

FoodSecInfo

Final Campaign Memo 2023

Addressing Food Insecurity in School Age
Children within Hamilton, Ontario

HTHSCI 4ZZ3
Global Health Advocacy

Ibrahim Hasan, Tyler Sun, Chloe Goss,
Hamda Altaf, Lingxuan Wu, Dalen Koncz

FoodSecInfo

Final Campaign Memo 2023

Abstract

Food security, a fundamental human right, is defined by four dimensions: availability, access, utilization, and stability. Food insecurity occurs when one or more of these dimensions is compromised. Food insecurity has negative effects on child development, leading to cognitive, behavioral, and socio-emotional consequences. The Code Red project revealed that 12% of Hamilton households experience food insecurity, double the national average, and nearly 20,000 people visit food banks every month, with 6,000 being children. Early-childhood development is identified as one of the top five health determinants in Hamilton. Our campaign strategy focuses on information advocacy through the creation of a comprehensive website, FoodSecInfo.com. This digital platform centralizes information about food security organizations in Hamilton, helping families connect to relevant resources. By leveraging information advocacy, we aim to reduce food insecurity among school-age children by increasing the use of existing services and improving nutritional literacy. The campaign will collaborate with the Hamilton-Wentworth District School Board (HWDSB) to integrate the resource onto their website and promote it through newsletters, email campaigns, and social media. Despite its potential, the campaign faces limitations, including language barriers and the need for continuous updates on food security organizations. Future plans involve expanding the resource to include translation options and maintaining open communication with users and service providers.

Literature Review

Food Security Dimensions

Food security is a basic human right and exists “when all people at all times have physical, social, and economic access to food, which is safe and consumed in sufficient quantity and quality to meet their dietary needs and food preferences for a healthy and active life”.¹ Food security is defined by four dimensions: food availability, food access, food utilization, and food stability.^{1,2} Food availability refers to the availability of sufficient and appropriate quantity and quality of food on a consistent basis.^{1,2} Food access refers to people having adequate resources and income to acquire and consume a nutritious diet.^{1,2} Food utilization is based on the understanding and sufficient knowledge of an appropriate diet to ensure nutritional wellbeing.^{1,2}

The last dimension of food security is stability which refers to the stability of the above three dimensions over time, that is, there is no hindrance to food availability, access, and utilization over time.^{1,2} According to Dr. Tina Moffat, one of our key informants, these four dimensions are a standardized framework to measure food insecurity which occurs when one or more of these dimensions are compromised (see Appendix A).

Food Insecurity and Health Outcomes in Children

Food insecurity is reported to have negative effects on child development including cognitive, behavioral, and socio-emotional outcomes according to the socio-ecological model as the leading framework.³ This model considers child development as a dynamic process that results from multiple interactions across vast levels of influence that are close and distal to the child.³ Some examples of these levels are family, community, and society.³ Hence, the effect of food insecurity on child development is understood as resulting from interactions such as food access, quality of home and parental socio-economic status.³ From a literature review of five longitudinal studies, four found a significant negative effect of the persistence of food insecurity on academic and cognitive outcomes in school-aged children assessed through reading and math scores.³ Additionally, one study found that children who transitioned from marginally food secure to food insecure households had lower math and working memory scores.⁴ Four studies on the effect of food insecurity on self-control found significant negative associations, especially when there was uncertainty around food security in their households highlighting the importance of food stability.³ Generally, lack of nutritious meals leads to inadequate consumption of required nutrients which can lead to impacted child development such as limited neural plasticity and impaired cognitive function.³

A joint report published by the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), the United Nations Children’s Fund (UNICEF), the UN World Food Programme (WFP) and the World Health Organization (WHO) in 2022, estimated that of all children in the world under the age of 5, 45 million children were suffering from wasting, 149 million had stunted growth and development, and 39 million were overweight.⁵ These alarming numbers highlight the need to address food insecurity in children to



ensure that they develop to their true potential.

Food Insecurity and Code Red

As the Code Red project explored health and socio-economic factors in Hamilton, one thing became evident: the significant differences in wealth and health between various groups of people and neighborhoods in Hamilton. The least wealthy of which being those in the lower city, who had the lowest median family income and highest percentage of children below the low-income cutoff in comparison to the more affluent suburbs around Hamilton (Stoney Creek, Glanbrook, Ancaster, Dundas and Flamborough) and the upper city.⁶

Families of lower socioeconomic status struggle to have adequate, healthy food on a regular basis and as such, experience food insecurity. While in Canada as a whole, about 5.8% of households experience food insecurity, almost 12% of households in Hamilton report food insecurity.^{7,8} This is essentially double the national average. Of the nearly 20,000 people that visit a food bank every month in Hamilton, almost a third, or more specifically, 6,000 of them are children.⁸ The Hamilton-Wentworth District School Board serves about 50,000 students, meaning that these 6,000 children accessing food banks every month represent more than 10% of the student population of Hamilton.⁹

The Code Red project determined that among the top five health determinants in Hamilton, one of them was early-childhood development and more specifically, healthy child development, “the effects of early experiences on brain development, school readiness and health in later life shows early-child development is a powerful determinant of health”.¹⁰ Code Red stressed the importance of access to nutritious foods in order for this healthy childhood development. Many of these families experience intergenerational low-socioeconomic status as their children are not as likely to perform well in school and gain a higher education.¹¹ For example, one of the inner-city neighborhoods (between King Street West, Queen Street South and the rail line) experiencing higher levels of food insecurity had a high school dropout rate of 267 per 1,000 students, whereas a neighborhood in the nearby suburb of Stoney Creek had a high school dropout rate of six per 1,000 students.¹⁰

While 20,000 people visit food banks every month in Hamilton, this is less than 5% of the city’s population and 12% of Hamilton households experience food insecurity.⁸ How can this gap be filled? There is a plethora of food resources in Hamilton available to serve these families; however, not all of them are aware of these resources. Over the last few decades, many immigrant families and families of low-socioeconomic status have moved into Hamilton’s lower city.⁶ These families often face many barriers

in accessing the resources they need: immigrant families in Hamilton may have difficulty understanding English, while families of lower socioeconomic status may not have a forgiving work schedule that allows them to spend time learning about the resources available to them. In order to bridge this gap and reduce the number of children and their families that experience food insecurity, there needs to be some intermediary means of connecting these families to the resources they need.

Campaign Strategy and Elements

Information Advocacy

Information advocacy, or information activism, refers to the process of collecting, aggregating, and disseminating information with the purpose of raising awareness and influencing public opinion on various social and political issues.¹²⁻¹⁴ It is especially able to leverage digital platforms and technologies (eg. the internet, social media, WEB 3.0) to enable individuals and organizations to share critical information on a large scale. Information activists, individually or with peers, engage in gathering relevant information, sharing it through various channels, and stimulating debate and discussion to bolster public opinion/knowledge on specific issues. By engaging in this way, information activists support the politicization, and hence, confrontation of particular issues while fostering connections between participants through shared understanding and interest in specific causes. Information activism represents a shift from traditional collective action to a more visceral, holistic, and markedly efficient way for people to engage in civic processes and contribute to the development of organizational structures to foster social change.¹²⁻¹⁴

FoodSecInfo.com

FoodSecInfo’s primary advocacy resource is the comprehensive and easy-to-use website: www.foodsecinfo.com. This website centralizes a wealth of information about food security organizations in Hamilton and makes it easy for families to connect to the resources most relevant to their needs. It directly supports our campaign goal of reducing food insecurity among school-age children by increasing the use of existing food security services and improving nutritional literacy. The website provides a detailed list of food security organizations in Hamilton and essential pieces of information on each; the organization’s name, specialization (e.g. emergency food supply, hot meal, cooking class or school lunch), description, and website links. Users can seamlessly navigate through this extensive list to find the resources best suited to them. FoodSecInfo.com uses a short user-friendly quiz to match users with the most relevant organizations based on their socio-demographic information, food preferences and needs. The questions cover various aspects such as: Age group of

FoodSecInfo

the user (e.g. Essential Aid serves younger users whereas Heart To Home, older users), dietary restrictions or preferences such as halal or kosher options, etc. By creating a resource that streamlines access to pertinent services and recommends targeted solutions based on individual requirements, we maximize the reach of food security organizations within Hamilton. While FoodSecInfo.com is only a working proof-of-concept, it does demonstrate our commitment to improving public awareness and utilization of available services, and crucially, lays the foundation for future expansion. For instance, a fully fledged website would have more organizations, cover more jurisdictions, offer a more comprehensive quiz to more accurately narrow down resources based on the user's needs. Ultimately, FoodSecInfo seeks to facilitate access to support mechanisms while fostering more robust connections between users, academics, service providers, and other stakeholders committed to combating food insecurity in Hamilton.

Why Information Advocacy?

Leveraging information advocacy is the most effective way to achieve our advocacy campaign goal of reducing food insecurity among school-age children in Hamilton by increasing the use of existing food security services and improving nutritional literacy. Information advocacy enables us to reach a broader audience, connecting those in need with vital resources and helping create awareness of available programs and services. It allows us to fill the critical knowledge gaps about food security services that have been mentioned by both Dr. Tina Moffat and Nancy Phelan ^(see Appendix A). The digital nature of information advocacy offers broad accessibility and provides users with an affordable and convenient way to access valuable information about food security services that may prove transformative.^{12,15}

Additionally, Steve Buist emphasizes that multi-jurisdictional collaboration is critical to developing sustainable solutions ^(see Appendix A). Information advocacy can act as a catalyst to bring service providers, policymakers, academics, and community leaders together to address systemic issues such as poverty and inequality that play a major role in food insecurity. By creating a centralized collaborative platform like the FoodSecInfo website, we educate parents and school administrators about different organizations, programs and initiatives tailored to their individual needs, thereby raising awareness of existing support systems. A centralized online platform provides room for continuous improvement and expansion based on evolving user needs and feedback. As policy changes occur or new services become available in Hamilton, FoodSecInfo may reflect appropriate updates.

In summary, FoodSecInfo aims to bridge the knowledge gap between resources and those in need, while fostering collaboration between policy makers, service providers

and citizens participating in this common endeavor.

Campaign Tactics

The HWDSB has an opportunity to make an impact by making FoodSecInfo.com easily available to access through their website. Integrating the resource directly onto their website would allow teachers, students, and families to access it with ease. By having the resource integrated onto the website, distributed through newsletters, and extended to parents by teachers, it can be an accessible resource that bridges the gap between food insecurity organizations and food insecure families.

To further promote the resource, the HWDSB should consider directly promoting the website to schools, teachers, and families through communication channels such as newsletters, email campaigns, and social media. Direct promotion would increase the reach and visibility of the resource to those not aware of the resource.

To convince the HWDSB to promote this resource, a variety of strategies and tactics can be employed. One effective approach is to highlight the benefits of the resource, such as improved student engagement, learning outcomes, and better student health outcomes. It can also be demonstrated as a culturally sensitive resource that serves the needs of Hamilton's diverse student population, especially newcomers to Canada that struggle with navigating social services.¹⁶ By showing the HWDSB how the resource can positively impact the education of students, they may be more inclined to promote it. Furthermore, engaging with the HWDSB through attending meetings, participating in events, and providing regular updates can help build relationships and create opportunities for collaboration. Building a coalition of supporters including teachers, parents, and community organizations of individual schools across the HWDSB can also demonstrate a groundswell of support and advocacy for the resource ^(see Appendix B). This was an effective tactic recommended by Nancy Phelan, the School Liaison at Food4Kids Hamilton, as a strategy to pressure the school board to take notice of these issues while also targeting individual schools. In addition, providing the HWDSB with resources such as marketing materials, training sessions, and support resources can equip them with the tools they need to promote the resource effectively. By employing these strategies and tactics, the HWDSB may become more invested in the success of the resource and more willing to promote it, ultimately benefiting the education and success of students in the community.

The HWDSB can make a significant impact by making the resource easily accessible, promoting it through various channels, and partnering with community organizations. By taking these steps, they can increase the visibility and

FoodSecInfo

reach of the resource, creating more opportunities for families of school age children to benefit from it, and supporting the overall education and success of the community.

Limitations and Barriers

While our resource makes the process of accessing aid easier, we want to acknowledge that it is not without flaws, and is a band-aid solution to a large and serious problem. We have included some of the limitations of this resource at the present moment, and our proposed plans for addressing these barriers whenever possible. First, the resource is currently only offered in English, which would be a barrier for anyone whose primary language is not English, especially newcomers to Canada. Since this limits the document’s accessibility, we would like to provide the option for translation to other languages in the future. Secondly, the resource is only useful to those who access it, requiring further public engagement and promotion of the resource. It does no use to anyone by simply existing. This barrier can be surmounted through the promotion of the resource by the HWDSB to the community it serves. This resource is also limited by the scope of the organizations that it is informed by, and does not address any gaps in the existing support. We acknowledge that there are needs that will remain unmet. Our vision for this resource is that it will remain relevant through an open line of communication between the users and us, the developers. We aim to

remain useful by adding organizations as they are formed, and by removing organizations or programs that no longer exist. Finally, as has been mentioned previously in this document, food insecurity is a complex and dynamic issue. Although our resource may help people mitigate the severity of their food insecurity, it does not address the underlying causes of it.

Conclusion

The HWDSB can help bridge the gap between food insecurity organizations and food insecure families by making FoodSecInfo.com easily accessible on their website and promoting it through various communication channels. The resource’s benefits, such as improved student engagement and better student health outcomes, can be highlighted to convince the HWDSB to promote it. Strategies such as building a coalition of supporters, attending meetings, and providing resources can be employed to build relationships and create opportunities for collaboration. There are limitations of the resource including its current availability only in English, limited usefulness without promotion, and not addressing the underlying causes of food insecurity. Yet, it remains an advocacy campaign that aims to address the utilization aspect of the four food security dimensions using information advocacy in the form of FoodInfoSec.com to create a tangible resource for change •

References

1. Gunaratne MS, Radin Firdaus RB, Rathnasooriya SI. Climate change and food security in Sri Lanka: towards food sovereignty. *Humanit Soc Sci Commun* 2021; 8: 1–14.
2. Lawlis T, Islam W, Upton P. Achieving the four dimensions of food security for resettled refugees in Australia: A systematic review. *Nutr Diet* 2018; 75: 182–192.
3. Gallegos D, Eivers A, Sondergeld P, et al. Food Insecurity and Child Development: A State-of-the-Art Review. *Int J Environ Res Public Health* 2021; 18: 8990.
4. Grineski SE, Morales DX, Collins TW, et al. Transitional dynamics of household food insecurity impact children's developmental outcomes. *J Dev Behav Pediatr JDBP* 2018; 39: 715–725.
5. Rigillo N. UN Report: *Global hunger numbers rose to as many as 828 million in 2021*. Food and Agriculture Organization of the United Nations, <https://www.fao.org/newsroom/detail/un-report-global-hunger-SOFI-2022-FAO/en> (7 June 2022, accessed 3 April 2023).
6. DeLuca PF, Buist S, Johnston N. The Code Red Project: Engaging Communities in Health System Change in Hamilton, Canada. *Soc Indic Res* 2012; 108: 317–327.
7. Roshanafshar S, Hawkins E. *Food insecurity in Canada*. Statistics Canada, 25 March 2015.
8. Hamilton Family Health Team. *Food Access Guide*. Hamilton Family Health Team, 2022.
9. Hamilton-Wentworth District School Board. *FACTS ABOUT HWDSB*. Hamilton-Wentworth District School Board, 20 October 2022.
10. Buist S, Johnston N, DeLuca P. Code Red Part 1: Worlds apart. *The Hamilton Spectator*, 1 April 2010, <https://www.thespec.com/news/hamilton-region/code-red/2022/09/20/worlds-apart.html> (1 April 2010, accessed 3 April 2023).
11. McLaughlin KA, Sheridan MA. Beyond Cumulative Risk: A Dimensional Approach to Childhood Adversity. *Curr Dir Psychol Sci* 2016; 25: 239–245.
12. Halupka M. The rise of information activism: how to bridge dualisms and reconceptualise political participation. *Inf Commun Soc* 2016; 19: 1487–1503.
13. Clear A, Paull M, Holloway D. Nonprofit Advocacy Tactics: Thinking Inside The Box? *Volunt Int J Volunt Nonprofit Organ* 2018; 29: 857–869.
14. Mosley JE, Suárez DF, Hwang H. Conceptualizing Organizational Advocacy Across the Nonprofit and Voluntary Sector: Goals, Tactics, and Motivation. *Nonprofit Volunt Sect Q* 2023; 52: 187S–211S.
15. McArthur LH, Ball L, Danek AC, et al. A High Prevalence of Food Insecurity Among University Students in Appalachia Reflects a Need for Educational Interventions and Policy Advocacy. *J Nutr Educ Behav* 2018; 50: 564–572.
16. Majid U, Najeeb H, Lam M. *Investigating the Social Service Needs of Hamilton's Muslim Community: Results from Key Informant Interviews*. Mishka Social Services, May 2021.

Appendix A

Informant Perspectives

Dr. Tina Moffat

Dr. Tina Moffat is an Associate Professor of Anthropology at McMaster University. Her primary interests lie in child health and nutrition, food insecurity, and environmental health. She is also an active participant in community-based research projects. In the interview, Dr. Moffat emphasized that food insecurity is primarily an income issue, advocating for basic income initiatives to address the problem. She is also a strong supporter of school meal programs; however, Dr. Moffat noted the challenge of finding enough volunteers for the program. Further, she outlined four dimensions of food insecurity: availability, access, utilization, and stability. To improve utilization, she suggested promoting food literacy, offering community cooking classes, and integrating these topics into school curriculums. The City of Hamilton Food Charter serves as an advocacy tool to hold politicians accountable and facilitate collaboration between the school board and the city. Additionally, Dr. Moffat mentioned the Hamilton Community Food Centre's programs, such as free lunches, subsidized farmers markets, and children's cooking programs. She proposed that similar initiatives could be implemented in school settings, where most have kitchens. To address issues with school/community gardens, she suggested that the city partner with the school board and explore the McQuesten Urban Farms Model. Lastly, she recommended that schools help families, especially newcomers, connect with available programs and services to increase utilization.

Steve Buist

Steve Buist is the creator of the Code Red Project. He is a former investigative reporter and feature writer with the Hamilton Spectator, named Canada's Investigative Journalist of the Year, and the recipient of several highly prestigious awards. In the interview, Mr. Buist highlighted the importance of collecting accurate data on the number of children facing food insecurity, their locations, and the causes of their insecurity to inform effective solutions. He argued that addressing food insecurity requires co-operation among different levels of government and departments within governments. To better equip parents and caregivers, he suggested implementing living wages, providing education on the value of good nutrition, and

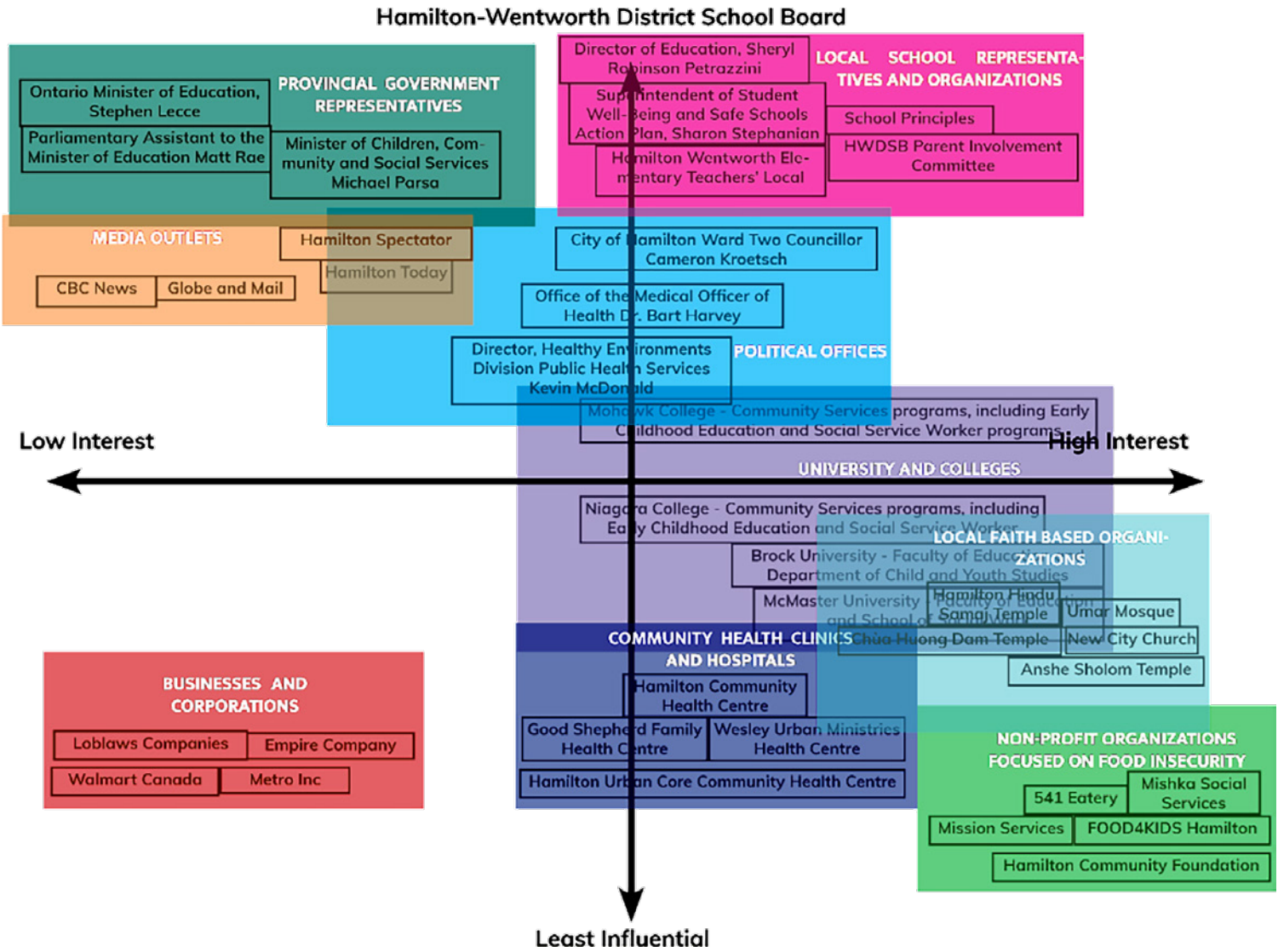
taxing low-value, high-calorie junk foods to make healthier alternatives more attractive. Additionally, Mr. Buist criticized the provincial funding for school breakfast programs, covering only 15% of costs and placing the burden on schools to fund the remaining 85%. He recommended implementing a sliding scale of support based on school needs, using average incomes by area or the proportion of children living in poverty as determining factors. Mr. Buist also mentioned the Hamilton Bulldogs' Foundation, which provides support for school breakfast programs. He cautioned against relying solely on schools and school boards, pointing out the need to address food insecurity during weekends, school holidays, PA days, and summer breaks, as well as for children not yet attending school.

Nancy Phelan

Nancy Phelan is the School Liaison at Food4Kids Hamilton, a non-profit organization dedicated to breaking the cycle of poverty by reducing barriers to children's access. Their vision is to ensure that any child sustaining entire weekends without food will be fed. In the interview, Ms. Phelan suggested that policymakers and community leaders collaborate, share ideas, and organize information-sharing forums to address the root causes of food insecurity. She also recommended providing easily accessible information and tools for preparing low-cost, nutritious meals with parents and caregivers of school age children. Ms. Phelan advised individuals and organizations wanting to address food insecurity to connect with local organizations, learn about their processes, and identify opportunities and gaps. Food4Kids Hamilton, for example, works exclusively with schools that identify and refer children in need of support. They value their partnerships with schools, which assess each family's level of food insecurity and ensure that their program serves those truly in need. However, the organization faces funding challenges, as it receives no provincial funding and relies on grants and donations. Despite having solid systems and processes in place, Food4Kids Hamilton could accommodate more children if more funds were available. Their volunteer base helps pack and deliver 1,425 food packages each week to 75 schools, but funding remains the most significant obstacle.

Appendix B

Power Map



Addressing Food Insecurity in School-Age Children within Hamilton, Ontario

FoodSecInfo Final Campaign Memo 2023

Ibrahim Hasan, Tyler Sun, Chloe Goss, Hamda Altaf, Lingxuan Wu, Dalen Koncz

McMaster University

HTHSCI 4ZZ3: Global Health Advocacy

Vito A. Buonsante & Muhannad Mulas

April 3, 2023