

Connecting Saskatchewan Education outcomes to the Saskatoon community through teaching about food from soil to stomach

Pre-visit & Post-visit

Lesson Plans

How to use this booklet





Infograph

For the teacher to get acquainted with the organization of the Garden Patch. The infographic can be used to describe to students how the Garden Patch runs, before the field trip.

Summary

A reference point for the teacher to view how the Garden Patch field trip connects to the outcomes outlined in the Saskatchewan Education Curriculum. Additionally, the summary provides an explanation for each activity provided.



Lesson Plans

Activities are organized for each grade level to spark wonder and curiosity prior to visiting the Garden Patch. As well, reflections to consolidate the unit of study with a student's experience at the Garden Patch, post-visit.

Note: please refer to the Educator Welcome Package for information regarding field trip preparation, expectations, and parent-information resources (i.e. letter home/what to pack for a field trip).



Infographic

2. Botany: The Sun

How is the sun connected to agriculture? How is the sun connected with our food?

6

Saskatoon

3. Sociology: Social Responsibility

4

The Saskatoon Food Bank & Learning Centre became a non-United Church. Its present residence is on Avenue C South.

1.Sociology: Empirical Evidence of People

serving? What are the needs of the community?

Donations

7. Funders

their own food.

8

The Garden Patch continues to have the incredible opportunity to partner with local companies who fund the mission of developing food

helping Saskatonians grow

6. Earth Science: Garden Patch

The Saskatoon Food Bank & Learning Centre assumes responsibility of Potato Patch in 2012 and renames it the Garden Patch. Much work is needed to improve the soil.

4. Biology: Emergency Food Hamper

The food bank recognized the important role fresh food has in a

in the emergency hamper?

What does the body need to stay



5. Community Garden

Nutritious food should not have to be sacrificed when a person has lack of money or is in crisis. Saskatoon Food Bank & Learning Centre partner's with the community garden, The Potato Patch in 2010



8. Botany: Seeds

SEEDS

The Garden Patch cannot function without the help of its wonderful volunteers and the groups who care for the plots and manage tasks.

What role do insects play in the production of food? Why are bugs important to plants?

Garden Patch

C W

10. Botany: Maintenance We care for plants by weeding the

9. Ecology: Benefitial Insects space around the plant and ensuring it is properly watered.

11.Harvest

We harvest the plants and wash them.

12.Preparation & Exchange

We organize the produce in boxes, label, and transfer to the SFBLC's pick-up truck to be brought to the SFBLC.

Grade 7 to Grade 8

Self-determination towards food choice is a human-right.

Social Studies Science

Purpose of Field Trip

At the Saskatoon Food Bank & Learning Centre Garden Patch, students will be facilitated in tasks and activities that reinforce how Canadian citizens engage with politics for the benefit of others; how food plants fuel the systems of the body; the process of composting, and how carbon, nitrogen, water, and air create an environment for decomposers to break down materials; and social responsibility towards food waste.

Provocation

Vocabulary

Activity

Query

Activity

Provocation is an activity that provokes a student's thoughts to wonder about the topic of study. After this activity students will be prepared to ponder and observe the following while at the Garden Patch:

Students will:

- Discover that our world has natural systems that are unobserved by the naked-eye, but are essential to the survival of living things.
- Look beyond the consumption of food, and wonder about the relationship between culture, food, people, and the land.

The vocabulary activity prepares students to be familiar with the terminology used by the Garden Patch Facilitator, while on site.

The query activity is a collaboration between students and teacher to create questions before and while at the Garden Patch related to the unit of study. Submit questions to the Urban Agriculture Department at Saskatoon Food Bank & Learning Centre.

Q: Why does access to nutritious food need to be considered as a human right?

The follow-up activity is facilitating reflection of the field trip by requesting students to tie-up loose ends when connecting the topic of study with their personal experience of the field trip.



Follow Up Activity

Central Idea: Self-determination towards food choice is a human-right.

- Is food a commodity or a human-right?
- Why do we have a food bank?
- What do food systems look like in Saskatoon?

The Science: Microbiology

1. How do decomposers make our community a more livable space?

The Science: Sociology

- 1. Why are people in affluent countries, like Canada, wasting so much food?
- 2. How can we better understand tradition and culture through food?



Life Science

IE7.2	Observe, illustrate, and analyze living organisms within local ecosystems as part of interconnected food webs, populations, and communities.
IE7.3	Evaluate biogeochemical cycles (water, carbon, and nitrogen) as representations of energy flow and the cycling of matter through ecosystems.
IE7.4	Analyze how ecosystems change in response to natural and human influences, and propose actions to reduce the impact of human behaviour on a specific ecosystem.
CS8.1	Analyze the characteristics of cells, and compare structural and functional characteristics of plant and animal cells.
CS8.4	Analyze how the interdependence of organ systems contributes to the healthy functioning of the human body.



The LEPTs of Science Education				
Life Science Physical Science Earth & Space Science Traditions				
	Earth and Space Science			
WS8.1	Analyze the impact of natural and human-induced changes to the characteristics and distribution of water in local, regional, and national ecosystems.			
WS8.2	Examine how wind, water, and ice have shaped and continue to shape the Canadian landscape.			
Physical Science				
HT7.1	Assess the impact of past and current heating and cooling technologies related to food, clothing, and shelter on self, society, and the environment.			
Social Studies				
PA8.2	Examine the role of power and authority in the application of diverse decision-making processes in a variety of contexts.			
PA8.4	Assess the impact of citizens' willingness and ability to actively engage in the Canadian political processes.			



Provocation

COLLECT

• Provocation Image. Accessible below.

INSTRUCTIONS

Display one of the images, found below, for students to see.

Explain to students: "Reading a picture is like reading a text. You read on a number of levels. I want you to read the picture first, and make a list of everything you see in the photo."

Example: yellow corn, red cars, chickens, farmers, etc.

Example of making a judgment/inferring: people are holding white signs & standing outside a building with a flag on it. Their faces look like they are yelling. That makes it look like they are protesting injustice.

Instruction:

(1) To begin, have students write down what captures their attention first in the photo.
(2) Afterward, have students write down a <u>list</u> of what they see in the picture. Emphasize to students that they are **not** making judgments on what is there, and must have evidence for every word they

place on their list. For example: if a student writes <u>injustice</u>. What is the evidence in the picture that explicitly shows the word injustice? How can they tell there is injustice?

(3) Next, have students walk around the room to view one another's lists, and add their words to the lists.

(4) Then, have students write down questions about the photo. Have them review their questions with a partner.

(5) All photos can be used below. For the article study to follow, found in lesson *What Does a Human Need to Thrive?*, entitled "How One Indigenous Nation is Reclaiming Their Food System One Breakfast at a Time" the preferred photo to provoke student thinking is in *picture B*.

(6) Choosing your own article of choice about the topics Food Sovereignty/Food Waste OR using the article provided (see note on bullet 5) have students use the 5Ws to provide hooks to capture images, facts, and ideas while reading the article.

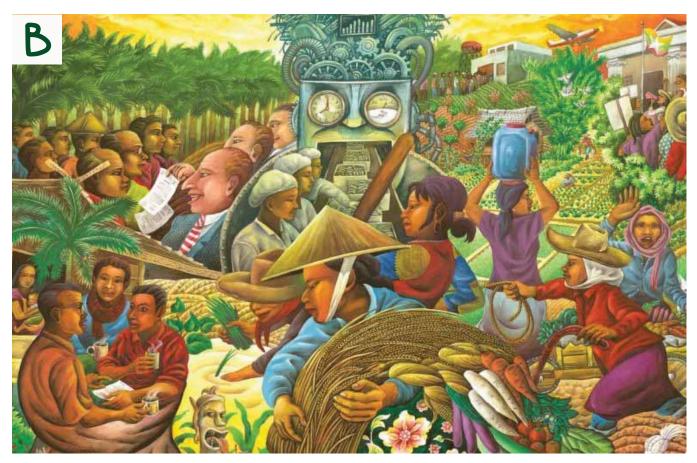
5Ws Questions:

- 1. Where is the picture taken?
- 2. What is in the picture?
- 3. When was the picture taken?
- 4. Why was it taken?
- 5. Who took the picture?





Accessed on November 27th, 2020 via Food Sovereignty - SourceWatch (http://www.sourcewatch.org/index.php/Food_Sovereignty)



Accessed on November 27th, 2020 via People, power, change: three pillars of a food sovereignty research praxis - People's Knowledge (http://www.peoplesknowledge.org/people-power-change-three-pillars-of-a-food-sovereignty-research-praxis/)

Provocation Image



Accessed on December 3rd, 2020 via https://www.foodmanufacture.co.uk/Article/2020/01/24/Significant-drop-in-food-waste

What does a human need to thrive?

Topic: Social Studies | Power and Authority

Central Idea: Self-determination towards food choice is a human-right.

Activity Goals:

- Determine the difference between needs and wants
- Introduced to the concept of Food Sovereignty (seeing food through culture)
- Identify how access to nutritious food is essential to the health of all people.

Learning Objectives:

At the end of these activities, students will <u>recognize</u> that humans need access to a variety of healthy foods to help their bodies function for daily tasks; <u>group</u> items into needs and wants, and <u>explain</u> why access to nutritious food is a human need.

Activity 1 : Food Justice Mural

Materials Needed:

- Butcher Paper/Large Sheet
- Pens, pencils, crayons, markers, paint
- Art supplies available (i.e. old magazines, scissors, glue, tape)

Step 1

Explain to students that over the course of learning about food justice, the Saskatoon Food Bank & Learning Centre, and Garden Patch they will be creating a "mural of us" to document the development of their knowledge and opinion towards food justice in Canada, based on historical documents, current facts/statistics, and personal stories.

After each activity and their visit to the Garden Patch, students will be asked to contribute a poem, lyrics, quotes, journal entry, picture to the mural that represents their reflections inspired by the food justice topic being discussed that day.

Note: depending on the needs of students, encourage them to use different mediums (paint, markers, pencil, paper). Also, an option is assigning students to complete the reflection at home, and asking them to bring it back to school the next day to be placed on the mural.

Step 2

For the initial submission to the mural, open up the following link and ask one student to read the definition of food justice.

Link: https://foodsecurecanada.org/community-networks/food-justice



What does a human need to thrive? (con't)

Step 3

Ask students to assess the definition; does this definition reflect the needs of their community? Is there anything that needs to be added or changed?

Ask students the series of questions below the definition (eg. who produces food and who makes food decisions, etc.), and record their answers (prior knowledge).

Step 4

As students pick parts of the definition that resonate with them OR represent a wonder that has been inspired through the discussion/answers to the questions, ask them to write and/or illustrate it on a section of the large paper (aka "this is us mural").

Step 5

From this point on, conclude each activity with a written/illustrative reflection and have students add it to the "this is us mural"

Activity 2 : Needs of a Human Being - Analysis of the Wampis Nation of the Peruvian Amazon

Step 1

Pose the question, *what does a human need to thrive.* Write down answers from students in an accessible area for students to refer to.

Step 2

Using the technology available, have students read through article "How One Indigenous Nation is Reclaiming Their Food System - One Breakfast at a Time" via the link below:

https://intercontinentalcry.org/how-one-indigenous-nation-is-reclaiming-their-food-system-one-breakfast-at-a-time/

While students are reading through the article have them actively searching for information related to the previous question: In the context of the Wampis Nation, *what does a human need to thrive?*

Possible Answer(s):

- There is a profound connection between the health of the land and the health of the Wampis families by ensuring a nutritious food supply.
- Food is the basis of life and a healthy diet ensures biological and spiritual strength.
- Explore Food Sovereignty and its 7 pillars.
- The state-led program's idea of healthy food included: tinned tuna, rice and biscuits, chicken and milk, oats, spaghetti. Foods that are high in carbohydrates and protein, but lack the necessary minerals and vitamins that come from vegetables and fruits to ensure the proper functioning of the body's 12 systems.



What does a human need to thrive?

Step 3

In small groups of 2-3 have students share their notes with one another:

- What words did I not recognize look them up and discover their meaning
- In the context of the Wampis Nation, what does a human need to thrive?
 - Do you agree? Explain your reasoning.
 - Do you disagree? Explain your reasoning.

Ask a member from each small group to share with the class what their group discussed.

Step 4 Watch "What is Food Sovereignty": https://www.youtube.com/watch?v=OzvcQVEFXLU

Step 5

Referring to the ideas purpose at the beginning of the period, ask students to compare their initial answers to the question "*what does a human need to thrive*" with the ideas formulated from reading the article about the Wampis Nation.

Extension: while comparing their answers have students categorize answers into needs versus wants.

Example:

NEEDS: BASIC SURVIVAL/ESSENTIAL 1.FREEDOM TO CHOOSE THE FOOD I EAT 2. ACCESS TO NUTRITIOUS FOOD 3. SHELTER 4. ACCESS TO CLEAN WATER 5. EDUCATION 6. BELONGING (CULTURAL IDENTITY) 7. BASIC CLOTHES TO KEEP WARM 8. HEALTHY SOIL 9. SAFETY WANTS: GOODS AND SERVICES THAT ARE DESIRABLE 1.SPACIOUS HOUSE
2.OPPORTUNITY TO PURSUE HOBBY
3.ACCESS TO CULTURAL LEARNING THROUGH TRAVEL
4. INTERNET
5.LATEST CELLPHONE WITH DATA
6. A CAR FOR TRANPORATATION

Assessment

Ask students to write/illustrate what resonated with them when answering the question "what does a human need to thrive". Encourage them to make connections with themselves in relation to the question. Add to *This is Us Mural*.

GARDEN PATC

How One Indigenous Nation is Reclaiming Their Food System - One Breakfast at a Time by Tom Younger

To the Wampis Nation there is a connection between territory (land), well-being, culture and autonomy

To the Wampis Nation reclaiming their food system is being given the freedom to access tasty, nutritious, and culturally meaningful food harvested from the land. In reality, they rely on imported foods provided by State-led school meal programmes.

The Wampis Nation is taking initiative for the preservation of the forests, lands, and rivers, but has had to advocate for the land to be legally recognized as traditional lands. The Peruvian State and the actions of illegal companies are often responsible for the harming of forests and the contamination of land and rivers.

The Wampis Nation sees natural food (not processed or man-created) as the basis of life. A healthy diet guarantees biological and spiritual strength.

Since the land is where we get food we must make great efforts to carefully steward forests, lakes, and rivers. The Wampis Nation noticed that their typical food sources were becoming scarcer; forcing reliance on processed foods.

06

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Foods that were a part of the State-led program lacked nutrition and cultural value. Some of the Wampis Nation children developed allergic reactions to dairy and gluten in the foods provided. CONSERVE THE NATURAL RESOURCES IN AN AREA BY MANAGING AND PROTECTING THE BIODIVERSITY OF THE LAKE AND PROVIDING THE LAKE WITH LEGAL PROTECTION SO THAT FUTURE GENERATIONS HAVE A RELIABLE FOOD SOURCE

AUTONOMY: INDEPENDENCE; FREEDOM FROM EXTERNAL CONTROL OR INFLUENCE; THE RIGHT OR CONDITION OF SELF-GOVERNMENT

> THE WAMPIS NATION TOOK INITIATIVE TO EXERCISE AUTONOMY BY CREATING A SUSTAINABLE PLAN TOWARDS USING THE LAKES FOR FOOD: ONLY TAKE AS MUCH FISH AS YOU NEED TO LIVE WELL.

07

The Wampis Nation needed freedom from external controls to be able to move forward with their initiative for a better life. To be able to thrive they needed their land to be legally recognized as traditional lands; self-determined education; technology to help steward the land so that they could grow and conserve nutritious and culturally valuable food.

Why is the SFBLC Garden Patch needed?

Topic: Social Studies | Power and Authority

Essential Question: Why do we have a food bank?

Lesson Focus and Goals:

- Identify the historic context that leads to the installation of food banks across Canada.
- Compare the original mission of the food banks across Canada, in the early 1980s, to the present values, vision, and mission of the Saskatoon Food Bank & Learning Centre.
- Predict the need to have an Urban Agriculture program (Garden Patch) at the Saskatoon Food Bank & Learning Centre.

Learning Objectives:

At the end of these activities, students will <u>recognize</u> how societal frameworks help to determine how individuals react to community needs; and <u>determine</u> supports that lead to dependency compared to support that provide short-term relief.

Lesson Plan

Materials Needed:

- PowerPoint Document PDF: What is a Food Bank.ppt
- PDF Document: Resource List_What is a Food Bank Research Activity

Step 1

Write/project the word **Food Bank** on a whiteboard/smartboard. Ask students to offer their explanations of what a food bank is, and what they want to know about the food bank. Take a picture of these words as a reference for assessment.

Step 2

Run provided PowerPoint: What is a Food Bank.ppt

Once on "ppt. slide 10" divide students into groups designated by the Resource List handout. There may be some groups that will research the same topic.

Using the technology available, have students research in groups:

what was happening socially, economically, and politically in Canada, during the 1970s and 1980s, that influenced the sudden need to open up food banks across Canada?

GARDEN PA

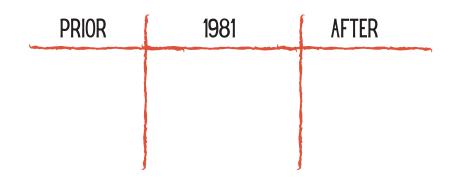
Why is the SFBLC Garden Patch Needed? (con't)

Links for students reference:

- 1. https://www.thecanadianencyclopedia.ca/fr/chronologie/economy-and-labour
- 2. https://thecanadianencyclopedia.ca/en
- 3. https://sttpcanada.ctf-fce.ca/human-rights/moments/
- 4. https://www.edmontonsfoodbank.com/about/history/
- 5. https://www.edmontonsfoodbank.com/documents/27/sharingtheharvest.pdf
- 6. https://www.cbc.ca/archives/entry/unemployment-reaches-all-time-high-in-1982
- 7. https://www.lipad.ca/#about
- 8. https://www.cbc.ca/player/archives

Step 3

After researching their topic, have each group present their findings. Write a timeline that consists of three columns. In the middle column write 1981; to the left write: Prior; and to the right write: After (like shown below). As groups are presenting their findings, have them designate which column their findings would be under.



Step 4

Gather students together and follow the notes that are contained throughout the remaining slides. These slides focus on stages of community development and crisis-management in communities. Afterward, students will be asked to predict what type of organization the current Saskatoon Food Bank & Learning Centre would be classified under. This will lead to a series of slides that capture the history of the food bank and how it has adapted, over the years, to attend to the needs of the community.

Assessment:

Ask students to write/illustrate what resonated with them while answering the question "why is the SFBLC Garden Patch needed in our community". Encourage them to make connections with themselves in relation to the question. Add to *This is Us Mural*.

GARDEN PA

Query

COLLECT

- Grocery Store Item Hunt Sheet. Accessible below.
- Saskatoon Food Bank & Learning Centre Item Hunt Sheet. Accessible below.

INSTRUCTIONS

Before coming to the Garden Patch, set aside time to lead participants through a series of Research Field-trips:

Grocery Store Research Field-trip

The purpose of this research is to facilitate an experience that causes students to become aware of where their food comes from and how it gets transported. In addition, students will be led through a series of questions that spark awareness of what nutrient-dense food is and what makes it good for us.

Instructions:

- Call the grocery store in advance to prepare their staff for your class's arrival. State that the purpose of your visit will be for students to investigate the prices of food items.
- Organize students into groups, and distribute to each member of the group a clipboard with the attached *Grocery Store Item Hunt* worksheet.
- Send groups throughout the store to find the items that help solve the questions on their worksheet.
- After returning to the classroom, ask students to discuss any wonders or new information that they experienced from their item hunt. Write down these questions & share them with the Urban Agriculture Team at the Saskatoon Food Bank & Learning Centre.

Saskatoon Food Bank & Learning Centre Research Field Trip

The purpose of this research is to facilitate an experience that causes students to become aware of the local food systems in their city, and that individuals in situations of crisis do not have many choices in the foods that they consume. Students will be led in an experience that directs them to think critically about food accessibility and how food plays a critical role in maintaining the healthy function of the body's systems.

Instructions:

• Book a visit to tour the Saskatoon Food Bank & Learning Centre's Warehouse & Client Services, or book an appointment for your class to volunteer in helping package emergency food hampers.

GARDEN PATCH

- Print *Saskatoon Food Bank & Learning Centre Item Hunt* for each student to fill out while at the food bank.
- After returning to the classroom, ask students to discuss any wonders that came from their experience, and send their questions to the Urban Agriculture Team at the SFBLC.

Query

IN-CLASS RESEARCH FIELD-TRIP



- Chromebooks
- Link to Living with Hunger Impossible Choices
- Link to The Food Security Quest Learning Game

INSTRUCTIONS

Either individually or as a whole class, direct students towards the following website and select one of the stories. Each story is based on the true experiences of Canadians, and engages students by periodically asking for students to select what choice the individual should make concerning their day-to-day decisions.

Link 1: Living with Hunger - Impossible Choices

https://foodbankscanada.ca/impossiblechoices/index.html

Link 2: The Food Security Quest

https://www.ryerson.ca/open-learning/modules/food-security-quest/

Afterward, guide students in a discussion using the following questions:

- What situations surprised you the most about your character?
- What motivated the decisions you made for your character? (convenience, practicality, wellbeing, etc.)
- For your characters, what factors led to them being considered food insecure? (availability of food; accessibility to food; adequacy; acceptability; agency)
- Why should Canadians consider nutrition when discussing problems of food insecurity and wellbeing within our country?
- Is food cultural? Defend your answer.
- What is your prediction of why the Saskatoon Food Bank & Learning Centre decided to partner with the community to work a 1.5-acre lot of land for food production?

Write down any questions students may have about food security or the Urban Agriculture Program (Garden Patch), and send them to the Urban Agriculture Team at the SFBLC.



Essential Question: How can we create a more livable community?

Fun Links

Nutrients for Life: Nitrogen Cycle Challenge https://nutrientsforlife.org/product/nitrogen-cycle-challenge/

Nutrients for Life: Humanity Against Hunger (International Development) https://nutrientsforlife.org/for-students/feeding-our-planet/

Nutrients for Life: Sustainable Agriculture (games on the bottom of the webpage) https://nutrientsforlife.org/for-students/sustainable-ag/#1536227442042-85178131-0b02

Nutrients for Life: Water Quality (case study simulation on bottom of the webpage) https://nutrientsforlife.org/for-students/water-quality/

COLLECT

Kahoot - Nutrient Knowledge

https://create.kahoot.it/share/nutrient-knowledge/fc7acbd5-88d6-4c1b-8f79-467df190e295



Follow Up Activity

 Food Justice Mural Activity found in What Does a Human Need to Thrive Lesson Plan

PREPERATION

Have students run through the questions/wonders/expectations/statements displayed on the *Food Justice Mural*, prior to their trip to the Garden Patch. Ask students to share if their expectations were correct or if any of their questions were answered/unanswered.

INSTRUCTIONS

After the large group discussion, have students complete a final submission to the mural that consolidates their experiences at the Garden Patch with the definition of Food Justice.



SFBLC Warehouse Item Hunt

Find 2 items of food in the warehouse.

What are these two items and are they fresh, frozen, or processed (i.e. canned goods, dried, etc.)? Write and circle below.

Item One:			Item Two:		
Fresh	Frozen	Processed	Fresh	Frozen	Processed

How does the food bank accommodate emergency hampers for those with dietary restrictions (i.e. Halal, Celiac Disease, Diabetes, Allergies, Vegetarian, Vegan, Kosher)?

Select two different boxes of cereal to compare. What are the first three ingredients listed on the nutrition label? How much fiber and sugar does each box have on the nutrition label?

Look at an emergency food hamper, and investigate its contents. Place each item under it's designated list.

Fresh	Frozen	Canned	Dried	Other
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What type of prepared food is most represented in the SFBLC emergency food hamper? Does the SFBLC accept fresh foods for the hampers? Yes or No?

Grocery Store Item Hunt

Find 2 items that were grown or produced OUTSIDE of Canada.

What are these two items and where were they produced?

Item One:	
Produced in:	
Item Two:	
Produced in:	
Find 2 different brands of milk. Compare e	qual amounts:
What is the brand's name and price of each	
Milk Brand (1):	Milk Brand (2):
Cost:	Cost:
How much more does the more expensive b	rand cost (what is the price difference)?
Price Difference:	
Why do you ti	hink there is a difference (if there is one)?

Select two different cereals to compare. What are the first three ingredients listed on the nutrition label? How much does each box cost:

Who are the distributors of each cereal and where are they located?