



Co-designing Places for Outdoor Learning Facilitation Guide

Design Engagement 4: Rhizome Mapping

Activity Purpose

Now that you have done the Place Mapping activity, your group is going to take the same walk, but use the Rhizome to consider each place beyond its physical attributes. Often, school gardens or outdoor classroom locations are selected purely for their proximity to water, the amount of sun they receive, or even if the place is “out of the way” or in a community gathering place. These are important factors depending on the kind of outdoor space you want to design, but they alone will not lead your group to create an equitable and transformative outdoor learning place. This is where the Rhizome helps us ensure that decisions about site selection are connected to larger social, ecological and relational contexts. The Rhizome helps us see ourselves and others in place — with families and communities, shaped by power and historicity, enacting nature-culture relations, engaged in science learning, and making decisions in complex socio-ecological systems (return to page 6 of the “Introduction to the Facilitation” for more information.) We can think about each of the Rhizome parts as a “lens” that we will use to think critically about the places we identified in the Place Mapping activity (DE 3.) These prompts may feel natural — and perhaps you have already identified some of them during the Place Mapping walk. Some may feel challenging, or maybe even be something you haven’t thought of before in place. Also keep in mind that people may have similar or conflicting experiences or histories in a place, and this should be considered carefully, as it will inform future experiences and learning there.

By considering these parts of the Rhizome, we aim to identify areas on the school ground where learners can further discuss, explore and investigate these larger contexts.



Activity Overview

This is a two-part activity:

- » **Part 1:** Walk the same route you took during Activity 3: Place Mapping. Using the Rhizome, mark on the map the five parts of the Rhizome.
 - Continue to add directly to the maps created during Activity 3. Or sketch a new map on Activity 4 and compare the maps during debrief.
- » **Part 2:** After the walk, come together and debrief your noticings using the Rhizome prompts on page 2. .

Using the Rhizome in the Co-design Process:

The following Rhizome prompts provide ways to routinely consider the core commitments towards creating more equitable outdoor learning places. The Rhizome foregrounds analyses of **power and historicity** and **nature-culture relations** as they intersect with the other parts of the Rhizome: **complex socio-ecological systems**; **field-based science**; and **culture, families & communities**. Use these questions as a way for the co-design group to keep all pieces of the Rhizome present during co-design.

Culture, Families and Community:

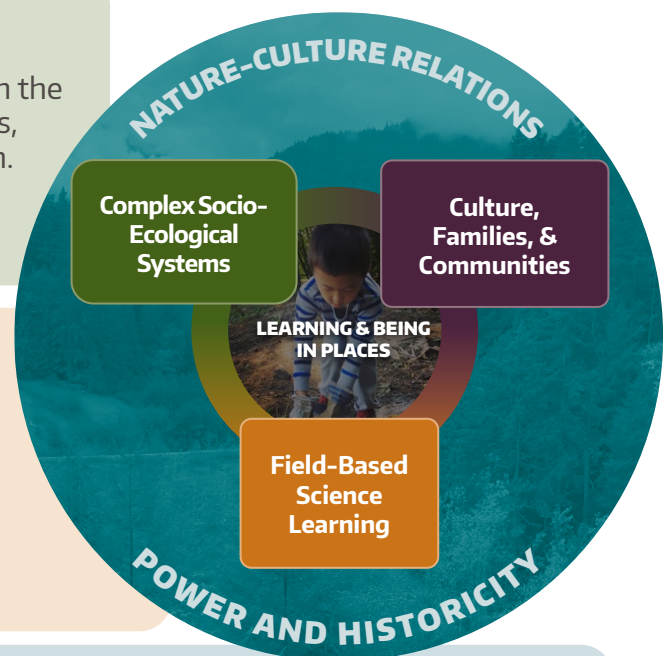
- » Where are places that are connected to family and/or cultural practices? How are they connected?
- » How can culture, families and communities be present in our learning place?

Complex Socio-Ecological Systems:

- » Where are interdependent relationships observable on the school ground? For example: mycelium and plant roots, birds and seed dispersal or ants and aphids in a garden.
- » How can our place design encourage learners to take action toward positive socio-ecological change?

Field-Based Science Learning:

- » How might learners investigate phenomena? What unique phenomena do we see here?
- » How does this outdoor learning place connect to science learning that happens in classrooms and/or informal education spaces?



Power and Historicity:

- » Power and historicity will inform future experiences and learning in this place. How does our design address powered dynamics?

Nature-Culture Relations:

- » How are humans and more-than-humans (plants, animals, water, soil) relating to one another in this place?
- » How could our design encourage more ethical relationships in this learning place?



CONNECT TO OTHER LEARNING ENGAGEMENTS

- Family LE 3.C Taking a Focused Walk Together: Places, Lands and Waters
- Family LE 3.E Taking a Focused Walk Together: Thinking Across Scales

LEARNING IN PLACES FRAMEWORKS TO CONSIDER

- Complex Socio-Ecological Systems
- Power and Historicity
- Nature-Culture Relations

Design Engagement 4: Rhizome Mapping

Part 1 & 2: Rhizome Mapping

MATERIALS

- » Bird's eye view of school yard (printed or drawn, see appendix C)
- » Materials for mapping:
 - different color markers/stickers
- » Activity Sheet 4 & Mapping Activity Prompts
- » large map or paper for whole group debrief

TIME: 60 MINUTES



ACTIVITY SHEET 4

Activity 4: Use these Rhizome prompts to mark on the map places that connect to the Rhizome

Culture, Families and Community:

Diverse perspectives from family knowledges and practices are critical for decision-making.

- » Where would we want to spend time as families?
- » What places help us feel a sense of wonder?
- » Where do we see our family culture?
- » What places remind us of home?
- » Where does your family spend time at school?



Complex Socio-Ecological Systems:

There are many interdependent and interconnected relationships in school yards. Humans are a part of these networks of relationships, and make many decisions that lead to ecosystem change.

- » Where do we see lots of life? (plants, animals, people...) How might the things you notice be connected?
- » Where do we see healthy ecosystems?
- » Where do we see people interacting with plants, animals, water, soil in this place?
- » Where has the lands and waters shaped human behavior and decision here? How have humans shaped the lands and waters?



Part one: Use the same route in Activity 3 to walk around the school yard and pause at different locations. Read through the prompts following Activity Sheet 4 and mark on the map places that connect to the Rhizome.

- Consider assigning different members of the co-design team to one of the 5 Rhizome nodes to ensure all aspects are being considered on your map.
- Use Activity Sheet 4 to sketch a map or print off a map and use different color markers, stickers or small sticky notes.

Draw a birds eye view of your school yard and map the connections to the rhizome.

During your walk draw use symbols, colors, drawings, stickers and/or words to record different places where you see connections to the rhizome.

- Culture, Families and Community
- Complex Socio-Ecological Systems
- Field-Based Science Learning
- Power and Historicity
- Nature-Culture Relations



Have a member of the co-design take notes during the walk! Write down questions and observations from the group.

Part two: After walking the land in and around the school grounds, return inside to discuss the experience. Use a large version (either printed or drawn) of the birds-eye view map to gather and synthesize information from everyone who participated. This conversation will support the group in selecting a site that connects to all the five parts of the Rhizome. Use the Rhizome prompts on page 2 to help to focus the discussion.

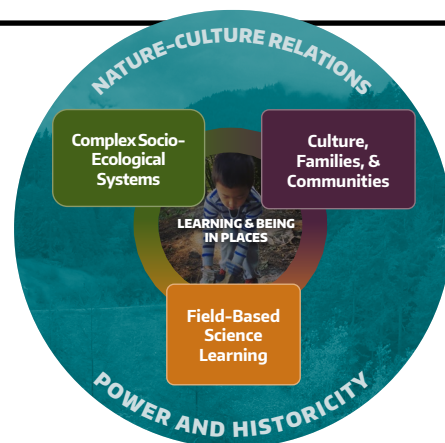
- What is our map showing us?
- Are there places on the school ground where all parts of the Rhizome are interacting?
- How does the Place Map and Rhizome Map interact? Are there physical features that connect to the Rhizome?
- Has your idea of a learning site changed? How?

Activity Sheet 4:

Draw a birds eye view of your school yard and map the different places where you see connections to the Rhizome.

During your walk draw use symbols, colors, drawings, stickers and/or words to record different places where you see connections to the Rhizome. See the next 2 pages for prompts for each of the Rhizome nodes.

- **Culture, Families and Community**
- **Complex Socio-Ecological Systems**
- **Field-Based Science Learning**
- **Power and Historicity**
- **Nature-Culture Relations**



Activity 4: Use these Rhizome prompts to mark on the map places that connect to the Rhizome

Culture, Families and Community:

Diverse perspectives from family knowledges and practices are critical for decision-making.

- » Where would we want to spend time as families?
- » What places help us feel a sense of wonder?
- » Where do we see our family culture?
- » What places remind us of home?
- » Where does your family spend time at school?



Complex Socio-Ecological Systems:

There are many interdependent and interconnected relationships in school yards. Humans are a part of these networks of relationships, and make many decisions that lead to ecosystem change.

- » Where do we see lots of life? (plants, animals, people...) How might the things you notice be connected?
- » Where do we see healthy ecosystems?
- » Where do we see people interacting with plants, animals, water, soil in this place?
- » Where has the lands and waters shaped human behavior and decision here? How have humans shaped the lands and waters?



Activity 4: Use these Rhizome prompts to mark on the map places that connect to the Rhizome

Power and Historicity:

Cultivating lands and waters is a cultural practice with expansive variation across time and place. For example, gardens have a range of purposes from food and medicinal, to material and aesthetic. Animals also cultivate land and water.

- » Who designed these places? Who are these places designed for? Is this place designed with more-than-humans in mind?
- » Who has access to this place? Who doesn't have access to this place? Why or why not?

Nature-Culture Relations:

Our choices around how we build outdoor learning spaces are shaped by views of how humans relate with the natural world. Learning outdoors and making healthful decisions that impact the natural world supports a view that humans are "a part of" rather than "apart from" nature.

- » Where have humans made healthful impacts to the natural world on the school ground? Include different methods of cultivation of land.
- » Where are spaces that would encourage future healthful decisions?



"Beehives, Novo Hopovo Monastery" by Gmihail



"Clamming" by LakeClarkNPS



"Terrace Farming" by esmar.abdulhamid



"Sprial Garden Demo" by colleen_laughter



"My Greenhouse" by axelki



Field-Based Science Learning:

Different places can help us learn different things. Outdoor places support interactive science learning.

- » What places make us curious?
- » What do we already know about this place?
- » What does this remind us of?
- » What can this place teach us?