

QUILLS

Queen's University Indigenous Land-Based Learning STEM
Queen's University Biological Station

Relational Gardening

Organization:

Title: Relational Gardening

Summary: Students learn about interdependence by discovering the role that each element in a 3 Sisters Garden plays in the garden's health and vibrancy. Students also reflect on their own responsibility to care for the land by being asked to express reciprocity with the natural world in a manner that is cohesive with their cultural background and traditions.

Inquiry Question: Inquiry Question 2: What do Indigenous land-based food gathering practices teach us about how we can maintain reciprocal, interdependent relationships with the natural world and in so doing fulfill our responsibilities to the land?

Duration: 1-2 Class periods

Learning Environment: Classroom, outdoor

Season: Fall Materials:

Indigenous Gardening Practices Background.pdf

Relational Gardening.pdf

Seed Songs.pdf

Curriculum Links:

Grade 9 Destreamed: A2.5, B1.3, B2.4, B2.5, B2.7

Grade 10 Academic: A1.11, D.1.1, D1.2

Grade 10 Applied: A1.11, D1.2

Meta Data:

Content Type: Activity, community action project, language learning, storytelling

Bundle: Food

Theme: Global Climate Change

Subject Area: Art, Biology, Drama, Environmental Education, Geography, Language Arts, Music,

Outdoor Education, Physical Education, Science, Social Studies

Curriculum Focus: 9,10

An Indigenous Knowledge Keeper or community member should be invited in to help you deliver this learning activity.

Spotlight on Language: Students learn the names for The Three Sisters, Corn, Bean, and Squash in Kanyen'kéha and are encouraged to add them to their Outdoor Learning Journal use them these throughout the Bundle. Students can also go to the online QUILLS dictionary to hear the words in Kanyen'kéha.



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Kanyen'kéha

The Three Sisters: Ahsen nikontate'ken:a

Corn- Ó:nenhste Bean- Oshahè:ta Squash- Onon'ónsera

Teacher begins by leading a discussion with students in which they introduce the 3 Sisters, 3 Sisters gardening, and polyculture gardening in general. With the teacher, students discuss the distinctive role that each element of the garden (including the person planting) has in ensuring the health and vibrancy of the garden. Students should be able to explain how (the three plant species and the humans tending to the garden) work together to help each other. Ie: Students should be able to articulate what each element in the garden gives and receives. Students should be able to link this approach to gardening rooted in reciprocity to Indigenous ways of knowing and being in general and an appreciation of them as an interconnected system eg. (the whole is greater than the sum of its parts). Background information for teachers to help them lead the discussion can be found in **Indigenous Gardening Practices Background.pdf.** Student infographic is titled **Relational Gardening.pdf.**

- Teacher asks students to choose how they would like to express their understanding of how
 the 3 Sisters are interconnected. (Ie: corn stalk supports bean vines, beans provide nutrients
 (nitrogen) for the corn); squash leaves provide cover which helps retain moisture and
 prevents weed growth between the mounds); humans clear the land, pull the weeds, and
 pick the bugs.
- Students may choose to draw a diagram, make a model, act out a scene etc. Creativity and arts-based expressions should be encouraged!

Activity:

- Students visit a garden. There are many amazing Indigenous lead community gardens in the Katarokwi region. A list of gardens is included in **Local Indigenous Gardens.pdf.**
- Students learn about seed songs and the ritual of opening and closing a garden with a song. Information included in **Seed Songs.pdf**. A Haudenosaunee community member should be invited into the learning environment when discussing seed songs.
- Students spend time writing a song or some words that are their own to open a garden ie:
 words that come from their own traditions and cultures, in their own language. This will
 also encourage students to develop a relationship with plants. Research does show that
 plants respond to positive energy such as talking to them kindly and playing soothing music.
 This will seem strange at first to some students but after a while they will come to enjoy it.
- Teachers can build this into a routine at school and encourage students to do this at home.



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Please note that the learning represented in these activities reflects Big Idea C. in the Indigenous Knowledge Learning Bundle: "Reciprocity, Interdependence, and Holism are at the Heart of Indigenous Ways of Knowing and Being". To help your students learn more about these foundational concepts check out the Learning Activities titled: *Holism, The Honorable Harvest,* and *Our Responsibilities* found in the *Indigenous Ways of Knowing and Being with the Natural World* Learning Bundle (Grades 7-10).