

Nature-Based Learning Competencies

Supplement for Early Care and Education Professionals



Washington State Department of
CHILDREN, YOUTH & FAMILIES



Table of Contents

- Acknowledgments..... 2
- Introduction 4
- Goals for Learning and Development Through Nature-Based Education..... 5
- Understanding Key Words..... 8
- Content Area I: Child Growth and Development 9
- Content Area II: Curriculum and Learning Environment 10
- Content Area III: Ongoing Measurement of Child Progress 17
- Content Area IV: Family and Community Partnerships 18
- Content Area V: Health, Safety and Nutrition..... 20
- Content Area VI: Interactions..... 23
- Content Area VII: Program Planning and Development..... 25
- Content Area VIII: Professional Development and Leadership 26
- Resources..... 28



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- Members of the Early Childhood Teacher Preparation Council
- Leaders and staff of independent environmental education teacher-training institutions
- Directors and staff of outdoor preschools
- Experts in child development
- Outdoor and environmental education experts from K-12
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ALIZA YAIR

*Department of Children,
Youth, and Families*

ANNA HOGAN

*Grandview
Early Learning Center*

CAROLINE COOK

*Polliwog Preschool at
Mercer-Slough Environmental
Education Center*

DEETTA SIMMONS

*Cultivate Learning –
University of Washington*

DEONNAH MCCLLOUD

*Grandview
Early Learning Center*

DIANA STOKES, ED. D

*Department of Children,
Youth, and Families*

ELIZABETH PENHOLLOW, M.ED

Wilderness Awareness School

ELIZABETH SCHMITZ

*Office of Superintendent of
Public Instruction*

ELLEN ZITO

*Department of Children, Youth,
and Families*

FELICITY BRUSH

*Squaxin Island Child
Development Center*

JAMIE ASHTON

*Child Care Aware
of Northwest Washington*

KELLIE MORRILL

Tiny Trees Preschool

KEN TURNER

*Office of Superintendent
of Public Instruction*

MARIANNA ROSS

*Child Care Aware
of Washington*

MARTA BRANCH

Sequoia's Treehouse

**MARY CLEVINGER-BRIGHT,
PHD**

Univeristy of Washington

MICHELLE ROBERTS

*Department of Children,
Youth, and Families*

MIKE BROWNE

Hilltop Children's Center

NICOLE CORBO

*Roots & Sky
Nature-Based Learning*

RAE JING HAN, M.ED.

*University of Washington
College of Education*

REAGAN HENRY

*Department of Children,
Youth, and Families*

SABRINA GREEN

*Squaxin Island Child
Development Center*

SAMANTHA DOLAN, PHD

North Seattle College

SAVANNAH FENTON

*Squaxin Island Child
Development Center*

SHERI HILL, PHD

*Policy & System Consultant and
Trainer SHERI L HILL PHD LLC*

SIBYL MAER-FILLO

Washington Outdoor School

Introduction

In 2021, the Department of Children, Youth, and Families (DCYF) became the first agency in the nation to license outdoor, nature-based (ONB) child care programs. These programs offer early learning services to children in outdoor natural space, and teach children a nature-based curriculum. Professionals who provide this type of care must have specialized knowledge and skills in order to offer a safe, high-quality outdoor learning experience.

Purpose

While the *Core Competencies for Early Care and Education Professionals* (EPS_0023), available online at www.dcyf.wa.gov/publications-library/eps_0023, capture the foundational knowledge, skills and abilities that are expected of all individuals who care for children, they do not provide guidance for professionals who work in outdoor nature-based programs. The Supplement for Nature-Based Learning highlights the unique aspects of the nature-based learning experience, and establishes expectations for educators and administrators who offer this type of learning environment. We ask that professionals in nature-based programs use both documents to understand the full range of knowledge, skills, and abilities that are connected to positive child outcomes.

NAVIGATING THE SUPPLEMENT

This supplement uses the same organizing content areas as the original document, but showcases a new subcategory and indicators that are specific for nature-based and nature-centered education and care across each of the content areas.

New Content Area Subcategory

The new subcategory, Promoting Ecological Identity and Nature Connectedness, is unique to ONB programs, and can be found in Content Area II - Curriculum and Learning Environment. This subcategory captures the idea that children can develop a sense of belonging and connection to the natural world through which they can deepen their understanding of the relationships within their ecological community.



Keeping Different Types of Nature-Based Programming in Mind

There are many different types of programs that are united around the importance of natural experiences for children. The Nature-Based Learning Competencies address this range by highlighting the knowledge, skills and abilities that are essential for professionals who work in primarily outdoor nature-based programs (these will appear in **bold font**), as well as more general indicators (these will appear in regular font) that are applicable to all programs that integrate nature and natural experiences.

Goals for Learning and Development Through Nature-Based Education

Nature-based and nature-centered education has many benefits for young children's learning and development. A 2019 meta-analysis of studies examined the cause-and-effect relationship between experiences with nature and learning outcomes and found "evidence [that] strongly suggests that experiences of nature boost academic learning, personal development, and environmental stewardship."¹

With regard to early learning specifically, outdoor, nature-based play has been shown to provide physical, cognitive, social and emotional benefits for children. Some of the benefits are listed below:

Physical

- Improves gross and fine motor development (e.g., bone health, balance, coordination, endurance, spatial awareness, core strength, and posture);
- Strengthens immune systems;
- Promotes lifelong engagement in physical activity.

Cognitive

- Improves executive functioning and self-regulation abilities;
- Increases observation and problem-solving skills;
- Increases attention and focus; and
- Supports children's resilience, independence, and self-confidence.

Social and Emotional

- Reduces stress, anxiety, and depression;
- Builds foundational sense of connection to self, others, place, and broader world;
- Supports development of empathy for the natural world.

Nature-based and nature-centered education can also promote children's ecological identity and nature-connectedness. DCYF provides the following definition and description for this distinct benefit:

Ecological identity and nature-connectedness

refers to a sense of belonging and connection to the natural world that grows from exploration and understanding of the interdependent relationships within the natural community. A nature-connected ecological identity positions humans within the ecological community, as opposed to above or outside it. This, in turn, supports the development of a lifelong, meaningful and reciprocal relationship with the natural world.

Nature-connectedness influences the attitudes and actions of a person towards nature. Through interactions with the natural world, children can physically connect to and form a positive emotional and/or reciprocal relationship with nature.² In forming an ecological identity, children grow a sense of kinship with nature and see themselves as a part of nature.³ Nature, therefore, is included in the system of environmental interactions that shapes and is shaped by human development.

1. Kuo M, Barnes M and Jordan C (2019) Do experiences with nature promote Learning? Converging evidence of a cause-and-effect relationship. *Frontiers in Psychology* 10:305. doi: 10.3389/fpsyg.2019.00305. <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.00305/full>

2. Barrable, A. (2019) The case for nature connectedness as a distinct goal of early childhood education. *The International Journal of Early Childhood Environmental Education*, 6(2), p. 59 ISSN: 2331-0464 (online)

3. Wilson, R. (2019) What is nature? *The International Journal of Early Childhood Environmental Education*, 7(1), p.26 ISSN: 2331-0464 (online)

Goals for Learning and Development Through Nature-Based Education (Continued)

The goals of early childhood environmental education and literacy are closely related to this idea of nature-connectedness and ecological identity. The North American Association of Environmental Education developed Guidelines for Excellence For Early Childhood Environmental Education Programs. To download this publication, go to https://cdn.naaee.org/sites/default/files/final_ecee_guidelines_from_chromographics_lo_res.pdf. They believe that environmental education must begin early in an individual's life so that there is time to shape attitudes and perceptions that will allow for appreciation and stewardship of the natural world.

“Personal perceptions, attitudes, and connections with nature are the key goals at this stage, and facilitating positive experiences varies from child to child... Children who respect the environment feel an emotional attachment to the natural world and deeply understand the link between themselves and nature, will become environmentally literate citizens. The task of environmental education for young children is to forge the bond between children and nature.”

We believe that all children, regardless of the learning setting, can benefit from exposure to natural environments, and encourage all professionals to incorporate experiences in nature and natural elements into their program. Educators and administrators who are interested in enriching their program may use these competencies to gather ideas and strategies, and may even use the information to guide their own future professional learning.



Providing Culturally Responsive and Culturally Affirming Experiences

The Nature-Based Competencies for Early Care and Education Professionals includes competencies to honor indigenous sovereignty, and supports professionals throughout Washington in fostering relationships with local tribes and to implement tribally approved curriculum. For more information on treaties with tribes in Washington State, please visit www.washingtonhistory.org/education/curriculum/treatytrail/readings/ and <https://nwtreatytribes.org/treaties/>

Within the ***Nature-Based Competencies for Early Care and Education Professionals*** there are competencies to support racial equity and social justice that are specific to nature-centered or nature-based programming. These practices support professionals to learn about and understand children and families' perspectives and practices related to nature and being outdoors, as well as the environmental concerns of the community at large. Based on these practices, as well as through the broader social justice and anti-racist efforts of an early learning program, the practices included in this supplement should be adapted to provide culturally responsive and culturally affirming experiences that are relevant to the demographic(s) of the program.

Honoring Indigenous Sovereignty

The Nature-based Learning Competencies includes competencies to honor indigenous sovereignty, and supports professionals throughout Washington in fostering relationships with local tribes and implementing tribally-approved curriculum.

The indigenous people of Washington have thrived as communities full of wealth, strength and healthy flourishing families, in unison with the surrounding land, since time immemorial. Today many indigenous communities struggle from the generational trauma they have endured as a result of the assimilative tactics of the federal government; these include colonization, genocide, the removal from ancestral lands, boarding schools, and continued oppression of indigenous rights. It is important for non-Native citizens to understand and acknowledge this challenging history and its impact. This history provides nature-based professionals with an empathetic responsibility and opportunity to honor indigenous sovereignty and actively support Native peoples as part of their efforts for racial and social justice.

Each tribe in Washington is a sovereign nation, with a unique history, culture, and system of governance and all of the federally recognized tribes have a government-to-government relationship with the state.⁴ Non-Native Washington professionals should research their local tribes and in making this effort can create better relationships with their neighbors. By creating and fostering relationships with tribal communities, non-Native professionals can also avoid participating in cultural appropriation or stereotyping, and can tailor their practices and curriculum to honor the unique culture, heritage, language and tribal protocols in a respectful way.

The *John McCoy (luliláš) Since Time Immemorial Curriculum* was designed by Native educators for our early learners to experience concepts related to tribal sovereignty and local tribal history, and has been approved by the Tribal Congress on Education. For more information, go to www.k12.wa.us/student-success/resources-subject-area/time-immemorial-tribal-sovereignty-washington-state. The lessons and resources of the John McCoy (luliláš) Since Time Immemorial Curriculum are place-based and inclusive of nature-centered themes for children's learning, and therefore are particularly relevant to the nature-based program's curriculum. The curriculum is a framework, however, so whenever possible, the curriculum should be implemented with tribal input. Tribes may even have their own specific curriculum for non-Native educators, such as the Spokane Tribal Lifeways Curriculum available online at <https://spokanetlc.com/>. The competencies included in this document rely on the acknowledgment of the tribe on whose ancestral lands the program is based and building relationships from that acknowledgment. By doing so, children can learn the unique history of the indigenous peoples from where they live, creating an even deeper sense of connection with the Nature around them.

4. For more information on treaties with tribes in Washington State, please visit <http://www.washingtonhistory.org/education/curriculum/treatytrail/readings/> and <https://nwtreatytribes.org/treaties/>

Benefits for Adults and Communities

It is worth noting that nature-based and nature-centered experiences also have an impact on the mental and physical wellbeing of adults, including professionals working with young children. Impacts of engaging in nature-based or nature-centered activities for adults include reduced stress, a positive mood, and stronger feelings of unity with neighbors.⁵ Nature is even being prescribed by doctors to help with hypertension, anxiety, and obesity,⁶ and a 2019 study of 20,000 people found that “people who spent two hours a week in green spaces — local parks or other natural environments, either all at once or spaced over several visits — were substantially more likely to report good health and psychological well-being than those who don’t.”⁷

5. www.takingcharge.csh.umn.edu/how-does-nature-impact-our-wellbeing#:~:text=Being%20in%20nature%2C%20or%20even,the%20production%20of%20stress%20hormones

6. <https://parkxamerica.org/patients/human-benefits-of-nature.php>

7. <https://e360.yale.edu/features/ecopsychology-how-immersion-in-nature-benefits-your-health>

“Communities thrive when the people within them have opportunities for meaningful experiences outdoors, whether at a nearby park, a garden or on the shores of an ocean. Getting outside connects us to ourselves, to each other and to the world around us, reminding us that we are part of a much bigger story. Building these connections increases people’s quality of life, health and social wellbeing, which are benefits everyone deserves. We have a shared responsibility to open the doors to all people, regardless of where they live or their backgrounds, and ensuring their experiences outdoors are positive and rewarding. The more people who connect in this way with nature, the more our communities are strengthened and the more we all benefit” – rethinkoutside.org

Understanding Key Words

You can find a complete list of definitions for key words associated with outdoor, nature-based programs in WAC 110-302: <https://app.leg.wa.gov/WAC/default.aspx?cite=110-302>.

Biome: a large naturally occurring community of flora and fauna (see below) occupying a major habitat.

Ecology: branch of biology that deals with the relations of organisms to one another and to their physical surroundings.

Flora: the plants of a particular region, habitat, or geological period.

Fauna: the animals of a particular region, habitat, or geological period.

Natural space: land that is natural, semi-natural, or planted and includes plants, animals, and other features and products of the earth. Spaces that are designed and created by nature and natural forces.

Risky play: physical activity and play that is thrilling and exciting and where there is a risk of physical injury. Risky play for ONB programs includes, but is not limited to play involving heights, speed, tools, or is near dangerous elements (e.g., fall into something), and where children may get lost.



CHILD GROWTH AND DEVELOPMENT

LEVEL 1

- a. Recognizes that child/human development is interconnected with nature and other living beings.
- b. Recognizes the importance of outdoor active play.
- c. Recognizes that children are active learners and learn through all of their senses.

LEVEL 2

- a. Articulates the health benefits of outdoor, nature-based learning.

LEVEL 3

- a. Explains how children learn to manage risk through play in nature based environments.





II CURRICULUM AND LEARNING ENVIRONMENT

Creating the Learning Environment and General Curriculum

LEVEL 1

- a. Recognizes nature as a teacher.
- b. Incorporates loose parts, including natural materials, into indoor and outdoor play areas.
- c. **Provides all children with opportunities for play and exploration in nature-rich outdoor spaces every day.**

LEVEL 2

- a. Identifies nature-centered or nature-based curricula and resources, as appropriate for their setting.

LEVEL 3

- a. Partners with local tribe(s) where possible to support indigenous curriculum priorities, and/or implements the John McCoy (luliláš) Since Time Immemorial early learning curriculum.
- b. Creates outdoor play and learning areas that are appropriate and inviting for local species and ecosystems.
- c. **Uses knowledge of local natural environment throughout the seasons and local flora and fauna to support all children's engagement in daily activities and learning opportunities.**
- d. Incorporates many, diverse natural elements in indoor and outdoor learning environments.

LEVEL 4

- a. Identifies and incorporates indigenous curriculum priorities through partnership with local tribe(s).
- b. Evaluates various nature-centered or nature-based curricula options for their suitability to the developmental stages and interests of children in their particular setting.
- c. Develops a learning environment that offers a variety of opportunities for play, including opportunities for group and individual play.

Promoting Physical Development

LEVEL 1

- a. **Recognizes that children’s engagement in risky and challenging play supports the development of physical abilities, when the risk is appropriate to children’s developmental levels.**

LEVEL 2

- a. Offers opportunities for children to learn and make sense of their world through all of their senses.
- b. Recognizes that outdoor, nature-based experiences are necessary for all children’s healthy development.
- c. **Recognizes that being outside in natural surroundings improves children’s physical development.**
- d. **Allows children to engage in risky and challenging play, appropriate to children’s developmental levels, and provides close supervision and support, as needed.**

LEVEL 3

- a. Supports children to notice and seek out the natural phenomenon that improve child development, such as looking far away, listening to sounds from far away, walking on and touching various textures, and being near plants and water features.
- b. **Provides opportunities for all children to engage in risky and challenging play, making adaptations for each child based on their individual abilities and needs.**

LEVEL 4

- a. Enhances understanding of the physical world through activities and tools to heighten observations through their senses (i.e., cupping ears, binoculars, etc.)
- b. Encourages and extends children’s opportunities to navigate risks and challenges in outdoor active play by evaluating children’s developmental progress and involving them in setting goals.





Promoting Cognitive Development

LEVEL 1

- a. Provides children with natural materials for hands-on and multisensory learning opportunities.
- b. Encourages children to use all their senses.

LEVEL 2

- a. Recognizes the benefits of risky play for children's cognitive development.
- b. Provides learning experiences with the natural world on a variety of developmental levels.
- c. **Recognizes that being outside in natural surroundings improves children's cognitive development.**

LEVEL 3

- a. Provides physical and conceptual tools and materials for children to investigate the outdoor/natural environments, including gathering, recording, and communicating information.
- b. Guides children to assess risks before engaging in risky play activities.
- c. **Supports children in observing qualities (e.g., shape, color, texture), patterns, phenomena, life cycles, similarities and differences, cause and effect, and changes over time in natural environments.**
- d. **Provides opportunities for choice and child-led activities during outdoor, nature play and follows children's lead and curiosity.**

LEVEL 4

- a. Supports children to understand the interconnected and interdependent relationships between living organisms and their interactions with the natural world.
- b. Identifies and describes scientific thinking and engineering processes in nature.
- c. Builds connections between nature and math, science, literacy, social studies, and arts learning activities.

LEVEL 5

- a. Guides discovery and uses examples from the natural world to support children's scientific thinking and engineering processes.

Promoting Language and Communication Development

LEVEL 1

- a. Provides vocabulary to children when describing what they see, smell, hear, taste, touch, and feel in the natural world.
- b. Uses reading materials, stories and songs that describe and are connected to the natural environment.

LEVEL 2

- a. Verbally identifies plants, animals and other common natural objects.
- b. Utilizes nature-rich indoor and outdoor learning materials to build vocabulary about the natural world.

LEVEL 3

- a. Supports children in recording and reflecting on their outdoor/nature play experiences using a variety of materials and formats.
- b. **Utilizes stories rich with vocabulary and imagery relevant to the surrounding environment.**



Promoting Social/Emotional Development

LEVEL 1

- a. Understands that nature and natural materials can have a calming effect on human physiology.
- b. Understands the role of empathy and compassion for nature in building young children's connection with nature.
- c. Models empathy and compassion for nature, including the local fauna, flora, and delicate ecosystems, by acknowledging that all living beings have autonomous and intrinsic value that is unrelated to human use.
- d. Understands the importance of children developing a sense of place and belonging in their local communities and environment.

LEVEL 2

- a. Guides children in self-regulation techniques that are supported by nature, such as grounding and conscious breathing, focusing attention on the sights and sounds of nature and the outdoors, and how to find space for comfort and privacy without separating from the group.
- b. **Supports children to feel safe in nature by emphasizing and explaining the boundaries of play, and engaging children in assessing risky elements of the environment.**

LEVEL 3

- a. Models the role of empathy and compassion for self, others, and nature, including the local fauna, flora, and ecosystems, to support building children's connection with nature.
- b. Supports children in developing a sense of place and belonging in their local communities and environment.
- c. Creates opportunities for cooperation, collaboration, and shared decision-making with and among children to support the systems of the biome.

LEVEL 4

- a. Models and encourages respectful, reciprocal, and sustainable interactions with nature, including the local fauna, flora, and delicate ecosystems.

Promoting Creative Expression

LEVEL 1

- a. Provides reusable or compostable, non-toxic art materials.
- b. Encourages children to be creative in natural environments and with found natural materials that plants and other beings are not using.

LEVEL 2

- a. Offers opportunities for children to create imaginative responses to experiences in and about the natural world.

LEVEL 3

- a. Guides children to build connections between creative expression and other forms of nature-centered learning (e.g., explorations of nature, outdoor play, mathematic and scientific investigations).



Promoting Ecological Identity and Nature-Connectedness

LEVEL 1

- a. Understands environmental practices such as reducing waste, recycling, and composting.
- b. Identifies local native flora and fauna.
- c. Explains the basic principles of botany and the water cycle based on children's developmental level.
- d. Demonstrates empathy and care for other living beings and ecosystems.
- e. Recognizes that we are on ancestral tribal land(s).
- f. Recognizes that children's emotional connections with the earth are supported by frequent positive experiences in their local natural environment or with living organisms.
- g. Notices and points out living organisms in urban areas or indoors.
- h. **Provides ample time and space for child-guided play and exploration in natural environments.**

LEVEL 2

- a. Uses self and parallel talk to model curiosity and positive feelings about the natural world.
- b. Models environmental care-taking and sustainability practices, including being careful around fragile ecosystems, reducing waste, recycling, and composting.
- c. Guides children to identify the flora, fauna and ecosystems they encounter.
- d. Offers opportunities to participate in gardening activities, when possible.
- e. Recognizes that we are on ancestral tribal land and identifies which tribe(s) have relationships with the land the program is located on.
- f. Uses recollection and discussion of childrens' experience with nature to reinforce children's emotional connections to the natural world.
- g. Models appropriate handling of living things.
- h. Helps children build understandings of the needs of plants, animals, and other inhabitants of the natural world and makes connections between these needs and children's own needs.
- i. Creates opportunities for children to care for living things, land, and ecosystems in order to build a sense of responsibility for their actions.
- j. **Exposes children to a variety of natural environmental and weather conditions.**
- k. **Provides frequent positive experiences for children in their local natural environment, including the green spaces of urban areas.**

LEVEL 3

- a. Educates children and families to understand whose ancestral tribal land(s) the program is located on.
- b. Explains the importance and impact of environmental caretaking and sustainability practices, including being careful around fragile ecosystems and reducing waste, recycling, and composting.
- c. Builds childrens' mindfulness practices by bringing awareness to stillness, active listening, and conscious breathing.
- d. Grows children's understanding of the traditional and current use of local flora and fauna by humans.
- e. Understands the basic principles of ecology, such as the role of various plants and animals in the food cycle, or symbiotic/predatory/parasitic relationships.
- f. Understands how human activities impact the local watershed.
- g. Acknowledges different cultures' relationships to nature, and incorporates into the curriculum in a respectful and sensitive manner.
- h. Builds and models a relationship with nature that is based on reciprocity in giving and receiving.
- i. Provides opportunities for children to expand their ability to engage in sustained attention and observation of natural phenomenon.
- j. Facilitates conversations about the interdependence and connectedness of the natural world, including human beings.
- k. Supports children in identifying the ecological relationships and interconnectedness of systems and living species.
- l. **Explains how humans impact the environment and minimizes the impact of children's outdoor play on ecological systems.**

LEVEL 4

- a. Explains how humans impact natural environments through their interactions with ecological, social, and economic systems, and describes our civic and sustainability responsibilities.
- b. Nurtures children's love, appreciation and respect for the natural world.
- c. Sustains the ecological perspectives and practices that are valued by children and their families, communities, and cultures.
- d. **Guides children to practice appropriate foraging and gathering techniques, explaining appropriate and inappropriate times to harvest plants.**

LEVEL 5

- a. Articulates and applies research and theory regarding children's development of ecological identities and ecological literacy.
- b. **Applies theory and ethics of being in 'right relationship with the land' by recognizing that everything is interconnected and acknowledging that all living beings have intrinsic value beyond and before their value to humans.**
- c. Communicates with stakeholders about children's development of a positive ecological identity and nature-connectedness



III ONGOING MEASUREMENT OF CHILD PROGRESS

LEVEL 1

- a. Listens to children's verbal and non-verbal communication regarding their own goals for play and learning.
- b. **Assesses children's ability to identify local flora and fauna.**

LEVEL 2

- a. Uses authentic observation that is based on real-life experiences and artifacts to assess children's progress of understanding of natural phenomena.

LEVEL 3

- a. Engages children in reflecting on their own learning, development, and progress towards their own goals.

LEVEL 4

- a. **Analyzes and applies children's verbal and non-verbal communication to create learning and exploration opportunities in the natural world.**



IV FAMILY AND COMMUNITY PARTNERSHIPS

Relationship with Families

LEVEL 1

- a. Explains to families the importance of being prepared for outdoor play every day.

LEVEL 2

- a. **Demonstrates willingness to understand the cultures and social considerations of families as it relates to being outdoors and relating to nature.**
- b. Communicates with families to arrive at shared expectations for children's daily outdoor activities.

LEVEL 3

- a. Communicates with families to learn about their perspectives and practices related to nature and being outdoors.

LEVEL 4

- a. Builds caregivers' understanding about the impact of nature on children's development.
- b. **Engages in culturally sustaining practices with families by honoring elders and facilitating spaces to sustain others' cultures as they relate to nature and the outdoors.**

Use of Community Resources

LEVEL 1

- c. Identifies the cultural history of the land you are on.

LEVEL 2

- a. Identifies and connect with your local Native American tribe(s) to create opportunities to incorporate awareness of the indigenous culture through stories, songs, or languages from the land you are on, if appropriate.
- b. Identifies experts and resources for nature-centered education in the community and surrounding areas that can extend children's learning.
- c. Communicates information to colleagues and families about the natural space(s) that the program uses.

LEVEL 3

- a. Invites and supports community members to share their ecological perspectives and practices with the children.

LEVEL 4

- a. Shares information with colleagues and families about service projects or direct actions that are related to habitat restoration, environmental care and sustainability.
- b. Engages with the local Native American tribe(s) to establish a respectful relationship, and support indigenous priorities in the goals of early childhood education.

LEVEL 5

- a. Builds long-term, equitable, collaborative partnerships with members of children's communities and invites them to share their ecological expertise through co-designing learning experiences.
- b. **Engages children and families in service projects or direct actions that take care of the environment, such as habitat restoration or clean-ups.**





V HEALTH, SAFETY AND NUTRITION

Knowledge of Regulations

LEVEL 1

- a. Follows risk management procedures that are based on a program's benefit-risk assessments
- b. Follows a program's benefit-risk assessments and risk management plans.
- c. Demonstrates knowledge of Leave No Trace principles and guidelines on land use from the land manager and local Tribes.
- d. Understands and implements all supervision regulations for nature-based activities with high risk of injury, such as campfires, water activities, and climbing natural features.

LEVEL 2

- a. Identifies environmental risks and reports problems associated with risk management.
- b. Recognizes implicit and overt biases about how different groups of people inhabit outdoor spaces.

LEVEL 3

- a. Engages in benefit-risk assessment for locations and activities in outdoor, nature-based setting.
- b. Informs others of risk management procedures and coordinates response to unexpected risk with a group of people.
- c. Minimizes impact on the land so as not to cause undue harm from overuse and to protect the environment for future generations.

LEVEL 4

- a. Articulates benefit-risk assessment for locations and activities in outdoor, nature-based setting, and evaluates continuing needs for improvement.
- b. Works in partnership with the land manager to plan strategies to mitigate potential impact of the program on the land, including an assessment of the impact of practices on program quality.

LEVEL 5

- a. Develops a plan for training and trains staff on the implementation of benefit-risk assessments and risk management procedures.
- b. Anticipates risk, develops risk management plans, and ensures others are able to implement risk management practices.

Knowledge of Regulations

LEVEL 1

- a. Identifies dangerous plants, animals, fungi, or toxic substances.
- b. Understands the basic principles of outdoor safety that are described by the USFS. For more information, go to www.fs.usda.gov/main/r8/recreation/safety-ethics
- c. Identifies environmental hazards and keeps children separated from these dangers.
- d. Positions self and other staff in proximity to children who are in risky play situations in order to be able to provide prompt support, if necessary.

LEVEL 2

- a. Removes or otherwise mitigates hazardous elements in the outdoor classroom environment and risky play activity areas.
- b. Teaches children to avoid dangerous plants, animals, fungi, or toxic substances.
- c. Limits the number of risky play activities occurring at one time to support supervision.

LEVEL 3

- a. Adapts routines, curriculum and risk management plans based on daily weather and physical and emotional needs of staff and children.
- b. Knowledge of botany and plant identification is sufficient to engage in safe foraging practices with children.
- c. Identifies potential sources of injury during risky play activities, mitigates these risks through teaching and supervision practices.

LEVEL 4

- a. Assists in self-assessment of program policies and procedures for risk management.
- b. Creates risk management plans and procedures to mitigate potential harm to children engaging in risky play activities.
- c. Co-constructs boundaries (and guidelines) for nature-based play with children, supporting children to share responsibility for individual and group safety and well-being.
- d. Recognizes and makes decisions to manage the impact of children's outdoor play and exploration on ecological systems.

LEVEL 5

- a. Evaluates benefits and risks of challenging play experiences when designing learning experiences for all children.

Responding to Health Needs of Children

LEVEL 1

- a. Guides children to check in with their bodily comfort and needs, such as feeling hot or cold, hunger, and bathroom needs.
- b. **Demonstrates excitement and awe about different weather conditions while addressing concerns for safety, and the steps that will be taken if weather conditions become unsafe.**
- c. **Ensures children are dressed appropriately for the weather.**
- d. **Ensures there is communication access to emergency medical services when taking children into backcountry environments, and has Wilderness First Aid training if emergency medical services are more than 30 minutes away.**

LEVEL 2

- a. Recognizes indicators of children's physical needs during outdoor play, including temperature regulation, hunger, and fatigue.
- b. **Supports children in monitoring their own physical needs and enacting strategies to address these needs (e.g., staying active in colder temperatures).**
- c. **Demonstrates knowledge of serious health concerns that could arise during outdoor play (e.g., hypothermia, heatstroke), how to minimize the possibility of these conditions arising, and how to handle the conditions if they do arise.**

Nutrition

LEVEL 1

- a. **Demonstrates awareness and recognizes the benefits of growing and harvesting seasonal edible foods.**

LEVEL 2

- a. Engages children in caring for plants or animals at the early learning program or school so that children learn where food comes from.
- b. **Plants and harvests food safely and appropriately, based on sufficient knowledge or under direct supervision of an expert.**
- c. Has knowledge of foraging, planting, harvesting and processing food appropriately and in the context of children's families and cultures.
- d. Coordinates food activities with natural seasonal availability of plants.

LEVEL 3

- a. Plans activities to introduce new foods, grow understanding of where food comes from, and the benefits of natural versus processed foods.

LEVEL 4

- a. **Identifies children and families that have limited access to healthy, natural and seasonally available foods, and partners with families to ensure that their children are able to meet their nutritional needs.**



VI INTERACTIONS

Providing Individual Guidance

LEVEL 1

- a. Gives children an opportunity to work through challenging or new tasks on their own before providing assistance.
- b. Encourages curiosity and appropriate hands-on explorations of the natural world or natural materials.

LEVEL 2

- a. Recognizes children's need for physical movement and uses gross motor time as an emotional self-regulation technique.
- b. Provides adaptations and addresses the impacts of bias, in order to support children of different developmental stages and abilities to participate in nature-based, outdoor environments.
- c. **Uses strategies to assist children in learning how to assess risk, capabilities, and comfort level to plan for and try new activities in an outdoor setting.**

LEVEL 3

- a. Engages in culturally sustaining pedagogy, supporting language use and cultural practices with regards to nature and the land.
- b. Collaborates with families to develop culturally sustaining pedagogy that supports language use and cultural practices with regards to nature and the land.
- c. Individualizes interactions to facilitate inclusive and appropriate participation in the outdoor environment.

LEVEL 4

- a. **Identifies and addresses barriers to participation in nature-based, outdoor environments for children of different developmental stages and abilities.**
- b. Uses visual aides and discussion to collaboratively define group agreements related to safety and community.

Enhancing Group Experiences

LEVEL 2

- a. Uses visual aids and discussion to reinforce expectations for interactions with the environment, flora and fauna.
- b. Uses visual aids and discussion to reinforce expectations for travel from space to space.

LEVEL 3

- a. Creates and maintains group expectations for interactions with the natural environment, flora, and fauna.
- b. Creates and maintains group expectations for travel from space to space.
- c. Creates and maintains boundaries for nature-based play using visual aids and discussion with children.

LEVEL 4

- a. Demonstrates flexibility in adjusting rules and expectations depending on unforeseen changes in the environment.





VII PROGRAM PLANNING AND DEVELOPMENT

Program Planning and Evaluation

LEVEL 3

- a. Establishes and maintains a positive working relationship with the land manager and local tribes.
- b. Understands how children's experiences in and relationships with natural environments support a wide range of learning and developmental goals.

LEVEL 4

- a. Evaluates the impact of the program on the land and environment.

LEVEL 5

- a. Advances culturally responsive practices with families that honor elders and sustain cultures.



VIII PROFESSIONAL DEVELOPMENT AND LEADERSHIP

Displaying Professionalism in Practice

LEVEL 2

- b. Articulates and adheres to the 7 Leave No Trace principles for a safe and prepared nature-based experience while being culturally responsive and aware of implicit and overt biases about how different groups inhabit outdoor spaces.
- c. Evaluates own mental, emotional, and physical wellbeing, and seeks self-care opportunities, or social or professional support.
- d. Guides others in adhering to leave no trace practices specific to the area where the program is located.

Ongoing Professional Growth

LEVEL 1

- a. Fosters own sense of wonder, awe, and enjoyment of the natural world.
- b. Reflects on own experiences and beliefs about nature.

LEVEL 2

- a. Engages in learning about nature alongside children and families.

LEVEL 3

- a. Continuously seeks knowledge and application of sustainability and stewardship practices.
- b. Continually deepens understanding of local places, including flora, fauna, geology, communities, histories, and environmental issues.

LEVEL 4

- a. Engages in regular reflection and dialogue about environmental learning goals, formative assessment of children's progress, and ways to support these learning goals.

LEVEL 5

- a. Participates in professional learning about ecology, sustainability, and environmental stewardship and apply learning to programming.

Leadership and Advocacy

LEVEL 1

- a. Recognizes that human life depends on a healthy environment.
- b. Recognizes potential program impacts on the environment.

LEVEL 2

- a. Reduces carbon footprint of the program and waste, whenever possible.
- b. Provides information to colleagues and families about the positive impact of nature.

LEVEL 3

- c. Provides opportunities for families and community partners to reduce their carbon footprints and waste.
- d. **Manages the outdoor space to improve ecological sustainability by using non-toxic pest management techniques, and cultivating native plants to support local insects and microbiome.**

LEVEL 5

- a. Works in collaboration with community partners to create program and policies that address equitable access to outdoor, natural environments.
- b. Advocates for children's equitable access to outdoor, natural environments.
- c. Engages colleagues and families in reflection and direct actions to address environmental impacts and injustices, including the intersections of the environment, racism and settler-colonialism.
- d. Participates in programs and initiatives that aim to dismantle racism and promote indigenous sovereignty.



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