Feeding Our Future: Options for Expanding School Meal Programs in BC

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Abstract

This study investigates the potential for expanding school meal programs to improve the diets of children in British Columbia (BC). A jurisdictional scan reveals a patchwork of existing programs across the province, but the majority are supplemented by charitable donations and volunteers, and many children do not have access to healthy foods during school hours. Case studies of 3 large-scale meal programs (England, Sweden, and Alberta) are analyzed using Comprehensive School Health as a lens to determine characteristics of successful programs and assess their applicability to the BC context. Expert interviews complement and verify the findings. Drawing on these findings, policy options are developed and evaluated on their performance on six criteria: effectiveness, equity, child development, cost, administrative complexity, and stakeholder acceptance. Based on this analysis, this study recommends funding a single non-profit partner to distribute funding to school districts and provide centralized support.

Keywords: school meal program; food insecurity; child nutrition; school lunch; breakfast program; comprehensive school health

Dedication

There is no greater priority for any nation than the well-being of its children. It's up to all of us – individual Canadians, the private sector and all levels of government – to come together and ensure all of our children from coast to coast to coast are safe, healthy, educated and have dreams for their futures – dreams they can achieve.

- David Morley, UNICEF Canada President and CEO

This project is dedicated to all the dreamers, and to my mother, Faye Smith, who always believes in my dreams.

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Executive Summary

Policy Problem

School meal programs are a dominant policy choice for addressing poor nutrition and encouraging positive health and education outcomes for children around the world. Yet in British Columbia (BC), there is no comprehensive program at the national or provincial level, leaving only a patchwork of school meal programs that fails to meet the needs of hungry and undernourished students (BC Teachers Federation, 2015). This study explores this gap by investigating the potential for expanding school meal programs to provide healthy meals to school children in BC.

Poor nutrition is a complex and multi-faceted problem. One in five BC children lives in poverty (First Call, 2017), and one in 10 experiences food insecurity (Statistics Canada, 2017). However, the problem of poor nutrition is not strictly about access. Only 15% of BC children eat the recommended daily servings of fruits and vegetables (Attorp, Scott, Yew, and Rhodes, 2014), and almost 30% of BC children are overweight or obese (British Columbia, 2006). There is a growing recognition that food literacy and healthy eating behaviours must be promoted from an early age, and that school meal programs can help to achieve this (Oostindjer et al., 2016; C. and Atkins, 2010).

Methodology

This study takes a mixed-method approach. A jurisdictional scan provides a baseline understanding of the reach and characteristics of current meal programs. A case study analysis of three large-scale school meal programs in other jurisdictions (England, Sweden, Alberta), is used to determine characteristics of successful meal programs, and evaluate various models. Interviews with subject matter experts are used to complement and verify the findings and assess their applicability in the BC context. From these methods, I develop potential policy options, complete a multi-criteria policy analysis and ultimately provide a policy recommendation. To provide a health promotion lens, the concept of Comprehensive School Health (CSH) is used to guide the analysis of this study. CSH considers four pillars: School Policies, Relationships and Environment, Teaching and Learning, and Community Partnerships.

Research Findings

BC has an existing patchwork of school meal programs, which are widely inconsistent in form, and rely heavily on charity and volunteer support. Analysis of school meal programs in England, Sweden, and Alberta finds that each program is successful to varying degrees in the four pillars of CSH, and yet there is significant variation within each jurisdiction. These findings suggest, together with the uneven baseline established by the jurisdictional scan, that a single-model school meal program is inappropriate in the BC context. Expert interviews confirmed that program success is more likely when schools have autonomy over their programs, while a central agency provides support.

The study also finds that successful school meal programs take a holistic, integrated approach, confirming the value of CSH as an evaluative lens. Universality also emerged as a key theme, both in reducing stigma, and to expand the potential for school meal programs in BC from a poverty reduction strategy, to a health promotion strategy.

Policy Analysis and Recommendation

Based on these findings, I consider three policy options: 1) A new unit in the government which would provide centralized support and funding to school districts for meal programs; 2) Funding a single non-profit partner which would provide centralized support and distribute funding to school districts for meal programs; and 3) School meal program grants that would provide funding directly to districts, NGOs, and partnerships. The three options are evaluated using the following criteria: effectiveness, child development, equity, cost, administrative complexity, and stakeholder acceptance. This analysis finds that funding a single non-profit partner is the best option for expanding school meal programs in BC.

Chapter 1. Introduction

Poor nutrition is a complex and multi-faceted problem facing children in British Columbia (BC). Access to adequate, healthy food is a problem for many, with one in five children living in poverty (First Call, 2017) and one in 10 experiencing food insecurity (Statistics Canada, 2017). Yet access is not the only issue, as just 15% of BC children eat the recommended daily servings of fruits and vegetables (Attorp, Scott, Yew, and Rhodes, 2014) and almost 30% of BC children are overweight or obese (British Columbia, 2006). There is a growing recognition that food literacy and healthy eating behaviours must be promoted from an early age, and that school meal programs can help to achieve this (Oostindjer et al., 2016; C. and Atkins, 2010).

Around the world, school meal programs are a dominant policy choice for addressing poor nutrition and encouraging positive health and education outcomes for children. The United Nations World Food Programme (2013, p x), reports that almost every country in the world feeds children in schools, reaching an estimated 368 million children. Schools are an effective site for nutrition interventions because children spend half of their waking hours and consume one-third of their daily energy there (Browning, Laxer, and Janssen, 2013). Schools also reach a high number of children, across a variety of socio-economic backgrounds, for over ten years of their lives (Oostindjer et al., 2016). Yet in BC, there is no comprehensive program at the national or provincial level, leaving only a patchwork of school meal programs that fails to meet the needs of hungry and undernourished students (BC Teachers Federation, 2015). This study explores this gap by investigating the potential for expanding school meal programs to provide healthy meals to school children in BC.

This study takes a mixed-method approach to evaluating the potential for expanding school meal programs in BC. A jurisdictional scan provides a baseline understanding of the reach and characteristics of current programs. A case study analysis of three large-scale programs (England, Sweden, Alberta), is used to identify characteristics of successful meal programs, and evaluate various models. Interviews with subject matter experts are used to complement the findings and assess their applicability in the BC context. From these methods, I develop potential policy options, complete a multi-criteria policy analysis and ultimately provide a policy recommendation.

To provide a health promotion lens, the concept of Comprehensive School Health (CSH) is used to guide the analysis of this study. CSH is an international framework that has been adopted by BC to guide policy at the intersection of health and education where school food lies. The CSH framework acknowledges the interdependence of health and education and provides an approach to ensure that benefits from school food policy extend beyond the classroom (Directorate of Agencies for School Health, 2017).

While many are calling for a national school meal program (Food Secure Canada, 2017; Jeffery and Leo, 2007; Collier, 2015), this study focuses on one province because school meal programs fall primarily within provincial jurisdiction. However, the analysis and findings of this study may inform improvements in other provinces and territories as well as a national strategy. The BC government has acknowledged the potential of school meal programs to improve students' diets, academic performance, and long-term health (British Columbia, 2006; British Columbia, nd). The province has invested in nutrition programs and nutrition education through several avenues, but a gap remains. This study investigates the policy problem: too many children are going hungry at school and have inadequate nutrient intake.

Chapter 2. Background and Policy Context

2.1. The Need for Food in BC Schools

There are both acute and long-term needs for food in BC schools. A large majority of teachers (80%) report having students in their classrooms that come to school hungry and that do not bring any lunch or snacks (BC Teachers Federation, 2015, p6). Teachers report that inadequate food leads to students having difficulty concentrating, feeling tired, and having less control over behaviour. In response, 40% bring food for hungry students. Teachers spend an average of \$30 of their own money per month, amounting to \$3.85 million per year across the province (BC Teachers Federation, 2015, p9, p14).

On a broader level, there are many children who are not necessarily hungry, but whose diet while at school is still inadequate. A Vancouver-based study finds that less than half of students report consuming fruits (49.6%), vegetables (42.3%), whole grains (34.7%), and low-fat milk (46.3%) during the school day. Unhealthy foods are commonly consumed, with 17.2% reporting consumption of fast food, 20.3% consuming minimally nutritious packaged snacks, and 31.4% drinking sugary beverages (Ahmadi, Black, Velazquez, Chapman and Veenstra, 2015). Diet quality decreases as students graduate to secondary school. While elementary and secondary students consume the same amount of healthy foods, secondary school students are significantly more likely to consume unhealthy foods, including fast food, sugary snacks and drinks (Velazquez, Black, Billette, Ahmadi, and Chapman, 2015).

2.2. Potential Benefits of School Meal Programs

There is evidence that both breakfast and lunch programs can improve diet quality. A US study finds that children with access to a school breakfast program have a healthier diet during the school year than over summer break, with the breakfast program leading to reductions in calories from fat, reduction in probability of low fibre, iron, potassium, and other mineral and vitamin deficiencies (Bhattacharya, Currie, and Haider, 2006). School breakfast programs also have the benefit of improving attendance and decreasing tardiness (Taras, 2005).

School lunch programs have also been shown to provide better nutritional value than lunches brought from home, especially for children from low-income families. A US study finds that children who eat school-provided lunches consume significantly lower calories per gram, fewer grams of carbohydrates, fewer grams of total fat, fewer added sugars, and fewer calories over all. Low-income students who do not participate in the school meal program have the lowest nutritional quality, consuming 60% more energy, 66% more carbohydrates, 58% more fat, and less than half the amount of fruit as school meal program participants (Vernarelli and O'Brien, 2017). A meta-analysis of seven studies from the UK comparing the nutritional content of school-provided lunches, to packed lunches from home, supports these results. The analysis shows that intakes of carbohydrate, sugar, saturated fat, and sodium are consistently higher in lunches brought from home or other sources. Like the US study, students in low-income neighbourhoods who do not eat the school-provided lunch consume the lowest nutritional quality (Evans, Cleghorn, Greenwood, and Cade, 2010).

Regular participation in school meal programs also provides opportunities to socialize with peers, and has been shown to strengthen social ties, lower conflict, and reduce peer victimization. A study about social opportunities provided by breakfast clubs and after-school clubs finds that breakfast clubs have significant effects on levels of companionship, closeness, help, and feelings of security relative to after-school clubs. The authors explain that "there is a possibility that the non-competitive nature of the [breakfast club] environment helps to facilitate children's relationships because there is no focus on achievement or competition between children" (Defeyter, Graham, and Russo, 2015). Social benefits are especially important for low-income children who experience higher levels of exclusion, anxiety, and social insecurity (Ridge, 2011).

School meal programs also have the potential to influence life-long health improvements through promoting healthy eating behaviours and teaching food literacy. Eating habits are improved by repeatedly exposing children to new and healthy foods (Sullivan and Birch, 1990; Wardle, Herrera, Cooke, and Gibson, 2003), and by peer and adult modeling of healthy eating (Dowey, 1996). Food literacy is promoted through reinforcement of nutrition lessons from the classroom, introducing other food systems topics, and teaching food preparation skills (Oostindjer, et al., 2016). One US study compares highly developed school meal programs (cooking and garden classes integrated with classroom lessons and improvements to food environment) and lesser

developed school meal programs (no cooking and gardening classes) and finds that the highly developed programs have a greater impact, but both affect children's knowledge, attitudes, and behaviour regarding food (C., and Atkins, 2010). Advocates also suggest that school meal programs contribute to larger societal objectives of breaking cycles of poverty, reducing inequality, and economic growth (World Food Programme, 2017).

2.3. Policy Context and Current Programs

School food is at the intersection of health and education policy, which are both provincial jurisdiction. The health and education systems are implemented through regional organizations: in health, through five regional health authorities, and in education, through 60 school districts. This regionalization leads to decentralized governance, in which school districts and their individual schools have autonomy to develop and implement school policies, with high-level policy direction from the province.

School districts and individual schools currently play the largest role in delivering school meal programs in BC, with funding from the province, charitable donations, and parents. Provincial funding is delivered through CommunityLINK (Learning Includes Nutrition and Knowledge), administered by the Ministry of Education. CommunityLINK allocates approximately \$63 million¹ throughout the 60 school districts each year "to support academic achievement and social functioning of vulnerable students" (British Columbia, 2017). Funding is determined by a formula that considers various vulnerability indicators.² School districts have autonomy to design and implement programs in collaboration with their schools; however, only a portion of this funding is spent on meal programs. Between the 2010/2011 and 2015/2016 school years, approximately 25% (\$16 million) was spent on food programs per year. This figure jumped to 38% (\$24 million) in the 2016/2017 year (Breuhan, 2018).

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¹ \$52 million is CommunityLINK base funding, and an additional \$11 million was added beginning in 2012 through the Vulnerable Student Supplement in response to changing demographics
² In determining which students may be vulnerable, school districts may consider: low income measures; involvement with the provincial social service ministries and related agencies; community socio-economic demographics; information obtained through community mapping; and other relevant information including staff observation and self-identification.

In addition to funding, the provincial government provides two guidance documents to support meal programs: *Guidelines for Food & Beverage Sales in BC Schools* and the *School Meal and School Nutrition Program Handbook*. The former provides mandatory nutritional guidelines that govern what foods can be sold and served in schools.³ The latter provides principles, best practices, meal planning suggestions, and food safety information. Allergy considerations and policy are covered by a variety of guidance documents available from the Ministry of Education.⁴

A 2015 survey by the BC Teachers Federation (BCTF) finds that 71% of schools provide some form of meal program, ranging from occasional snacks to full meal programs. The most common type of program is the BC School Fruit and Vegetable Nutrition Program (BCSFVNP), which provides fresh snacks on 12 occasions per year and is offered at 56% of schools. Lunch programs are available at 44% of schools, breakfast programs at 43%, and snack programs at 29%. In some cases, food is offered just one or twice a week or on an as-needed basis. Teacher comments on the survey indicate that CommunityLINK funding is insufficient as the programs frequently need additional support (BC Teachers' Federation, 2015). The jurisdictional scan in Chapter 5 provides a more in-depth examination of existing school meal programs.

The provincial government indirectly supports food in schools through Farm to School BC and the BCSFVNP. Both programs are delivered by non-profit organizations and receive additional funding from non-government sources. Building on the international Farm to School brand, Farm to School BC is an initiative of the Public Health Association of BC (PHABC), a non-profit, non-government organization funded by its members and by the Ministry of Health. Farm to School BC does not directly deliver meal programs in most cases but provides grants to schools that can be used for activities that complement them. The BCSFVNP is funded by the Ministry of Agriculture and delivered by the non-profit BC Agriculture in the Classroom. Both programs are discussed further in Chapter 5.

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³ Fresh food is scored as "Sell" or "Do Not Sell", while packaged foods is scored as "Sell Most", "Sell Sometimes", and "Do Not Sell" (British Columbia, 2013)

⁴ See https://dsweb.bcsta.org/docushare/dsweb/View/Collection-7655

Chapter 3. Comprehensive School Health

To provide a health promotion lens, the concept of CSH is used to guide the analysis of this study. Based on an internationally accepted framework developed by the World Health Organization⁵, CSH takes a holistic approach to health in schools with the goal to improve both healthy behaviours, and education outcomes. CSH acknowledges the complexity of health and the interventions designed to improve health. It recognizes that health is not simply taught in the classroom; that to be successful, such lessons must be reinforced through a variety of activities and relationships in the school environment (Healthy Schools BC, nd).

The BC government (Directorate of Agencies for School Health, 2017) defines CSH through four interrelated pillars:

- 1) **School policies**: Includes considerations related to policies and rules at all levels of governance that influence the school environment and student health.
- 2) Relationships and environments: Includes considerations related to the physical environment such as buildings and equipment, as well as the social environment, such as relationships and emotional wellbeing.
- Teaching and learning: Includes considerations related to formal and informal learning opportunities that build knowledge and skills related to health.
- 4) **Community partnerships**: Includes considerations related to connections between the community and the school, including parents, community organizations, health professionals, and others.

The motivation for using CSH as an evaluative framework in this study is twofold. First is the practical value; the framework has been shown to improve effectiveness of health interventions in schools (Stewart-Brown, 2006), and has been adopted by BC. The second is philosophical; it provides a tool to think about school meal programs in a more holistic way, to respect the complex role that food plays in our lives, to give standing to the diverse characteristics that contribute to success in a meal program, and

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⁵ Known internationally as Health Promoting Schools

therefore, to conduct analysis that connects the dots between policy and reality, and between children and health.

Chapter 4. Analytical Methodology

4.1. Jurisdictional Scan

The jurisdictional scan establishes the baseline of existing programs in BC and explores their characteristics and gaps. It includes two sections: a scan of district- and school-level programs and a qualitative overview of major NGOs.

4.1.1. BC School District Website Scan

The website for each district was reviewed and searched for mention of a school meal program using the terms "meal", "breakfast", and "lunch". If no mention was found, then 5-7 school websites chosen randomly from the district were visited and a review and search were conducted. In addition, a Google search was performed for each district. Districts were recorded as having a district-wide daily school meal program, at least one school with a daily program, at least one school with a part-time program⁶, or no online mention of a program. The type of meal was recorded (breakfast or lunch) and when possible, use of charity support and/or payment recovery from parents was recorded.

A limitation of the scan is that it was completed using online sources only and no districts or schools were contacted. In addition, visiting the webpage of every school was not feasible, therefore this method does not offer an exhaustive list or tally of every school meal program, and may underestimate the number of districts with school meal programs.

4.1.2. Overview of Major Non-Governmental Organizations

The qualitative overview of NGOs was completed using publicly available literature. The overview includes information about reach, funding, program mandate, and the organization's approach to supporting school meal programs in BC.

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⁶ Part-time program is defined as at least one school in the district has a school meal program that provides meals for free or at a reduced cost that is not run every day

4.2. Case Studies

Three case studies are analyzed to explore the successful characteristics of large-scale school meal programs and evaluate different models. Case studies analyzed include England, Sweden, and Alberta. Table 4-1 provides an overview of the selection criteria.

Table 4-1 Case Study Selection Criteria

Jurisdiction	School Meal Program Model	Level of Development	Level of Inequality	Education and Health Governance
British Columbia	None	High	2015 Gini Index= 31 ¹	Federal Parliamentary system, governance of education and health decentralized to school districts
England (United Kingdom)	Available to all children, free for low-income	High	2017 Gini Index = 36 ²	Central Parliamentary system, governance of education and health decentralized to "County Councils"
Sweden	Available and free for all children, regardless of income	High	2017 Gini Index = 28 ²	Central Parliamentary system, governance of health decentralized to regional government, education decentralized to local authorities
Alberta	Subsidy to school districts, available mostly to low-income	High	2015 Gini Index= 34 ¹	Federal Parliamentary system, governance of education and health decentralized to school districts

¹ Statistics Canada. Table 206-0033 - Gini coefficients of adjusted market, total and after-tax income, Canada and provinces, annual, CANSIM (database). (accessed: December 13, 2017)

Cases are analyzed based on descriptive characteristics and their ability to deliver in the four pillars of CSH. Table 4-2 outlines the framework for analysis and defines qualitative measures to evaluate them.

² OECD (2018), Income inequality (indicator). doi: 10.1787/459aa7f1-en (accessed: 18 February 2018)

 Table 4-2
 Case Study Evaluation Framework

	Characteristic	Measure
Descriptive Characteristics	Program Structure	How is the program structured?
	Access/Eligibility	What are the criteria for students to access or be eligible for the program?
	Meal(s) Served	Does the program serve breakfast, lunch, snacks or a combination?
	Funding level and source	What is the funding level and source?
	Reach	How many students does the program reach?
	Participation Rate	What is the participation rate of students?
CSH 1. School Policies	Legislation	Is the program shaped by legislation?
Folicies	Nutrition	Is the program aligned with nutrition guidelines and/or policies?
	Small/Remote Schools	Does the program address unique needs of small and remote schools?
	Food preferences	Does the program involve policies to account for food preferences and dietary restrictions?
CSH 2. Relationships and	Modes of Delivery	Does the program support various modes of program delivery? (Acknowledging various levels of infrastructure)
Environment	Program Location	Is there a welcoming and inclusive space for children to eat?
	Social Environment	Does the program provide space and opportunity for social interaction?
	Stigma	Does the program involve strategies to minimize stigma?
CSH 3. Teaching and Learning	Nutritional Lessons	Does the program include educational content about healthy nutrition?
	Healthy Behaviour Lessons	Does the program include opportunities for school staff to model healthy food choices and behaviour?
CSH 4. Community	Volunteers/Parents	Does the program engage and train volunteers and parents?
Partnerships	Charity Involvement/Donations	Does the program include funding from or partnerships with charities or donations from other community sources?
	Partnerships	Does the program include partnerships with community organizations?
	Community Capacity Building	Does the program build capacity within the community?

4.3. Expert Interviews

Expert interviews are utilized to complement the findings of the jurisdictional scan and case study analysis, as well as assess the applicability to the BC context. Interviews

were conducted with seven individuals who have expertise in school food policy, school food implementation, and the BC school system. Interviewees are:

- Josée Desjardins, Vice President, Western Canada and Ontario, Breakfast Club of Canada
- Richard Han, Provincial Manager, Farm to School BC, Public Health Association of BC
- Mary McKenna, Professor, Faculty of Kinesiology, University of New Brunswick
- Margo Riebe-Butt, Executive Director, Nourish Nova Scotia / Professional Dietician
- Vicky Baker, Working Group Member, Children and Youth Working Group, Vancouver Food Policy Council
- **Brent Mansfield,** Teacher, Vancouver School Board / former Director of BC Food Systems Network
- Sasha McNicoll, Coalition for Healthy School Food Coordinator, Food Secure Canada

Chapter 5. Jurisdictional Scan

5.1. BC School District Scan Results⁷

5.1.1. Existing Program Reach

The BC school district scan finds that 45 of the 60 school districts or 75% have a school meal program, as shown in Figure 5-1. Ten have district-wide programs, defined as all schools in the district have a program offering breakfast, lunch, or snacks daily for free or at a reduced cost.⁸ Thirty-three districts have at least one school with a daily meal program, two have a part-time meal program, and 15 districts have no online mention of meal programs. Schools that have a paid-only meal service are considered to have no mention of a program, although some of these schools may informally offer food support to vulnerable children.

District-wide Program

At least 1 school in District

Part-time Program Only

No online mention

Figure 5-1 Number of Districts with School Meal Programs by Type

School meal programs tend to reach a small proportion of the total student body. For example, in Vancouver, 16% of students participate in a meal program (Vancouver School Board, nd). In Southeast Kootenay, the breakfast program reaches 12% of

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⁷ Full results and sources are found in Appendix A

⁸ In all cases, daily programs are not necessarily available to all children.

students⁹. In Victoria, 5% of students receive food support¹⁰. Several districts and schools state on their websites that available resources are too low to provide food support to all students in need (Johnson, 2017; Surrey Schools, 2016).

Figure 5-2 shows the percentage of school districts in each regional health authority area with a school meal program in at least one school. The interior region has the highest proportion (94%), followed by Vancouver Island (83%), Fraser (73%), Vancouver Coastal (63%), and the North region has the lowest proportion of districts with school meal programs (60%). There is also regional variation in the location of school districts with district-wide programs. Although they are split between the Vancouver Coastal and Fraser regional authorities, 6 of the 10 are in the greater Vancouver area: Vancouver, Burnaby, North Vancouver, Abbotsford, Surrey, and Coquitlam.

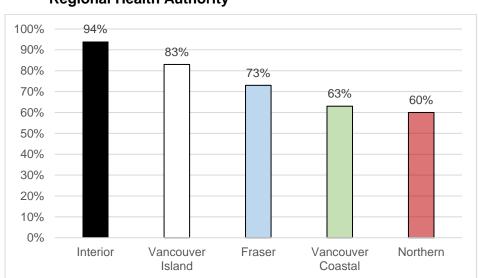


Figure 5-2 Percentage of School Districts with School Meal Program by Regional Health Authority

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⁹ Author calculation based on 700 students participating in the breakfast program (Johnson, 2017) and a total of 5474 students enrolled in the 2016-2017 year

¹⁰ Author calculation based on 1000 lunches served daily (Greater Victoria School District, nd), and a total of 20,002 students enrolled in the 2016-2017 year

5.1.2. Existing School Meal Program Characteristics

The BC jurisdictional scan provides insight to the characteristics of existing school meal programs, including whether lunch or breakfast is offered, and their funding sources. Themes regarding organizational structure, infrastructure and mode of delivery are also described.

Breakfast and lunch programs are found in an equal number of districts: 38 districts have at least one school with a daily breakfast program, 38 districts have at least one of each (in some cases at the same school, in others at different schools). Availability is different in each district. For example, Quesnel school district has a lunch program available for students in need at every school (Quesnel Junior School, nd), and nine of their schools also offer breakfast in collaboration with Breakfast Club of Canada (School District 28, 2014). In Okanagan Similkameen school district, each school is unique. One elementary school has universal free breakfast and a paid hot lunch program in which parents are invited to sponsor children in need (Cawston Elementary, 2018), while another school has just a minimal breakfast program of muffins and orange juice (Osoyoos Secondary, nd).

Few of the districts with school meal programs rely solely on CommunityLINK funding. Thirty-five districts (81%) have programs that cite charity funding sources. These include the major organizations discussed further in section 5.2, community-based organizations, and direct donations. Partnerships with local farmers, restaurants, and grocers are also common. Less than half of districts (46%) have programs that utilise a cost-recovery scheme, in which parents pay full or reduced-cost (ranging from \$1 to \$6 per meal). Some schools distribute a "pay what you can" form to parents, while in other cases parents must speak to the school principal to request free or reduced-cost meals for their child.

Three general organizational structures were found in the scan: 1) designed and delivered by the district; 2) designed and delivered by individual schools, and; 3) designed and delivered with NGO involvement. For example, Vancouver has a district-run program that categorizes schools into three tiers based on the number and proportion of vulnerable students and offers different levels of food support to each tier

of school. More common is for individual schools to design and deliver their own programs. For example, Powell River school district has food available for vulnerable children at every school, but each school manages their own needs with support from parents, the community, and the Tla'amin First Nation. Haida Gwaii is an example of a program designed and delivered with NGO involvement, with a version of Farm to School in every school. In other examples, such as in Sooke and Saanich, and Cowichan Valley, local charities were created to provide meals in schools (KidsKlub Charity and Nourish Cowichan Society).

BC school districts have varying levels of infrastructure to provide meals, therefore the mode of delivery also varies. Some schools have industrial kitchens and cafeterias, allowing service of hot meals and a la carte items. Others have smaller kitchens allowing preparation of some hot meals or cold meals only, while some have no kitchen facilities. When meal preparation is not possible on site, food is prepared at another school or community facility. Schools without cafeterias serve meals in classrooms or multi-purpose rooms or ask vulnerable students to pick up bag lunches or breakfast items from a central location. In some cases when infrastructure is lacking, relationships with community businesses, such as cafés and grocery stores, eliminate the need for food preparation on site.

5.2. Major Non-Governmental Organizations

This section provides an overview of the major non-profit and charitable organizations operating in BC. These include: Breakfast Club of Canada, President's Choice Children's Charity, Farm to School / Farm to Cafeteria, and the BC School Fruit and Vegetable Nutritional Program.

5.2.1. Breakfast Club of Canada

The Breakfast Club of Canada is a national organization providing breakfast in schools across the country. In BC, the programs reach 6,000 children in 132 schools (Breakfast Club of Canada, 2016a). The mandate for providing breakfast is rooted in food insecurity and equity concerns, with the goal to ensure that all students have the nutrition they need to learn and reach their full potential (Breakfast Club of Canada, 2016b).

Breakfast Club of Canada supports schools by providing funding, kitchen equipment, training, tools, and food donations. To be eligible, applicants must demonstrate that the breakfast program is available daily for all students in the school, promotes healthy eating and positive role modeling, is food safe, financially accountable, culturally appropriate, accommodates allergies, and offers adequate time to eat (Breakfast Club of Canada, 2016c). There is currently a waiting list to receive funding of 132 schools in BC (Breakfast Club of Canada, 2016a).

Breakfast Club of Canada is funded almost exclusively by donations of cash, food, and services, with 2% of funding from government grants. Many large corporate sponsors support the program. For example, Walmart donated \$2 million in 2015-2016. General Mills provides boxes of cereal, the Egg Farmers of Canada donates eggs, and Minute Maid donates orange juice. The programs rely on volunteers, with over 11,500 preparing and serving breakfast across the country (Breakfast Club of Canada, 2016b).

5.2.2. Presidents Choice Children's Charity School Nutrition Grant

President's Choice (PC) Children's Charity is a national organization established by Loblaw's, a major Canadian grocer. After several years as its largest sponsor, the organization acquired Breakfast for Learning, a national charity similar in size and scope to Breakfast Clubs of Canada. In 2016, Breakfast for Learning programs fed 12,251 BC children at 205 schools with a mandate to help children reach their full potential (Breakfast for Learning, 2017).

PC Children's Charity offers two grant streams. School Nutrition Grants are intended to supplement funding of existing programs and can only be used to purchase food and consumable supplies. To be eligible, the applicant program must be available at least 3 days per week, be universal and non-stigmatizing, meals must contain 3 of 4 food groups, and have diverse funding sources (PC Children's Charity, nd). Community Fund grants are available to NGOs operating nutrition programs to children outside of school hours, including education initiatives (PC Children's Charity, nd-b).

5.2.3. Farm to Cafeteria / Farm to School Canada

Farm to School Canada is an initiative of Farm to Cafeteria, a national organization whose goal is to increase sustainability and local foods in the cafeterias of schools, universities, and hospitals, while teaching children about healthy nutrition and the food system. The organization, working with other NGOs in the regions, provides grants and works directly with schools to establish salad bars, hot lunch programs, school gardens and greenhouses, as well as facilitating relationships with local farmers. Providing children with healthy food is a component of the program, but their mandate is focused on food education, promoting healthy eating habits, supporting local agriculture, and protecting the environment (Farm to Cafeteria Canada, 2015). Approximately 25 grants of \$10,000 are awarded in BC per year (Farm to Cafeteria Canada, 2017).

Farm to Cafeteria receives the bulk of its funding from the Whole Kids Foundation, a US charity. In October 2017, the federal government announced \$1.2 million over three years to support the national Farm to School initiative (Farm to Cafeteria Canada, 2017).

5.2.4. Farm to School BC

Farm to School BC is an initiative of the Public Health Association of BC (PHABC), a non-profit NGO, with a mandate to increase access to healthy, local foods in schools, provide students with hands on learning opportunities, and enhance community connectedness. There are 3 regional hubs (Vancouver, Greater Victoria, and Kamloops) through which they work with approximately 90 schools by providing grants, network facilitation, and on the ground support (Han, 2018). Programs differ by school and may not necessarily include food provision. Grants can also be used to build gardens, buy equipment, take children on field trips, or improve physical spaces.

Farm to School BC receives funding from the BC Ministry of Health (PHABC, 2017), as well as their members. The programs rely heavily on volunteers and "champions"; a principal, teacher, or parent who builds a team and drives implementation in the school (PHABC, 2012).

5.2.5. BC School Fruit and Vegetable Nutritional Program +Milk

The BC School Fruit and Vegetable Nutritional Program (BCSFVNP) is a province-wide program that delivers fruit and vegetable snacks to participating schools 12 times per school year. In addition, every grade K-5 student receives a small cup of milk 12 times per year. The mandate of the program is to increase children's acceptability and exposure to fruits and vegetables, increase their availability in schools, increase awareness of local varieties and safe handling practices, and build relationships and capacity in the local community. The program reaches almost every BC student: 549,000 children at 1,464 schools (BCSFVNP, 2017).

The BCSFVNP is funded by the BC Ministry of Agriculture and administered through the non-profit BC Agriculture in the Classroom Foundation. The program is provided at no cost to schools, but is reliant on volunteers, with over 1,241 volunteers assisting in the 2015/2016 school year (BCSFVNP, 2017).

5.3. Discussion and Policy Implications

The jurisdictional scan confirms that a patchwork of school meal programs exists throughout BC, although the programs are inconsistent in their form and mandate. These findings demonstrate there is a recognized need for healthy food to support BC children with significant effort and resources expended to meet this need. The findings support the BC Teacher Federation (2015) research that existing meal programs are not extensive enough to meet the needs of children coming to school hungry or without lunch. Gaps remain as scarce resources are generally directed at only the most vulnerable children, many districts and schools have no meal programs at all, and wait lists for charity support are long.

The results of the scan are also consistent with research that finds the institutionalization of charities in the provision of food to those in need (Rideout et al, 2007; Tarasuk, Dachner, and Loopstra, 2014). Most existing programs cite charity and volunteer support. This is problematic, not only because it may reduce pressure on government to intervene, but also because it places onus on individuals such as teachers, administrators, or parents to seek funding and run meal programs in addition to their regular roles, and funding cannot be guaranteed in the medium-long term.

Existing programs are thus precarious, both dependent on champions who may move on to other jobs or locations and subject to unstable funding.

NGOs currently play a role in meeting the objectives of Comprehensive School Health (CSH). While the Breakfast Club of Canada and PC Children's Charity are more closely aligned with a poverty reduction mandate and the provision of food, Farm to School and the BCSFVNP have health promotion mandates that emphasize teaching children about nutrition and healthy eating. All the major organizations strive to reduce stigma by including all students, encourage positive physical and social environments, promote and model healthy eating habits, and build community relationships and capacity. These organizations assist with the procurement of equipment and facilitation of relationships that enable schools to implement their own health promoting policies. Recognizing and building on the success of these organizations is important for future policy consideration.

The inconsistency among existing programs also has policy implications. With school meals ranging from a basket of breakfast foods in the office, to full hot meals in a cafeteria, BC children are not currently receiving equal levels of support. This is especially true for children in the Northern region, who have the highest level of food insecurity and the lowest proportion of districts with meal programs. Districts and schools also have varying baselines of experience, equipment, infrastructure, and relationships. Policy interventions may therefore be implemented at lower cost and complexity in some areas, but require extensive investment in others.

Chapter 6. Case Study Analysis

This chapter examines the school meal programs in three selected cases: England, Sweden, and Alberta. For each case, the school meal program is described, and actions addressing the four pillars of CSH are outlined. From this analysis, common program characteristics are identified and applications to the BC context are discussed.

6.1. England

6.1.1. Program Description

England uses a commercial model in which schools are expected to recover costs (and ideally profit), through a combination of purchased meals and government transfers. All children between the ages of 5-7, and low-income children thereafter are eligible for free meals. For children older than 7, parents must apply for subsidized meals from the regional authority. If they qualify, a subsidy of £600 (~\$1000 CAD) is paid directly to the school. Eligibility is tied to the benefits system, so parents who receive social security benefits or who have an income below approximately £24,000 can receive free meals for their children (United Kingdom, 2018). Children who do not qualify for free meals can purchase one for an average cost of £2 (~\$3.50 CAD) (Dimbleby and Vincent, 2013).

The program feeds over 3 million children at 20,000 schools, with approximately 1 million children eating for free. This represents approximately 40% of all students—the rest bring lunch from home or purchase lunch off school grounds (Dimbleby and Vincent, 2013, p 7). Low participation is considered a barrier to program success: on average, 50% take up is required to break even (Dimbleby and Vincent, 2013, p7). If a school does not break even, the funding gap is covered by the regional authority or school budget. In 2013, the program operated at a loss of £140 million across the country (Dimbleby and Vincent, 2013, p7).

6.1.2. Comprehensive School Health Pillars

School Policies

The Education Act (1996) and school food regulations introduced in 2015 provide the legal framework for school meals in England. The Education Act stipulates that schools may offer meals and charge students for them, except for children eligible for free school meals (United Kingdom, 1996). Although schools are not obligated to provide meals, fewer than 1% abstain (OC&C Strategy Consultants, 2013, p55). The 2015 School Food Standards are mandatory guidelines that outline recommend servings of food groups, which are considered easier to implement than nutrient-based standards (i.e. recommendations for energy, protein, carbohydrates, etc.) (British Nutrition Foundation, 2018). There is no legal responsibility to accommodate special diets and food preferences, however schools must provide accurate information regarding potential allergens (United Kingdom, 1996). The minimal legal framework leaves most decision-making in the hands of schools leading to a wide variety of school policies and outcomes.

The English school meal program acknowledges that small and remote schools face unique challenges. A Small Schools Toolkit provides advice and resources, and a £2300 grant was made available to small schools in the 2014/2015 school year to be spent at their discretion (Children's Food Trust and Lead Association for Catering in Education, nd).

Relationships and Environment

The physical environment varies across English schools, both in the mode of delivery, and the space where children eat. There are four main modes of delivery. Most commonly, the school contracts service to the local education authority, who delivers meals through an in-house provider (food is prepared at a central location, or in the individual school, with staff reporting to the local authority). Alternately, the local authority hires a private contractor, the school hires a private contractor directly, or, least commonly, the school provides their own in-house service (OC&C, 2013). The dining area ranges from newly renovated canteens, to halls, to classrooms. Dining location is identified as an area for English schools to improve (Dimbleby and Vincent, 2013; Sahota, Woodward, Molinari, and Pike, 2014).

The social environment also varies. The schools considered to have the most successful meal programs take this into account, ensuring that all children can sit together (not segregating children who eat school meals from children who bring lunch), and have a long enough lunch break to allow for eating and other activities (Dimbleby and Vincent, 2013). Avoiding segregation is also critical to reduce stigma, as are cashless payment systems, so that students who receive free meals are not singled out (Dimbleby and Vincent, 2013; Sahota et al., 2013).

Teaching and Learning

Teaching and learning of cooking and proper nutrition are institutionalized in the English school system through mandatory curriculum. Curriculum includes the principles of a healthy diet, where food comes from, cooking a variety of dishes, and using a variety of techniques and equipment (Department for Education, 2013). Such curriculum may create opportunities for school staff to model healthy food choices and behaviour, however this is not formalized in the meal program and outcomes vary. In every school considered to have good food culture by a 2013 review (Dimbleby and Vincent), teachers regularly eat with the students, and this practice is recommended to all schools.

Community Partnerships

Community partnerships exist but are not a hallmark of the English school meal program. On a large scale, Magic Breakfast and the School Farms Network are two charitable organizations working with schools across the country. Magic Breakfast provides free, or low-cost, breakfasts to schools with high percentages of low income children (Magic Breakfast, 2016). The School Farms Network works with schools to establish gardens and provide information and peer-support to teachers (Federation of City Farms & Community Gardens, 2015). On a smaller scale, some schools rely on community volunteers in the day-to-day delivery of their school meal programs or procure local food products through community partnerships (Dimbleby and Vincent, 2013).

6.2. Sweden

6.2.1. Program Description

Sweden uses a universal model which considers school meals as part of the social security and education systems, not as a poverty reduction strategy (Gullberg, 2006). All students between the ages of 6 and 15 are entitled to a free lunch every day, and most students between 16 and 19 also receive a free meal (National Food Agency, Sweden, 2015). The program is wholly funded by taxes from both the national and local level with a cost of approximately 5900 SEK (\$900 CAD) per student per year (National Food Agency, Sweden, 2015).

The program feeds approximately 1.6 million students, with a participation rate of approximately 90% (Osowski, Lindroos, Barbieri, and Becker, 2015, see Table 1). It is rare for Swedish schools to have vending machines or shops to compete with school meals, and there is no tradition of bringing a packed lunch (Osowski, Lindroos, Barbieri, and Becker, 2015).

6.2.2. Comprehensive School Health Pillars

School Policies

The Education Act (2010) provides the legislative framework for school meals in Sweden, which is supplemented by nutritional recommendations and program guidelines. The act states that school meals must be nutritious and free but does not define nutritious. Instead, schools are expected to adhere to the Nordic nutritional recommendations: nutrient-based guidelines that also prescribe serving sizes (National Food Agency, Sweden, 2013). National school meal guidelines outline six areas for schools to address to provide high quality meals: nutritious, safe, sustainable, tasty, pleasant, and integrated (meals as a resource for educational activities). There is a legal requirement to provide meals to children with special diets, including allergies and hypersensitivity. Although this does not extend to preferences, it is common for schools to prepare vegetarian options (National Food Agency, Sweden, 2013). The unique needs of small and remote schools are not addressed in the policy framework.

Relationships and Environment

The physical and social environment of Swedish schools is fairly consistent across the country. National guidelines suggest that schools consider design, temperature, smells, and sounds of the room to make it a pleasant experience (National Food Agency, Sweden, 2013). Most schools have a kitchen and dining hall, and there are only two main modes of delivery. At 66% of schools, all food is made in the school's kitchen. At 25% of schools, hot dishes are delivered and side dishes are made on-site. At 8% of schools, all food is delivered (Patterson, Lilja, and Elinder, 2011). Food that is delivered may be prepared by a private contractor, or by the municipality at a central location (National Food Agency, Sweden, 2015).

Stigma does not appear to be an issue in the Swedish meal program. As a country with a strong social welfare state, school meals have a place in the country's culture (Gullberg, 2006).

Teaching and Learning

There is a long-established culture of schools in Sweden taking a holistic view of educating children, going beyond the transfer of knowledge to teach children how to be good, healthy citizens (Gullberg, 2006). Within this culture, school meals are considered a pedagogical tool with high potential to teach children about healthy nutrition and eating habits, and school staff act as role models for healthy behaviour (Osowski, 2012). Approximately 90% of teachers eat lunch with the children one or more days per week, and 30% of teachers are required by management to eat in the school dining room (Waling and Olsson, 2017, p 545).

Community Partnerships

Community partnerships are not a feature of the Swedish school meal program and are not addressed in the national guidelines. However, some schools pursue relationships independently. For example, one school in Älmhult brought their students to tour a meat processing plant and farm, after which the students helped to produce a meal for the entire school (TrySwedish, nd).

6.3. Alberta

6.3.1. Program Description

The Alberta school meal program began as a pilot project in the 2016-2017 school year with 14 school districts and was expanded to all 62 school districts for the 2017-2018 year. The program model is a contribution from the provincial government to the school district with minimal policy guidance. Programs must provide one nutritious meal per day, with an emphasis on reaching the most vulnerable children. Each district determines the type of meal, if it is universal or targeted, and how it will be delivered according to the needs and resources available. In the pilot, each participating school district received \$250,000 for the year, and the program reached approximately 5000 students. In the expanded program, the pilot districts receive \$250,000, while every other district receives \$141,000 (Alberta Government, 2017). The program is expected to reach 21,000 students at 200 schools, at a cost of \$10 million (Alberta School Council's Association, 2018).

6.3.2. Comprehensive School Health Pillars

School Policies

The policy framework for the Alberta school meal program consists of conditions associated with the funding, and the Alberta Nutrition Guidelines for Children and Youth. To receive the grant, schools must demonstrate effective financial management, adhere to nutritional guidelines, and provide opportunities for students, teachers, and parents to learn about reading food labels, the choice and preparation of healthy foods, and access to Alberta's food resources (Alberta Government, 2017). The Alberta Nutrition Guidelines for Children and Youth provide food group-based nutrition recommendations, food safety standards, and actions to promote healthy food choices. The guidelines address allergies by advising schools to provide ingredient lists and labelling foods that contain common allergens (Government of Alberta, 2012).

Relationships and Environment

The physical and social environment differs across districts and schools, with each tailoring the program to their specific needs. More districts are working with outside

vendors than are preparing food in-house, although within single districts, there are at times multiple modes of delivery. This leads to very different eating environments. For example, in the Calgary district, one school serves the meal in a central room, while another school distributes food to the children who eat in their classroom.

These physical environments also create unique social environments. The Calgary school that eats in a central room invites parents to join, and finds that some of the most marginalized parents, who would not otherwise participate in the school community, attend. New opportunities for relationships are thus created. The classroom model may also provide social opportunities, as teachers at the school integrate breakfast into daily classroom activities (Alberta Government, 2017).

To address stigma, many schools involved in the pilot offered universal programs at 1-3 schools. However, several districts offered meals to vulnerable students only at a larger number of schools. Strategies to reduce stigma in these cases include placing the lunch in the child's locker or running a 'fun club' to encourage a positive atmosphere during the meal (Alberta Government, 2017).

Teaching and Learning

Participating schools are required to include a nutrition education component. Each school in the pilot program took their own approach, leading to many innovative ideas. For example, one district initiated family cooking lessons. Another created a food safety course for grade 6 students to involve them in the program delivery and highlight nutrition issues. One school is integrating the use of technology and math by having the students administer a survey on meal preferences. Often, the educational component is organic, introduced through conversations at various points in the program; however, this leads to inconsistent outcomes as some schools teach about table setting and manners, some about food culture and the emotional connection with food, and others about body image (Alberta Government, 2017).

Community Partnerships

Community partnerships figured prominently in the Alberta meal program pilot, and are emphasized as a component of the program, although each of the districts utilized partnerships differently. In some cases, parents and student volunteers played a key role in preparing, serving, and cleaning up after meals. In other cases, relationships

with grocery stores and caterers were instrumental for reducing costs and solving logistical problems. In several cases, the funding was used to leverage existing knowledge and networks to enhance programs with the Breakfast Club of Canada or other local NGOs. The pilot also produced examples of connecting with farms and greenhouse operators, local First Nations, and in one case, a community retirement home (Alberta Government, 2017).

6.4. Summary and Analysis

Overall, the three jurisdictions have quite different meal programs that vary in their ability to deliver on the four CSH pillars. A summary of the program characteristics appears in Table 6-1. A checkmark (\checkmark) indicates that the criteria is met, while a circle (O)indicates that there are variable outcomes within the jurisdiction, but that it is often met or emphasized in policy documents.

6.4.1. Characteristics of Successful Meal Programs

The characteristics present in all three cases are: the programs align with nutritional guidelines, accommodate various modes of delivery, and perform well in the Relationships and Environment, and Teaching and Learning categories. This suggests that the model itself is not an important indicator of program success, and that any of the three models (or combination of models) could be applied successfully in the BC context. However, the English model suffers from low participation, and the 50% take up needed to break even may not be achievable in some BC districts. 11 Sweden's universal model meets most criteria consistently, while the programs in England and Alberta have more variable outcomes. However, the majority of Swedish schools have in-house kitchens, and there are cultural aspects, including social democratic principles, contributing to its success which are not currently present in BC. Community partnerships are less extensive in England and Sweden, but figure prominently in the Alberta program.

¹¹ In the Vancouver school district, minimum 125 students are required to recover operational costs (Vancouver School Board, 2015)

All three jurisdictions approach school meals as a holistic intervention that goes beyond providing food. Positive physical space, social opportunities, educational activities, and role modeling were emphasized in all three cases. This supports the value of using a comprehensive approach to meal programs in BC and addressing the CSH pillars in any future policy.

The case studies find significant variation *within* each jurisdiction. In several instances, it is not possible to conclude whether a criterion is met, because some schools in the jurisdiction perform well, while others do not. When a criterion is consistently met, there are still examples of schools achieving success in vastly different ways. These variable outcomes appear to be a symptom of decentralized governance: delegating program design and delivery to regional authorities and individual schools empowers them to meet their individual needs, but also leads to inconsistent outcomes. Many aspects of CSH are initiated and implemented locally, and policy cannot always mandate their existence.

Due to this high inconsistency, centrally produced resources play a critical role in supporting successful programs at the local level. All three jurisdictions have centrally produced guidelines that include nutritional expectations and cover various aspects of the CSH pillars¹². England and Sweden also have online hubs that are used to share resources, success stories, and provide assessment tools. The jurisdictional scan (Chapter 5) suggests that in BC, there is likely no one-size-fits-all approach. Thus centrally produced resources including guidelines, checklists, best practices, as well as coordination staff, and an online hub for sharing successes, challenges, and networking could be critical to delivering a school meal program with consistent outcomes that meet the objectives of CSH.

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¹² In Alberta, these come in the form of Nutritional Guidelines and an overview of the 2016-2017 pilot

Table 6-1 Summary of Case Study Characteristics

Characteristic	Measure	England	Sweden	Alberta
Descriptive Characteris	stics			
Program Structure	How is the program structured?	Commercial model	Universal benefit	Subsidy to school district
Access/Eligibility	What are the criteria for students to access or be eligible for the program?	All students have access, free for low-income and ages 5-7	All students have access for free	Varies by district
Meal(s) Served	Does the program serve breakfast, lunch, snacks or a combination?	Primarily lunch	Primarily lunch	Varies by district
Funding level and source	What is the funding level and source?	Subsidy from central government to schools (~\$1000 per low income student per year), plus payment from students	Subsidy from central government to municipality (~\$900 per student per year)	Subsidy from provincial government to school district (\$250,000 or \$141,000 per district per year)
Reach	How many students does the program reach?	3 million children, 1 million eat free	1.6 million children	5000 children
Participation Rate	What is the participation rate of students?	~40%	~90%	Less than 1%
CSH 1: School Policies				
Legislation	Is the program shaped by legislation?	✓	✓	
Nutrition	Is the program aligned with nutrition guidelines and/or policies?	✓	✓	✓
Small/Remote Schools	Does the program address unique needs of small and remote schools?	√		
Food preferences	Does the program involve policies to account for food preferences and dietary restrictions?		√	

Characteristic	Measure	England	Sweden	Alberta
CSH 2. Relationships a	and Environment			
Modes of Delivery	Does the program support various modes of program delivery? (Acknowledging various levels of infrastructure)	✓	✓	✓
Program Location	Is there a welcoming and inclusive space for children to eat?	0	✓	0
Social Environment	Does the program provide space and opportunity for social interaction?	0	✓	0
Stigma	Does the program involve strategies to minimize stigma?	0	✓	✓
CSH 3. Teaching and L	.earning			
Nutritional Lessons	Does the program include educational content about healthy nutrition?	✓	✓	0
Healthy Behaviour Lessons	Does the program include opportunities for school staff to model healthy food choices and behaviour?	0	✓	0
CSH 4. Community Par	rtnerships			
Volunteers/Parents	Does the program engage and train volunteers and parents?			0
Charity Involvement/Donations	Does the program include funding from or partnerships with charities or donations from other community sources?	0		✓
Partnerships	Does the program include partnerships with community organizations? (such as community gardens, farms or companies)	0	0	√
Community Capacity Building	Does the program build capacity within the community?	0		0

Chapter 7. Interview Findings

7.1. Reaching the Full Potential: Universality, an Integrated Approach, and Attractiveness to Children

Interviewees were asked how they would rate the potential for school meal programs to address food insecurity and poor nutrition in schools. Overall, interviewees indicated a high potential, but most interviewees drew a clear distinction between the two parts of the question. They argued that school meal programs can play an important short-term role for food-insecure children, but that the underlying causes of food insecurity must also be addressed through income security. Interviewees expressed that the greater potential for school meal programs is related to the second objective: improving the nutrition and food literacy of all children. As teacher Brent Mansfield explained:

It's not just about my two students that are on the bagged lunch program because they're below a certain socio-economic index. No, it's about all of the students. The quality of the food that they're all eating is pretty low. This is an issue for the whole population, it's not just about food insecurity and poverty, although that's layered on top.

Universality was the most consistent theme across interviews. The primary reason cited for is to reduce stigma, as targeted programs were considered to alienate those who most need it. Universality is also central to the idea that school meal programs can benefit all children regarding hunger, nutrition, and educational opportunities. As Vicky Baker, member of the Children and Youth Working Group of the Vancouver Food Policy Council stated:

It's a priority that vulnerable kids eat, but at the same time, you're not addressing the larger problem of poor nutrition if only a few kids participate. It's better to have a universal program because it can provide benefits far beyond food and nutrition.

Josée Desjardins of the Breakfast Club of Canada also felt strongly about universality, adding that hunger is not limited to children with low socio-economic status:

Even schools that don't "need" a meal program will benefit ... it brings people together, creates a happy atmosphere, facilitates social interaction and there's less bullying. Just because a kid needs breakfast

doesn't mean there's no food in the fridge at home. Sometimes kids have had breakfast at 6am so by 9, they're hungry again. Maybe they had a long bus ride or sports practice in the morning. Maybe they had a bowl of cereal but no fruit or whole grains. Or maybe they're just growing. There are a lot of reasons why kids are hungry.

Several interviewees noted that universality does not always mean that the program is offered at no cost to all, but that it should be available for all. However, if some are paying and others are not, it is important to maintain privacy of those receiving free meals to reduce stigma. Others noted that even when programs are universal, the number of students accessing them will differ by school and is significantly less than the whole student population. Breakfast Club of Canada programs have approximately 20% participation and Nourish Nova Scotia programs have approximately 25%.

Interviewees consistently expressed that in addition to providing healthy food, school meal programs have potential to teach food literacy, build life-long healthy habits, and provide educational opportunities in a wide variety of topic areas. These include: social relationships and bonding with other children and adults, sense of belonging, body image, informed consumption, food systems and supply chain, local and native plants, agriculture and gardening, foods from other cultures and cultural sensitivity, food safety, etiquette, cooking skills, food waste and recycling, sustainability, and social justice. Professor Mary McKenna explained:

Schools miss an opportunity by relegating food to a peripheral place... I think the school cafeteria is equivalent to the school library. You put books in a school library to foster a love of reading and an appreciation of words, you try to find quality books that are going to contribute to the students' appreciation of that. Well a school cafeteria can equally be a resource for learning. It can be an opportunity to eat food that is going to taste good, be healthy and help you explore that part of life... It's getting better in some places, but it's still an under-utilized aspect of school

Interviewees expressed a need to take an integrated, or whole school approach to school meal programs, confirming the value that applying the concept of CSH to school meals could bring to BC. This idea was described in a variety of ways, including integrating food into school curriculum, using the "hidden curriculum" of school actions, creating hands on learning opportunities, connecting to the larger community, and involving students in a meaningful way in program implementation. Brent Mansfield explained:

If there was my dream version of school food plopped into schools tomorrow, and there wasn't a coordinated educational effort on the other side, most kids wouldn't eat it. If you get kids involved in gardening and cooking—hands on, engaging and fun activities, not just "I'm going to teach you why you should eat vitamin C, but I'm going to teach you how food grows," they will eat it. You have to find ways to connect the two sides of the house—the operations side, and the teaching and learning side.

Sasha McNicoll of Food Secure Canada put it this way:

I think meal programs are a really good example of how a food systems approach can work. A really good school meal program is not only feeding children healthy foods, but also connecting to the school community and the school curriculum, and connecting with local farmers, supporting local agriculture and local economies.

All interviewees spoke about the need to make school meal programs attractive to children. While this seems obvious, some interviewees noted that it could be overlooked by policymakers, who might, for example, put too much focus on the health aspects, or frame the program using government jargon that has little meaning to those on the ground. Both universality and taking an integrated approach contribute to attractiveness, by creating welcoming spaces, fostering a sense of belonging, and introducing fun learning opportunities. Interviewees also mentioned that ensuring children have enough time to both eat and play, the food is tasty and healthy, adults and older children act as role models, and children are empowered to participate in program delivery, all contribute to the attractiveness of the program.

7.2. Organizational Structure and Governance

The most common theme regarding organizational structure was that school districts and schools need autonomy over their programs, as they know best their children's needs, and potential resources. However, the need for minimum guidelines, support, and monitoring and evaluation from a central agency of some kind were also emphasized, both to help the programs succeed, and to encourage more consistent outcomes across the province. Mary McKenna explained:

Ideally there are basic fundamental guidelines to follow, and after that, leave it to the school. The school is most aware of resources within the school, where likely volunteer support might come from, most aware of the dietary preferences or interests, local food availability. Having some local latitude is really important for these types of programs. That being

said, there needs to be some accountability. You don't want to make monitoring too onerous, but at the same time you have to know how things are occurring in the program.

A common theme was that resources such as guidelines and checklists are helpful, but coordination staff are a stronger tool for support. As Richard Han of the Public Health Association of BC (Farm to School BC) explained:

If you just give money to schools, in a lot of cases the program falls apart because they have no support, they have no network. That's where our animators at Farm to School BC have been really important. Wherever we have a regional hub, wherever we have an animator to support the schools, they are able to come out of sticky situations. But for some other schools that are outside our regional hubs, some of the programs have fallen apart as a result of that lack of communication and support.

Staff at central agencies were commonly discussed as facilitators of conversations, partnerships, and knowledge sharing to encourage success at the local level. Margo Riebe-Butt of Nourish Nova Scotia explained:

Whenever there's a challenge, there's someone out there that has already overcome it, so it's our job to harness those successes and share them with people. We have a network around the province, and we engage people in their own solutions. We don't just say "this is how you do it", we bring people together so that they can learn from their peers.

There were differing views on who is best suited to play the leadership or central agency role, but in general, interviewees spoke about a multi-level, multi-sectoral and cost-shared approach. As Richard Han stated,

A lot of the things we're trying to do, complex societal issues, can't be solved within one discipline. It does require that multi-sectoral approach, multi-layered approach to addressing society's complex issues that are only becoming more complex as the years go on.

Several interviewees suggested a school food policy council to provide governance, which would bring together the health and education sectors, as well as actors from all levels of government, including school boards and even students. Sasha McNicoll explained:

Government has a tendency to work in silos. If you divide the responsibility for one thing into two silos, they're not touching each other, just going down their own path. Food as an issue touches so many different departmental responsibilities, so it's imperative that we start to get those departments talking to each other. As a good example, the

federal National Food Policy has 16 different departments at the table. But we also need to start working across government, horizontally and vertically.

In general, interviewees felt that there are good reasons for NGOs to continue to play a role in meal programs, either as the lead agency or in complementary role: they have existing relationships, institutional knowledge, can reduce administrative burden on government and schools, and can bring in funding from the private sector. However, several interviewees felt it is important that school meal programs are not characterized as a charity. Concern was also expressed over industry ties, which can lead to unhealthy products in schools, and unwanted marketing and advertising to children. Margo Riebe-Butt suggested that one way to mitigate this is to have strong policies regarding corporate partnerships that ensure what they offer meets the nutrition standards programs need to uphold. If they fall outside of this, the company can still support the agency, however they should do so anonymously, so as not to give them a "health halo".

7.3. Stakeholder Acceptance

The most consistent theme regarding stakeholder acceptance was that the general public may oppose any increase in taxes caused by an expensive program, especially those without children and those with more conservative ideologies. Interviewees coupled this idea with needing public education, as well as a larger culture change, both in and outside of schools. Brent Mansfield explains:

Current public imagination about what government should do and what it should cost is a barrier. The reality is, you'll have people saying "You want to invest how much? Are you a nanny state? You're going to force our kids to eat a certain thing?" We're talking about a comprehensive shift that would have to address this. It's a 5-10 year plan.

A secondary theme was that unless the program was appropriately funded, there may also be opposition from teachers and other school staff who could be expected to take on extra duties without additional resources.

Chapter 8. Summary of Key Findings

The jurisdictional scan, case study analysis, and expert interviews contribute a set of learnings to the complex policy area of school meal programs. This section provides a summary of the key findings, which are used to determine policy options that are applicable in the BC context.

School meal programs have potential to meet acute food needs as well as longer-term health promotion. Each of the case studies emphasizes health promotion in various ways and interviewees stressed the need to expand the vision for school meals beyond poverty reduction.

A top down, one-size-fits-all approach will not work. The jurisdictional scan finds an uneven baseline of existing school meal programs, and that each school has unique needs in terms of their students' nutrition, infrastructure, training, and resources. The case study analysis confirms that a single model is not necessary: both England and Sweden still experience variation within. The expert interviews suggest that giving schools and districts autonomy over their programs is a practical way to achieve flexibility and build on existing strengths.

A central agency has an important role to play. The case studies and interviews suggest that to encourage consistent outcomes in a decentralized model of governance, a central agency can provide guidelines, resources, and support staff.

Universality is key to reducing stigma. The jurisdictional scan showed that the NGOs currently operating in BC strive for universality, as do the case study examples. Interviewees also stressed this point. Universality does not mean that the program must be free for all students, but it must be open to all students.

Successful school meal programs take a holistic, integrated approach. All three case studies addressed to some degree the four pillars of CSH, and the interviews confirmed the need to integrate healthy eating and learning about food into school activities and culture.

CSH cannot be achieved by policy alone. The jurisdictional scan, case studies, and interviews revealed an endless number of ideas for success in the areas of

school policies, relationships and environment, teaching and learning, and community partnerships. Policy can encourage a CSH approach by providing guidance and resources, and embedding the pillars in monitoring and evaluation, however, success is driven by committed actors at the local level.

Chapter 9. Policy Options

This chapter outlines policy options for expanding school meal programs in BC. Policy options are developed based on the jurisdictional scan, the case study analysis, and expert interviews.

Policy options that would create a single-model school meal program across the province (both in choice of meal and mode of delivery) are not considered, because this study finds a need for autonomy at the district and school levels and a need to build upon a variety of existing programs with established infrastructure and partnerships. In addition, even when one model is mandated, there is significant variation in outcomes. The options below were chosen because they have the potential to both fill gaps and build on the strengths of existing offerings. In all options, school districts, working with their schools, would determine the program choice and mode of delivery that best meets their needs and resources. Like the Alberta program, this would result in a variety of different programs across the province.

9.1. Option 1: Provincial School Meal Program

This option would create a unit within the provincial government tasked with creating centralized resources and providing districts with funding to implement school meal programs in collaboration with their schools. Schools and districts would have autonomy to design and implement programs according to their own needs and resources. The province would provide minimum guidelines requiring the funding to be used for meals, that meals meet the mandatory nutritional guidelines, that the program strive for universality, and consider all four pillars of CSH.

The unit would include dedicated coordination staff that would work directly with schools to develop and improve meal programs and build capacity within local organizations. They would also create centralized resources such as an updated best practices guide, nutrition education tools, professional development opportunities for teachers, a small schools toolkit, and a website that would act as a hub for sharing success stories, challenges, ideas, and resources.

9.2. Option 2: Fund a Single Non-Profit Partner

This option would provide stable funding, through a contribution agreement, to a single non-profit partner with a provincial mandate. The organization would be a registered charitable organization and expected to procure additional funding sources. The province would provide minimum guidelines requiring the funding to be used for meals, that meals meet the mandatory nutritional guidelines, that the programs strive for universality, and consider all four pillars of CSH.

The non-profit would distribute funding to school districts, and provide program support and resources, nutrition expertise, and capacity building. It is expected that the organization would create many of the same centralized resources as option 1. Although they are not identical to this proposed option, Nourish Nova Scotia, and Kids Eat Smart Newfoundland and Labrador are examples of a non-profit partnering with a province in Canada.

9.3. Option 3: School Meal Program Grants

This option would provide multi-year grant funding to support school meal programs in a less prescriptive manner, recognizing there is a substantial number and diversity of organizations currently operating in the food system space. The objective would be to provide seed or capital funding or that would eventually lead to a self-sustaining program. The province would develop criteria and proponents would submit proposals for evaluation. Proponents could include schools, districts, NGOs, and partnerships of multiple actors. Criteria would include that the funding is used for meal programs or activities that complement meal programs (such as school gardens, cooking competitions, etc.), that any meals served meet the mandatory nutritional guidelines, that the programs strive for universality, and take action in one or all four pillars of CSH.

Both new and existing organizations and could potentially access funding in this option.

Chapter 10. Policy Evaluation Framework: Objectives, Criteria, and Measures

The results of this study have clarified that the policy objectives of a school meal program in BC are twofold: to meet the acute need of hungry and undernourished children so that they can fulfill their full learning potential; and to help build healthy eating habits and contribute to improved food literacy for all children.

The policies are compared based on seven criteria. Three criteria consider societal objectives: effectiveness, development, and equity. The other four consider governmental objectives: durability, cost, administrative ease, and stakeholder acceptance. Each criterion has a measure which is ranked from 1 (low) to 3 (high), based on qualitative information derived from literature, and the findings of the jurisdictional scan, case studies, and interviews. An overview of the framework is found in Table 10-1.

Table 10-1 Criteria and Measures for Policy Analysis

Criteria	Measure	Measurement Scale
Effectiveness	The extent to which the option increases access to healthy	Estimated proportion of students reached (%)
	food for all BC school children	65-100% = High (3)
		30-64% = Moderate (2)
		1-29% = Low (1)
Child	The extent to which the option	Delivers on all 4 pillars = High (3)
Development	supports long term health,	Delivers on 2-3 pillars = Moderate (2)
-	delivers on CSH criteria	Delivers on 0-1 pillars = Low (1)
Equity	The extent to which the option	Very inclusive = High (3)
	is inclusive of all BC regions,	Moderately inclusive = Moderate (2)
	and rural/small schools	Not very inclusive = (1)
Durability	The extent to which the option	Very durable = High (3)
	is expected to endure over	Moderately durable = Moderate (2)
	time	Not very durable = Low (1)
Minimizes	The estimated annual cost to	Low cost = High (3)
Cost	government for implementing	Moderate cost = Moderate (2)
	the option	High cost = Low (1)
Administrative	The administrative ease for	Utilizes existing networks and processes = High (3)
Ease	government involved in	Utilizes some existing networks and processes and
	implementing the option	requires new ones = Moderate (2)
		Requires mostly new networks and processes = Low
		(1)
Stakeholder	The extent to which primary	High acceptance = High (3)
Acceptance	and secondary stakeholders	Moderate acceptance = Moderate (2)
	are expected to support the	Low acceptance = Low (1)
	option	

Chapter 11. Policy Analysis and Recommendations

This chapter applies the criteria and measures from Chapter 10 to the policy options identified in Chapter 9. The evaluation is presented by criteria, with an analysis of the performance of each option for comparison. An overview of the analysis is found in Table 11-7 at the end of the section. Finally, policy recommendations and implementation considerations are presented.

11.1. Effectiveness

Table 11-1 Evaluation Summary: Effectiveness

Effectiveness: The extent to which the option increases access to healthy food for all children				
Measurement Scale	Option 1: Provincial School Meal Program	Option 2: Fund a Single Non-profit Partner	Option 3: School Meal Program Grants	
Estimated proportion of students potentially reached by meal program (%)	40-60%	40-60%	≤ 30%	
65-100% = High (3) 30-64% = Moderate (2) 1-29% = Low (1)	Moderate (2)	Moderate (2)	Low (1)	

11.1.1. Option 1: Provincial School Meal Program

Government run school meal programs have a wide range of participation rates, making it difficult to project potential participation rates in the BC context. For example, the participation rate in England is approximately 40% (Dimbleby and Vincent, 2013), while in Sweden it is above 90% (Osowski, Lindroos, Barbieri, Becker, 2015). Both countries have a long history of providing school meals, although the liberal democratic culture in England is more closely aligned with the BC context than the social democratic culture in Sweden. The United States has a commercial program with subsidy for low-income, similar to England's, with a participation rate of approximately 60% (Ralston and Newman, 2015). All of these programs offer lunch, which is expected to have higher participation rates than breakfast because some children are unable to arrive at school early. Based on these programs, I estimate that a provincial program would reach 40-60% of students initially, although this will be highly dependent on the choices made by school districts regarding the meal offered and its price. Uptake may increase over time

as recent investments in licenced child care spaces will create a larger cohort of families accustomed to their children receiving meals, and a culture of providing school food develops in the province.

11.1.2. Option 2: Fund a Single Non-profit Partner

Non-profit run school meal programs in Canada currently have a lower participation rates than the government run programs identified in this report. Breakfast Club of Canada estimates a 20% participation rate (Desjardins, 2018), and Nourish Nova Scotia estimates 25% (Riebe-Butt, 2018). Additionally, Kids Eat Smart in Newfoundland reaches 40% of students¹³. However, these three programs focus on serving breakfast. As this option, like option 1, is likely to lead to a variety of breakfast, lunch, and snack programs, participation may be higher. In addition, significant investment by government and the launch of a province-wide program may raise the profile and interest, attracting participation. Based on these reasons, I estimate that this option could, like the government run program, reach 40-60% of students.

11.1.3. Option 3: School Meal Program Grants

It is difficult to estimate the potential reach of this option because it would likely lead to a wide variety of meal and nutrition education programs. In addition to programs that directly provide food, activities that complement meal programs would be eligible for funding (such as building greenhouses, or hosting student chef competitions), which although valuable, would not increase access to healthy food in the short term. Therefore, I estimate that this option would reach a lower proportion of students than either Option 1 or 2 and give it a low rating.

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¹³ Author calculation based on 27,000 meals served daily (Kids Eat Smart, 2014), and a total of 66,323 students (Government of Newfoundland and Labrador, 2017)

¹⁴ Although the emphasis is on breakfast, they each support other lunch, snack, gardening, and nutrition programs in addition

11.2. Child Development

Table 11-2 Evaluation Summary: Child Development

Child Development: The extent to which the option promotes long-term health and development through consistent delivery on the CSH pillars			
Measurement Scale	Option 1: Provincial School Meal Program	Option 2: Fund a Single Non-profit Partner	Option 3: School Meal Program Grants
Delivers on all 4 pillars = High (3) Delivers on 2-3 pillars = Moderate (2) Delivers on 0-1 pillars = Low (1)	High (3)	Moderate (2)	Moderate (2)

11.2.1. Option 1: Provincial School Meal Program

This option includes centralized resources, including staff, which this study finds are key to empowering local actors to deliver on the pillars of CSH. With these resources, this option has potential to deliver consistently in the school policies, teaching and learning, and relationships and environment pillars; however, it may be less equipped to deliver on community partnerships: an area that NGOs generally perform stronger in (Government of Northwest Territories, 2011; Gidron, 2010). The Alberta pilot program, however, was able to incorporate community partnerships in a meaningful way. I therefore assign this option a high rating.

11.2.2. Option 2: Fund a Single Non-profit Partner

Like option 1, this option includes centralized resources to empower local actors, and thus has the potential to consistently deliver in the teaching and learning, relationships and environments, and community partnerships pillars. A non-profit partner is more likely to perform strongly in community partnerships. Non-profits tend to have fewer resources, so they are encouraged to develop partnerships to procure additional resources and leverage what they do have. They are less likely to perform strongly in the school policies category, as they may be unable to influence policy at the provincial and regional levels. Due to the weakness in the school policies category, I assign a moderate rating.

11.2.3. Option 3: School Meal Program Grants

This option is more flexible and therefore is likely to provide funding to organizations with various mandates relating to different pillars of CSH. This would create space for innovation and allow schools to target known gaps. However, the option could lead to a concentration on one pillar, undermining the integrated intent of CSH. While this concern could be mitigated through grant distribution design, the program is still limited to the proposals received. In addition, the lack of a centralized body may make it less likely to contribute to the school policy category in a cohesive way across the province. I therefore assign this option a moderate ranking.

11.3. Equity

Table 11-3 Evaluation Summary: Equity

Equity: The extent to which the option is inclusive of all BC regions, and rural/small schools			
Measurement Scale	Option 1: Provincial School Meal Program	Option 2: Fund a Single Non-profit Partner	Option 3: School Meal Program Grants
Very inclusive = High (3) Moderately inclusive = Moderate (2) Not very inclusive = (1)	High (3)	High (3)	Moderate (2)

11.3.1. Option 1: Provincial School Meal Program

A unit within the provincial government tasked with providing support and resources to schools would potentially be very inclusive of all regions and schools, especially if tasked with creating a rural and small schools toolkit. As the jurisdictional scan shows, BC schools are currently highly collaborative with NGOs from the national to local level and the program would seek to build on these existing networks. However, the Northern region currently has a lower proportion of districts with meal programs and fewer local organizations to support them. Richard Han of the Public Health Association of BC explains how support staff can help to build equity across the province:

In Vancouver, there's so many different organizations that actually provide direct support to schools, so our animator's time spent in schools is almost zero. The animator connects the schools to the local organizations and facilitates dialogue between them. If there are regions where there are no local organizations, then the animator would need to foster that individual relationship with the schools. That's what we've

been experiencing with establishing the northern hub. There are fewer organizations to work with, so is there a way for us to develop them, to increase their reach and capacity? That's what we're trying to do.

Due to the potential for supporting all schools with centralized resources and building capacity in rural or remote regions, I assign this option a high ranking. However, to ensure this potential is met, equity should be embedded in the unit's mandate.

11.3.2. Option 2: Fund a Single Non-profit Partner

Due to the same reasons as option 1, I assign this option a high ranking. Like option 1, it is important that equity is embedded in the mandate of the organization.

11.3.3. Option 3: School Meal Program Grants

This option has a lower potential to be inclusive of all regions, and rural and small schools due to the lack of centralized resources, support staff, and unequal capacity in local non-governmental organizations across regions that could partner with schools. In this option, funding could be allocated disproportionately across the province, depending on the proposals received. The option also puts onus on participants to apply for funding, and some children may miss out simply because there is no 'champion' for school meals at their school. In some cases, however, new organizations and partnerships in rural areas may emerge to apply for grant funding, building new capacity. A funding allocation structure could also be designed to encourage equitable distribution across regions. I therefore assign this option a moderate ranking.

11.4. Durability

Table 11-4 Evaluation Summary: Durability

Durability: The extent to which the option is expected to endure over time				
Measurement Scale	Option 1: Provincial School Meal Program	Option 2: Fund a Single Non-profit Partner	Option 3: School Meal Program Grants	
Very durable = High (3) Moderately durable = Moderate (2) Not very durable = Low (1)	High (3)	Moderate (2)	Moderate (2)	

11.4.1. Option 1: Provincial School Meal Program

This option is expected to be highly durable due to the stable funding from government, centralized resources, and support staff who can assist with any struggling programs. This option may be the most vulnerable to change with election cycles, due to the large role of government, however, it may be difficult politically to remove a benefit once it is given, due to loss aversion and the endowment effect (Avram, 2015). I therefore assign this option a high ranking.

11.4.2. Option 2: Fund a Single Non-profit Partner

This option is expected to be moderately durable because although it has stable funding from government, centralized resources, and support staff, it relies on the private sector to provide some of the funding, and potentially higher levels of volunteerism at the local level. Recessions and other economic downturns could reduce funding, putting program durability at risk.

11.4.3. Option 3: School Meal Program Grants

This option is expected to be moderately durable because the purpose of the grant is to provide seed or capital funding to establish a self-sustaining program. However, Farm to School BC has found that without the aid of support staff, some programs are unable to endure (Han, 2018), and Breakfast Club of Canada also finds that some programs are unable to self-sustain and continue to receive annual funding (Desjardins, 2018). In this option, programs at some schools are expected to thrive, while others will not receive the ongoing financial and program support they require.

11.5. Cost

Table 11-5 Evaluation Summary: Cost

Cost: The cost to government for implementing the program				
Measurement Scale	Option 1: Provincial School Meal Program	Option 2: Fund a Single Non-profit Partner	Option 3: School Meal Program Grants	
Estimated cost annually, measured in dollars				
Low cost = High (3) Moderate cost = Moderate (2) High cost = Low (1)	Low (1)	High (3)	Moderate (2)	

11.5.1. Option 1: Provincial School Meal Program

Food Secure Canada estimates that the cost for a universal school meal program in BC is approximately \$233 million per year. This estimate includes food, staffing, and general equipment and infrastructure investments (McNicoll, 2018). The English and Swedish school meal programs provide schools with approximately \$1000 per student¹⁵, which is expected to cover all costs. At this rate, a BC program expected to reach 50% of students would cost \$320 million per year. This is likely on the high end of program costs, as England and Sweden both offer hot lunch programs. In this policy option, schools could choose to provide breakfast, which comes at a lower cost, or cost-recovery programs in which parents pay some or all the cost (as several schools in the province now do). At this rate, if the province provided funding for vulnerable children only with the expectation of cost-recovery, approximate cost for a lunch program would be \$128 million per year. Although these estimates are rough, they are significant annual costs; I assign this option a high cost and therefore a low rating.

11.5.2. Option 2: Fund a Single Non-profit Partner

Non-profit run school meal programs in Canada operate with relatively small budgets, likely due to their ability to leverage partnerships and volunteers. They receive

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¹⁵ In England, only vulnerable students are covered by government funding

¹⁶ Estimated at 20% of students, based on the statistic that 1 in 5 lives in poverty (First Call BC, 2017).

stable funding from government and donations from corporations and individuals. For example, Nourish Nova Scotia operated on approximately \$1.1 million in 2017, with \$750,000 provided by government (Nourish Nova Scotia, 2017). BC's student population is approximately five times the size of Nova Scotia. A back of the envelope calculation suggests the government contribution would be approximately \$4 million. In Newfoundland and Labrador, Kids Eat Smart receives \$1.25 million annually from the province and has a total operating budget of \$1.725 million. With approximately ten times the number of students, this would correspond to a \$12.5 million annual contribution in BC. Both organizations predominantly provide breakfast, and therefore may underestimate the costs of a program in which some schools prefer to provide lunch. In addition, BC is geographically larger and initial funding for infrastructure would be required, further inflating costs. Program spending should at least match current spending from CommunityLINK, which was \$24 million in 2016/2017. Again, these estimates are rough, but because they are significantly lower than option 1, I assign this option a low cost, and therefore a high rating.

11.5.3. Option 3: School Meal Program Grants

The cost of this option is flexible. The larger the investment, the further the potential reach of the grants. BC could follow Alberta in granting \$250,000 within each district, for a total of \$60 million annually. However, in the Alberta pilot, the funding was not generally enough to operate programs at every school in the district and the programs were not always universal. Several school districts involved in the pilot reported there was still a hunger gap (Alberta Government, 2017). This option is also less likely to take advantage of opportunities for economy of scale that could be pursued in option 1 or 2, because funding would be allocated to specific projects rather than to districts. I therefore assign this option a moderate cost.

11.6. Administrative Complexity

Table 11-6 Evaluation Summary: Administrative Ease

The administrative ease for government involved in implementing the program				
Measurement Scale	Option 1: Provincial School Meal Program	Option 2: Fund a Single Non-profit Partner	Option 3: School Meal Program Grants	
Utilizes existing networks and processes = High (3) Utilizes some existing networks and processes and requires new ones = Moderate (2) Requires mostly new networks and processes = Low (1)	Low (1)	Moderate (2)	Moderate (2)	

11.6.1. Option 1: Provincial School Meal Program

This option has few actors, with the provincial government providing funding and support directly to school districts and schools. Districts and schools will play a large role in all of the options presented here and NGOs would also continue to play a role at the local level. The option would require the creation of new networks and processes, including a unit within the government, policy development, creation and maintenance of materials and a website, and community engagement. It would also add administrative burden in the form of monitoring and evaluation. I therefore assign this option a low administrative ease.

11.6.2. Option 2: Fund a Single Non-profit Partner

This option shifts program administration from government to a third party and is therefore high ease to government in implementation. Initially, a new entity may need to be established, and new networks and processes needed within the new partner, however it is possible that an existing organization could expand to take on the role. Ideally, government partners would continue to play a role in governance, through a school food policy council or as board members. Due to the high ease for government in the longer term, but the requirement for collaboration across a larger number of people/organizations I assign this option a moderate rating.

11.6.3. Option 3: School Meal Program Grants

This option has moderate administrative ease for the province, as it utilizes a common funding structure and the public service has employees with grant programs expertise; however, there is a need for some new processes and networks. Criteria would need to be established, proposals evaluated, and payments tracked. Several staff members would be required at the provincial level. Districts and schools may experience additional administrative burden, because they will have to develop proposals and apply for funding. Due to these factors I assign this option a moderate rating.

11.7. Stakeholder Acceptance

 Table 11-7
 Evaluation Summary: Stakeholder Acceptance

Stakeholder Acceptance: The extent to which primary and secondary stakeholders support the option			
Measurement Scale	Option 1: Provincial School Meal Program	Option 2: Fund a Single Non-profit Partner	Option 3: School Meal Program Grants
Level of expected acceptance High acceptance = High (3) Moderate acceptance = Moderate (2) Low acceptance = Low (1)	Moderate-High (2.5)	High (3)	Moderate (2)

11.7.1. Option 1: Provincial School Meal Program

Overall, stakeholder acceptance to any school meal program option in BC is likely to be moderate or high. Interviews with subject matter experts suggest that children and parents have no major reasons to oppose a school meal program, as they can provide a significant benefit, and families would be free to opt out. Concerns of schools and districts can also be mitigated through engagement and sufficient resourcing.

As noted in section 7.3, interviewees felt that taxpayers would raise the largest opposition, due to financial and moral reasons.¹⁷ However, no public opinion data for BC confirms or denies this assertion. In the United States, which has a more individualistic

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¹⁷ See the discussion at Littlewood and McConnell, 2013, for more detail on the moral arguments

culture than Canada, support for school meals is high, with 93% of Americans believing it is important to serve nutritious foods in schools to support children's health and capacity to learn (W.K Kellogg Foundation, 2015). A recent poll of Manitobans found that 7 out of 10 support a national school food program (Food Matters Manitoba, 2017). I assign this option a moderate-high ranking, because relative to the other options, its high cost may anger taxpayers, and because as a government program, it may be opposed by some on ideological grounds.

11.7.2. Option 2: Fund a Single Non-profit Partner

Like option 1, this option could expect moderate to high acceptance by the primary stakeholders. Outsourcing administration may increase the acceptance by taxpayers, as NGOs are generally more cost-effective and enjoy a great degree of legitimacy in the public eye (Allard and Martinez, 2008). It may also alleviate some concerns of those with more conservative ideologies. I therefore assign this option a high ranking.

11.7.3. Option 3: School Meal Program Grants

For the same reasons as option 2, this option could expect high acceptance by stakeholders. However, the grant structure may lead to less stable funding for specific school programs and puts an additional onus on local actors to apply for funding and develop programs and partnerships, and therefore may have lower acceptance among schools and districts. I therefore assign this option a moderate ranking.

11.8. Recommendation

Table 11-8 Policy Evaluation Overview

Criteria	Provincial Program	Non-profit Partner	Meal Program Grants
Effectiveness	2	2	1
Child Development	3	2	2
Equity	3	3	2
Cost	1	3	2
Administrative	1	2	2
Complexity			
Durability	3	2	2
Stakeholder	2.5	3	2
Acceptance			
Total	15.5	17	13

Based on the analysis above, either the provincial program or non-profit partner option could be successfully implemented in BC. Both options perform well in the societal objectives of increasing access to healthy food, contribution to child development, and equity. However, the non-profit partner also performs strongly in the governmental objectives of cost, administrative complexity, and stakeholder acceptance. I therefore recommend funding a single non-profit partner to take a leadership role in distributing funding, providing program support and resources, nutrition expertise, and capacity building to school districts and schools.

11.9. Implementation Considerations

School food is a complex, cross-cutting policy issue. To implement a school meal program successfully, implementation discussions will require many parties at the table. As one Alberta district found, "The school district and school staff felt an urgency to get food going for students that needed it. In retrospect, it would have been helpful to involve more stakeholders in the planning" (Alberta Government, 2017, p 32). Engagement with students, teachers, parents, school districts and other community partners can foster a greater sense of ownership over the program, contributing to long-term success. The non-profit partner will also have to work in some capacity with the provincial ministries of education, health, agriculture, and children and family development, and potentially the federal and local governments.

A province-wide school meal program cannot be implemented overnight. The province will need time to determine who the non-profit partner will be. An existing

organization, such as DASH BC, could fulfill this role, although further analysis on this point is required. The non-profit partner will also need to time to develop resources and build relationships in order to support districts through the program development stage. For their part, districts need time to complete a needs assessment, including students' dietary needs, available equipment, partnerships, and resources. Once needs and resources have been assessed, districts will have to analyze program options, acquire equipment, design/upgrade spaces and menus, and train staff. A phase-in or pilot approach, as was done in Alberta, could give time for capacity building and stakeholder engagement. However, the principle of universality should be maintained in any incremental approach to implementation, for example, by starting with universal programs in targeted areas, rather than targeted programs in all schools.

Program branding will also be critical to reduce stigma. Although charitable donations will play a role in the recommended option, this policy should not be branded as a charitable response to food insecurity, but as health promotion for all children in the province. The organization would need to establish policies around fundraising to limit corporate influence resulting from donations or partnerships.

Finally, monitoring and evaluation must be established to instill accountability, collect program data, and strive for continuous improvement. Districts and schools could be asked to report their progress and achievements in the 4 pillars of CSH, reinforcing an integrated approach.

Chapter 12. Conclusion

A school meal program is not a silver bullet for improving children's nutrition. This is complex policy problem that will require many interventions in different environments, and indeed, a cultural change. However, school meal programs that take a Comprehensive School Health approach present an opportunity to step in the right direction to provide children in acute need with healthy, nutritious food, and to promote healthy eating behaviours in all children.

There are many important considerations this project cannot address. One is funding formulas. The formula used to determine how funding is allocated amongst districts is critical to equity. Many of the people I spoke to during this project talked about how vulnerability indicators always miss *someone*. There are many ways of being vulnerable. Funding can also be distributed inefficiently, if it does not account for existing programs and networks. A much more detailed look at funding formulas is necessary.

This project also does not address ways to formalize nutrition and food literacy education. As the case studies show, both England and Sweden have nutrition in their national curricula, and it may be appropriate in BC as well. While there are many opportunities for teaching and learning within a school meal program, these can be effectively reinforced in the classroom. This is an area in the school policies pillar that could benefit from more research as a school meal program matures.

This analysis gives little attention to the needs of small and remote schools that may have the greatest challenge implementing a school meal program. More policy research is needed to determine specific strategies in areas where access to fresh to food is more difficult and where economy of scale makes providing the service more expensive. For example, the Central Coast school district is one of the largest geographically but has just 200 students in 4 schools, including an 8-student school in a fly-in only community. The Central Coast's meal program solutions will look very different from that of an urban district with tens of thousands of students. England provided one-time grants to assist with infrastructure needs for small and remote schools and there are likely other creative solutions that can help. In BC, school districts with small and remote schools may need additional resources and program design support to provide meal programs.

During the course of this project, I read and heard countless ideas for making school meal programs fun and attractive to children, while achieving the goals of CSH. Unfortunately, I could not include them here. To help and inspire others, I have collected school meal resources from many jurisdictions, which can be found in Appendix A.

Finally, although Canada has no national meal program, there is a significant amount of work on school meal programs at the provincial and local levels. Future research should follow the outcomes of the new Alberta program, Nourish Nova Scotia, Kids Eat Smart Newfoundland and Labrador, and the work of other provinces and territories to highlight the uniquely Canadian contributions, successes, and challenges of providing school meal programs.

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Appendix A. BC Jurisdictional Scan Results

Definitions

District-Wide SMP: All schools in the district have a program offering breakfast, lunch, or snacks daily for free or at a reduced cost. Program may be run by the district or by the individual schools.

≥1 Daily SMP: At least one school in the district has a daily school meal program of some form that provides meals for free or at a reduced cost.

Part time SMP: At least one school in the district has a school meal program that provides meals for free or at a reduced cost that is not run every day.

No Mention of SMP: No information about a meal program that provides free or reduced cost meals can be found in the online sources. There may be paid meals available.

Cost-Recovery: The identified program is funded in part by payments from some parents, while low-income parents pay nothing or reduced amounts.

Charity Support: The identified program is funded in part by an organized charity, or by donations.

*Note that sources are found below in Table A-2

Table A-1 BC Jurisdictional Scan Results

School District	Health Authority	District- Wide SMP	≥1 Daily SMP	Part-Time SMP	No Mention of SMP	Break- fast	Lunch	Cost- recovery	Charity Support	Description & Notes
5 Southeast Kootenay	Interior		Х			Х	х		Х	- CommunityLink, Salvation Army and donations provide breakfast program in 2017 - Reached 700 students with \$30,000, \$12,000 from donations (unclear if offered at every school) - Lunch program available at Amy Woodland Elementary, bagged lunch dropped off daily by Salvation Army for children in need - Paid lunch available at Mount Baker Secondary School, daily, delivered from local restaurants including fast food
6 Rocky Mountain	Interior			Х			Х	Х		 Paid lunch (\$5 with possible subsidy) available at Eileen Madson Elementary - 11 times per year. Food prepared and delivered by local cafe Similar PAC driven program at Marysville Elementary Paid lunch available Golden Secondary, school has Meal Coordinator on staff Paid lunch available at Nicholson Elementary, once per week. Subsidy may be available upon contacting principal
8 Kootenay Lake	Interior		Х			Х	Х		Х	 Crawford Bay Elementary School has a hot meal program associated with the Farm to School. Run by parents, children involved in cooking. Canyon Lister Elementary School has a volunteer run breakfast program, accepts donations
10 Arrow Lakes	Interior				Х					- No mention of school meals online
19 Revelstoke	Interior		Х			Х			Х	 Breakfast pilot programs introduced at two elementary schools in 2017-2018. Informal breakfast program at one secondary school formalized in 2017-2018, universal and reaches 15-20% of students Supported by volunteers and donations, Coordinator hired for 5 hours per week
20 Kootenay- Columbia	Interior	Х					Х			 Bagged lunch program is available at all schools, parents must contact principal for inclusion Rossland Summit School participates in the meal program with food from cafeteria No additional information regarding funding

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22 Vernon	Interior		Х			Х	Х	х	Х	- Breakfast and lunch programs at Alexis Park Elementary. Breakfast is grab and go style, provided by local church. Lunch is subsidized through CommunityLINK and through cost recovery by other parents. Lunch is picked up at the school kitchen Several other school websites contain links to Breakfast for Learning, although no information about their breakfast programs is provided
23 Central Okanagan	Interior		Х			Х	Х		Х	 Out of 43 schools in Central Okanagan, 21 have free universally accessible breakfast and lunch (bag lunch) programs. Funded by CommunityLINK, Breakfast Club of Canada, and donations from the community including Okanagan Community Food Bank Breakfasts generally served in common rooms Hope for the Nations/Food for Thought is a charity that delivers breakfast to over 1500 in 30 schools, works with Starbucks for left over foods, and purchasing additional from grocery stores, volunteer run, delivered once per week (there must be some overlap between this and the top point as there are only 43 schools) Neil Bruce Middle School has paid hot lunch program that accepts 150
27 Cariboo- Chilcotin	Interior		Х			Х	Х		Х	- Breakfast club available daily, and Farm to School salad bar available 2 days per week at Mountview Elementary (served in gym). Programs receive volunteer support from parents Farm to School supported hot lunch available once per week, and Breakfast for Learning supported breakfast daily at Horsefly Elementary. Snacks also available on as-needed basis
28 Quesnel	Northern	Х				Х	X		х	 District-wide free or reduced cost lunch program available to students in need. Parents must contact school administrator or counsellor. In partnership with Breakfast Clubs of Canada and Quesnel Partnership for Student Nutrition Society, breakfast is available at nine schools, open to all students at those schools. Include parent volunteers.
33 Chilliwack	Fraser		Х			Х	Х		Х	- Chilliwack Middle has hot lunch program, in partnership with local charity Chilliwack Bowls of Hope. Served by students and teachers in "Resource Room". Same school also has daily breakfast in partnership with Breakfast Club of Canada, teachers and education assistants - F.G. Leary Elementary also lists Breakfast Club and Bowls of Hope on their website, without additional information.
34 Abbotsford	Fraser	х				Х	Х	Х	Х	 District School Meals Program provides 450 lunches per day, funded by CommunityLINK, augmented by individual and corporate donations Church partnerships with individual schools deliver breakfast programs. Food is prepared off-site and delivered to students as they arrive. School PACs organize additional breakfast programs Abbotsford Middle School has bag lunch program, asks for contribution of \$1 per lunch per child if possible. Not intended as a convenience lunch - for families who are struggling financially
35 Langley	Fraser				Х					- No mention of school meals online. Only paid hot lunches which occur sporadically and are PAC fundraisers
36 Surrey	Fraser	Х				Х	Х	Х	х	 Partners with Breakfast Club of Canada, Vancouver Sun Children's Fund, Surrey Firefighters Charitable Society, and other community donors to offer 700 breakfasts at 20 schools. Breakfast clubs are by invitation and food served by community volunteers. Bag lunch is available to all elementary students (reaches approximately 3000 daily). Parents pay \$1 per meal if they can, CommunityLINK pays the rest. District has chosen bag lunch to maximize number of meals instead of purchasing kitchen equipment. At secondary schools, private donors and CommunityLINK fund lunch for 200 students at 8 schools
37 Delta	Fraser				Х					- No mention of school meals online

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38 Richmond	Vancouver Coastal		Х			Х	Х		Х	 Food Bank of Richmond works with the school district to provide breakfast programs in 4 elementary schools, lunch programs in 2, and snack programs in 3 schools, reaching 400 students each week At McNair Secondary, the breakfast club has a lounge with fridge, where students can access food throughout the day, and students do most of the 'work' with support from teachers
39 Vancouver	Vancouver Coastal	X				X	X	X	X	- 16% of students (55,000 x .16 = 8,800) participate in a school meal program. - The Vancouver School Board designed a tier system process to deliver school meals targeted to vulnerable students - Approximately 10 schools with highest need have 'universal' school meal programs where parents contribute if they are able to do so (Full cost ranges from \$65-90 per month). - Breakfast is also offered to vulnerable students at Tier 1 and 2 schools. Tier 3 schools (approximately 8) have breakfast or lunch programs which are either subsidized through the user-pay model used by Tier 1 and 2, or through a vendor delivery program, or from Site Production Kitchens. - Meals are subsidized by CommunityLINK funding, parent contributions and food and money donations from individuals, corporations, and the City of Vancouver. Cost per lunch is \$4.75, \$2.00 for breakfast, or \$6.70/lunch, \$5.50/breakfast in the site production kitchen model. - Site Production Kitchen model estimated to cost approximately \$1200 per student annually for lunch, and \$1000 annually for breakfast. VSB finds that the parent contributions are currently \$30,000-\$50,000 short of recovering costs. - Variety of infrastructure in schools
40 New Westminster	Fraser		Х			Х	Х	х	х	- Lunch program operated at 4 highest need schools, provided by in-house service and paid for with CommunityLINK - Additional breakfast, lunch, and snack programs operate with funding from Breakfast for Learning, New Westminster Fire Fighters, RBC Dominion Securities, CKNW Orphans fund, A Beef with Hunger Society, and other corporations and local businesses.
41 Burnaby	Fraser	Х					Х	Х	Х	 School lunch program available to all students in the district, however not all schools are actively participating Program is paid for with CommunityLINK, parent contributions, charitable donations. Cost per child per month is \$70. Parents who are unable to pay are asked to contribute what they can
42 Maple Ridge-Pitt Meadows	Fraser		Х			Х	Х		Х	- Rotary club provides bag lunches for 180 students across the district - Davie Jones Elementary has breakfast program with funding from CommunityLINK, Breakfast for Learning, and Breakfast Clubs of Canada - Eric Langton Elementary meal program provides breakfast, lunch, and snacks to children in need, with funding from various community sources
43 Coquitlam	Fraser	Х					Х	Х		- Bag lunch program is available throughout district. Meals are prepared at one school by School Meal Coordinators and delivered to the others. \$4 per lunch per child. Lunches can be subsidized through speaking with principal.
44 North Vancouver	Vancouver Coastal	Х				Х	Х	Х		- The Food Access Program was introduced by the district in 2016/2017 school year and will be expanded to all schools in the district. Aimed only at the most vulnerable students and funded by CommunityLINK. Each school is provided with funding and can accommodate their own vulnerable students how they wish. - Intended as "hunger eradication" not "meal replacement" - Depending on school, food is centrally located or in classrooms - Mountainside Secondary has cost-recovery program, with \$4 per lunch per child. Partnered with local catering company and approximately 60-70 students
45 West Vancouver	Vancouver Coastal				Х					- No mention of school meals online

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46 Sunshine Coast	Vancouver Coastal		Х			Х	Х		Х	- Some schools provide breakfast or lunch programs, no additional information on district website - Show Kids You Care charity works with the district, but unclear to what extent (website states mixture of breakfast, lunch, and snacks for 3600 students, but enrollment in the district is lower than that)
47 Powell River	Vancouver Coastal	Х				Х	Х	Х	Х	 Each school has a program, although it's not centrally planned by the district. Supported by parents, community, and the Tla'amin Nation. At least one school works with Farm to School Food at Brooks Highschool prepared in cafeteria by culinary arts students, any student can purchase for \$6 but low-income students can receive free punch card Edgehill Elementary, parents/grandparents invited to bake muffins for breakfast program
48 Sea to Sky	Vancouver Coastal				Х					- No mention of school meals online
49 Central Coast	Vancouver Coastal				Х					- No mention of school meals online
50 Haida Gwaii	Northern	Х					Х		Х	 All schools have a version of the Farm to Cafeteria program Funded by CommunityLINK and the Gwaii Trust (local First Nations) Emphasis on local foods, direct purchasing from farmer Six schools have a food coordinator position for 4 hrs per week Sk'aadgaa Naay Elementary has cook working 20 hrs per week, with help from volunteers Most schools have full hot entree lunch or soup and sandwich lunch Several schools receive meals prepared at central location on-reserve
51 Boundary	Interior		Х			Х			Х	- Grand Forks Secondary has a breakfast program available to all funded by Breakfast for Learning, served in multipurpose room - West Boundary Elementary has paid hot lunch program, \$4 each, must bring own plate, utensils
52 Prince Rupert	Northern				Х					- Pineridge Elementary has paid lunch program, but no mention of subsidy of any kind
53 Okanagan Similkameen	Interior		х			х	Х	Х	х	- Cawston Elementary has free breakfast for any student, and hot lunch program (\$3.25 per meal) for 80-100 students, some of which are subsidized. "Sponsor a lunch" program where parents and community provide donations to cover subsidized children, school asks \$40-\$50 per month per child. Lunches prepared at high school and delivered - OK Falls elementary has a breakfast program, funded by the Lion's Club and served in community room - Osoyoos Elementary has paid hot lunch program, \$3-5, delivered from local restaurants - Osoyoos Secondary has free breakfast (muffins and juice) every Tuesday and Thursday, run by community volunteers
54 Bulkley Valley	Northern				Х					- No mention of school meals online
57 Prince George	Northern		х			Х	х	х	Х	 Edgewood Elementary is part of the BC School Vegetable and Fruit Program Ron Brent Elementary has breakfast and lunch programs. Lunch is paid, \$30 per month, breakfast is free. Breakfast is prepared and served in multi-purpose room. Westwood Elementary has free breakfast program, provided by PAC Morfee Elementary has breakfast and lunch available only to students in need, parents to contact principal for inclusion Mackenzie Secondary has breakfast and hot lunch for those in need, supported by donations of cash, food, and bottles for recycling
58 Nicola- Similkameen	Interior		Х			Х	Х	Х	Х	 Paid lunch programs are available in several schools, at \$3-\$4 per meal, in some cases every other day. Merritt Central Elementary has breakfast and lunch (mostly paid) available for all children, regardless of income. School asks for parent donations to breakfast program. Diamond Vale Elementary has paid hot lunch available daily, if child forgets lunch, they will be given food

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59 Peace River South	Northern		Х			Х			Х	- Pouce Coupe Elementary School has a free breakfast program Paid lunch program is made available by PAC at several schools (Canalta Elementary, Pouce Coupe Elementary)
60 Peace River North	Northern		Х			Х	Х	х		- Alwin Holland Elementary has a breakfast program and lunch program, funded by CommunityLINK. School has cafeteria, utilizes student and parent volunteers - Duncan Cran Elementary has breakfast program, supported by donations from community. Serves pancakes to approximately 30 children daily
61 Greater Victoria	Vancouver Island		Х				х			 Hot and cold School Meal Programs are offered at 18 schools, over 1000 lunches served daily, funded by CommunityLINK Regulation 3313.0 governs meal program: programs must be universal (elementary level), non-stigmatizing, involvement is confidential, donations accepted but no advertising, each school will have a school meal committee open to all interested parents, staff, and students. KidsKlub Charity provides free lunches (approx 450) to vulnerable students in Sooke, Saanich, and Victoria
62 Sooke	Vancouver Island		Х			Х	Х	Х	х	-KidsKlub Charity provides free lunches (approx 450) to vulnerable students in Sooke, Saanich, and Victoria - Hans Helgesen Elementary has free breakfast program funded by OneXOne Foundation, prepared and served by parents, supported by Education Assistants - Ecole John Stubbs has paid hot lunch provided by PAC as a school fundraiser (not every day), subsidy may be available by contacting school administrator/counsellor. Delivered from local restaurant. Elementary school children eat in classrooms, middle school students pick up from canteen.
63 Saanich	Vancouver Island				Х					- KidsKlub Charity provides free lunches (approx 450) to vulnerable students in Sooke, Saanich, and Victoria (coding as No Mention because # reached in district is very small and school/district are not involved) - Several schools have paid hot lunches, once every week or two, organized by PAC as a fundraiser
64 Gulf Islands	Vancouver Island		Х			Х			Х	- Fernwood elementary has a breakfast program, paid for by community donations. Paid hot lunch program available through PAC - Phoenix elementary has a breakfast program, paid for by community donation.
67 Okanagan Skaha	Interior		Х			Х	Х	X	х	- Giant's Head Elementary has a breakfast program funded by donations and run by volunteers. Food prepared in small kitchen at school, 11,500 breakfasts costing \$8,600 per year - Parkway Elementary has a breakfast club Queens Park has breakfast program provided by Meals on Wheels, reaching 50 children, and a \$2 lunch program reaching 140 students per day - Columbia Elementary has breakfast program at \$2 per day, however 'no child should go hungry' - Skaha Lake Middle has a breakfast program open to all, and lunch program for families needing assistance
68 Nanaimo- Ladysmith	Vancouver Island		х			х	Х		х	 Ladysmith Primary, PAC hosts a hot lunch once per month, and the Chemainus First Nation provides lunches to students who need it throughout the year. Breakfast Club of Canada and Nanaimo-Ladysmith Schools Foundation fund 7,400 meals per month at 11 schools.
69 Qualicum	Vancouver Island			Х		Х			Х	- Springwood Elementary has breakfast program offering 'nutritious snack' before class to 50 students, 3 days a week, supported by donations and run by volunteers - PAC organized paid hot lunches for sale at Arrowview Elementary, Bowser Elementary, Qualicum Beach Elementary, not every day.

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70 Alberni	Vancouver Island		х			Х	х	х	Х	 Wood Elementary School has a lunch program with parent cost-recovery. AW Neil elementary has a breakfast program, served in a classroom. Students have to sign up. Run by volunteers Alberni High School also has breakfast program, funded by school (\$7,000 annually) and community donations (\$13,000 annually), volunteer run. Feeds 400 daily in eight areas of the school Read and Feed program delivered by non-profit Alberni Valley NeighbourLink Society delivers breakfasts to 5 of 6 elementary schools. Run on donations and grants, volunteers
71 Comox Valley	Vancouver Island		Х			Х	Х	Х	Х	 Courtenay Elementary has both breakfast and lunch available for children who need it, funded by CommunityLINK, Breakfast Club of Canada, and community donations. Cumberland Community School has a cost-recovery lunch program, with free or subsidized meals available for students in need, also funded by community donations and run by volunteers. Huband Elementary has Farm to School salad bar lunch on Tuesdays serving 180-200, run by volunteers, students. Prepared in small school kitchen
72 Campbell River	Vancouver Island				Х					- No mention of school meals online
73 Kamloops/Th ompson	Interior		Х			Х	Х	Х	Х	- AE Perry elementary has a cost-recovery program, \$4 a meal. Arrangements can be made for students who can't afford it, after contacting principal. - Power Start Program by the Boys & Girls Club is a charity program providing breakfast and rides to school for 5 elementary schools. Some district funding helps to fund it.
74 Gold Trail	Interior		Х			Х			Х	- Cayoosh Elementary has a meal program funded by Breakfast for Learning - Lytton Elementary has breakfast program supported by CommunityLINK
75 Mission	Fraser		Х			Х	Х			- Deroche Elementary breakfast program for all students, prepared and served in each classroom - Mission Central Elementary has breakfast and lunch program for 'elligible' students, run by volunteers including local seniors
78 Fraser- Cascade	Fraser				Х					- No mention of school meals online
79 Cowichan Valley	Vancouver Island		Х			Х	Х	Х	Х	- Nourish Cowichan Society is an NGO providing breakfast for \$1 per student at 5 schools (20 in district). The NGO has converted an old metal shop at one school into a food preparation facility - Lake Cowichan school has a lunch program for \$1.25 each meal, served in the theatre foyer
81 Fort Nelson	Northern				Х					- No mention of school meals online
82 Coast Mountains	Northern		х			Х	Х		х	- Caledonia Secondary has free breakfast program. Served in canteen area, prepared by a teacher. Supported by PAC fundraising, Breakfast for Learning and local donations, including from local coffee shop -The Kitimat Food Share Program recovers food that will to go waste from supermarkets for breakfast and lunch programs at Kildala and Nechako Elementary schools, and Mount Elizabeth Secondary. The Food Share Program also shares recipes, inofmration on low-cost cooking, nutrition, and budgeting Thornhill Elementary has breakfast club open to all students, served in one classroom and provided by two teachers. Salad bar also available on Wednesdays for \$4-\$5
83 North Okanagan- Shuswap	Interior		Х			Х	Х			- Armstrong Elementary has breakfast program free for all students, run by parents - Salmon Arm West Elementary has breakfast and lunch program for students in need. Staff communicate with parents if children are attending
84 Vancouver Island West	Vancouver Island		Х			Х	Х			 Kyuquot Elementary-Secondary School has breakfast program. Prepared by two community members Zeballos Elementary has breakfast program, served by parent and community volunteers, supported by Breakfast Club of Canada. Hot lunch provided by First Nation band members once per week

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85 Vancouver Island North	Vancouver Island		Х			Х	Х			 Port Hardy Secondary School has breakfast and lunch programs. Does not indicate funding source Eagle View Elementary has breakfast program run by volunteers, prepared in school kitchen Fort Rupert Elementary has PAC-run breakfast program Sea View Elementary has "Healthy Hungry Kids Program" but no information on what it is
87 Stikine	Northern				X					- No mention of school meals online
91 Nechako Lakes	Northern		Х			Х	Х		Х	 Lakes District Highschool has breakfast program for all students, served in multi-purpose room. Funded by local businesses and Breakfast Club of Canada. Cold breakfast items except for Thursdays. David Hoy elementary also has breakfast and lunch for those in need, run by support staff employees. Funding source not noted Evelyn Dickson Elementary has breakfast program prepared and served by staff and volunteers. Funded by PAC, Breakfast Club of Canada, school funds and donations
92 Nisga'a	Nisga'a				Х					
93 Conseil scolaire francophone					Х					

Table A-2 BC Jurisdictional Scan Sources

School District	Sources
5 Southeast Kootenay	http://www.thedrivefm.ca/2017/09/28/37470/
	http://www.sd5.bc.ca/school/awes/ProgramsServices/Breakfast%20Club%20and%20Lunch%20Program/Pages/default.aspx
	http://www.sd5.bc.ca/school/mbss/ProgramsServices/Lunch%20Program/Pages/default.aspx
6 Rocky Mountain	http://www.sd6.bc.ca/school/mes/Parents/Newsletter/Documents/September%20October%202017.pdf
	http://www.sd6.bc.ca/school/emps/Programs/Healthy%20Lunch%20Program/Pages/default.aspx
	http://www.sd6.bc.ca/school/gss/Programs/lunchprogram/Pages/default.aspx
	www.sd6.bc.ca/school/nes/Parents/Documents/Lunch%20form%20April%20to%20May%202018.pdf
8 Kootenay Lake	https://sd8learns.sd8.bc.ca/fullcyclefoods/
	http://canyon.sd8.bc.ca/programs/breakfast-program/
	http://blewett.sd8.bc.ca/hot-lunch-forms/

10 Arrow Lakes	
19 Revelstoke	http://www.sd19.bc.ca/2018/02/26/breakfast-programs-up-and-running/
20 Kootenay-Columbia	https://www.sd20.bc.ca/school-meals.html
20 Rootonay Columbia	
00 \/amaan	https://rosslandsummit.org/meals-program/
22 Vernon	http://www.sd22.bc.ca/school/alexispark/Programs/breakfastlunchprograms/Pages/default.aspx
	http://www.sd22.bc.ca/school/beairsto/parents/pac/Pages/default.aspx
23 Central Okanagan	https://www.kelownanow.com/watercooler/news/news/Kelowna/16/09/08/Thousands of Okanagan students receive free meals during school day/
	https://www.hopeforthenations.com/project.aspx?asset=4053
	https://globalnews.ca/news/3455972/celebrating-the-expansion-of-central-okanagan-school-breakfast-program/
27 Cariboo-Chilcotin	http://www.sd27.bc.ca/schools/mountview-elementary/
	http://www.sd27.bc.ca/schools/horsefly-elem-jr-secondary/
28 Quesnel	http://www.sd28.bc.ca/content/breakfast-program
	http://www.gjs.sd28.bc.ca/district-lunch-program.html
33 Chilliwack	http://cms.sd33.bc.ca/lunch-program
	http://fgleary.sd33.bc.ca/programs
34 Abbotsford	http://abbymiddle.abbyschools.ca/sites/default/files/Parental%20Consent.pdf
	http://www.abbyschools.ca/blog/feeding-children-changing-brains
35 Langley	
36 Surrey	https://www.surreyschools.ca/departments/FSRV/Meal_Programs/Pages/default.aspx
	https://www.surreyschools.ca/departments/FSRV/Meal_Programs/LunchProgram/Pages/default.aspx
37 Delta	
38 Richmond	http://richmondfoodbank.org/programs/school-meals/
	https://globalnews.ca/news/2739801/richmond-school-food-program-does-more-than-just-feed-students/
39 Vancouver	http://go.vsb.bc.ca/schools/selkirk/Programs/Pages/Food-and-Meal-Programs.aspx
	https://www.vsb.bc.ca/sites/default/files/C3%20-%20Update%20on%20Elementary%20Meals%20Program%20-%20REVISED%20%28November%2015%2C%202015%29.pdf
40 New Westminster	https://qayqaytschool.ca/2017/05/03/event-sample-1/
	https://newwestschools.ca/wp-content/uploads/2016/10/180116-OPEN-Ops-Agenda.pdf
41 Burnaby	http://www.sd41.bc.ca/services/school-meals-program/

42 Maple Ridge-Pitt Meadows	http://www.sd42.ca/program-community-foundation/
	http://www.haneyrotary.org/sitepage/lunch-bag-program
43 Coquitlam	http://elementary.sd42.ca/daviejones/breakfast-club-program/ https://www.sd43.bc.ca/school/rochester/ProgramsServices/LunchProgram/Pages/default.aspx
·	
44 North Vancouver	https://www.sd44.ca/Pages/newsitem.aspx?ItemID=208&ListID=d00680b1-9ba1-4668-9328-d82dd27dacd4&TemplateID=Announcement_Item
	https://www.sd44.ca/ProgramsServices/SafeCaringSchools/Pages/FoodAccess.aspx
	https://www.sd44.ca/school/mountainside/Parents/MSSMealProgram/Pages/default.aspx
45 West Vancouver	
46 Sunshine Coast	http://www.sd46.bc.ca/about-sd46
	http://www.showkidsyoucare.org/who-we-serve/program-partner-profiles/sunshine-coast-breakfast-kids-program
47 Powell River	http://www.prpeak.com/community/brooks-secondary-school-lunch-program-supports-students-1.23080542
	http://www.sd47.bc.ca/school/eh/Publications/January%202018%20Newsletter.pdf#search=breakfast
48 Sea to Sky	ITTLD://www.su47.bc.ca/scrioo//eri/F ublications/sandary /szozo10 /szonewsietter.pul#search-breaklast
49 Central Coast	
50 Haida Gwaii	http://www.farmtocafeteriacanada.ca/2014/07/lessons-from-haida-gwaii/
51 Doundan	http://www.farmtocafeteriacanada.ca/2012/09/it-takes-an-island-growing-local-in-haida-gwaii/ http://www.sd51.bc.ca/gfss/index.htm
51 Boundary	Inttp://www.sdb1.bc.ca/giss/index.ntm
	http://www.sd51.bc.ca/gfss/index.htm
52 Prince Rupert	http://pineridge.rupertschools.ca/index.php/programs/
53 Okanagan Similkameen	http://cps.sd53.bc.ca/?q=parent-handbook
	https://docs.wixstatic.com/ugd/4c39fc_047cef3c10894f60b3957aa65d176b85.pdf
	http://cps.sd53.bc.ca/sites/default/files/newsletter/March%202018.pdf
	http://ose.sd53.bc.ca/wp-content/uploads/2018/02/MARCH-APRIL-2018-LUNCH-MENU.pdf
54 Dulldon Valley	http://osoyoossecondary.ca/breakfast-program
54 Bulkley Valley	http://www.playistheway.ca/lighthouse-school.html
57 Prince George	nttp://www.piayistrieway.ca/lightriouse-scripor.html
	http://www.sd57.bc.ca/school/morf/Programs/Pages/default.aspx
	http://www.sd57.bc.ca/school/west/Lists/Publications/Sept 2017 Newsletter.pdf
	http://www.sd57.bc.ca/school/ronb/About
	http://www.sd57.bc.ca/school/macs/Documents/December%202015%20Newsletter.pdf

58 Nicola-Similkameen	http://cves.sd58.bc.ca/wordpress/?page_id=25
	http://dves.sd58.bc.ca/wp-content/uploads/2018/01/DV-HOT-LUNCH-FORM-Jan-Feb-2018.pdf
	http://mces.sd58.bc.ca/wordpress/wp-content/uploads/2015/03/HOT-LUNCH-MENU-December-2017.pdf
59 Peace River South	https://pouce.sd59.bc.ca/lunch-program/
	http://canalta.sd59.bc.ca/files/2009/08/Hot-Lunch-Letter-Aprilpdf
60 Peace River North	http://www.prn.bc.ca/?page_id=16
	http://www.holland.prn.bc.ca/?page_id=5
	https://www.energeticcity.ca/2017/09/arc-resources-employees-donate-two-school-breakfast-programs/
61 Greater Victoria	https://www.sd61.bc.ca/programs/student-services/communitylink/
	https://www.sd61.bc.ca/our-district/documents/name/regulation-3313-school-meal-program/
62 Sooke	http://kidsklub.ca/programs/brown-bag-lunch-program/
	http://hanshelgesen.web.sd62.bc.ca/programs/breakfast-program/
	http://johnstubbs.web.sd62.bc.ca/2017/09/11/pac-hot-lunch-information-and-menu/
63 Saanich	http://kidsklub.ca/programs/brown-bag-lunch-program/
64 Gulf Islands	http://fernwood.sd64.bc.ca/pac
	http://fernwood.sd64.bc.ca/school-news/untitledpost-30
	https://phoenixelementaryschool.weebly.com/
67 Okanagan Skaha	http://www.pentictonherald.ca/news/article_b6bd00ac-22fb-11e7-9360-6fa88a07515a.html
	http://www.sd67.bc.ca/school/parkwayelementary/Programs/breakfastclub/Pages/default.aspx
	http://www.sd67.bc.ca/school/parkwayelementary/Programs/breakfastclub/Pages/default.aspx
	http://www.sd67.bc.ca/school/skahalakemiddle/Programs/foodprograms/Pages/default.aspx
	http://www.sd67.bc.ca/school/columbiaelementary/_layouts/15/WopiFrame.aspx?sourcedoc=/school/columbiaelementary/Documents/November%202017%20Newsletter.docx&action=default&DefaultItemOpen=1
68 Nanaimo-Ladysmith	https://www.google.ca/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjpl4LS5oDYAhVSyWMKHX_1BvgQFggpMAA&url=http%3A%2F%2Flp.schools.sd68.bc.ca%2Fprograms%2Fbreakfast-program-hot-lunch-program%2F&usg=AOvVaw17BID74LwtsrAaqls8PSfx
	http://www.nlsf.ca/index.php?p=1_25_feeding-hungry-kids-school-food-programs-breakfast-programs-hunger-in-Nanaimo-hunger-in-Ladysmith-poverty-in-Nanaimo-poverty-in-Ladysmith
69 Qualicum	https://www.sd69.bc.ca/school/BES/Pages/default.aspx
	https://www.pqbnews.com/community/breakfast-program-needs-boost-at-springwood-school-in-parksville/

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1 https://www.ad70.bc.ca/school/wea/Parents/Newsietters/Documents/Sept%205%202017%20Newsletter.pdf 11 Comox Valley		https://www.sd70.bc.ca/school/awnms/Parents/Newsletters/ layouts/15/WopiFrame.aspx?sourcedoc=/school/awnms/Parents/Newsletters/Archive%20Newsletters/September%2014%202017.docx&action=default&DefaultItemOpen=
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79 Cowichan Valley http://sd79.bc.ca/partnership-means-increased-food-security-for-students/ http://sss.sd79.bc.ca/meal-deal/ 81 Fort Nelson 82 Coast Mountains http://caledonia.cmsd.bc.ca/index.php/breakfast// https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/uploads/sd82.pdf https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/uploads/sd82.pdf https://thornhillelem.cmsd.bc.ca/index.php/breakfast-club/ http://thornhillelem.cmsd.bc.ca/index.php/salad-bar/ https://grisd83.files.wordpress.com/2018/03/grindrod-newsletter-march-2018docx.pdf	75 Mission	
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79 Cowichan Valley http://icss.sd79.bc.ca/mal-deal/ 81 Fort Nelson 82 Coast Mountains http://caledonia.cmsd.bc.ca/index.php/breakfast/ https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/uploads/sd82.pdf https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/uploads/sd82.pdf https://thornhillelem.cmsd.bc.ca/index.php/breakfast-club/ http://thornhillelem.cmsd.bc.ca/index.php/breakfast-club/ http://thornhillelem.cmsd.bc.ca/index.php/salad-bar/ 83 North Okanagan-Shuswap https://grisd83.files.wordpress.com/2018/03/grindrod-newsletter-march-2018docx.pdf	78 Fraser-Cascade	nttp://www.mpsd.ca/schools/growtriplans/iviission-centralElementary2010.pdf
82 Coast Mountains http://caledonia.cmsd.bc.ca/index.php/breakfast/ https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/uploads/sd82.pdf https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/uploads/sd82.pdf http://thornhillelem.cmsd.bc.ca/index.php/breakfast-club/ http://thornhillelem.cmsd.bc.ca/index.php/salad-bar/ 83 North Okanagan-Shuswap https://grisd83.files.wordpress.com/2018/03/grindrod-newsletter-march-2018docx.pdf		http://sd79.bc.ca/partnership-means-increased-food-security-for-students/
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83 North Okanagan-Shuswap https://grisd83.files.wordpress.com/2018/03/grindrod-newsletter-march-2018docx.pdf		http://thornhillelem.cmsd.bc.ca/index.php/breakfast-club/
83 North Okanagan-Shuswap https://grisd83.files.wordpress.com/2018/03/grindrod-newsletter-march-2018docx.pdf		http://thornhillelem.cmsd.bc.ca/index.php/salad-bar/
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https://aes.sd83.bc.ca/principals-message/		https://aes.sd83.bc.ca/principals-message/
84 Vancouver Island West http://zess.sd84.bc.ca/hot-lunch-zeballoselementarysecondaryschool-3	84 Vancouver Island West	
http://zess.sd84.bc.ca/breakfast-club-zeballoselementarysecondaryschool		http://zess.sd84.bc.ca/breakfast-club-zeballoselementarysecondaryschool
http://kess.sd84.bc.ca/programs-kyuquot		http://kess.sd84.bc.ca/programs-kyuquot

85 Vancouver Island North	https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/uploads/sd85.pdf		
	https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/uploads/sd85.pdf		
	http://fres.edublogs.org/		
87 Stikine			
91 Nechako Lakes	https://ldss.sd91.bc.ca/WelcomeToLakesDistrictSecondary/BreakfastProgram/Pages/default.aspx		
	http://dvdhoy.sd91.bc.ca/About/BreakfastProgram/Pages/default.aspx		
	http://dvdhoy.sd91.bc.ca/About/BreakfastProgram/Pages/default.aspx		
92 Nisga'a			
93 Conseil scolaire francophone			

Appendix B. School Meal Program Resources

This appendix provides hyperlinks to various school meal program policy and guideline documents. It is not an exhaustive list, but is intended as a resource for researchers and practitioners.

Document Name and Description	Hyperlink			
Canada	Try position.			
Alberta – Alberta Pilot Program Overview, 2017: an overview of the 1 year pilot program	https://education.alberta.ca/media/3704342/school-nutrition-2016-17-pilot-summary.pdf			
BC – School Meal and Nutrition Program Handbook: General guidelines for operating school	https://healthyschoolsbc.ca/program/587/school-meal-and-school-nutrition-program-handbook			
meal programs				
Saskatchewan – Nourishing Minds, 2012: A policy document about general nutrition in	http://publications.gov.sk.ca/documents/11/85696-MOE-43A-NourishingMinds.pdf			
schools, not primarily about school meal programs				
Manitoba – Various guideline and fact sheet documents available at Child Nutrition Council	http://childnutritioncouncil.com/resources/guides-and-handbooks/			
website	http://childnutritioncouncil.com/resources/fact-sheets/			
Ontario – Student Nutrition Program Nutrition Guidelines, 2016: Guidelines for schools	http://www.children.gov.on.ca/htdocs/English/documents/studentnutrition/SNP-nutrition-guidelines-2016.pdf			
operating school meal programs in the province.				
Nova Scotia – Provincial Breakfast Program Standards, 2007: Guidelines regarding effective	https://www.ednet.ns.ca/docs/foodnutritionbreakfaststandards.pdf			
breakfast program management				
Various resources regarding school meal programs, school gardens, and other food literacy	https://nourishns.ca/program-resources			
topics.				
Prince Edward Island – Final Report Submitted to Prince Edward Island Home and School	http://peihsf.ca/sites/default/files/Prince%20Edward%20Island%20School%20Food%20Environment%20Report.pdf			
Federation, 2017: An environmental scan of school food including lessons learned on				
successful approaches	http://www.bidecatageat.co/wg.comtont/uploads/20014/40/VECE.NJ. Decayons Evolvation and			
Newfoundland and Labrador – Kids Eat Smart Foundation Program Evaluation, 2013: An	http://www.kidseatsmart.ca/wp-content/uploads/2014/10/KESF-NL-Program-Evaluation.pdf			
overview of the breakfast program and evaluation of its success.				
United States A website containing resources for integrating school garden activities to the classroom	https://biggreen.org/teaching-in-your-garden/classroom-resources/			
Rethinking School Lunch Guide, 2010: Guide for planning school lunches in a way that	https://www.ecoliteracy.org/download/rethinking-school-lunch-guide			
promotes health and food systems literacy.	Tittps://www.econteracy.org/download/retrilirking-school-iurich-guide			
National School Lunch Program website contains overview documents, program history and	https://www.fns.usda.gov/nslp/national-school-lunch-program-nslp			
various resources	nttps://www.ms.dsda.gov/nsip/national-school-fundit-program-nsip			
School Breakfast Program website contains overview documents, program history and various	https://www.fns.usda.gov/sbp/school-breakfast-program-sbp			
resources	https://www.mo.asaa.gov/osp/oshloci-si-saktast-program-osp			
An organization that delivers healthy school meal programs. Various resources.	https://foodcorps.org/about/			
Europe				
Healthy Eating for Young People in Europe: A school-based nutrition education guide, 1999:	http://www.euro.who.int/data/assets/pdf_file/0005/119921/E69846.pdf			
Guide for incorporating nutrition education into curriculum				
England				
The School Food Plan, 2013: an overview of the government-requested review of school meal	www.schoolfoodplan.com/wp-content/uploads/2013/07/School_Food_Plan_2013.pd			
programs in the country				
A website containing many resources regarding school meals	http://www.schoolfoodplan.com/			
Finland				
School Meals in Finland, 2008: National Board of Education overview and policy document	http://www.oph.fi/download/47657_school_meals_in_finland.pdf			
France				
Website of the French Ministry of Education – School Catering contains overview and	http://www.education.gouv.fr/cid45/la-restauration-a-l-ecole.html			
resources				

New Zealand			
Guidelines for School Food Programmes, 2014: Best practices and guidelines for initiating	http://www.occ.org.nz/assets/Publications/Guidelines-for-School-Food-Programmes.pdf		
school food programs			
Brazil			
Website of the National School Lunch Program of Brazil contains overview information and	http://www.fnde.gov.br/programas/pnae		
various resources in Portuguese.			
Japan			
Website of the Japan National Federation of School Food Associations contains various	http://www.zenkyuren.jp		
resources, in Japanese			
South Africa			
Website of the South Africa National School Nutrition Programme contains overview, FAQ,	https://www.education.gov.za/Programmes/NSNP/tabid/632/Default.aspx		
various resources			