



# Co-designing Places for Outdoor Learning Facilitation Guide

Design engagements for families, students, teachers, and  
communities to reimagine schoolyards





The **Co-designing Places for Outdoor Learning Facilitation Guide** creates a process by which people can co-design outdoor places for field-based science learning on schools grounds. It is only one piece of a much larger ecosystem of materials that are part of the Learning in Places project. More information about the project and all of the materials can be accessed for free on the Learning in Places website: [learninginplaces.org](http://learninginplaces.org)

The Learning in Places Project cultivates equitable, culturally based, socio-ecological systems learning using a new approach to field based science education. A shift in designing outdoor learning places is also necessary to create equitable and sustainable learning opportunities which is reflected in this Facilitation Guide.

We are grateful for the staff and families from Viewlands Elementary and Dearborn Park International Elementary who co-designed and implemented the first iteration of the Design Engagements. Thank you to all our Community-Based Organization partners: Muckleshoot Tribe, Washington Green Schools, EarthCorps, Readers to Eaters, Slow Food Seattle, Creative Kids, Seattle Parks and Recreation Urban Food Systems Program, IslandWood, Nurturing Roots, Seattle Public Schools Self Help Projects, and school garden coordinators. A special thank you to Maren Neldam for her vision and creative leadership on the Facilitation Guide.

Learning in Places is a research partnership between University of Washington Bothell Goodlad Institute, Northwestern University, Tilth Alliance and Seattle Public Schools, funded by the National Science Foundation (grant #1720578).





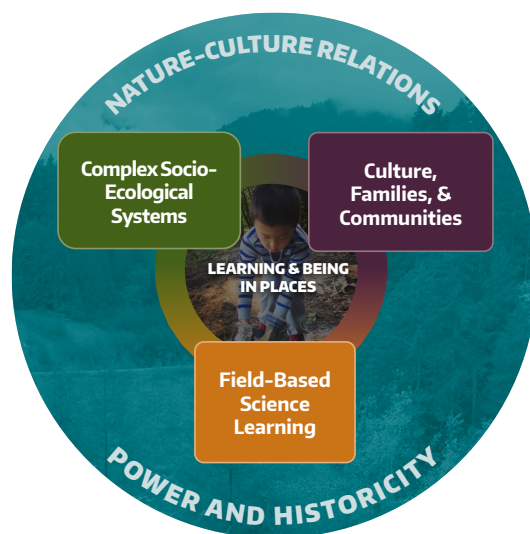
In the Learning in Places project, we co-design innovative research and practice with educators, families, and community partners that cultivate equitable, culturally based, socio-ecological systems learning and sustainable decision-making utilizing “field based” science education in outdoor places, including gardens, for children in Pre-Kindergarten to 3rd grade and their families.

## Materials in the Learning in Places Ecosystem

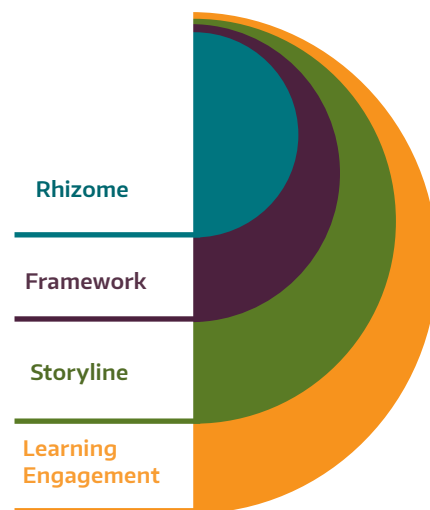
The **Rhizome** (further explained on page 6) illustrates the key principles and commitments of the project. There are 25 corresponding **frameworks** that provide in-depth, research-based information on the various aspects of the Rhizome. These frameworks are designed for educators working in a variety of places (Community-Based Organizations of all types, homes and schools.)

Out of the Rhizome and frameworks emerge overarching activity systems called **storylines**. The storylines operationalize principles from the Rhizome and provide a sequence for the **Learning Engagements** (LEs). These LEs engage learners and their communities in progressions of field-based science-related activities, including wondering, questioning, observing, investigating, deliberating, and decision-making. Each Learning Engagement contains various tools designed for educators and families as this learning is intentionally meant to cross boundaries between home, communities and schools.

While Learning in Places can happen in any outdoor space, it can also take place in intentionally designed **places for outdoor learning**, like a garden or outdoor classroom (defined on page 4).



Learning in Places Rhizome



Learning in Places Material Ecosystem



# Co-designing Places for Outdoor Learning Facilitation Guide

Introduction to the Facilitation Guide and Design Engagements

## Introduction

The Co-designing Places for Outdoor Learning Facilitation Guide is composed of several Design Engagements (DE). The DEs guide groups of families, teachers, Community-Based Organizations and community members in collaborative visioning and decision making, called **co-design**. When outdoor learning places at school are co-designed using multiple cultural and value systems they provide more **equitable** and **sustainable** learning opportunities.

When using the Rhizome as a lens (see page 6), outdoor learning places can be locations for rigorous, relevant, equitable and critical science learning that is woven into the larger community. These places need to be designed to be welcoming to all learners and their families, while supporting healthy ecosystems. Each Design Engagement intentionally includes the Rhizome to elevate different perspectives towards creating more equitable outdoor learning places.

The long-term sustainability of outdoor learning places at schools often hinges upon the continual reflection and revision of the values of the outdoor learning place as school interests and focuses change, and when leadership transitions. Conversations around decision-making and roles are critical to long-term sustainability. Designing with the unique affordances and challenges of particular sites is another crucial component. Activities from this guide should be revisited regularly to keep the space relevant and to continue to invite multiple perspectives speaking to the sustainability and use of the designed space.



## Why say “places for outdoor learning” instead of “garden”?

Many of the partners and schools involved with the Learning in Places project have worked and taught outdoors in gardens, most often annual vegetable gardens – or food-for-human gardens. While many of us continue to work in annual vegetable gardens, we also work in many other kinds of gardens and outdoor spaces such as rain gardens, native gardens, permaculture gardens, restoration spaces, wetlands, parks, and more. To make sure we are thinking expansively about outdoor places, we are using “places for outdoor learning” instead of “gardens” throughout this and other documents. An expansive view of outdoor learning places makes visible design opportunities that can happen in a variety of school yard environments including those that have limited green space.

# Design Engagements:

This guide is made up of eight different Design Engagements (DEs) that will inform collective decision making for the design of a new outdoor learning site or the enhancement of an existing site. The activities are listed in this order as they support the development of the corresponding activities.

1. **Histories of Places:** think across multiple time scales to consider how the school yard came to be the way it is today and what it could be in the future
2. **Vision and Values Discussion:** set a direction for the outdoor learning place
3. **Place Mapping:** identify the features of the land that support learning
4. **Rhizome Mapping:** re-walk the school grounds together and use the Rhizome as a “lens” to think critically about the places you identified in the place mapping activity
5. **Site Selection Synthesis:** reflect on the previous activities to identify a site for outdoor learning
6. **Designing Your Site:** create a design for the site and share out with the wider community
7. **Planning for Installation:** finalize your design plan and prepare for installation
8. **Sustainability, Decision-Making and Governance:** consider how decisions will continue to be made and create a common agreement to support sustainability of the outdoor learning place

Since **sustainability** is such a critical issue for the long term success of the outdoor learning place, the Histories of Places (DE 1) and Vision and Values Discussion (DE 2) are essential to complete with the co-design group. If these activities are not completed, different assumptions might be made by different members of your group related to the use and purpose of the outdoor learning place that can lead to misunderstandings and conflicts.

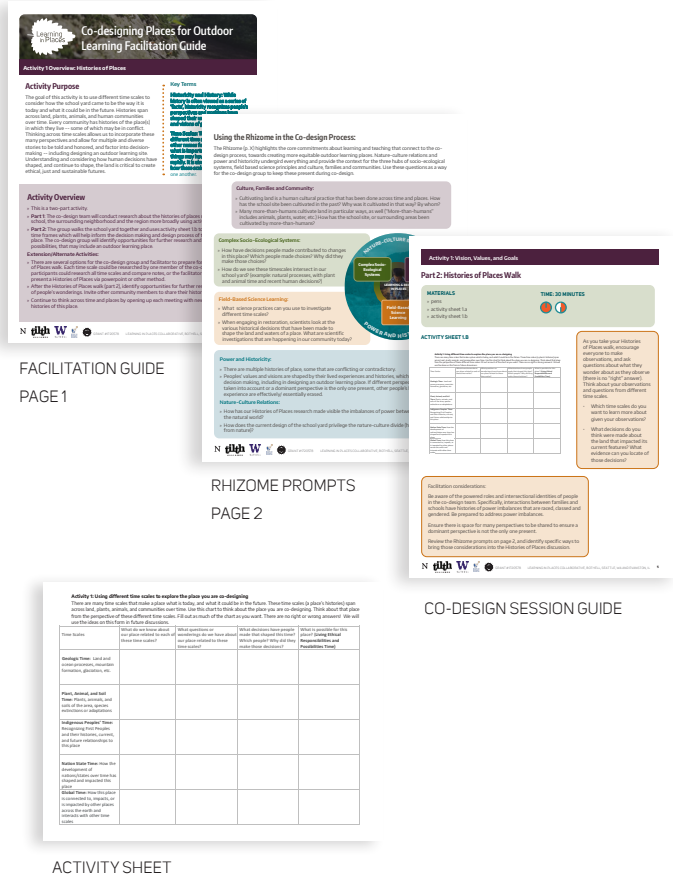
## Components of this Guide:

Each Design Engagement has a three-page Facilitation Guide.

- **Page 1:** provides an overview and purpose of the activity
- **Page 2:** the Rhizome helps prompt co-designers to keep multiple perspectives in mind when making decisions. It also lists connections to Learning Engagements (LEs) from the Learning in Places classroom science storyline and the family science storyline. These materials can be found at [learninginplaces.org](http://learninginplaces.org)
- **Page 3:** provides suggestions for how to use the activity sheets in a co-design session.

Each **activity sheet** provides prompts for the co-design team to consider. The team can write down noticings, wonderings, questions and reflections as they move through different activities. These activity sheets can also be copied onto a blank piece of paper or into a bounded notebook.

There are various **appendices** that are referenced throughout the Facilitation Guide that offer additional supports for specific considerations. They are compiled at the end of the guide.





## Setting up a co-design space:

This facilitation guide should be completed as a co-design group, not individually. Co-designing is an important way to shift who has decision-making power. Co-designing is an iterative process where ideas are formed, shared, and re-designed several times with many groups of people who will be involved in the learning environment. This includes educators, families, students and community-based organizations. Allow plenty of time for trust and relationships to be built, and remember this takes time and intentional effort.

The co-design process will take time and will evolve. There will be times when smaller groups of folks work closely together. There will be times when co-design happens in larger one-time sessions. Co-design is a continual relational process where we are shifting the ways we interact with each other in an effort to move towards a collective vision.

## Preparing for co-design sessions:

**Identify and invite stakeholders** (see “Who should be involved?”) Inviting stakeholders will range from individually targeted asks, to broad outreach through sending fliers home in backpacks, newsletters, or e-mails.

**Schedule a series of meetings** at times that work for the co-design team. To get a sense of how long the design engagements take and how they may be grouped for meetings, please see an example timeline in Appendix A.

During your first session prepare for an **introduction time** where the co-design team can get to know each other. Building relationships is an important part of co-design. Share names and roles you hold in the community as well as an ice breaker activity of your choosing. This can be as simple as asking people “How do you know it’s fall?” “What does your family like to learn outside in this season?”

## Who should be involved?

Outdoor learning spaces, like gardens of any kind, take coordination. Depending on the activities and the space being used, the needs can vary greatly. There is always some level of decision making occurring, ranging from who will use the space to how to care for the space being used.

When forming a co-design committee, think about who is involved in decision making and what implications that may have.

- Families who represent different racial, ethnic and cultural groups
- Teachers, principal, district staff, para-educators, custodians, cafeteria manager
- Community members, partners and Community-Based Organizations (CBOs)
- Students
- Outdoor learning place coordinator and/or outdoor educator

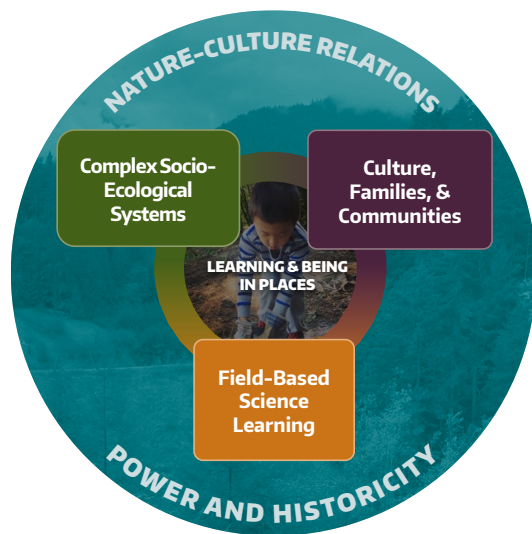
### Important Considerations:

- Who is involved in decision making around the outdoor learning place?
- How are they involved in the co-design process?
- Are the people who will be caring for and educating in the site after installation involved in the design process?
- Are there people who should be involved who you haven’t thought of and/or who aren’t usually asked to participate?



# Learning in Places Rhizome:

In the Learning in Places project, we call our core commitments, stances, and ideas the “Rhizome.” A rhizome is an underground plant stem system that produces both new roots and new shoots for the plant. In other words, it is the foundation from which the plant makes new growth. We use the Rhizome as a metaphor for the foundation of our work, in which our core commitments and key concepts propagate through teaching and learning, and from where we cultivate new ideas and practices. The Rhizome foregrounds analyses of power and historicity and nature-culture relations as they interact with complex socio-ecological systems, culture, families & communities, and field-based science. In the Facilitator Guides, the Rhizome page will provide prompts to routinely consider how these concepts are connected to the outdoor learning places design process. The Rhizome is intentionally included in every activity, to elevate different perspectives towards creating more equitable outdoor learning places (for example, beyond just identifying the sunniest spot on the school grounds).



## Field-Based Science Learning:

The Next Generation Science Standards represents a shift beyond studying concepts, towards engaging in scientific practices and deep sense-making. When students engage in the practices of scientific inquiry, they develop understandings of scientific ideas as well as the processes through which scientists learn about the natural world. Outdoor learning places provide a place for learners to engage in these scientific practices and ideas.

## Complex Socio-Ecological Systems:

All social and ecological systems interact in a complex web of relations across time and place. These are referred to as socio-ecological systems. Understanding complex socio-ecological systems is increasingly important in a world that is socially and ecologically shifting at rapid rates. The outdoor learning place should be a place to reason about systems and patterns and should reveal interdependent relationships in and across places.

## Culture, Families and Community:

Culture is constituted by the ways in which human beings engage with and make sense of the world as we participate in everyday activities of our communities. Thus, culture reflects socially and historically organized ways of living and making sense of life. Families bring a wealth of diverse perspectives and experiences that inform their relation to places and are crucial to creating equitable learning spaces. However, without careful facilitation traditionally powered roles and relationships can easily get re-enacted.

## Power and Historicity:

While history is often viewed as a series of “facts”, **historicity** recognizes how people’s perspectives and positions have shaped their understanding of history and visions of possible futures. Historicity is inherently **powered** – in other words, systemic power dynamics shape the structure relations between and among individuals, communities, and institutions (involving humans and more-than-humans). Creating equitable outdoor learning places means there must be a recognition of the power and historicity present in these places to reconstruct a more equitable and ethical future.

## Nature-Culture Relations:

The natural world makes human life possible. The ways that humans understand, interact with, and make decisions about the natural world has varied across cultural communities, as well as over history. The decisions around how to build outdoor learning spaces are shaped by culturally constructed conceptions of human relations with the natural world – what we refer to as nature-culture relations.

# Glossary

*Consider printing this page and making it available during co-design sessions.*

**CBOs:** Community-Based Organizations are nonprofit groups that work at the community level.

**Co-design:** co-design is a process of bringing people with diverse perspectives and roles together, to collectively identify areas of inquiry and to design solutions. Co-design is not a focus group or listening session. Rather, this process positions families and communities as collective decision makers.

**Colonialism:** the processes of a country or group of people seeking to extend or retain its authority over other people or territories, generally with the aim of economic and cultural dominance, often manifesting in espoused racialized supremacies. In the process of colonization, colonizers may impose their religion, economics, and other cultural practices on the peoples Indigenous to targeted territory, often done in very violent ways. The foreign administrators rule the territory in pursuit of their interests, seeking to benefit from the colonized region's people and resources.

**Historicity:** while history is often viewed as a series of "facts," historicity recognizes how people's perspectives and positions have shaped their understanding of history and vision of possible futures. Historicity is inherently powered – in other words, systemic power dynamics shape the structured relations between and among individuals, communities and institutions (involving humans and more-than-humans.)

**Kinds:** refers to water, sunlight, wind/air, soil, rocks.

**Makerspace:** this term refers to a hands-on space used to creatively design solutions. In DE 6 setting up a makerspace could include gathering things like cardboard, branches, burlap, etc. with the focus on building a model of the outdoor learning place design.

**More-than-human:** includes animals, plants, fungi, and microorganisms. This term intentionally replaces "non-human" as a way to decenter human dominance in the natural world.

**Nature-Culture:** refers to human relationships in and with the natural world. The two predominant models of nature-culture relations are (1) humans "apart from" the natural world (2) humans are "a part of" the natural world. Learning in Places is cultivating learning environments in which humans are a part of the natural world.

**Phenomenon:** an observable event that happens in the world (example: a plant growing towards the sun, soil eroding out of a garden bed, a caterpillar eating a leaf).

**Rhizome:** is an underground plant stem system that produces both new roots and new shoots for the plant. In other words, it is the foundation from which the plant makes new growth. The Learning in Places project uses the Rhizome as a metaphor for the foundation of our work, in which our core commitments and key concepts propagate through teaching and learning, and from where we cultivate new ideas and practices (see pg 5).

**Socio-Ecological Systems:** is the interaction of social systems (e.g. cultural communities, economies, governments) and ecological systems (e.g. forests, gardens) across time and place.

**Time Scales:** there are multiple time scales that shape a place. This project names six different time scales. You may have other names for these timescales but what is important is to consider how these scales interact and are layered. These layered histories continue to shape the present and are critical in order to create ethical, just and sustainable futures.

**Values:** what we hold to be important as a community

**Vision:** an overarching plan for the future, an overall intent of use or purpose

**Ways of Knowing:** everyone comes to learning environments with their own ways of knowing, influenced by cultural and family practices, language and histories. It is important to create learning environments that invite multiple ways of knowing.