDSOR-ESSEX

Final Report

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Executive Summary

This report will outline the research process and findings of the three-year project entitled *Addressing Child Literacy Concerns in Windsor-Essex County Through a Place-and-Equity-Based Cradle-to Career Approach.* This project was supported by the College and Community Social Innovation Fund (CCSIF). CCSIF grants are managed by the Natural Sciences and Engineering Research Council of Canada (NSERC), in collaboration with the Canadian Institutes of Health Research (CIHR) and the Social Sciences Humanities Research Council of Canada (SSHRC).

Four milestones were co-developed with the project's community partner, ProsperUs, and they are as follows:

1. Primary and secondary data collection and analysis
2. Co-development of intervention
3. Implementation and optimization of intervention
4. Dissemination of research and knowledge translation

These four milestones guided the project's trajectory, which will be discussed in further detail throughout this report.

To begin, researchers sought to contextualize the project by gathering a baseline understanding of the literacy rates in Windsor-Essex County. This began with a review of secondary data, which was conducted in 2020 through a scoping review of existing literature, as well as an analysis of the census, the Social Risk Index, the Early Development Instrument, and Education Quality and Accountability Office (EQAO) data. In 2021, the research team began working with community members and partners to develop a literacy intervention prototype. To ensure the program was informed by the community, the research team sought to collect primary data and was granted Research Ethics Board (REB) clearance to conduct focus groups to gain insight from parents in the target communities, thus understanding their perceptions of literacy barriers in Windsor-Essex County. This was done through virtual semi-structured focus groups.

After community consultations with residents and stakeholders, the 1000 Books Before Kindergarten (1BBK) pilot intervention program was launched in collaboration with Windsor and Essex County Public Libraries. 1BBK is a free literacy program for children aged 0-5. The program was extended through the addition of weekly story-times and monthly workshops for caregivers, which was a request that was specifically made by focus group participants. Pre-test surveys were distributed through the program registration process, which lasted a month from September to October 2022, and post-tests were conducted at the end of the pilot period in May 2023. The pilot program was successful on many fronts, including but not limited to, encouraging greater enthusiasm for reading, engaging parents andguardians in literacy activities, as well as building greater collaborations in the community to support early literacy. The following report will discuss the purpose behind this study, the methods in which data was collected, overall insights and findings, as well as recommendations for further program development and further research such as parent and community involvement.

Introduction

Identified Challenge

As outlined by the International Adult Literacy Survey, published by Statistics Canada, literacy is defined as the ability to use and understand text (print-based and digital) and thereby participate in society, achieve goals, and develop one's knowledge and potential (Clermont et al., 2005). To measure literacy proficiency, a study on literacy by Statistics Canada was released, identifying five levels of reading skills among adult Canadians, with Level 3 being the "benchmark," which is considered the level required to fully participate in today's knowledge-based economy ("Building on our Competencies," 2003). Despite the importance of Level 3 literacy proficiencies, many Canadians struggle with literacy. In 2013, Statistics Canada reported that 1 in 6 (or 15%) Ontarians aged 16 to 65 score at or below Literacy Level 1 (Statistics Canada, 2013). At this level, individuals struggle with very serious literacy challenges, including literacy skills required to read basic texts. Those who score at a Literacy Level 2 account for 32% of Ontarians; these individuals can read, however, literacy skills necessary for employment and understanding medical instructions are significantly lacking. Overall, Literacy Levels 1 and 2 are associated with decreased participation in society; individuals who score at these levels are less likely to vote, volunteer, work, or engage in community programs. According to a 2022 report, Statistics Canada data indicates that "49% of the adult population score below high-school literacy levels; 17% scored in the lowest level. Newcomer, Indigenous, and low-income populations are disproportionately challenged by low literacy. These groups have also been more impacted by the learning, employment, and financial crises that resulted from the (COVID-19) pandemic" (United for Literacy, 2022, p. 3). The literature also notes that poor reading in the primary grades is one of the most common characteristics of students who withdraw from high school prior to completion (Denti & Guerin, 1999). EQAO results from 2019 indicate 25%of Ontario's Grade 3 students were falling short of provincial reading standards. For students with disabilities, the number soared to 53% (McQuigge, 2019).

Project Partner

In 2018, 50+ Windsor-Essex County community leaders officially began an initiative sparked by the public announcement that the City of Windsor has one of the highest poverty rates in Canada. They realized that current practices of funding isolated and sector-specific interventions to reduce poverty were not effective, and a cross-sectoral approach to improving overall neighbourhood health was required. This resulted in the formation of ProsperUs, which seeks to develop cross-sector solutions to childhood poverty. United Way/Centraide Windsor-Essex County is the backbone organization for ProsperUs. The ProsperUS strategy is to create a continuum of support for children and youth from birth until they find a career. This is referred to as the Cradle to Career (C2C) strategy.

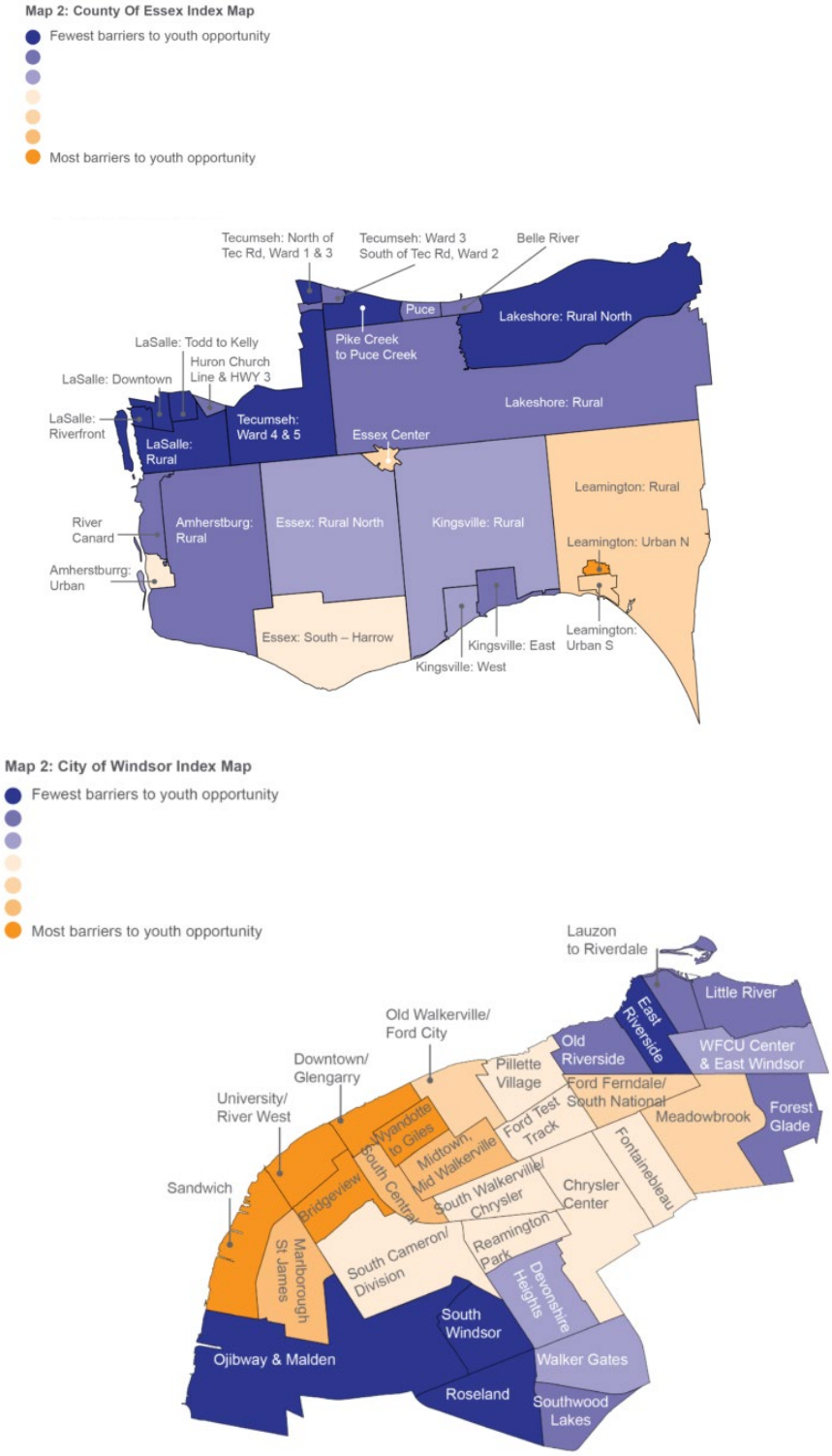
Figure 1

Note. Cited in ProsperUs (2022)

ProsperUs is committed to ongoing research in order to remove barriers for children and develop evidence-based solutions. Early literacy was identified as one of these barriers to success, which led to the partnership between St. Clair College and ProsperUs as part of the Cradle to Career initiative, which seeks to provide early interventions for vulnerable children, from birth (cradle) to increase their chances of success later in life (into their career). Literacy has a primary role in children's success, setting the stage for positive life outcomes which is a preliminary goal of C2C strategy. Children with low literacy are less likely to pursue post-secondary education and are more likely to drop out of high school (Denti & Guerin, 1999). As such, aligning children for success requires early intervention to improve literacy, using a strength-based team model or wraparound approach. While St. Clair College researchers worked with ProsperUs to identify barriers to literacy, the project did so through an applied-research lens, compiling findings to inform the development of a testable solution.

ProsperUs identified three neighbourhood clusters to launch targeted interventions based on identified metrics. Two clusters in Windsor including West-Windsor containing Sandwich, Marlborough, University/River West, and Bridgeview neighbourhoods as well as Downtown Windsor including Downtown/Glengarry, Midtown (Wyandotte to Giles), South-Central and Midtown Mid-Walkerville neighbourhoods. The third priority neighbourhood focused on the town of Leamington. It was found that these three neighbourhoods face some of the greatest challenges to children's success in the region, including high poverty rates, poor educational attainment, evidence of poor health outcomes, concentrations of potentially vulnerable demographics such as single-parent households, and higher rates of youth crime (ProsperUs, 2019). To quantify these risk factors, ProsperUs created a Neighbourhood Opportunity Index (NOI) to help determine neighbourhood prioritization. A score of zero indicates the neighbourhood is average. A negative score within the index indicates that the neighbourhood faces fewer barriers to opportunity, while a positive score indicates that the neighbourhood faces more barriers. These neighbourhoods were determined to have high index ratings of single-parent households, lower post-secondary attainment rates, and significantly lower neighbourhood wealth compared to other neighbourhoods (ProsperUs, 2020).

Figures 2&3



Note. Cited in ProsperUs (2019)

Research Questions

There were five primary research questions for the project, which the team sought to answer throughout the duration of the project. These included:

1. What considerations should be made when developing a short-term, targeted literacy intervention for Windsor-Essex County?
2. What impact can a short-term, targeted intervention, "1000 books Before Kindergarten" (1BBK), have on children's early literacy skills, as perceived by parents/guardians?
3. What assets and gaps exist in the 1BBK pilot intervention delivery in target neighbourhoods from a parent/guardian perspective, and how can this information be used to inform changes to the program design?
4. How can an intervention such as 1BBK be sustainably mobilized in other neighbourhoods in Windsor-Essex County? What considerations should be made (i.e., best practices)?
    a. What is the most effective team structure for implementation of 1BBK in subsequent years, in Windsor-Essex County?

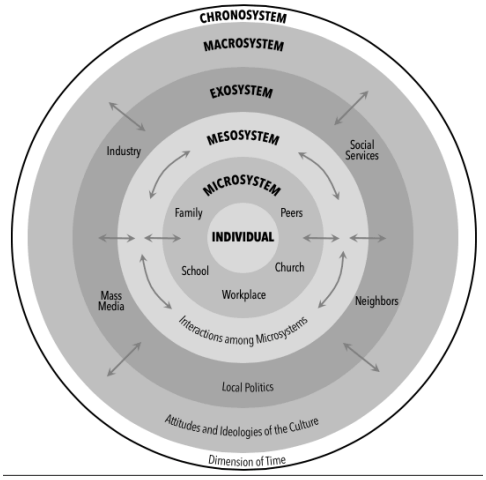
Milestone 1: Data Collection and Analysis

Literature Review

The literature review was a preliminary assessment of the potential size and scope of available research literature on the topic of early literacy and, more specifically, early literacy challenges faced by low-socioeconomic communities. This report outlines literacy challenges faced by vulnerable communities based on existing and current literature. This literature summary was used as a basis for analyzing existing gaps and assets locally. In turn, these findings supported researchers and stakeholders in developing research questions and proposing literacy interventions. The literature review highlights four risk factors for early literacy development: household income, health and physical environment, literacy environments (home literacy environment, schools and childhood centers, neighbourhoods), and English as a second language (ESL).

The research team outlined Urie Bronfenbrenner's Ecological Systems Theory as the theoretical framework guiding the project, identified via literature review. This theory explains the different "layers" that make up the environments that children engage in. These layers include the home, school, childcare centers, and neighbourhood environments. Every environment that a child interacts with influences their literacy development. The theory recognizes both the interactions that children have with each environment as well as the relationships between the environments themselves. For instance, if a school has programming that only runs during the week, many low-SES families would not be able to attend due to their increased potential to work non-standard hours. To improve child literacy environments, the interactions between environments must be considered. Rather than evaluate each environment in isolation, this theory emphasized the importance of the intersections and reciprocal processes of each environment and how this influences development. This wrap-around approach to literacy development was fundamental to the research at all stages.

Figure 4



Note: Cited in Davis, B. & Francis, K. (2023)

Community Profiles

Once the research team completed a scoping review of existing literature, it became apparent that understanding literacy challenges required an intersectional lens which looked at compounding factors that influence literacy. The research team reviewed existing data and used it to prepare community profiles on the target neighbourhoods. Community profiles are a valuable resource to better understand the community being assisted. In order for the intervention to be successful, it is important to assess the assets and areas of need of a community. These profiles enabled the research team to get a full picture of the target communities to make the most informed decisions on intervention design.

The profiles outline the ProsperUs identified neighbourhoods:West Windsor, Downtown Windsor, and Leamington, Ontario. The community profile provides a detailed picture of each community and was created by gathering information about community needs, demographics, and existing resources in order to develop opportunities for action. To build these community profiles, a range of secondary data was used. These included analyzing census, Social Risk Index, Early Development Instrument, and EQAO data, as well as reviewing agency records, and Windshield Walking surveys from which a Google Photos Album was created.

These profiles were specifically used to understand resources, community demographics, and cultural landscape of the target neighbourhoods to formulate strategic plans for literacy improvement based on established needs and assets. Identified needs encompassed areas such as affordable housing, a sense of safety, a specific focus on literacy employment and education, accessible services, assistance for the growing homeless population, better-maintained residential areas, and low EDI scores.

It is essential to recognize each community's assets, which were identified and noted as culturally diverse resources, newcomer services, mental health and addiction services and historic buildings and features. From these assets, the research team pinpointed opportunities, including translating literacy resources across multiple languages, and establishing a literacy service channel to provide literacy services for learners entering preschool to adult employment, employment-focused literacy programs, and interventions to address other community issues

such as food insecurity. These community profiles aided the research team in milestone two of the co-development of the intervention. Most importantly, drawing on the assets of the community led the research team to seek collaboration with local libraries in each target neighbourhood.

Asset Mapping

Asset Mapping was completed as a supplementary set of information on the target neighborhoods that complements the community profiles. The Data Analytics team at St. Clair College compiled the listed assets from the community profiles as well as other information about each target neighbourhood onto an interactive map. The main information on each target neighbourhood is the population of children aged 0-14 years old, the Social Risk Index and the number and percentage of children who scored 'vulnerable' (EDI Scores). The Assets are marked on the mapped area and food and nutrition, education, health, social support, housing, employment, and other significant places/services. Along with the mapped assets, is an EQAO Score Analysis section. In this section, the user can select the school from one of the target neighbourhoods and view data such as the percentage of English language learners and percentage of first language learned at home other than English, the percentage of children at or above the provincial standard by year, and the percentage of children at or above the provincial standard in reading, writing, and math by grade. This asset mapping process help establish a progression into the next steps of the project such as collaborations and discussions.

Collaboration and Discussion

In addition to consulting existing literature, it was important for the team's understanding to speak to leaders in other communities tackling similar barriers to literacy. The research team explored several different communities with similar demographics to Windsor-Essex, all of which implemented a literacy initiative. The team then conducted a SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis. After the analysis was created, the team set up online meetings with the leaders of these initiatives to discuss best practices as well as any challenges they may have come across. The research team had discussions with members from Decoda British Columbia, Raising Readers in Story County, Kingston-Galloway-Orton Literacy Now, and Diamond Educational Excellence Partnership (DEEP) Early Readers Future Leaders. Links to each initiative are below. The collaborations and discussions with community partners mentioned above helped establish preparedness for the analysis of data.

SWOT Analysis

Community	**Programs**	**Strengths**	**Weaknesses**
<u>Kingston-Galloway-Orton Literacy Now</u> **References:** Helping communities bloom: A family	• 360 Stories • Kids ReadTO • Eating and reading	Success in recruiting youth in literacy-based programs through other programs.	Lack of translated materials (p.14). Transportation costs (p.14).

literacy resource guide for British Columbia. (n.d.). Retrieved from https://decoda.ca/resource/helping-communities-bloom-a-family-literacy-resource-guide-for-british-columbia/ KGO Adult Literacy Program. (2021). Retrieved from https://www.kgoadultliteracy.com/ Price, N. (2018). *Literacy Now! Exploring challenges, capacities and opportunities for improved literacy in Kingston Galloway-Orton Park (KGO)* (Rep.).		Responsiveness to residents-several programs led by literacy workers living in the KGO area with an understanding of the community (p.15). Connection to local programs. Learning opportunities for children AND parents (p.20) Recognition of community issues of poverty and food insecurity (p.38, 39).	Lack of access to affordable reading materials aside from library (p.14). Some programs are inaccessible due to enrolment or registration criteria (ignoring issues of language/literacy barriers) (p.14). Lack of culturally appropriate literacy materials representing minority groups (p.14). ESL funded separately from literacy programs; system navigation becomes difficult (p.14). Lack of coordination of agencies (p.15). Lack of resources (p.15). Lack of employment-focused literacy programming for youth not in school or employed (p.15).
DECODA British Columbia **References:** Decoda Literacy Solutions Community Literacy Planning	• Immigrant Parents as Literacy Supporters (IPALS). • Displaced Workers Literacy and	Conference held every 2 years to share best practices. Programming for all ages (school-aged to seniors). Programs are free with 24/7 access to library resources.	Rural or remote areas lack access to resources. Donations by individual donors, corporations, and government funds; therefore, planning is

Guide. (2012). Retrieved https://www.decoda.ca/wp-content/uploads/Community-LIteracy-Planning-Guide-2012.pdf Tchau. (2021). DECODA Literacy Solutions. Retrieved from https://decoda.ca/	Essential Skills Project. • CALP (Community Adult Literacy Programs). • Heroes Read Campaign in Powell River	Expert panel makes decisions about literacy programming at the beginning of the year (teachers, educators, community members). Community Adult Literacy Benchmarks (CALB) were established to evaluate and monitor adult learner's progress in community-based programs. Rewards/recognition-digital badges, micro-credentials, certified for encouragement and motivation. Place-based framework allows rural and remote communities to identify literacy needs and objectives.	dependent upon available funds, and services may vary. Lack of coordination of programs especially those in rural/remote areas.
DEEP USA (Diamond Educational Excellence Partnership) **References:** Diamond Educational Excellence Program. (2021). Retrieved from https://deepsd.org/ 1,000 Books Before Kindergarten. (n.d.). Retrieved from	• San Diego's 1000 Books Before Kindergarten Program. • Workshops. • Super Readers. • Super Tuesdays. • Monthly Read Aloud. • Summer Reading Program. • Dinner with DEEP.	Activities and educational opportunities beyond the classroom. Addressing large community issues like food insecurity through grocery gift cards and events. 2019-2020 DEEP raised $118,000 through donations and partnerships (p.24).	DEEP partnered with the California Reading and Literacy Project and in 2019 to 2020 DEEP funded the participation of 17 teachers with training and follow up coaching focusing on early literacy instruction and English language development (p. 11). Why only 17? Lack of funding? Due to the pandemic, DEEP was unable to offer the 'Summer Readers'- a future

https://www.sandiego.gov/1000books#:~:text=The San Diego Public Library,your goal within one year.		During the 1BBK program, DEEP makes personal calls to families to help them be more engaged in literacy learning with their children (p.4-5) The San Diego County Office of Education supported 31 local childcare providers by donating new math and literacy supplies which supported 240 children in the area (p.6). Engaging activities to bring fun to literacy learning.	leader's literacy – enriched summer program (p. 16). A back-up program was offered employing 4 teachers and serving 51 children to improve and develop reading skills. Again, why such few students? From 2019-2020, DEEP raised $118,000 through in–kind donations or services paid for by partners (p. 24). How does DEEP ensure these donations will continue?
Story County (USA) **References:** The Reading Partnership. (2018). Retrieved from https://readingpartnership.com/ The Westcoast Reader. (2021). Retrieved from https://thewestcoastreader.com/ *Raising Readers in Story County Community Literacy Tool Kit* (Rep.). (2017).	• Story Time. • Reach out and Read. • Raising a Reader. • Small Talk Story County. Story Pals. • Gift Books.	Able to expand by adding a part-time executive director that was eventually expanded to full-time because of ample funding (p.13). A communication plan was developed to help deliver clear and concise communication about the project to the community and project partners (p.14). A strong social media presence has been developed by the team to spread their	Meetings are hosted in convenient locations; however, program locations are semi-permanent and not always convenient to everyone who may want to attend (pg. 26). Funding for the program was cut in half in 2008 leading to the organization having to convert some positions into different titles or volunteer positions (pg. 12). Education is mainly used to help with mental health issues found in children accessing programs, but no other mental

		message and educate others (p.14, 29, 30). Identified mental health as the biggest challenge to early learners in their area and have put measures in place to combat this issue (p.26). Programs are occasionally made mobile and moved around the community for more convenience. (p.26). Two-generation family literacy approach (empowering families to nurture child development, provide literacy experiences to children, connect adults to resources) (p.26). Logic Model to assess results and outcomes of programs (p.27). Adequate funding (p.29).	health services are mentioned (pg. 26).

Qualitative Data Collection: Focus Group

To explore literacy needs within the target neighborhoods, the authentic voices and first-hand experiences of community residents were sought out through focus groups. The research team received Research Ethics clearance and conducted two focus groups: one for Leamington residents and one for Windsor residents. ProsperUs recruited focus group participants from the Early Years Community Action Network (CAN) table group. Throughout each focus group session, researchers asked several open-ended questions designed to elicit conversation and meaningful dialogue amongst participants. Once the focus groups were completed, audio recordings from the focus groups were transcribed and coded. The results of the focus groups provided a great deal of insight into the relevant aspects of the research.

The focus group interviews sought to answer the following questions:

1. What factors influence a family's access to literacy resources in vulnerable communities in Windsor-Essex County?
2. How do parents from vulnerable communities perceive their influence/role in their children's literacy knowledge, attitudes, and practices?
3. What assets and gaps currently exist in local literacy support services, interventions, and programs from a parent perspective, and how can this information be used to improve literacy services?

The focus group analysis resulted in four major overarching themes/challenges; findings were prepared in a report but have been summarized below:

1. Feelings of disconnection
    a. Windsor participants felt there was a disconnect between services and the existing program. They experienced system fragmentation that led families to feel disconnected from the community.
    b. Leamington participants felt disconnected and isolated due to proximity as a rural community and overall lack of essential programs.
    c. In both focus groups, there was an overall reliance on technology to attempt to stay connected to services, programming, and the community, which was identified as a potential asset to leverage in intervention design.
2. Accessibility
    a. Windsor participants stated that issues they commonly face when trying to access literacy resources included time, costs, waitlists, and poorly promoted programs.
    b. Leamington and Windsor participants discussed similar barriers, with the addition of distance/proximity issues and an overall lack of programming experienced by the participants of Leamington.
3. Language challenges
    a. Participants from both focus groups expressed concerns about diversity and language barriers.
    b. Participants from both focus groups also expressed an interest in their children learning multiple languages in educational settings.

   c. It can be suggested that by promoting biliteracy, it could not only offer English as a second language children the ability to participate in programming more easily and confidently, but it could also better equip English-speaking children with the skills to engage with more diverse populations more easily.
4. Attitudes towards literacy
   a. Windsor and Leamington participants expressed both a strong interest in their child's literacy development as well as concern over their children's literacy needs.
   b. Participants from both focus groups expressed frustrations with schools and educators' attitudes toward children's literacy, which hindered children's literacy learning, particularly those that were already struggling.

Milestone 2: Co-development of Intervention

1000 Books Before Kindergarten

Using data from Milestone One, St. Clair College researchers, community members, and ProsperUs identified several key components of the literacy intervention:

- An evidence-based literacy program that builds caregiver skills for early childhood literacy development.
- An accessible program that could leverage existing community resources.
- Provide incentives for both children and families to encourage engagement.
- Ensure program is culturally responsive and addresses multiple languages.

To continue the community-centered research approach, the research team partnered with the Windsor Public Library and the Essex County Library. Three branches of the Windsor Public Library (John Muir, Bridgeview, & Central branches) and one branch of the Essex County Library (Leamington branch) participated in the literacy intervention. The research team and their partners collaborated to implement the 1000 Books Before Kindergarten Pilot (1BBK)Program. This is a free literacy program for children from zero to five years old.

The 1BBK Program has been used in other communities both internationally and nationally. In fact, it was used in one of the communities the research team analyzed during Milestone One of the projects, Diamond Educational Excellence Program (DEEP) USA. This specific implementation of 1BBK was based on research that showed that "sharing books, conversations, and songs with young children builds language skills. This type of sharing contributes to children's healthy development, provides skills to succeed in school, and helps assure that they will learn to love reading" (The City of San Diego, Public Library, 2023, para. 24). Other communities include Las Vegas-Clark County-The Library District which emphasizes the importance of reading to children prior to formal education provided by schools stating that "children that are read to on a regular basis have an advantage when learning to read for themselves" (LVCCLD_Camille, 2018, para. 2). A parent that took part in the 1BBK program in another community found it very helpful to her children's literacy skills (Reid, 2017, para. 3). Burlington Public Library is another library that runs the 1BBK program with an important emphasis on research that shows the high value that shared reading has on a child's development

(Burlington Public Library, 2023, para.9). The 1BBK program is run in very similar ways with different aspects depending on the organization running it. The core principles of the program are mainly to promote a positive relationship with reading for children under the age of five. The research team used this program as a foundation for the initiative implemented at the Windsor and Leamington libraries.

The goal of the program was to develop positive attitudes towards reading, build a rapport with librarians, and increase both shared reading and library usage. In order to ensure that every aspect of the program aligned with the research team's findings in Milestone One, the team utilized the basic 1BBK program outline but then added to it, uniquely meeting the needs of the community, much like other communities had and continue to do. The focus groups conducted in the first milestone were the basis for how the program would be implemented and executed. During the duration of the program (October 2022 to May 2023), the libraries held weekly story times and monthly parent workshops, as these types of engagement opportunities were explicitly mentioned by parents/guardians within the focus groups. As mentioned in the section of the report regarding focus group discoveries, proximity to services was identified as a barrier to accessing literacy services; therefore the research team ensured that the libraries utilized were close by, if not within the neighbourhoods this project was focused on. This element, along with the story times and parent workshops, became a major development, especially in one particular library, as they did not previously have story times but became the most visited when the 1BBK program was running.

Another element that was implemented that other communities did not have was incentivizing parent workshops. The research team ensured this element was put into action for the project due to findings in multiple aspects of Milestone One, including the Literature Review, the Community Profiles, and the focus groups. Before implementing 1BBK, research showed that low-SES families have other priorities, such as how they will get food on the table, that supersede extra activities such as the one the team was planning to implement. It was important for the team to not only provide something to help families come out to participate in the program, but it was also important to help them in a way the research shows they are struggling. The incentives included grocery cards for the families. The program ran for a total of 8 months and was monitored through a variety of different methods, most notably the pre and post-test surveys, as well as data collected from the libraries.

Milestone 3: Implementation and Optimize Interventions

The 1BBK Program ran from October 2022 to May 2023, and within that time the research team collected a variety of different data sources. The first involved data from registration and feedback surveys, and the second through administrative data. The team looked at library usage of participants, the number of library visits and the number of books borrowed. Registration and milestones were also tracked during this time during which the pre-test surveys were conducted. At the end of the program, post-test surveys were distributed. The caregiver surveys provided the researchers with information of the child’s literacy and reading habits as well as parent/caregiver perceptions of their child’s literacy and knowledge of literacy services.

Quantitative Data Collection: Pre- & Post-Test Surveys

The research team utilized a mixed methodology research design combining quantitative surveys in addition to qualitative focus groups to ensure community members' voices were heard. The purpose of the two surveys was to discover if there was an increase in library usage and positive attitudes towards reading and visiting the library, along with parents' perceived improvements in their child's reading abilities. As stated above, the 1BBK program ran for eight months, from October 2022 to May 2023. Pre-test surveys were given out at registration, from which the team accumulated 160 pre-test surveys. After the eight months ended, the post-test survey was provided via email to registered members of the 1BBK program, from which 41 parents completed and reported on 49 different children. With this data, the research team was able to analyze the outcomes of the 1BBK program for about 30% of the participants.

The post-test results were analyzed in three sections: program evaluation, literacy and reading habits, library engagement and workshop evaluation. An analysis conducted by the researchers showed multiple strengths as well as some weaknesses of the 1BBK program, which are listed below.

Strengths:

- Increased excitement for reading.
    - 57% of respondents noticed an increase in their child's enthusiasm for reading after participating in the program.
- Significant improvement in literacy skills.
    - 86% of respondents noted an improvement in their child's literacy skills.
- Active role in literacy development (parent).
    - 47% of respondents felt they gained slightly more skills in engaging in literacy activities with their child after participating in the program.
    - 49% of respondents reported feeling significantly more comfortable playing an active role in their child's literacy development after participating in the program.
    - 45% of respondents felt that they gained significantly more strategies to assist in their child's literacy development after participating in the program.
- Increased library engagement.
    - 57% of respondents reported that their child's excitement about going to the library increased after participating in the program.
    - 49% of respondents stated that visiting the library has become a significantly higher priority for their family after participating in the program.
- Increased book selection and interaction.
    - 43% of participants reported that their child's participation in selecting books increased significantly.

Weaknesses:

- Limited workshop attendance.
    - 39% of respondents reported attending 1-2 workshops at the library during the program, and 39% reported that they never attended a workshop during the program.

    - 55% of respondents did not attend library story times during the program.
- Mixed perceptions of workshop effectiveness.
    - Among respondents who attended workshops, the majority found them to be informative. The responses suggest that attending multiple workshops positively influenced the understanding of their child's literacy development. The highest agreement was seen among those who attended six times, with 100% agreeing, followed by those who attended 5-6 times, with 67% strongly agreeing and 33% agreeing. Similarly, 50% of those who attended 3-4 times strongly agreed, and 33% agreed.
- Low familiarity with community literacy resources.
    - 45% of respondents reported no change in accessing community literacy resources outside of the library.
    - 57% of respondents reported being somewhat familiar with literacy resources available in their community.
    - There was an increase in library usage from October 2022 to February 2023 with a total number of 3760 literacy-related items circulated/borrowed, 1747 board and picture books circulated, and 40 new library cards generated for 1BBK participants.

Milestone 4: Dissemination of Research and Transfer of Knowledge

The research project allowed for many opportunities for dissemination of research and transfer of knowledge. Over the three years, the team has two Windsor Star articles, one research showcase presentation, one research conference rapid-fire presentation and poster presentation, one CBC Radio segment, and one YouTube video.

Wilhelm, T. (2021). *Holiday Happening Offers Food, Games, Books, for Kids in Need.* Windsor Star. Retrieved from https://windsorstar.com/news/local-news/holiday-happening-offers-food-games-books-for-kids-in-need

Saylors, K. (2021). *Researchers Focused on Bolstering Early Childhood Literacy with New Study.* Windsor Star. Retrieved from https://windsorstar.com/news/local-news/windsor-kids-lagging-in-early-literacy-researchers

Windsor Public Library. (2022). *1000 Books Before Kindergarten.* Retrieved from https://youtu.be/tpndLD2rNB8/

Discussion

The research team at St. Clair College set out to understand child literacy concerns in low socio-economic neighbourhoods informed by the community and its residents to support its project partner, ProsperUs, in designing interventions for the Cradle to Career strategy. The team focused their efforts on collaborating with community agencies and residents in order to implement a program that would support the literacy learning of children between the ages of 0 and5 in West and Downtown Windsor as well as in Leamington.

The following section will review findings in the context of the five research questions:

What considerations should be made when developing a short-term, targeted literacy intervention for Windsor-Essex County?

Based on this three-year project, the research team considered many different aspects when developing a short-term, targeted literacy intervention for Windsor-Essex County. The main considerations included timing and personnel; more specifically, who would deliver the program (keeping sustainability in mind) and where would the program be hosted? Timing was also important as this was a concern that parents and guardians expressed in the focus groups. When the research team was deciding on who was going to deliver the program and where it would be held, it was important for the team to go back to the community-centered research design and enhance existing services. Since part of the 1BBK program is to build a positive attitude towards reading, libraries seemed like a natural fit, especially since libraries are centrally located in the target neighbourhoods, which helped remove the barrier of proximity that many parents expressed during the focus groups. An additional consideration was how to realistically engage families in the 1BBK program. During Milestone One, it was determined that families in the target neighbourhood had a lack of knowledge of the different literacy supports, which was part of the reason for not attending them. To ensure that families engaged with the research team's intervention, the team prepared flyer hand-outs, social media posts, word-of-mouth, and reaching out to other community services that the families might utilize. To promote other literacy services, information was given out at the registration stage of the 1BBK program about different literacy supports that the family access. This action was not as successful as parents in the post-test survey reported that they still do not access other literacy supports and services. Researchers must consider different ways to engage families to ensure that the families continue to get support and/or get access to more support if needed.

What impact can a short-term, targeted, evidence-based intervention have on children's early literacy skills, as perceived by parents/guardians?

a. W*hat impact can such a program have on non-academic skills, particularly those related to kindergarten readiness, including social and emotional intelligence and behaviour?*

The post-test survey results showed that the 1BBK program has shown significant strengths in fostering a love for reading and improving early literacy skills among participants. According to parent perception, the program successfully increased children's excitement for reading and has been associated with a substantial improvement in their literacy abilities. The majority of participants reported that the program effectively increased the children's excitement for reading, as 43% of participants reported that their child's participation in selecting books increased significantly, and 86% of respondents noted an improvement in their child's literacy skills.

What impact can a short-term, targeted, evidence-based intervention have on parents/guardians

a. *Knowledge of early literacy and school readiness?*

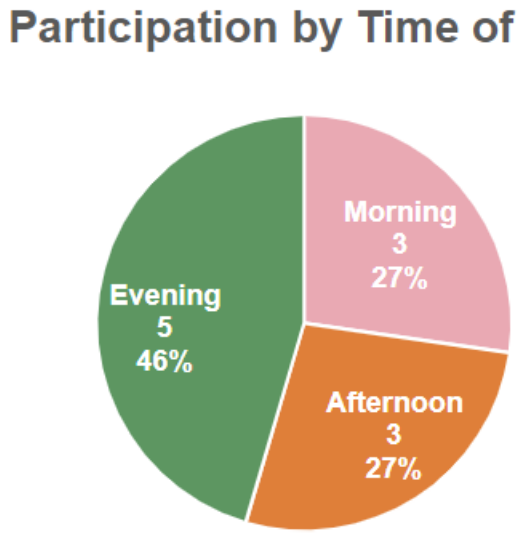
b. *Feelings of connection to the larger community/knowledge of available community resources?*

Another significant finding was that parents and caregivers reported feeling more empowered and actively engaged in their child's literacy development as a result of the 1BBK program. Participants expressed feelings of comfort and confidence in playing an active role in their child's literacy development after participating in the program. 45% of respondents felt that they gained significantly more strategies to assist in their child's literacy development after participating in the program. The program aided participants' feelings of connection to a larger community; however this did not translate to knowledge of existing community literacy resources apart from the library. This may have resulted from a lack of promotion of other literacy resources. The lack of knowledge of existing programs was one of the issues that was brought up in both the focus group discussions as well as in the pre-test analysis as to why literacy resources were not being utilized. Nearly half of the respondents of the post-test (49%) stated that visiting the library has become a significantly higher priority for their family after participating in the program. However, 45% reported no change in accessing community literacy resources outside of the 1BBK program. This suggests that while the program heightened the value of library visits, a lack of knowledge remains a substantial barrier to accessing other community literacy resources.

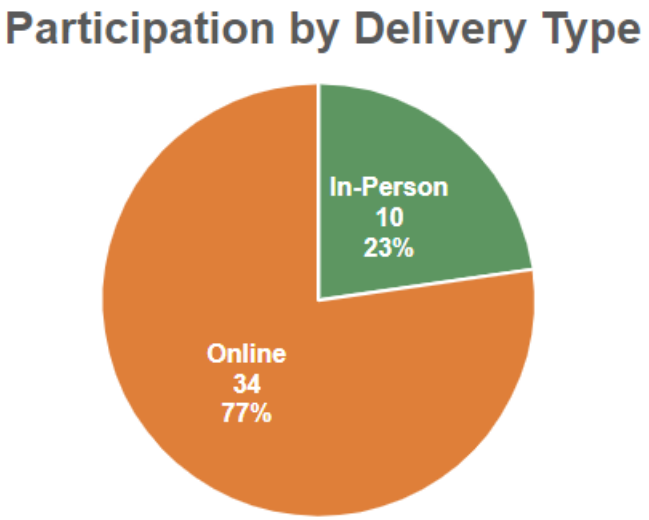
Although parts of the program were deemed successful as reported by participants, there are areas that require attention for further improvement. These include encouraging workshop attendance, enhancing the effectiveness of workshops, increasing awareness of community literacy resources, and addressing specific aspects of literacy that may require more targeted strategies. By building upon its strengths and addressing these challenges, the program can continue to make a positive impact on early literacy development. Overall, the 1BBK program exhibits several strengths, including increased excitement for reading, improved literacy skills, active parental involvement, community engagement, and enhanced book selection and interaction. However, addressing the challenges related to workshop attendance, workshop effectiveness, awareness of community resources, and targeted literacy aspects will contribute to the program's continued growth and success.

What assets and gaps exist in the 1BBK pilot intervention delivery in target neighbourhoods from a parent*/guardian perspective and how can this information be used to inform changes to the program design?*

Assets: One of the main assets of the 1BBK pilot intervention delivery was the times at which the workshops were scheduled. Literature review data indicates that families in low-SES households have other priorities that supersede attending community resources. The workshops were scheduled at different times in the day, however the most popular and most convenient for families were those offered after 6pm. The post-test results showed that the majority of respondents preferred attending workshops after dinner (after 6pm) across most attendance categories. It is important to have a program that runs at times that are most suitable for the targeted audience.



Gaps: A major limitation of the one-group design is the inability to draw statistically significant correlations between the 1BBK program and the demonstrated results without a control group. However, the self-formulated respondent answers still tell a story of community engagement and literacy development. The data from the pre- and post-test surveys showed that there was only a slight increase in participants' familiarity with other literacy resources from when they entered into the pilot program to when it ended. Since this percentage was not significantly higher in the post-test results, one possible explanation could be a lack of communication between different literacy resources. There are rarely programs that meet all the needs of individuals while the 1BBK program promoted and encouraged families to read and attend the library more often. However, it does not provide in-depth literacy support therefore the other programs could utilize the library's connection with the families to reach an overlooked community. Collaboration via workshops with other community organizations would be a great way to fill this gap. The libraries held some online workshops, however, the majority of them were in-person. With new technology advances, providing virtual opportunities from home has become a more common and convenient form of attendance for many events. The post-test survey showed that among the respondents who provided a preference for the workshop format, the majority (53%) expressed a preference for the online format. It is suggested that this program should utilize this method more in order to generate higher engagement at workshops. It could potentially reach more registrants as the availability of online workshops removes the transportation barrier that many have, especially those living in more rural areas.



How can an intervention such as 1BBK be sustainably mobilized in other neighbourhoods in Windsor-Essex County?

a. *What is the most effective team structure for the effective implementation of 1BBK in subsequent years in Windsor-Essex County?*

The 1BBK pilot program was quite successful in gaining many participants and can be successful in the future as the majority of respondents (57%) to the post-test survey expressed definite intention to participate in the program again with a younger sibling. This indicated a high level of satisfaction and perceived value in the program, with only a small percentage (2%) showing disinterest. Communities in these target neighbourhoods benefitted from the program in many ways, and it is clear that many families would return in the future.

Conclusion

The theoretical framework this project used as the basis for the literacy design was Urie Bronfenbrenner's Ecological Systems Theory, which states that a child's development is influenced not just by the family at the home (micro level) but also by the community (mezzo level), and society at large (macro level). The research team aimed to discover ways to enhance literacy development for children in low SES households, especially within the target neighbourhoods. The goal was to provide literacy support that would encompass and maximize the assets of each environmental layer, including the family and the community In the future, strategic partnerships such as those fostered through this project may have the capacity to fill identified gaps and address barriers to provide all families with literacy resources that uniquely fit their needs.

References

Building on our competencies Canadian results of the International Adult Literacy and Skills Survey, 2003. (2006). Statistics Canada.

Burlington Public Library. (2023). *1000 Books Before Kindergarten.* Retrieved from https://www.bpl.on.ca/1000

Clermont, Y., Binkley, M., & Murray, T. (2005). Measuring adult literacy and life skills new frameworks for assessment. Statistics Canada.

Davis, B. & Francis, K. (2023). Ecological Systems Theory. Discourses on Learning in Education. Retrieved from https://learningdiscourses.com/discourse/ecological-systems-theory/.

Decoda Literacy Solutions Community Literacy Planning Guide. (2012). Retrieved from https://www.decoda.ca/wp-content/uploads/Community-LIteracy-Planning-Guide-2012.pdf

Denti, L., & Guerin, G. (1999). Dropout Prevention: A Case for Enhanced Early Literacy Efforts. The Clearing House, 72(4), 231-235. Retrieved from http://www.jstor.org/stable/30189584

Diamond Educational Excellence Program. (2021). Retrieved from https://deepsd.org/

Fathers, F. (2019). Coming together- building a hopeful future for children and youth in Windsor-Essex County (Rep.). Windsor, ON: Prosperus.

Helping communities bloom: A family literacy resource guide for British Columbia. (n.d.). Retrieved from https://decoda.ca/resource/helping-communities-bloom-a-family-literacy-resource-guide-for-british-columbia/

KGO Adult Literacy Program. (2021). Retrieved from https://www.kgoadultliteracy.com/

LVCCLD Camille. (2018). *The Benefits of Reading 1000 Books Before Kindergarten.* The Library District Las Vegas-Clark County. Retrieved from https://thelibrarydistrict.org/blogs/post/the-benefits-of-reading-1000-books-before-kindergarten/#:~:text=Research%20demonstrates%20that%20young%20children,hard%20as%20it%20might%20sound.

McQuigge, M. (2019, October 3). *Public inquiry into reading levels among Ontario. students launched by Human Rights Watchdog*. Toronto. https://toronto.ctvnews.ca/public-inquiry-into-reading-levels-among-ont-students-launched-by-human-rights-watchdog-1.4621989?cache=%3FclipId%3D68596

More than words can say - Literacy: Why it matters (Rep.). (2018). Retrieved http://www.communityliteracyofontario.ca/wp/wp-content/uploads/Literacy-Why-it-Matters-Digital.pdf

Price, N. (2018). *Literacy Now! Exploring challenges, capacities and opportunities for improved literacy in Kingston Galloway-Orton Park (KGO)* (Rep.).

ProsperUs (2019). *Coming Together- Buidling a Hopeful Future for Children and Youth in Windsor-Essex County. Report Synopsis.* UnitedWay Windsor-Essex ProsperUs. Retrieved from https://weunlockpotential.com/wp-content/uploads/2022/04/Final-Full-Version-ProsperUs-Neighbourhood-Report.pdf

ProsperUs (2019). *Coming Together- Buidling a Hopeful Future for Children and Youth in Windsor-Essex County.* UnitedWay Windsor-Essex ProsperUs. Retrieved from https://weunlockpotential.com/wp-content/uploads/2022/04/Final-Full-Version-ProsperUs-Neighbourhood-Report.pdf

ProsperUs (2020). *2020 Fall Update Report.* UnitedWay Windsor-Essex ProsperUs. Retrieved from https://weunlockpotential.com/wp-content/uploads/2022/04/Final-Full-Version-ProsperUs-Neighbourhood-Report.pdf

Raising Readers in Story County Community Literacy Tool Kit (Rep.). (2017).

Reardon, S. F., Valentino, R. A., Kalogrides, D., Shores, K. A., & Greenberg, E. H. (2013). Patterns and trends in racial

Academic achievement gaps among states, 1999-2011. Retrieved from https://cepa.stanford.edu/content/patternsand-trends-racial-academic-achievement-gaps-among-states-1999-2011

Reid, R. (2017). *Why Read 1000 Books Before Kindergarten?* Parenting and Family. Retrieved from https://homeschool.rebeccareid.com/why-read-1000-books-before-kindergarten/

Statistics Canada. (2013). Skills in Canada: First Results from the Programme for the International Assessment of Adult Competencies (PIAAC). Statistics Canada Catalogue no. 89-555-X. Ottawa.

Tchau. (2021). DECODA Literacy Solutions. Retrieved from https://decoda.ca/

The Reading Partnership. (2018). Retrieved from https://readingpartnership.com/

The Westcoast Reader. (2021). Retrieved from https://thewestcoastreader.com/

United for Literacy - A national charitable literacy organization. (2022). Why Literacy Matters. https://www.unitedforliteracy.ca/

1,000 Books Before Kindergarten. (n.d.). Retrieved from https://www.sandiego.gov/1000books#:~:text=The San Diego Public Library,your goal within one year.