

the alliance for healthy food & farming

POLICY BRIEFING NOTE: SUMMARY Bill 216 - Food Literacy for Students Act, 2020

Policy issue

Canadians - including Ontario elementary, middle and high school students - often do not have the knowledge, skills and/or opportunity to actualize their personal health and well-being in relation to food, or to participate as informed and engaged citizens in their food systems.

Background

Canadians know very little about modern food production. Many argue that society's disconnect from where our food comes from and how it is grown and produced is contributing to social and ecological harm. Food skills are being eroded in households regardless of socio-economic status and we've seen a significant increase in the consumption of processed foods. This has contributed to growing rates of diet-related diseases that are disproportionately affecting those who already experience health inequities.

With rising health concerns, limited access to food for many, and growing concerns about climate change as well as other environmental crises, individuals and society as a whole need to be more informed about nutrition and food systems, empowered with food skills, and taught to think critically about food and nutrition to be able to improve their own personal health and the health of our planet.

Defining Food Literacy

The concept of food literacy is growing in interest but a common definition has not yet been established. It is increasingly being recognized that we need to think of food literacy more broadly through two core dimensions: (1) health and well-being, and (2) food systems. Food literacy education also needs to include 3 different levels of literacy: declarative knowledge (i.e., factual information or "knowing of/about"), procedural knowledge (i.e., food skills or "knowing how to") and critical reflection.

Current Situation

When we look at the curriculum we see gaps in all levels of food literacy: declarative, procedural knowledge as well as critical literacy. The current Ontario curriculum mainly emphasizes nutrition literacy through the Health and Physical Education Curriculum and focuses on declarative knowledge.

Students who do not take optional specialized food courses are not likely to get much more than basic nutritional education (e.g., learning about Canada's Food Guide) in their schooling.

Taken all together, Ontario students can better advance their personal health and well-being and participate effectively in their food systems if they have knowledge, personal skills, and critical thinking skills relating to health and well-being as well as food systems.

Recommendations:

Food literacy is a pedagogical domain that can be improved through a *Food Literacy for Students Act*. If it is addressed comprehensively it can improve the health of our population and food systems.

We recommend that the Government of Ontario:

- 1. **Implement Bill 216:** *A Food Literacy for Students Act* at the earliest convenience, making experiential food literacy education mandatory from grades 1-12.
- 2. Adopt a definition and a broad conceptualization of food literacy that includes both the dimensions of health and well-being as well as food systems.
- 3. Begin to meaningfully consult and engage with a broad range of individuals and groups including educators, dietitians, community organizations, food professionals such as chefs and farmers, and Indigenous nations to ensure that the approach for implementing Bill 216 is appropriate in different contexts, cultures and worldviews.
- 4. Determine a set of desired competencies and expected food literacy benchmarks for different grade levels, including expectations for graduation from grade 12. Ensure that these desired competencies include Indigenous and cultural references throughout each aspect of food literacy so as to be relevant for all students and to acknowledge neo-colonial issues in modern health approaches and food systems. Also ensure that food literacy education includes experiential hands-on learning as well as critical literacy, as these will complement theoretical learning and increase knowledge solidification and future action.
- 5. **Identify and document gaps in food literacy education** across the dimensions of health and nutrition as well as food systems for each level of food literacy (declarative, procedural and critical literacy).
- 6. Review Ontario's current curriculum to explore how it could be modified to best achieve the desired competencies and specific food literacy objectives throughout and across different subject areas for each grade level. This effort can draw on existing resources, lesson plans and materials that have been developed by teachers and organizations in this field.
- 7. Ensure the modified curriculum reflects the cultural diversity of Ontario, including the perspectives and traditions of BIPOC (Black, Indigenous, and People of Colour) communities and their relationships to the land and food systems. Land-based and experiential learning should be prioritized wherever possible.
- 8. **Develop a multi-year roll-out plan** that includes curriculum changes, the engagement of community partners with an expertise in food literacy, professional development for teachers and other school staff, infrastructure modifications and policy development. This roll-out plan should take a flexible approach to enable school boards and school communities to implement the legislation based on their own context, needs, opportunities, gaps and assets in their own communities.
- 9. Allocate a sufficient budget to support the development and implementation of a comprehensive, effective, and sustainable food literacy curriculum that incorporates the above recommendations.

See our full policy briefing note (pages 3-32) for additional discussion and considerations for rolling out Bill 216: *A Food Literacy for Students Act*.



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POLICY BRIEFING NOTE Bill 216 - Food Literacy for Students Act, 2020

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Supporters of this policy brief:

- Alliance for Healthier Communities **BGC Canada Canadian Cancer Society** Canadian Environmental Law Association **Community Food Centres Canada** Ecosource Food Policy Council for KFL&A **FoodShare Toronto** Frontenac County Council Green Thumbs Growing Kids Hastings Prince Edward Public Health Headwaters Food and Farming Alliance Heart & Stroke Kids' Growing City London Environmental Network London Food Coalition, Inc. Middlesex London Food Policy Council **National Farmers Union**
- National Farmers Union Ontario Nature Harmony Foundation NFU Local 316 **Ontario Dietitians in Public Health Ontario Family Studies Home Economics Educators'** Association **Ontario Food Collaborative Ontario Public Health Association Ottawa Food Policy Council Peel Food Action Council Rainbow Plate** Roots to Harvest Simcoe County Food Council Sudbury Shared Harvest summerlunch+ The Local Community Food Centre **UNICEF** Canada West Elgin Community Health Centre

Policy issue:

Canadians - including Ontario elementary, middle and high school students - often do not have the knowledge, skills and/or opportunity to actualize their personal health and well-being in relation to food, or to participate as informed and engaged citizens in their food systems.

Definition and Conceptualization of Food Literacy:

The concept of food literacy is growing in interest but a common definition has not yet been established. It is increasingly being recognized that we need to think of food literacy more broadly. This brief emphasizes two core dimensions: (1) health and well-being, and (2) food systems.

Health Canada has adapted the definition of food literacy by <u>Cullen and Colleagues (2015)</u> in their <u>2019 Dietary</u> <u>Guidelines</u>:

"Food literacy includes food skills and practices that are learned and used across the lifespan to participate within a complex food environment. Food literacy also means considering the social, cultural, economic and physical factors related to food" (p. 36)

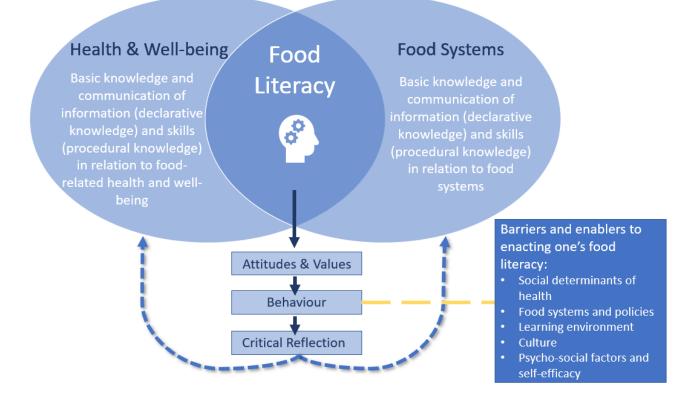
In the context of education, the original definition by Cullen and Colleagues may be more applicable given that it uses the language of "a complex food system" instead of "a complex food environment". It also references the ideas of participating in food systems, making decisions to achieve personal health and names the concept of sustainability. Cullen and Colleagues define food literacy as:

"the ability of an individual to understand food in a way that they develop a positive relationship with it, including food skills and practices across the lifespan in order to navigate, engage, and participate within a complex food system. It's the ability to make decisions to support the achievement of personal health and a sustainable food system considering environmental, social, economic, cultural, and political components" (p. 143).

In 2016 the Ontario Dietitians in Public Health went through a process to determine <u>attributes for food literacy</u> and concluded that "Food literacy is a set of interconnected attributes organized into the categories of food and nutrition knowledge, skills, self-efficacy/confidence, food decisions, and other ecologic (external) factors such as income security, and the food system."

These two core dimensions, health and well-being and food systems, as they relate to food literacy are shown in Figure 1.

Figure 1: Food literacy conceptualization including dimensions, knowledge and action elements, and barriers or enablers (adapted by Martin from <u>Azevedo-Perry et al., 2017</u>; published in Martin & Massicotte, in press; <u>Rosas et al., 2021</u>)



For food literacy education to be effective it also needs to include 3 different levels of literacy: declarative knowledge (i.e., factual information or "knowing of/about"), procedural knowledge (i.e., food skills or "knowing how to") and critical reflection (see Table 1 for more details).

Table 1: Food Literacy Framework		
Declarative Knowledge (Functional food literacy)	Basic knowledge and communication of credible, evidence-based nutrition, food, and agri-food systems information, involving accessing, understanding and evaluating information.	
Procedural Knowledge (Interactive food literacy)	Development of personal skills (i.e., cooking, farming/growing, harvesting, etc.) regarding food and nutrition issues, and agri-food systems, involving informed decision-making, goal setting and practices to enhance nutritional health and well-being and agri-food systems sustainability.	
Critical reflection (Critical food literacy)	Respect for different cultural, family and religious beliefs in terms of food and nutrition. Understanding the wider context of agri-food systems (production, processing, distribution, marketing, consumption and waste) and nutritional health, and advocating for individual, community and	

	institutional changes that enhance nutritional and agri-food systems health at the local, regional, national and global scales.
Source: Martin & Massicotte	(in press; adapted from <u>Slater (2013</u> , p. 623)

Taken all together, Ontario students can better advance their personal health and well-being and participate effectively in their food systems if they have factual knowledge, procedural skills, and critical thinking skills relating to health and well-being as well as food systems.

Background:

Although there is little research on Canadians' food literacy, the Conference Board of Canada released a report in 2013 that showed that our food literacy levels are limited, especially about food systems (Howard & Brichta, 2013). The Canadian Centre for Food Integrity confirmed this finding in their 2019 annual report, which indicated that **91% of Canadians know little, very little or nothing about modern food production** (<u>CCFI, 2019</u>).

The past decades have seen large cutbacks of food skills education in the Ontario school curriculum. Hands-on cooking programs are now voluntary and are only taken by a minority of students. In many families, children are also no longer learning how to cook at home for a variety of reasons; **food skills are being eroded in households regardless of socio-economic status**. The mass deskilling in growing and preparing healthy foods has happened at the same time as we've seen an increase in the consumption of processed foods. This has contributed to growing rates of diet-related diseases. Unhealthy diets have been estimated to <u>cost Canada</u> <u>\$13.8 billion per year</u> in lost productivity and healthcare costs and are <u>costing Ontario \$7.4 billion annually</u>. These impacts are disproportionately affecting those who already experience health inequities (e.g., low socioeconomic status, poor mental health, Indigenous people).

Public Health research has for years shown that **improved nutritional knowledge and food skills would promote cooking at home and better diet quality** (<u>Desjardins & Azevedo, 2013</u>; <u>Nutrition Connections</u> <u>evidence briefs</u>). Further evidence suggests that eating habits developed during early childhood are sustained into adolescence and adulthood, and are associated with reduced risks of chronic diseases later in life (<u>Health</u> <u>Canada, 2012</u>; <u>Ratcliff et al., 2011</u>).

Other public health and community voices have added that **food choices are often out of individuals' control** and depend on their socio-economic status, housing conditions and other social determinants of health. All of these can impact access to kitchen facilities, food, time and other conditions needed for healthy eating behaviours (Azevedo-Perry et al., 2017). As such, some food literacy programs and approaches put more **emphasis on educating about how to improve access to food by** teaching gardening skills and how to shop on a budget. These programs may teach about food systems and raise awareness of how to improve community access to healthy and sustainable food.

Many also argue that society's disconnect from where our food comes from and how it is grown and produced can **contribute to social and ecological harm** (<u>Clapp, 2020</u>). Researchers such as <u>Lang (2005)</u> and <u>Nemecek et al</u> (<u>2016</u>) recommend that food be discussed in a comprehensive and food systems-oriented way so that environmental and other issues related to our food supply chains are considered (e.g., refraining from making nutrition recommendations for individuals to consume large amounts of fish while fish stocks are declining).

With rising health concerns, limited access to food for many, and growing concerns about climate change as

well as other environmental crises, **individuals and society as a whole need to be more informed about nutrition and food systems, empowered with food skills, and taught to think critically about food and nutrition** to be able to improve their own personal health and the health of our planet (<u>Willett et al., 2019</u>).

Food and hands-on food literacy education can act as powerful catalysts for students to gain the academic skills and personal skills that contribute to long-term success including critical thinking, innovation, collaboration, problem-solving, numeracy, literacy, communications, and thinking about complex issues including health, the environment, the economy, and our place within broader food systems.

Hands-on experiences that connect students with food are exciting, engage students who are tactile learners, and help make learning real. **Food literacy education brings curriculum material**—including math, science, the arts, history, geography, social studies, health and language—to life, and makes the curriculum much more accessible because everyone eats and has a connection to food.

Current Situation:

When we look at the curriculum, while keeping in mind the broader conceptualization of food literacy, we see gaps in all levels of food literacy: declarative (functional, including factual information), procedural knowledge (interactive, including food skills) as well as critical literacy. The current Ontario curriculum mainly emphasizes nutrition literacy through the Health and Physical Education Curriculum and focuses on declarative knowledge.

- At the moment hands-on food skills are primarily taught as optional courses and only in high school. Some teachers and community partners are doing some <u>fantastic work</u> teaching the curriculum through hands-on learning, but these efforts are voluntary and can only reach a small amount of students at a school.
- Education about food systems, their complexity, and how they intersect with other issues such as health and wellbeing, equity, food cultures and traditions, food security or insecurity, and the environment is mainly offered in optional high school courses and is not very present in the mandatory curricula. Many teachers and educators are linking a variety of subjects and curriculum expectations to broader food system education (see Appendix A); however, this is only possible when the teacher understands and intentionally makes these connections.

As such, students who do not take optional specialized food courses are not likely to get much more than basic nutritional education (e.g., learning about Canada's Food Guide) in their schooling. **Table 2 presents examples of food literacy competencies that are missing or are minimally covered in the curriculum based on an initial scan**.

Table 2: Examp	able 2: Examples of food literacy gaps in the Ontario Curricula			
Health and Nutrition Food Systems				
Declarative knowledge gaps	 Knowing about foods and what ingredients are in them 	 Understanding where food comes from and how and where it is produced, processed, sold and thrown away 		

		 Understanding what local foods are available, how and where to obtain them Understanding how food systems impact the environment and contribute to climate change
Procedural knowledge gaps	 The development of food skills, self-efficacy and confidence (how to cook food including following and adapting recipes or accommodating preferences and dietary needs of family members) 	 Knowing how to find and choose sustainable foods and support local farmer livelihoods The development of food skills (how to grow food; how to sustainably harvest, hunt, fish for or forage for food; how to make good use of leftovers and avoid food waste)
Critical literacy gaps	 Celebrating and having respect for different cultural, family and religious beliefs and practices in terms of food and nutrition Understanding the social determinants of health as they relate to food and nutrition 	 The impact of the food system on individual health, broader societal and economic wellbeing, and the environment as well as how to think critically and influence the food system Understanding the impact of food systems on the availability of cultural foods

See Appendix A for a more thorough illustration of food literacy gaps that exist in the Ontario curriculum.

It is important to note that some schools in Ontario have advanced food literacy programs, which often exist as a result of the initiative of a champion teacher, principal, parent, community member, or a partnership with a community food organization. Many of these programs come about as a result of external grant opportunities and/or community partnerships.

Recommendations:

Food literacy is a pedagogical domain that can be improved through the *Food Literacy for Students Act*. If it is addressed comprehensively it can improve the health of our population and food systems.

We recommend that the Government of Ontario:

- 1. **Implement Bill 216:** *Food Literacy for Students Act* at the earliest convenience, making experiential food literacy education mandatory from grades 1-12.
- 2. Adopt a definition and a broad conceptualization of food literacy that includes both the dimensions of health and well-being, as well as food systems. We recommend making use of the definition by Cullen

and Colleagues (2015) outlined in this briefing note to inform a definition for the legislation. (See Definition and Conceptualization of Food Literacy on Page 1 above).

- 3. Begin to meaningfully consult and engage with a broad range of individuals and groups including educators, dietitians, community organizations, food professionals such as chefs and farmers, and Indigenous communities to ensure that the approach for implementing Bill 216 is appropriate in different contexts, cultures and worldviews.
- 4. Determine a set of desired competencies and expected food literacy benchmarks for different grade levels, including expectations for graduation from grade 12. Ensure that these desired competencies include Indigenous and cultural references throughout each aspect of food literacy so as to be relevant for all students and to acknowledge neo-colonial issues in modern health approaches and food systems. Also ensure that food literacy education includes substantial experiential hands-on learning as well as critical literacy, as these will complement theoretical learning and increase knowledge solidification and future action. (See Appendix A for a set of competencies that could be built upon)
- 5. **Identify and document gaps in food literacy education** across the dimensions of health and nutrition as well as food systems for each level of food literacy (declarative, procedural and critical literacy; see Appendix A for an initial scan)
- 6. Review Ontario's current curriculum to explore how it could be modified to best achieve the desired competencies and specific food literacy objectives throughout and across different subject areas for each grade level. Distinct curriculum and associated learning outcomes should be established by grade. This may include modifying curriculum objectives; for example, modifying mention of "social systems" to specifically reference "food systems", or using food as an example across different subject areas. This effort can draw on but cannot be replaced by existing resources, lesson plans and materials that have been developed by teachers and organizations in this field (see Appendix A for some examples of these resources).

Curriculum expectations and resources should be reviewed, updated and developed by experts in the areas of education (especially teachers), food, nutrition, health, food systems and other relevant areas of expertise and assessed for age/developmental stage using a health equity lens. Revised expectations should be evidence-based and aligned with best practices for teaching food literacy to children and youth. These changes should be substantial enough in terms of time and content to achieve the desired competencies. The interests of students should be at the centre of this work, ensuring that they gain the knowledge and skills to support their long-term health and wellbeing. Curriculum that advances specific stakeholder group and/or private sector interests, and lessons that include marketing or advertising to students should be absent from the curriculum.

- 7. Ensure the modified curriculum reflects the cultural diversity of Ontario, including the perspectives and traditions of BIPOC (Black, Indigenous, and People of Colour) communities and their relationships to the land and food systems. Land-based and experiential learning should be prioritized wherever possible.
- 8. **Develop a multi-year roll-out plan** that includes curriculum changes, the engagement of community partners with an expertise in food literacy, professional development for teachers and other school staff, infrastructure modifications and policy development. This roll-out plan should take a flexible approach to enable school boards and school communities to implement the legislation based on their own context, needs, opportunities, gaps and assets.

Professional development should equip educators to use hands-on food education as a vehicle for teaching about critical food issues (e.g., food security, food sovereignty, food justice, climate change, cultural awareness, etc.), helping students to make informed decisions throughout their lives and understand what actions are needed to build just, equitable, resilient, and sustainable food systems.

9. Allocate a sufficient budget to support the development and implementation of a comprehensive, effective, and sustainable food literacy curriculum that incorporates the above recommendations.

Key Considerations and Opportunities for Roll-Out:

In order to ensure the comprehensive implementation of Bill 216, it will be important to take a number of considerations into account:

Broader framework: It will be valuable to foster linkages between different Ministry of Education policies, frameworks, and initiatives such as: <u>Foundations for a Healthy School</u>, Community-Connected Experiential Learning: A Policy Framework for Ontario Schools, <u>Ontario's Indigenous Education Strategy</u>, and the <u>Acting</u> <u>Today, Shaping Tomorrow Policy Framework for Environmental Education in Ontario Schools</u>. It would also be valuable to explore how food literacy education could align with the Ontario Student Nutrition Program and a possible National School Food Program.

Curriculum revisions: Food can be a fantastic catalyst to teach all areas of the curriculum as it is <u>not only an</u> <u>object of education, but a vehicle for education</u>. As shown in Appendix A, many food literacy competencies are not directly covered in the current curriculum. Embedding food literacy expectations, opportunities and examples in all grades and across subjects of the Ontario curriculum would be valuable as appropriate. Curriculum revisions can draw on existing resources, lesson plans and considerations from both internal and external sources. There are also many opportunities to scale up existing programs such as the Specialist High School Major (SHSM) program, which offers culinary, horticulture and agriculture specializations.

Experiential learning: Extensive benefits can be had from establishing curricula based in experiential learning. Experiential food lessons will provide students with practical life skills to plan, purchase, prepare, and grow food. Such hands-on activities can make students excited about trying new foods and more likely to choose healthy options. Developing these important competencies can also lead to increased confidence and improved self-esteem (Blair, 2009). Research has shown that experiential food education is associated with personal and academic skill development, including critical thinking, innovation, collaboration, cooperation, problem solving, numeracy, literacy, communication, and thinking about complex issues including our health, the environment, the economy, and our place in the broader food system (Korzun & Webb, 2014; Williams & Dixon, 2013; Block et al., 2012). Those that provide experiential food-based learning regularly hear that hands-on experiences that let students connect with food are exciting, that they engage students who are less enthusiastic about school, and that they help make learning real. Land-based learning is an effective way to go about experiential learning and is critical when learning about Indigenous food traditions. For these reasons we advocate that experiential learning activities are prioritized in the curriculum.

Community partner engagement: Many teachers and volunteers feel overloaded and food literacy programming takes time and expertise. As shown with the curriculum and workshop resource examples in the right-hand column of the chart in Appendix A, community partners already support food literacy education in schools throughout the province in many significant ways. It would be valuable to support existing community organizations and partners who have expertise in food literacy to help bring food literacy into schools and to

support co-op and career opportunities. Also consider developing the role of comprehensive school-based health educators to support comprehensive school health, or food literacy facilitators (see the <u>Apple Schools</u> <u>model</u>, which has shown a high rate of return on any dollar invested).

Professional development: Teachers and other school staff are not trained to provide food literacy education except for those teachers who are planning to teach family studies and/or hospitality and tourism. To complement support from community partners and/or dedicated food literacy staff, food literacy should be included in both pre-service training and ongoing professional development opportunities and staff should be given release time to attend training. Such training should support a comprehensive approach to bringing food literacy education into the classroom and as well as throughout the whole school environment. It should draw on the expertise of experienced food literacy teachers, registered dietitians and other community partners. Training and professional development would be best complemented by resources that share teaching concepts and opportunities to embed food literacy education into the curriculum. Such resources should be assessed for quality/accuracy using standardized criteria.

Infrastructure: Ontario schools were often not built with facilities, kitchens and gardens needed to accommodate hands-on experiential food literacy learning for large numbers of students. It will be important to consider how to fill the gap in school infrastructure for experiential food literacy. Optimizing these opportunities will require creativity and financial resources. Implementation could be planned over a longer time period for both retrofits and future school design, although a great deal can be achieved with existing resources and facilities in many schools. Similar approaches have been taken in Ontario with acts such as the Accessibility for Ontarians with Disabilities Act, 2005 (AODA), which specified that changes to the built environment were to occur over a number of years to enable institutions and organizations to have enough time to make modifications where necessary. A joint-letter by the Council of Ontario Directors of Education and Council of Ontario Medical Officers of Health (CODE-COMOH letter) to the Premier of Ontario recommends developing legislation that any new schools must include adequate infrastructure for food skills development. Many innovative approaches could be applied to the lack of physical infrastructure for food literacy in schools. For example, some schools and organizations have made use of mobile kitchen carts and other portable food skills equipment such as blenders, crock pots and kettles as well as the use of community or commercial kitchens and gardens. These types of innovative examples provide a basis for immediate opportunities for experiential food literacy education in Ontario schools and communities. Infrastructure considerations of this nature are important and timely as the federal government contemplates the development of a National School Food Program since funds could be coordinated across jurisdictions.

Building on Existing Law and Policy: Future directions in the implementation of Bill 216 could draw upon a number of existing laws and policies:

- Environmental Education: The Ontario Ministry of Education has highlighted the importance of environmental education through <u>Shaping our Schools</u>, <u>Shaping our Future: Environmental Education in</u> <u>Ontario Schools</u> (2007) and the <u>Framework for Environmental Education in Ontario Schools</u> (2009). The framework provides an excellent model for how food literacy could be integrated into the Ontario curriculum.
- The <u>Local Food Act, 2013</u> calls for "improv[ing] food literacy in respect of local food", which was expanded in a later release of <u>Local Food Literacy Goals</u> by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). These goals include "Increase the number of Ontarians who know what

local foods are available", "Increase the number of Ontarians who know how and where to obtain local foods", and "Increase the number of Ontarians who prepare local food meals for family and friends, and make local food more available through food service providers". Bill 216 poses a significant opportunity to realize these goals.

- The *Food Policy for Canada*, released in 2019, announced the desire to consult towards a National School Food Program. It stated that "The Government of Canada will also engage with provinces, territories, and key stakeholder groups to work toward the creation of a National School Food Program" (p. 9). This commitment was initially made in the 2019 federal budget plan (at p. 163). Bringing more healthy food into schools in a shared meal environment would undoubtedly support Bill 216 and make many opportunities for food literacy learning available.
- It will also be important to consider what supportive policies are needed such as school-board level wellness policies and the development of a set of standards for food literacy education similar to the <u>Standards for Environmental Education in the Curriculum</u> (2008).

Appendix A: Desired food literacy competencies, Existing curriculum links, Curriculum gaps and Example resources and plans

The following table identifies food literacy competencies that have been articulated in various relevant frameworks, shares a preliminary examination of where these competencies exist in the current curriculum, identifies observed curriculum gaps and highlights examples of existing resources and lesson plans that have been developed by external organizations to fill curricular gaps and to enhance food-related education.

Many of the desired competencies in this table have been drawn from two sources, which have been colour-coded in the document:

- Ontario Dietitians in Public Health Food Literacy Framework
- Canada's Food Guide, 2019 Canada's Dietary Guidelines for Health Professionals and Policy Makers

Note that the items identified in the "Existing Curriculum Links" column are **not a complete list** but start to form a picture from an initial set of searches.

Also note that these example resources and lesson plans have been included to show the breadth of opportunities to teach food literacy in the curriculum. These resources can be screened and built upon during an independent review by subject experts. They cannot, however, replace a strong cross-curricular approach nor the essential and adequate training and capital resources.

Dimension: Health and Nutrition				
	Food Literacy Attribute: Food Knowledge			
Desired Competency	Existing Curriculum Links	Curriculum Gaps	Ex. Resources / Lesson Plans	
Knowing about a wide variety of foods (Declarative)	Direct curriculum expectations: Gr 3 Health and Physical Education D3.1: explain how local foods and foods from various cultures (e.g., berries, curries, chapatis, lychees, kale, lentils, corn, naan, wild game, fish, tourtière) can be used to expand their range of healthy eating choices Gr 11 Food and Culture - Foods and Flavours C1. Food Availability: demonstrate an understanding of the relationship between geography and the foods naturally found and/or produced in Canada and various other countries; C2. Sources of Foods: demonstrate an understanding of the sources of foods eaten in Canada and in various other countries/ cultures	Very few direct links	FoodLand OntarioKids' CornerEcosource -ClassroomConnects (Gr 9-12)Healthy EatingHabits (AgScape)Food Around theWorld (AgScape)All About Food(AIT-C)Fruits and VeggiesEveryday(AgScape)Grown andProduced inOntario (AgScape)Eat Local?(AgScape)	

Knowing what ingredients are in food (Declarative)	Gr11 <u>Food and Culture</u> - Foods and Flavours C3. Flavours of the World: demonstrate an understanding of the characteristic flavours, aromas, herbs, and spices associated with cuisines of various countries/cultures.	Very few direct links	Food Around the World (AgScape)Nutrition & Health Claims (AgScape)Reading Labels Means Healthy Food Choices (AgScape)
Knowing how healthier foods fit into your eating pattern (Declarative)	 Direct curriculum expectations: Gr 1 Health and Physical Education D2.1: describe how Canada's Food Guide can help them develop healthy eating habits Gr 1 Health and Physical Education D2.2: know and recognize cues to hunger, thirst, and the feeling of fullness, and explain how they can use these cues to develop healthy eating habits Gr 2 Health and Physical Education D2.1: use Canada's Food Guide to identify food and beverage choices that contribute to healthy eating patterns Gr 2 Health and Physical Education D2.2: demonstrate an understanding of how to make healthy food choices for meals and snacks, considering the factors they can and cannot control (e.g., the food that 's available in the home; the food that 's available when eating out; energy needed at different times of day; allergies; food guidelines associated with medical conditions such as diabetes or celiac disease; food safety related to food preparation, storage, handling, and cleanliness) Gr 2 Social Studies People and Environments B3.6: Identify basic human needs (e.g., for food, water, clothing, transportation, shelter), and describe some ways in which people in communities around the world meet these needs (e.g., food: hunting, fishing, farming, shopping at grocery stores; transportation: on foot, using animals, using motorized vehicles, by water) Gr 3 Health and Physical Education D3.1: explain how local foods and foods from various cultures (e.g., berries, curries, chapatis, lychees, kale, lentils, corn, naan, wild game, fish, tourtière) can be used to expand their range of healthy eating choices Gr 9/10 Food and Nutrition - Nutrition and Health B1: Canada's Food Guide: demonstrate an understanding of the nutritional and health recommendations in Canada's Food Guide Gr 9/10 Food and Nutrition - Nutrition and Health B2: Eating Patterns: demonstrate an understanding of the autritional and health Gr 12 Nutrition and Health Indirect opportunities		Ontario Dietitians in Public Health's BrightbitesFoodShare's Signature Salads (Gr 3-8)FoodShare's Scrappy Salad worksheetFoodShare's 2019 Great Big Crunch toolkitFoodShare's Fuel for Fun lesson plan"Herbalicious/ self care"AgScape: Healthy Eating Habits (gr 1)AgScape: Healthy Eating: Eating Well in OntarioAITC-C: Health &

Knowing where to find healthy foods (Declarative)		No direct links	Ecosource - Classroom Connects (Gr 9-12) FoodShare's My Food Justice League worksheet AgScape: <u>Healthy</u> Eating: Eating Well in Ontario (Gr 4-6) AgScape: <u>Eat</u> Local?
Respect for different cultural, family and religious beliefs and practices in terms of food and nutrition. Consideration: Cultural food practices should be celebrated (Declarative, Critical)	 Direct curriculum expectations: Gr 2 Social Studies <u>Heritage and Identity A1.2</u>; Compare their family's structure and some of their traditions and celebrations with those of their peers' families (e.g., traditions/celebrations related to rites of passage, holidays, foods) Gr 2 Social Studies <u>Heritage and Identity A2.1</u>; Formulate questions to guide investigations into some of the past and present traditions and celebrations in their own family and the communities to which they belong (e.g., simple questions related to past and present practices associated with Christmas, Yom Kippur, Eid ul-Fitr, Diwali, or Kwanzaa) Gr 2 Social Studies <u>Heritage and Identity A3.2</u>; Identify some different groups in their community (e.g., various religious and ethnocultural groups), and describe some of the ways in which they contribute to diversity in Canada (e.g., different languages, foods, music, clothing, holidays; ethnic neighbourhoods with specialized shops and restaurants) Gr 2 Social Studies <u>Heritage and Identity A3.6</u>; Identify some ways in which heritage is passed on through various community celebrations and events (e.g., recipes are passed down to new generations when traditional food is prepared for a community celebration; ethnocultural festivals often showcase traditional costumes, music, dance, stories, and/or games) Gr 3 <u>Health and Physical Education D3.1</u>: explain how local foods and foods from various cultures (e.g., berries, curries, chapatis, lychees, kale, lentils, corn, naan, wild game, fish, tourtière) can be used to expand their range of healthy eating choices Gr 11 <u>Food and Culture</u> - B1. Food Choices: demonstrate an understanding of the factors that influence food choices, with reference to a variety of cultures; B2. Food Guidelines: demonstrate an understanding of the key recommendations in Canada's Food Guide and the food and nutrition guidelines of other countries; B3. Culture and Food Habits: demonstrate an understanding of the inf	Very few links, more declarative rather than critical education	FoodShare's Food & Culture presentation (JK/SK) FoodShare's Fuel for Fun lesson plan "Wrap It Up" FoodShare's Reconcili-ACTION lesson plan FoodShare's Putting Race on the Table lesson plan Food Around the World (AgScape) AgScape: The Three Sisters (Gr 5) Pulses Around the World (AITC-C) https://bit.ly/2OV OwDH The Sky Woman (AgScape) https://bit.ly/3cOe X34

	flavours, aromas, herbs, and spices associated with cuisines of various countries/cultures. Indirect opportunities to link to the curriculum: Gr 2 Social Studies People and Environments B1.1: compare selected communities from around the world, including their own community, in terms of the lifestyles of people in those communities and some ways in which the people meet their needs		
	Dimension: Health and Nutrition Food Literacy Attribute: Nutrition knowledge and literacy		
Desired Competency	Existing Curriculum Links	Curriculu m Gaps	Ex. Resources / Lesson Plans
What nutrients are in food (Declarative)	Direct curriculum expectations: Gr 4 <u>Health and Physical Education D1.1</u> : identify the key nutrients (e.g., fat, carbohydrates, protein, vitamins, minerals) provided by foods and beverages, and describe their importance for growth, mental and physical health, learning, and physical performance	Not much discussion of nutrients and what foods they're in	FoodShare's <u>Fuel</u> <u>for Fun lesson</u> <u>plan</u> "Is wealth good for your health/ homemade gatorade" <u>How Does a Label</u> Influence my <u>Choice?</u> (AgScape) <u>Nutrition & Health</u> <u>Claims: What Do</u> <u>They Mean?</u> (AgScape)
How food affects your health (Declarative)	 Direct curriculum expectations: Gr 1 Health and Physical Education D1.1: explain why people need food to have healthy bodies and minds (e.g., food provides energy and nutrients for the healthy growth of teeth, skin, bones, and muscles and the healthy development of the brain) Gr 1 Health and Physical Education D1.1: explain why people need food to have healthy bodies and minds (e.g., food provides energy and nutrients for the healthy growth of teeth, skin, bones, and muscles and the healthy development of the brain) Gr 1 Health and Physical Education D1.1: explain why people need food to have healthy bodies and minds (e.g., food provides energy and nutrients for the healthy growth of teeth, skin, bones, and muscles and the healthy development of the brain) Gr 3 Health and Physical Education D2.1: demonstrate an understanding of the importance of good oral health to overall health, and assess the effect of different food choices on oral health Gr 3 Health and Physical Education D1.1: demonstrate an understanding of how the origins of food (e.g., where the food is grown, harvested, trapped, fished, or hunted; whether and how it is processed or prepared) affect its nutritional value and how those factors and others (e.g., the way we consume and dispose of food) can affect the environment Gr 4 Health and Physical Education D1.1: identify the key nutrients (e.g., fat, carbohydrates, protein, vitamins, minerals) provided by foods and beverages, 	Many direct curriculum links	Ontario Dietitians in Public Health's Brightbites FoodShare's <u>Cooking & Tasting</u> <u>Toolkit</u> (educators) FoodShare's <u>FoodPrints &</u> <u>Energy Detectives</u> (gr 7) FoodShare's <u>Time</u> <u>to Talk Turkey</u> (gr 8) FoodShare's <u>Green</u> <u>New Meal</u> lesson plan <u>All About Food</u> (AITC-C)

	and describe their importance for growth, mental and physical health,		Healthy Eating
	learning, and physical performance		Habits (AgScape)
	Gr 6 <u>Health and Physical Education D3.1</u> : explain how healthy eating and active living work together to improve a person's overall physical and mental health and well-being (e.g., both provide more energy and contribute to		<u>Fruits & Veggies</u> <u>Every Day</u> (AgSCape)
	improved self-concept and body image, greater resistance to disease, and better overall health; both help a person to maintain a weight that is healthy for them) and how the benefits of both can be promoted to others		<u>Health & Nutrition</u> (Pulses) (AgScape)
	Gr 8 <u>Health and Physical Education D2.1</u> : evaluate personal eating habits and food choices on the basis of the recommendations in Canada's Food Guide, taking into account behaviours that support healthy eating (e.g., mindful eating, enjoying your food, choosing a variety of healthy foods, awareness of food marketing, using food labels, making water your drink of choice more often)		
	Gr 9 <u>Health and Physical Education C1.1</u> : explain how active living and healthy eating contribute to a person's physical health and mental, emotional, and spiritual well-being, and describe the benefits of a holistic approach to health		
	Gr 10 <u>Health and Physical Education C2.2</u> : assess the nutritional implications of a variety of dietary choices, including those reflecting current dietary trends, and explain how they can make personal choices that will provide the nutritional requirements for a healthy, active life		
	Gr 9/10 <u>Food and Nutrition</u> - Nutrition and Health B2: Eating Patterns: demonstrate an understanding of eating patterns that contribute to optimal physical health		
	Gr 9/10 <u>Food and Nutrition</u> - Food Choices C1: demonstrate an understanding of factors affecting people's food needs and of ways of meeting those needs		
	Gr 11 <u>Health and Physical Education C1.1</u> : describe the impact of various diseases and health conditions (e.g., Crohn's disease, celiac disease, diabetes, cancer, anemia, allergies and food sensitivities, vitamin deficiency) on nutrient requirements, food choices, and meal planning		
	Gr 12 Nutrition and Health		
	Indirect opportunities to link to the curriculum:		
	Gr 1-8 <u>Language - Media Literacy OE1</u> : demonstrate an understanding of a variety of media texts		
Knowing how to find reliable and correct info about food and nutrition; how to make sense of it	Gr 5 <u>Health and Physical Education D2.1</u> : explain how to use nutrition fact tables and ingredient lists on food labels to make informed choices about healthy and safe foods	Very few direct curriculum links	FoodShare's <u>Fuel</u> for Fun lesson plan "Is wealth good for your health/ homemade gatorade"
(e.g., reading a food label). How to read, evaluate and interpret nutrition			How Does a Label Influence my Choice? (AgScape) <u>https://bit.ly/3vDl</u> <u>cie</u>
information such			Nutrition & Health Claims: What Do They Mean?

as food and menu labels (Declarative, Procedural)			(AgScape) https://bit.ly/3cNh x9Z Reading Labels Means Healthy Food Choices (AgScape) https://bit.ly/3IDO QAA
To be able to distinguish between credible and false nutrition information (e.g. to think critically about how information from food studies are presented.) How to read, evaluate and interpret marketing of foods and beverages. (Procedural, Critical)	Direct curriculum expectations: Gr 5 Health and Physical Education D3.1: describe how advertising, food marketing, and media affect food choices (e.g., TV commercials, product packaging, celebrity endorsements and social media postings, product placements in movies and programs, idealized and unrealistic body images in movies and programs, magazine articles promoting fad diets, loyalty programs), and explain how these influences can be evaluated to help people make healthier choices (e.g., by critically examining the reasons for celebrity endorsements or public personas or the plausibility of product claims, checking whether there is information in an advertisement to verify its claims, asking for information about product ingredients and nutrients, critically examining the reality and healthiness of idealized body images in the media) Gr 6 <u>Health and Physical Education D2.1</u> : apply their knowledge of medical, emotional, practical, and societal factors that influence eating habits and food choices (e.g., allergies and sensitivities, likes and dislikes, feelings of stress, dental health, food availability, <u>media influence</u> , cultural influence of family and friends, school food and beverage policies, environmental impact, cost) to develop personal guidelines for healthier eating Gr 9/10 <u>Food and Nutrition</u> - Food Choices C3: Media, Advertising, and Food: demonstrate an understanding of how media and advertising messages affect food choices. Indirect opportunities to link to the curriculum: JK/SK (<u>DE12</u>): demonstrate an understanding and critical awareness of media texts Gr 7 <u>Health and Physical Education D3.1</u> : demonstrate an understanding of personal and external factors that affect people's food choices and eating habits (e.g., personal: likes and dislikes, basic food skills, busy schedules, food allergies or sensitivities, health conditions, personal values, cultural practices or teachings; external: family or household budget, cost of foods, access to clean drinking water, t	Some inclusion of how to read, evaluate and interpret marketing of foods and beverages but not much critical education	Growing Up Organic - Intro to Organics, Planning the Garden and Spring Planting (Gr 9-10) FoodShare Toronto - Food, Media & Marketing (Gr 5-12) - Supporting slides: Eood Packaging and Advertising Health Claims and Nutritional Information Name That Brand, Name That Brand, Name That Brand, Name That Brand, Name That Brand, Name That Food, Portion Distortion You Sure You Want to Drink That? FoodShare's Everybody for Every Body lesson plan How Does a Label Influence my Choice? (AgScape) https://bit.ly/3vDI cie Nutrition & Health Claims: What Do They Mean? (AgScape) https://bit.ly/3cNh x9Z

Dimension: Health and Nutrition					
Food Literacy Attribute: Food and Nutrition Language					
Desired Competency	Existing Curriculum Links	Curriculu m Gaps	Ex. Resources / Lesson Plans		
Commonly used words to describe the healthier benefits of foods (e.g., high-fibre, low-sodium) (Declarative)	Indirect opportunities to link to the curriculum: Gr 5/6 Language - Writing: generate, gather, and organize ideas and information to write for an intended purpose and audience	Largely absent in the curriculum	FoodShare's <u>Herbalicious</u> <u>Poetry</u> activity FoodShare's <u>Macky Mac & the</u> <u>Crunchy Bunch</u> activity		
Commonly used words related to preparing and cooking of food (e.g., to sauté or to fold or to boil, bake or fry) (Declarative)	Indirect opportunities to link to the curriculum: Gr 5/6 Language - Writing: generate, gather, and organize ideas and information to write for an intended purpose and audience	Largely absent in the curriculum			
	Dimension: Health and Nutrition				
	Food Literacy Attribute: Social Determinants of Health				
Desired Competency	Existing Curriculum Links	Curriculu m Gaps	Ex. Resources / Lesson Plans		
How a variety of external factors impact food availability and nutrition options and choices (e.g. Supportive environments; living situation such as income, housing, education, access to food; food traditions;	Direct curriculum expectations: Gr 7 Health and Physical Education D3.1: demonstrate an understanding of personal and external factors that affect people's food choices and eating habits (e. g., personal: likes and dislikes, basic food skills, busy schedules, food allergies or sensitivities, health conditions, personal values, cultural practices or teachings; external: family or household budget, cost of foods, access to clean drinking water, type of food available at home, at school, or in the community), and identify ways of encouraging healthier eating practices Gr 9 Health and Physical Education C2.1: analyse the influence of social and environmental factors on food and beverage choices (e.g., financial status, culture, religion, media influence, peer influence, family food traditions, accessibility of different kinds of food, restaurant choices, proximity to where food was produced, environmental impact of food production methods) Gr 10 Health and Physical Education C3.1: demonstrate an understanding of	Direct curriculum link in gr. 7, 9, 12 and in Food & Nutrition Gap throughout most years Gap in critical education	What Toronto Eats (Gr 9-12) What Toronto Eats Supporting DocumentsFoodShare's Food (In)Security 101 lesson planFoodShare's Reconcili-ACTION lesson planFoodShare's Putting Race on		

Desired Competency	Existing Curriculum Links	Curriculu m Gaps	Ex. Resources / Lesson Plans
	Dimension: Health and Nutrition Food Literacy Attribute: Socio-Cultural Influences and Eating P	ractices	
	environmental importance (e.g., child labour, dwindling oil supplies, ownership of and access to fresh water, climate change, food shortages, refugees, or natural disasters), their impact on the global community, and responses to the issues		
	variety of information and data that present various perspectives about Canadian social and/or environmental issues, including the perspectives of Indigenous peoples and of the level (or levels) of government responsible for addressing the issues Gr 6 Social Studies <u>People and Environment B2.1</u> : formulate questions to guide investigations into global issues of political, social, economic, and/or		(AgScape/Arrell Food Institute) Feeding 9 Billion graphic novel, <u>#foodcrisis</u>
	Gr 5 Health and Physical Education: Demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others' health and well-being. Gr 5 Social Studies <u>People and Environment B2.2</u> : gather and organize a		Ontario (AgScape) From Rural to Urban (AgScape) Feeding 9 Billion: The Haven Project
	Gr 2 Social Studies <u>People and Environments B1.1</u> : compare selected communities from around the world, including their own community, in terms of the lifestyles of people in those communities and some ways in which the people meet their needs		AgScape: <u>Eat</u> Local? <u>Grown &</u> <u>Produced in</u>
(Declarative, Critical)	Gr 2 <u>Health and Physical Education D2.2</u> : demonstrate an understanding of how to make healthy food choices for meals and snacks, considering the factors they can and cannot control (e.g., the food that 's available in the home; the food that 's available when eating out; energy needed at different times of day; allergies; food guidelines associated with medical conditions such as diabetes or celiac disease; food safety related to food preparation, storage, handling, and cleanliness)		Security Infographic Part 2 AgScape, F&FC: Temporary Foreign Workers In Canada
for people's food-related health and well-being	Gr 12 <u>Nutrition and Health</u> Indirect opportunities to link to the curriculum:		AgScape <u>Food</u> <u>Security</u> Infographic Part 1 AgScape <u>Food</u>
and accessibility of resources (such as finances, a functioning kitchen, cooking equipment, and a basic shelf of food; time constraints; peer and family supports) How to advocate	ethical and environmental considerations related to food choices) Gr 9/10 Food and Nutrition - Food Choices C2: demonstrate an understanding of various factors that influence food choices Gr 9/10 Food and Nutrition - Local and Global Foods D3: Food Security: demonstrate an understanding of issues related to food security. Gr 12 Health and Physical Education C3.1: assess the food requirements and available food choices of people in a variety of life situations (e.g., the elderly, children, people with chronic diseases, women who are pregnant, families with low in-come, residents of remote northern communities, urban residents living in "food deserts" without ready access to fresh and local foods, shift workers, workers in sedentary occupations, individuals training to be elite athletes), and describe the options available to them for maintaining a healthy diet		FoodShare's <u>Is</u> <u>Wealth Good For</u> <u>Your Health</u> lesson plan FoodShare's <u>Fuel</u> <u>for Fun lesson</u> plan "Wrap It Up" FoodShare's <u>Spotlight on</u> <u>Migrant</u> <u>Farmworkers</u> <u>toolkit</u> (2021)
those you live with; availability	school and in the community (e.g., promoting availability of healthy choices in restaurant and cafeteria menus and in grocery stores, raising awareness of		<u>the Table</u> lesson plan

Social, cultural and gender norms; the influence of socio- cultural values, norms, and beliefs on food choices and eating practices The social support to learn and share food skills. The cultural and family food practices (e.g., eating together) (Declarative, Critical)	 Direct curriculum expectations: Gr 7 Health and Physical Education D3.1: demonstrate an understanding of personal and external factors that affect people's food choices and eating habits (e. g. , personal: likes and dislikes, basic food skills, busy schedules, food allergies or sensitivities, health conditions, personal values, cultural practices or teachings; external: family or household budget, cost of foods, access to clean drinking water, type of food available at home, at school, or in the community), and identify ways of encouraging healthier eating practices Gr 9 Health and Physical Education C2.1: analyse the influence of social and environmental factors on food and beverage choices (e.g., financial status, culture, religion, media influence, peer influence, family food traditions, accessibility of different kinds of food, restaurant choices, proximity to where food was produced, environmental impact of food production methods) Gr 9/10 Food and Nutrition - Food Choices C1: demonstrate an understanding of factors affecting people's food needs and of ways of meeting those needs Gr 9/10 Food and Nutrition - demonstrate an understanding of various factors that influence food choices, with reference to a variety of cultures; B2. Food Guidelines: demonstrate an understanding of the factors that influence food choices, with reference to a variety of cultures; B2. Food Guidelines: demonstrate an understanding of the factors in Canada's Food Guide and the food and nutrition guidelines of other countries; B3. Culture and Food Habits: demonstrate an understanding of the influence of culture on how people obtain, prepare, serve, and consume food. 	Direct curriculum links in gr. 7&9 and in Food & Nutrition Gap throughout most years Gap in critical education	FoodShare's Food & Culture presentation (JK/SK) FoodShare's Everybody for Every Body lesson plan FoodShare's Fuel for Fun lesson plan "Herbalicious/ Self care" Food Around the World (AgScape) ODPH Youth action on food insecurityToolkit
	Dimension: Health and Nutrition Food Literacy Attribute: Food and Nutrition Self-Efficacy; Cooking	Self-Efficacy	
Desired Competency	Existing Curriculum Links	Curriculu m Gaps	Ex. Resources / Lesson Plans
Believing you can choose, buy and prepare food that is healthier Believing you can cook tasty meals using food you have on hand		Largely absent in the curriculum	Growing Up Organic - Intro to Organics, Planning the Garden and Spring Planting (Gr 9-10) FoodShare's <u>So</u> <u>Bad It's Good</u> worksheet
Food Attitude: Attitude towards foods and trying new foods. The desire to learn how to	Gr 9/10 <u>Food and Nutrition</u> - Nutrition and Health B3: Body Image and Attitudes about Food: demonstrate an understanding of factors that contribute to a positive body image and healthy attitudes about food.	Largely absent in the curriculum	FoodShare's <u>Everybody for</u> <u>Every Body</u> lesson plan

Despect for food			
Respect for food traditions and culture.			
Demonstrating eating competence - i.e. being positive, comfortable, and flexible with eating			
	Dimension: Health and Nutrition		
	Food Literacy Attribute: Food Skills		
Desired Competency	Existing Curriculum Links	Curriculu m Gaps	Ex. Resources / Lesson Plans
Basic kitchen skills like chop, mix, stir and measure ingredients How to prepare and handle food safely; how to correctly store food; How to store and prepare food safely.	Direct curriculum expectations (optional courses): Gr 9/10 Food and Nutrition - Food-Preparation Skills E1: Kitchen Safety: demonstrate an understanding of practices that ensure or enhance kitchen safety; E2: Food Safety: demonstrate an understanding of practices that ensure or enhance food safety; E3: Food Preparation: demonstrate skills needed in food preparation; E4: Kitchen Literacy and Numeracy: demonstrate the literacy and numeracy skills required in food preparation Gr 11 Food and Culture - Food-Preparation Skills D1: Kitchen Safety: demonstrate an understanding of practices that ensure or enhance kitchen safety; D2: Food Safety: demonstrate an understanding of practices that ensure or enhance food safety; D3: Food Preparation: demonstrate skills needed in food preparation; D4: Kitchen Literacy and Numeracy: demonstrate the literacy and numeracy skills required in food preparation Gr 12 Nutrition and Health Gr 12 Food and Healthy Living	Largely absent except in optional high school family studies courses	FoodShare's <u>Cooking & Tasting</u> <u>Toolkit</u> (educators) AgScape <u>Food</u> <u>Safety Lesson Plan</u> (Gr. 2-3) AgScape <u>Food</u> <u>Safety Part 1</u> AgScape <u>Food</u> <u>Safety Part 2</u>
How to grow food. How to make a grocery list and stay within budget. How to use the senses needed to assess texture, appearance, taste, and smell of foods; to determine ripeness of plants	Indirect opportunities to link to the curriculum: JK/SK (OE13): Use the processes and skills of an inquiry stance (i.e., questioning, planning, predicting, observing, and communicating) JK/SK (OE14): Demonstrate an awareness of the natural and built environment through hands-on investigations, observations, questions, and representations of their findings JK/SK (OE9): demonstrate literacy behaviours that enable beginning readers to make sense of a variety of texts Gr 1-8 Language - Writing: generate, gather, and organize ideas and information to write for an intended purpose and audience Gr 1/2: Make connections among simple mathematical concepts and procedures, and relate mathematical ideas to situations drawn from everyday contexts	Entirely absent in the curriculum; schools and organization s are using other curriculum expectations to teach these food literacy skills	Growing Up Organic workshops (Planning a garden, planting the garden, composting, etc) Kids' Growing City - <u>Spring School</u> <u>Garden 10 Week</u> <u>Program (Gr 3)</u> Ecosource - <u>Classroom</u> <u>Connects</u> (Gr 9-12

and berries to harvest.	Gr 1/2: Demonstrate an understanding of the use of non-standard units of the same size (e.g., straws, index cards) for measuring	Ecosource's <u>Jardin</u> de l'Éducation
How to hunt or fish; to know where to find plants and berries to	Gr 1 Science and Technology <u>Understanding Life Systems 2.3</u> : Investigate and compare the physical characteristics of a variety of plants and animals, including humans (e.g., some plants produce flowers and some do not; most plants have roots; some animals have two legs, while others have four; all animals have sense organs)	Ecosource's <u>Re-Routed in Play</u> Ontario Dietitians in Public Health's <u>Brightbites - Green</u>
harvest. How to read and follow recipes and prepare meals. To adjust recipes.	Gr 2 <u>Health and Physical Education D2.2</u> : demonstrate an understanding of how to make healthy food choices for meals and snacks, considering the factors they can and cannot control (e.g., the food that 's available in the home; the food that 's available when eating out; energy needed at different times of day; allergies; food guidelines associated with medical conditions such as diabetes or celiac disease; food safety related to food preparation, storage, handling, and cleanliness)	Thumb Badge FoodShare's <u>Can</u> You Dig It? (Gr 2-4) <u>Can You Dig It?</u> <u>Support</u> <u>Documents</u> FoodShare's
Techniques to make meals. How to organize and prepare nutritious meals;	Gr 3 Science and Technology <u>Understanding Life Systems OE2</u> : Investigate similarities and differences in the characteristics of various plants, and ways in which the characteristics of plants relate to the environment in which they grow	Herbalicious Poetry, Match-Up, Butter & Tea (Gr 5-6) ; Herbalicious Poetry (Gr 3-6)
Techniques to prepare and preserve wild	 Gr 3 Science and Technology <u>Understanding Life Systems OE3</u>: Demonstrate an understanding that plants grow and change and have distinct characteristics. Gr 3/4 <u>Math E2</u>: compare, estimate, and determine measurements in various 	FoodShare's <u>Cook</u> <u>Off the Grid</u> - "You Built It!" Series (Gr
foods. How to accommodate preferences and dietary needs of	contexts Gr 3/4 <u>Math E1</u> : describe and represent shape, location, and movement by applying geometric properties and spatial relationships in order to navigate the world around them	4-6) FoodShare's <u>Cooking & Tasting</u> <u>Toolkit</u> (educators) FoodShare's <u>Roots</u>
family members.	Gr 3/4 <u>Math C1</u> : identify, describe, extend, create, and make predictions about a variety of patterns, including those found in real-life contexts	& Shoots lesson plan(JK -2)
Knowing which equipment and tools to use.	Gr 4 The Arts: Visual Art: Apply the creative process to produce a variety of two- and three-dimensional art works, using elements, principles, and techniques of visual arts to communicate feelings, ideas, and understandings	FoodShare's <u>Plant</u> <u>Part Yoga</u> video
Consideration - Food skills should be considered	Gr 5 Science and Technology <u>Understanding Life Systems OE1</u> : analyse the immediate and long-term effects of energy and resource use on society and the environment, and evaluate options for conserving energy and resources	FoodShare's Grow To your Room Pop Bottle Planters lesson plan & worksheet
within the social, cultural, and historical context	Gr 5/6: Demonstrate an understanding of the properties of matter, changes of state, and physical and chemical change. Gr 5/6: Create two-dimensional, three-dimensional, and multimedia art	FoodShare's <u>Build</u> <u>A Worm Bin</u> lesson
of Indigenous Peoples.	works that explore feelings, ideas, and issues from a variety of points of view Gr 5/6: Demonstrate an understanding of composition, using selected principles of design to create narrative art works or art works on a theme or	FoodShare's <u>Build</u> <u>A Bee Condo</u> Iesson
	topic Gr 5/6: Use a variety of materials, tools, techniques, and technologies to determine solutions to design challenges	FoodShare's <u>Turn</u> <u>Food Scraps into</u> <u>Fashion</u> lesson
	Gr 5/6: Analyse the impact of human activities and technological innovations on human health; (Link - Preserving foods)	FoodShare's <u>Build</u> <u>A Seed Ball</u> lesson
	Gr 6 Science and Technology <u>Understanding Life Systems OE3</u> : demonstrate an understanding of biodiversity, its contributions to the stability of natural systems, and its benefits to humans.	Stories:

To make healthy food choices	Gr 2 <u>Health and Physical Education D2.2</u> : demonstrate an understanding of how to make healthy food choices for meals and snacks, considering the factors they can and cannot control (e.g., the food that 's available in the home; the food that 's available when eating out; energy needed at different times of day; allergies; food guidelines associated with medical conditions such as diabetes or celiac disease; food safety related to food preparation,	Many curriculum links	Ontario Dietitians in Public Health's Brightbites FoodShare's Salad Bar toolkits (elementary/ high
Desired Competency	Existing Curriculum Links	Curriculu m Gaps	Ex. Resources / Lesson Plans
	Food Literacy Attribute: Dietary Behaviours		
	Dimension: Health and Nutrition		
	Art - basic art concepts in plating, food photography, teaching history of early painters by making paints out of tea, berries, beets etc		
	Science (cooking with heat, combining liquids, creating emulsifications, baking reactions, learning about our senses through food; roux, acidic reactions (curdling milk), starch thickeners, colour change reactions (baking soda and purple cabbage), pH levels, water temperature and yeast, browning butter, effect of time/temp on hard boiled eggs, food preservation - drying, canning)		
	Literacy (understanding directions and recipe instructions, following instructions in sequential order – ie. following a recipe; writing a review of a meal, developing language to describe taste, texture, appearance; understanding nutritional labelling and portion sizes, creative writing)		
	Math (measuring ingredients and multiplying/ dividing fractions; doubling recipes; figuring out fractions using measuring cups with sand; using a meal planning / budgeting tool; sequences)		
	Gr 7/8: Use scientific inquiry/experimentation skills to investigate the properties of mixtures and solutions Opportunities to link to the curriculum include:		
	Gr 7/8: Investigate ways in which heat changes substances, and describe how heat is transferred;		
	Gr 7/8: Solve problems by using proportional reasoning in a variety of meaningful contexts		
	Gr 7/8: Solve problems involving addition, subtraction, multiplication, and division with simple fractions		applying hands-on food literacy skills
	Gr 7/8: Solve problems involving percent that arise from real-life contexts (substituting ingredients using nutrition labels)		farm to school grantee schools
	are directly proportional (e.g., the number of servings and the quantities in a recipe Gr 7/8: Solve problems involving proportions, using concrete materials		Secondary School (Gr. 9-12, Ottawa) Stories of Ontario

recreation centre, stores, food courts, special events; when camping , having a snack or meal at a friend's house, eating on weekends versus weekdays) Gr 4 <u>Health and Physical Education D2.1</u> : identify personal eating habits through self-monitoring over time, and set a goal for developing healthier eating habits, on the basis of the recommendations and guidelines in Canada's Food Guides (e.g., make water their drink of choice; eat plenty of vegetables and fruits; eat meals with others; help with food shopping and meal prepara-tion at home; trap, fish, hunt, harvest, and cultivate food) Gr 4 <u>Health and Physical Education D3.1</u> : identify ways of promoting healthier eating habits in a variety of settings and situations (e.g., school, arena,	AgScape: <u>Healthy</u> <u>Eating: Eating Well</u> <u>in Ontario</u>
recreation centre, stores, food courts, special events; when camping , having a snack or meal at a friend's house, eating on weekends versus weekdays) Gr 6 <u>Health and Physical Education D2.1</u> : apply their knowledge of medical, emotional, practical, and societal factors that influence eating habits and food choices (e.g., allergies and sensitivities, likes and dislikes, feelings of stress, dental health, food availability, media influence, cultural influence of family and friends, school food and beverage policies, environmental impact, cost) to develop personal guidelines for healthier eating	
Gr 6 <u>Health and Physical Education D2.2</u> : apply their recognition of internal hunger and thirst cues and their knowledge of physical factors that influence the desire to eat and drink (e.g., stage of development, growth spurts, level of physical activity, eating larger portions) to develop personal guidelines for healthier eating	
Gr 6 <u>Health and Physical Education D2.1</u> : demonstrate the ability to develop healthier eating patterns, using information about the role that different foods play as contributing or preventive factors in a variety of health disorders (e.g., cancer, Type 2 diabetes, cardiovascular disease, obesity, food allergies and anaphylaxis, tooth decay, osteoporosis)	
Gr 7 <u>Health and Physical Education D3.1</u> : demonstrate an understanding of personal and external factors that affect people's food choices and eating habits (e. g., personal: likes and dislikes, basic food skills, busy schedules, food allergies or sensitivities, health conditions, personal values, cultural practices or teachings; external: family or household budget, cost of foods, access to clean drinking water, type of food available at home, at school, or in the community), and identify ways of encouraging healthier eating practices	
Gr 8 <u>Health and Physical Education D2.1</u> : evaluate personal eating habits and food choices on the basis of the recommendations in Canada's Food Guide, taking into account behaviours that support healthy eating (e.g., mindful eating, enjoying your food, choosing a variety of healthy foods, awareness of food marketing , using food labels, making water your drink of choice more often)	
Gr 8 <u>Health and Physical Education D3.1</u> : identify strategies for promoting healthy eating habits and food choices within the school, home, and community (e.g., implementing school healthy food policies, launching healthy-eating campaigns, choosing healthy food items to sell in fundraising campaigns, getting involved in family meal planning, learning food preparation skills, urging local restaurants to highlight healthy food choices)	
Gr 9 <u>Health and Physical Education C2.1</u> : apply their knowledge of basic nutrition principles and healthy eating practices (e.g., relating food intake to activity level, ensuring their diet includes foods from all food groups in Canada's Food Guide, using healthy preparation methods) to develop a healthy eating plan	

Gr 10 <u>Health and Physical Education C2.1</u> : explain how their knowledge of physical and emotional factors that influence personal eating habits (e.g., level of physical activity, physical stage of development, hunger and satiety cues from their bodies, food allergies and sensitivities, hydration and nutritional needs, body image, peer and family influence, stress) can be applied to making healthy eating choices	
Gr 9/10 <u>Food and Nutrition</u> - Food Choices C1: demonstrate an understanding of factors affecting people's food needs and of ways of meeting those needs	
Gr 9/10 <u>Food and Nutrition</u> - demonstrate an understanding of various factors that influence food choices	
Gr 11 <u>Health and Physical Education C3.1</u> : identify current issues that involve food either directly or indirectly (e.g., issues involving food safety or quality, such as pesticide use, genetic modification of crops, the sale of non-pasteurized milk products; issues involving food marketing and advertising; environmental issues, such as climate change, packaging and waste reduction, water pollution, biodiversity, long-range transportation of food; issues involving agricultural practices, such as humane treatment of animals, labour and trading practices), and explain how healthy eating choices are related to these issues	
Gr 12 <u>Health and Physical Education C2.1</u> : demonstrate the ability to make healthy eating decisions that take into account their personal requirements and resources (e.g., nutritional needs, personal likes, ethical and environmental values, budget, time available to shop and cook, access to different kinds of foods) in a variety of situations that they may encounter now and in the future (e.g., camping, living on their own, sharing accommodations)	
Indirect opportunities to link to the curriculum:	
Grades 1-8 <u>Health and Physical Education D2</u> : demonstrate the ability to apply health knowledge and social-emotional learning skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being	
Grades 1-8 <u>Health and Physical Education D3</u> :demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others' health and well-being.	

Dimension: Food Systems			
Food Literacy Attribute: Food System Knowledge			
Desired Competency	Existing Curriculum Links	Curriculu m Gap	Ex. Resources / Lesson Plans
Where food comes from (how and where food is produced, processed, sold	Direct curriculum expectations: Gr 3 <u>Health and Physical Education D1.1</u> : demonstrate an understanding of how the origins of food (e.g., where the food is grown, harvested, trapped, fished, or hunted; whether and how it is processed or prepared) affect its	A few direct links to the curriculum exist but most current opportunitie s are through	AgScape <u>thinkAG</u> <u>Career</u> <u>Competitions</u>

and thrown	nutritional value and how those factors and others (e.g., the way we consume and dispose of food) can affect the environment	making use of indirect	AgScape Local
away).		curriculum	<u>Food Infographic</u> Part 1
Understand the	Gr 3 Science and Technology <u>Understanding Life Systems 3.7</u> : describe the	expectations	
basic activities	different ways in which plants are grown for food (e.g., on farms, in		AgScape Local
within a food	orchards, greenhouses, home gardens), and explain the advantages and		Food Infographic
system (e.g.,	disadvantages of locally grown and organically produced food, including environmental benefits		Part 2
production,			
transformation,	Gr 3 Social Studies <u>People and Environment B3.5</u> : describe major types of		Growing Up
distribution,	land use (e.g., for agriculture, industry, commerce, housing, recreation,		Organic's <u>Seed</u> <u>Starting</u> (Gr 5)
consumption	transportation, conservation) and how they address human needs and wants (e.g., agricultural lands provide us with a variety of foods for local		
and waste) and	consumption)		Green Thumbs
how they			Growing Kids -
interact	Gr 9/10 <u>Food and Nutrition</u> - Local and Global Foods D1: Availability of Food:		<u>Patricia and the</u> <u>Pea Shoots</u>
	demonstrate an understanding of where various foods are produced		(K-Gr1)
Understand the	Gr 11 Food and Culture - Foods and Flavours C1. Food Availability:		
different scales	demonstrate an understanding of the relationship between geography and		Green Thumbs
of food systems	the foods naturally found and/or produced in Canada and various other		Growing Kids - You Are What You
(i.e., local,	countries; C2. Sources of Foods: demonstrate an understanding of the sources of foods eaten in Canada and in various other countries/ cultures; C3.		Eat! The Plant
regional and	Flavours of the World: demonstrate an understanding of the characteristic		Parts Game (Gr3)
global foods)	flavours, aromas, herbs, and spices associated with cuisines of various		
Understand what	countries/cultures.		Ecosource's <u>Jardin</u> de l'Éducation
careers exist in			
the agri-food	Gr 12 Nutrition and Health Local and Global Issues - D1. Food Security:		Ecosource's
sector.	demonstrate an understanding of various factors involved in achieving and		Re-Routed in Play
	maintaining food security; D2. Food Production and Supply: demonstrate an understanding of various factors that affect food production and supply; D3.		FoodShare's <u>Cook</u>
(Declarative)	Food Production and the Environment: demonstrate an understanding of the		<u>Off the Grid</u> -
	impact of food production on the environment.		"You Built It!"
			Series (Gr 4-6)
	Indirect opportunities to link to the curriculum:		FoodShare's <u>Can</u>
	JK/SK (OE14) Demonstrate an awareness of the natural and built		<u>You Dig It?</u> (Gr
	environment through hands-on investigations, observations, questions, and		2-4) <u>Can You Dig</u>
	representations of their findings		It? Support
	Gr 1 Social Studies People and Environments B 1.1:. Describe some of the		<u>Documents</u>
	ways in which people make use of natural and built features of, and human		FoodShare's
	services in, the local community to meet their needs, and what might happen		Pollination Patrol
	if these features/services did not exist		(Gr JK-2) Pollination Patrol
	Gr 1 Science and Technology <u>Understanding Life Systems 2.3</u> : Investigate and		Supporting
	compare the physical characteristics of a variety of plants and animals,		Documents
	including humans (e.g., some plants produce flowers and some do not; most		
	plants have roots; some animals have two legs, while others have four; all		FoodShare's FoodPrints &
	animals have sense organs)		Energy Detetives
	Gr 1 Science and Technology <u>Understanding Life Systems 2.4</u> : Investigate the		(gr 7)
	physical characteristics of plants (e.g., basic parts, size, shape, colour) and		FoodShare's
	explain how they help the plant meet its basic needs (e.g., roots anchor the		Waste in our Food
	plant and help provide the plant with food and water; some plants have		System (gr 3-8)
	brightly coloured flowers to attract bees), using a variety of methods and resources		
			FoodShare's Roots and Shoots
	Gr 2 Science and Technology <u>Understanding Life Systems 3.2</u> : Describe an		(Gr JK-2) Roots
	adaptation as a characteristic body part, shape, or behaviour that helps a plant or animal survive in its environment		and Shoots

Gr 2 Social Studies <u>People and Environment B3.7</u> : describe selected communities around the world, with reference to their major physical features, wildlife, and some aspects of their culture (e.g., physical features such as mountains, lakes, rivers; native animals; cultural practices related to food, clothing, recreation, the arts)	Supporting Documents Ecosource - <u>Classroom</u> <u>Connects</u> (Gr
Gr 2 Social Studies <u>People and Environment B3.8</u> : describe similarities and differences between their community and a community in a different region in the world (e.g., with respect to food, clothing, housing, beliefs, climate, flora and fauna, recreation, agricultural practices)	9-12) AgScape <u>Conventiona</u> Organic Part
Gr 3 Science and Technology <u>Understanding Life Systems OE2</u> : Investigate similarities and differences in the characteristics of various plants, and ways in which the characteristics of plants relate to the environment in which they grow	AgScape <u>Conventiona</u> <u>Organic Part</u>
Gr 3 Science and Technology <u>Understanding Life Systems OE3</u> : Demonstrate an understanding that plants grow and change and have distinct characteristics	AgScape From Rural to Urba (AgScape)
Gr 4 Social Studies <u>Heritage and Identity A 3.5</u> : describe the importance of the environment for a few early societies, including at least one First Nation and one Inuit society, with a particular focus on how the local environment affected the ways in which people met their physical needs (e.g., food, housing, clothing)	AgScape AgScape Agriculture in Canada Part
Gr 4 Science and Technology <u>Understanding Life Systems OE2</u> : investigate the interdependence of plants and animals within specific habitats and communities	AgScape Agriculture in
Gr 4 Science and Technology <u>Understanding Life Systems OE3</u> : demonstrate an understanding of habitats and communities and the relationships among the plants and animals that live in them	Canada Part Grown and Produced in
Gr 4 Social Studies <u>Heritage and Identity A 3.4</u> : describe significant physical features and natural processes and events in a few early societies, including at least one First Nation and one Inuit society () and how they affected these societies, with a focus on the societies' sustainability and food production	Ontario (AgS https://bit.ly 771 Stewardship Sustainability
Gr 5 Science and Technology <u>Understanding Life Systems OE3</u> : Demonstrate an understanding of the various forms and sources of energy and the ways in which energy can be transformed and conserved	(AgScape) https://bit.ly 7f75
Gr 5 Social Studies <u>Heritage and Identity A3</u> ; Describe significant features of and interactions among Indigenous peoples, among Europeans, and between Indigenous and European people prior to 1713 in what would eventually become Canada (Link: Learning to smoke and cure meat/fish, preserving food)	The Cycle of Agriculture (AgScape) <u>https://bit.ly</u> <u>YCxu</u>
Gr 6 Social Studies <u>Heritage and Identity A3</u> : Demonstrate an understanding of significant experiences of, and major changes and aspects of life in various historical and contemporary communities, including First Nations, Métis, and Inuit communities, in Canada	Agriculture is Everywhere: Bi-Products (AgScape)
Gr 6 Science and Technology <u>Understanding Life Systems OE3</u> : Demonstrate an understanding of biodiversity, its contributions to the stability of natural systems, and its benefits to humans	https://bit.ly FdZF Temporary Foreign Work
Gr 7 Geography <u>Natural Resources B 3.2</u> : describe ways in which people use the natural environment, including specific elements within it, to meet their needs and wants	in Canada (AgScape & F

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	Gr 9 <u>Issues in Canadian Geography E3.3</u> (applied): identify spatial connections between human systems and services in their community and the broader regional, national, and/or global networks to which they belong (e.g., food distri-bution, communications, transportation, and energy networks) Gr 10 <u>Issues in Canadian Geography E3.3</u> (applied): describe some key trends and developments in the Canadian economy since 1982 (e.g., the decline of the manufacturing sector and fisheries, developments in the information economy, free trade, recessions, the development of the energy sector in western and Atlantic Canada, the European Union ban on sealskin products, food insecurity in the Far North), and explain their impact on different people in Canada, including First Nations, Métis, and Inuit individuals and communities		https://bit.ly/TFW Canada Growing for the Future (AgScape/Good in Every Grain) https://bit.ly/3cG Yxet The Real Dirt on Farming (F&FC) https://bit.ly/3ue Amu0 The Business of Food (AgScape) https://bit.ly/3mc Ld4P Feeding 9 Billion Video Series on Sustainable Food Systems
	Dimension: Food Systems		
	Food Literacy Attribute: Food System Impacts		
Desired Competency	Existing Curriculum Links	Curriculu m Gaps	Ex. Resources / Lesson Plans
Understand the relationship between the food system (e.g., growing, manufacturing, transportation, preparation, consumption and disposal of food products)	Direct curriculum expectations: Gr 3 Health and Physical Education D1.1: demonstrate an understanding of how the origins of food (e.g., where the food is grown, harvested, trapped, fished, or hunted; whether and how it is processed or prepared) affect its nutritional value and how those factors and others (e.g., the way we consume and dispose of food) can affect the environment Gr 3 Science and Technology <u>Understanding Life Systems 3.7</u> : describe the different ways in which plants are grown for food (e.g., on farms, in orchards,greenhouses, home gardens), and explain the advantages and disadvantages of locally grown and organically produced food, including	A few direct links to the curriculum exist but most current opportunitie s are through making use of indirect curriculum expectations	Growing Up Organic - <u>Seed</u> <u>Starting</u> (Gr 5) Ecosource's <u>Re-Routed in Play</u> Ecosource - <u>Classroom</u> <u>Connects</u> (Gr 9-12) FoodShare's

	Cr 0 losues in Considion Coopranty C1.2 (applied), access the impact of	<u>г г</u>	Feeding9Billion's
changes that enhance the	Gr 9 <u>Issues in Canadian Geography C1.2</u> (applied): assess the impact of different types of food production on resource use and the environment in		<u>Illustrated video</u>
health and	Canada		series about food
resilience of			systems, security
agri-food	Gr 9/10 Food and Nutrition - Local and Global Foods D2: Food and		and feeding
-	Environmental Responsibility: demonstrate an understanding of how various		growing
systems at local,	food-purchasing choices and food-preparation practices affect the environment		populations
regional,			FoodShare's
national and	Gr 9-10 Food and Nutrition: Determine how food-production methods can		Green New Meal
global scales.	contribute to satisfying global food needs; Differentiate between the		lesson plan
Understanding	food-production methods of developed and developing countries and the		FeedCheve/e
the systems'	impact of those methods on food security.		FoodShare's Reconcili-ACTION
impact on the			lesson plan
availability of	Indirect opportunities to link to the curriculum:		
cultural foods in	Gr 2 Science and Technology <u>Understanding Life Systems 1.1</u> : identify positive		Temporary
order to be able	and negative impacts that animals have on humans (society) and the		Foreign Workers
to celebrate	environment, form an opinion about one of them, and suggest ways in which		in Canada
cultural food	the impact can be minimized or enhanced		(AgScape & F&FC)
traditions.	Gr 2 Science and Technology Understanding Life Systems 3.3: Identify ways in		https://bit.ly/TFW Canada
	which animals are helpful to, and ways in which they meet the needs of,		Canada
(Critical)	living things, including humans, to explain why humans should protect		From Rural to
	animals and the places where they live		Urban (AgScape)
	Gr 3 Science and Technology Understanding Life Systems OE1: Assess ways in		https://bit.ly/2Po
	which plants have an impact on society and the environment, and ways in		<u>12cM</u>
	which human activity has an impact on plants and plant habitats		Grown and
			Produced in
	Gr 4 Social Studies <u>People and Environments B.2.1</u> : formulate questions to		Ontario (AgScape)
	guide investigations into some of the issues and challenges associated with balancing human needs/wants and activities with environmental stewardship		https://bit.ly/3tAr
	in one or more of the political and/or physical regions of Canada		771
			Stewardship &
	Gr 4 Science and Technology <u>Understanding Life Systems OE1</u> : analyse the		Sustainability
	effects of human activities on habitats and communities		(AgScape)
	Gr 5 Science and Technology Understanding Life Systems 1.1: assess the		https://bit.ly/3c1
	effects of social and environmental factors on human health, and propose		<u>7f75</u>
	ways in which individuals can reduce the harmful effects of these factors and		
	take advantage of those that are beneficial		
	Gr 5 Science and Technology Understanding Life Systems OE1: analyse the		
	immediate and long-term effects of energy and resource use on society and		
	the environment, and evaluate options for conserving energy and resources		
	Gr 6 Science and Technology <u>Understanding Life Systems OE3</u> : demonstrate		
	an understanding of biodiversity, its contributions to the stability of natural		
	systems, and its benefits to humans		
	Gr 7 Science and Technology <u>Understanding Life Systems OE1</u> : Assess the		
	impacts of human activities and technologies on the environment, and evaluate ways of controlling these impacts; <u>OE2</u> : investigate interactions		
	within the environment, and identify factors that affect the balance between		
	different components of an ecosystem; <u>OE3</u> : demonstrate an understanding		
	of interactions between and among biotic and abiotic elements in the		
	environment		
	Gr 7 Geography <u>Physical Patterns in a Changing World A2</u> : use the geographic		
	inquiry process to investigate the impact of natural events and/or human		
<u> </u>	I inquiry process to investigate the impact of hatural events and/or hullidit		

	activities that change the physical onvironment, evoluting the impact from a	I
	activities that change the physical environment, exploring the impact from a geographic perspective	
	Gr 8 Geography <u>Creating Canada, 1850-1890 A2.1</u> : formulate questions to guide investigations into issues related to the interrelationship between human settlement and sustainability from a geographic perspective - Sample questions: "What are the costs of the encroachment of human settlement on agricultural or wilderness areas? What are the social, environmental, and economic effects of loss of agricultural land?"	
	Gr 9 <u>Issues in Canadian Geography E1</u> : The Sustainability of Human Systems: analyse issues relating to the sustainability of human systems in Canada	
	Gr 9 Biology: Assess the impact of human activities on the sustainability of terrestrial and/or aquatic ecosystems, and evaluate the effectiveness of courses of action intended to remedy or mitigate negative impacts;Investigate factors related to human activity that affect terrestrial and aquatic ecosystems, and explain how they affect the sustainability of these ecosystems.	
	Gr 9-10 Business	
	Gr 11 Biology: Describe some evolutionary mechanisms (e.g., natural selection, artificial selection, sexual selection, genetic variation, genetic drift, biotechnology), and explain how they affect the evolutionary development and extinction of various species; Analyse the economic and environmental advantages and disadvantages of an artificial selection technology, and evaluate the impact of environmental changes on natural selection and endangered species.	
	Gr 11 Biology	
	Gr 12 Food and Nutrition: Identify the social, psychological, economic, emotional, cultural, religious, and physical factors that affect food choices.	
	Gr 12 Nutrition and Health	
	Dimension: Food Systems	
	Food Literacy Attribute: Food Skills	
• How to grow food	Direct curriculum expectations:	See food skills section above
 How to sustainably harvest food 	Indirect opportunities to link to the curriculum: See Food Skills section above in the Health and Nutrition section	
 How to shop for and source food that supports the health of people and planet How to make 		
good use of leftovers		

Teacher Training Opportunities and Resources:

Ontario Dietitians in Public Health: Addressing Weight Bias Resources

OPHEA: Food Literacy Teaching Tools | Tips for Talking about Healthier Food Choices

AgScape: Business of Food

Ecosource: <u>Certificate Course</u> | <u>2020 offering</u>

Kids' Growing City: Masterclass for Elementary Teachers | DCP Program