

# CONNECTING PLT'S TREES & ME TO EARLY LEARNING BENCHMARKS



# **Table of Contents**

Introduction	3
NAEYC Accreditation Standards, Standard 2—Curriculum	5
NAAEE Guidelines for Excellence, Early Childhood EE Programs	8
NSA Nature-Based Preschool Professional Practices	12
Head Start Early Learning Outcomes Framework	15
K-2 Early Learning Standards: NGSS, Common Core, and C3 Framework	18

















## **Introduction**

Project Learning Tree is committed to supporting educators in providing learning experiences that help to meet recognized education standards and program benchmarks. This toolkit identifies correlations between <u>Trees & Me: Activities for Exploring Nature with Young Children</u> and well-respected programs whose practices also promote high-quality education for young children.

The sections of the toolkit connect PLT's *Trees & Me* guide with the following programs and associated benchmarks:



NAEYC has set 10 standards that define what it believes all early childhood programs should provide, as outlined in *NAEYC Early Learning Program Accreditation Standards and Assessment Items*. This toolkit focuses on connections to Standard 2—Curriculum.

### NORTH AMERICAN ASSOCIATION FOR ENVIRONMENTAL EDUCATION

NAAEE promotes Guidelines for Excellence that highlight exemplary practices for a variety of environmental education initiatives. This toolkit identifies connections with NAAEE's *Early Childhood Environmental Education Programs: Guidelines for Excellence*.

#### NATURAL START ALLIANCE

NSA has published the *Nature-Based Preschool Professional Practices Guidebook*, which identifies professional practices important in programs where children are engaged in nature-based play and learning. This toolkit identifies connections with each of four program categories: Teaching, Environments, Safety, and Administration.

#### HEAD START

Head Start's Early Learning Outcomes Framework outlines what early learners should be able to do in each of five essential learning domains. This toolkit identifies connections between *Trees & Me* activities and each domain.

## NGSS, COMMON CORE, AND C3 FRAMEWORK

*Trees & Me's* Appendix E: Connecting to Standards features early learning standards connections to nationally accepted academic benchmarks for science (Next Generation Science Standards), English language arts (Common Core—ELA), mathematics (Common Core—Math), and social studies (College, Career, and Civic Life Framework). In addition to being in this toolkit, these connections can also be found on pages 157–159 of the *Trees & Me* guide.

Visit <a href="ptt.org/treesandme">ptt.org/treesandme</a> for additional resources.





# ATTEND A PROFESSIONAL DEVELOPMENT WORKSHOP

PLT offers online and in-person workshops tailored for specific grade levels, academic standards, environmental topics, and formal and nonformal teaching situations. Often recommended to them by colleagues, educators consistently rate PLT workshops as one of the best professional development events they have ever experienced.

See plt.org/training to learn more.

## **During PLT's hands-on training you will:**

- Learn new teaching skills and become comfortable teaching outdoors.
- Receive PLT's instructional materials and supplements tailored to your state's standards.
- Practice modeling PLT activities and get tips for lesson planning specific to your educational setting.
- Establish access to a professional network and support system.
- Earn continuing education credits.

## Trees & Me Correlations to NAEYC Accreditation Standards

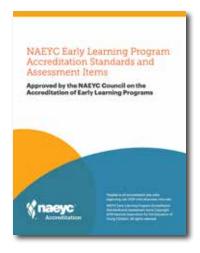
## STANDARD 2—CURRICULUM

Project Learning Tree is committed to supporting educators in providing learning experiences that meet education standards. The National Association for the Education of Young Children (NAEYC) has set 10 standards that are the foundation of the NAEYC Accreditation system for early childhood programs. Based on research on the development and education of young children, the standards define what NAEYC believes all early childhood programs should provide. This document identifies correlations between *Trees & Me* activities and <u>NAEYC Early Learning Program Accreditation</u>
<u>Standards and Assessment Items</u>.

<u>Trees & Me</u> activities offer opportunities to help meet the following NAEYC Accreditation Assessment Items under Standard 2—Curriculum. This standard promotes learning and growth in the areas of social, emotional, physical, language, and cognitive development. *Trees & Me* activities may also be used to partially support other NAEYC Accreditation Assessment Items in Standard 2, as well as other NAEYC Standards not listed here.

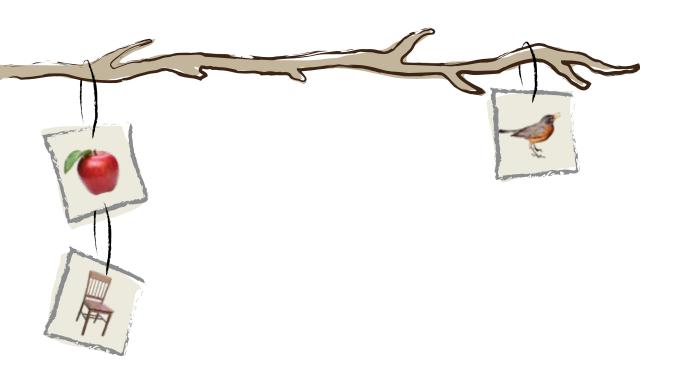
Visit <u>plt.org/treesandme</u> for additional *Trees & Me* content correlations.





### PLT Correlations Key:

- $\star$  = Addressed in Featured Experience and other activity experiences
- ✓ = Addressed in Featured Experience only
- = Addressed in other activity experiences only



	TREES & ME ACTIVITY														
ACCREDITATION ASSESSMENT ITEM	1	2	3	4	5	6	7	8	9	10	11	12			
<b>2A—ESSENTIAL CHARACTERISTICS</b> 2A.4. Highlight and label two weeks of lesson plans to show where they include each of															
these content areas: literacy, mathematics, science, technology, creative expression and the arts, health and safety, social studies.	*	*	*	*	*	*	*	*	*	*	*	*			
2A.5. Show or describe two examples of play experiences you have planned which are related to learning themes in the curriculum.	•	•	•	•	•	•		•	•	•	•	-			
2C—PHYSICAL DEVELOPMENT															
2C.1.Show or describe two examples of activities and materials that give children the chance to play physical games with rules and structure.								•		•	•	•			
2D—LANGUAGE DEVELOPMENT															
2D.1. Children have discussions with each other or with staff to solve problems related to the physical world.	•	•	•	~		•	•	•	•	•	•	•			
2D.2. Teachers use words that children may not understand and provide explanations or examples of these words.	*	*	*	~			•		~			•			
2E—EARLY LITERACY															
2E.3 Some of the books available to children relate to current learning topics, themes, or activities.	•	•	•	•	•	•	•	•	•	•	•				
2E.4. Writing materials and activities are readily available in art, dramatic play, and one or more other learning centers.	-		•	•	•	•	•	•		•	-	•			
2E.5 Teachers help children write the words and messages they are trying to communicate.	•		•	•	•	•	•			•	•	•			
2E.6 Printed words about topics of current interest are posted in the classroom at eye level or made available on laminated cards.		*				-		•							
2E.16. Show or describe how children have chances to retell or reenact events in storybooks.										•					
2E.17. Show two examples of lesson plans that link books to current learning topics, themes, or activities.		-		-	-			-		-	•				
2E.20 Show or describe how you help children write the words and messages they are trying to communicate.	•								•		-	•			
2E—EARLY MATHEMATICS															
2F.4. Infants, toddlers, and twos have chances to play with a variety of visually patterned toys and other objects.	•											•			
2F.5. Children have chances to see and learn about number concepts.					<b>/</b>										
2F.6. There are toys and other objects in the learning environment that children can categorize by shape, size, and color.	•		•		•	•	•		•			+			
2F.7. There are toys and other objects in the learning environment that allow children to name and recognize two- and three-dimensional shapes.	*			•		•		•	•						
2F.8. Children have chances to recognize and name repeating patterns.															
2F.9. Kindergartners and school-agers have chances to make and record measurements of things.				•				•							
2F.10. There are toys and other materials in the learning environment that allow kindergartners and school-agers to create or explore repeating and growing patterns.						•				•					
2F.12. Show examples of toys and other materials of different shapes, sizes, colors, and visual patterns (two examples of each).	•		•		•	•	•	•	•			7			
2F.13. Show or describe two examples of experiences or materials you provide that help children learn about number concepts.				•	~	•	•		•		•	•			
2F.14. Show two lesson plans in which children learn to understand basic concepts of geometry.	*			•		•		•	•						
2F.15. Show two lesson plans in which children learn to understand repeating patterns.						•				•					
2F.16. Show two lesson plans in which kindergartners and schoolagers make and record measurements of things.				•				•							
2F.18. Show or describe two examples of materials or experiences that encourage kindergartners and school-agers to do addition, subtraction, and other numerical functions using numerical symbols and operators.										•					

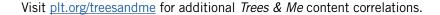
	TREES & ME ACTIVITY														
ACCREDITATION ASSESSMENT ITEM	1	2	3	4	5	6	7	8	9	10	11	12			
2G—SCIENCE															
2G.3. There are at least two representations of data collection (e.g., through drawing or graphing) included in classroom displays.	•		•	•	•						*				
2G.4. Children have chances to do activities that encourage them to think, ask questions, and make predictions about natural and physical phenomena.	*	*	*	*	*	*	*	*	*	*	*	*			
2G.5. Show six toys or classroom materials that provide interesting sensory experiences in sight, sound, and touch (two of each).	•	*	*	•	*	•	*	•	•	•		*			
2G.8. Show two lesson plans that teach children about the structure and properties of matter.				~					*						
2G.9. Show two lesson plans in which children collect data, then represent their findings (for example, drawing or graphing).	•		•	•	•						*				
2G.10. Show two lesson plans in which you encourage children to ask questions or make predictions about natural and physical phenomena.	*	*	*	*	*	*	*	*	*	*	*	*			
2G.11. Show or describe two ways you teach children to learn and use science-related vocabulary.	*	*	*	*	*	*	*	*	*	*	*	*			
2H—TECHNOLOGY															
2H.1. Show two lesson plans in which you use technology to enrich your curriculum.															
2J—CREATIVE EXPRESSION AND APPRECIATION FOR THE ARTS															
2J.2 Children have chances to appreciate culturally diverse dramatic arts in their learning environment.					•										
2J.3. Infants, toddlers, and twos have chances to explore and manipulate age- appropriate art materials.			•			•									
2J.4. Children have chances to develop and practice art skills.									*			*			
2J.5. Children have chances to create both two- and three-dimensional art.									*			*			
2J.7 Show two lessons plans that help children appreciate dramatic arts from different cultures.					•					•					
2J.8. Show two lesson plans that provide infants, toddlers, or twos with chances to explore and manipulate age- appropriate art materials.			-			-									
2J.13 Show three examples of opportunities and materials you provide for children to create three-dimensional art.	•				•				~	•		*			
2L—SOCIAL STUDIES															
2L.2. Children have chances to learn specific details about the actual community in which they live.											*				
2L.3. Children have chances to learn about the physical and geographic characteristics of their local environment.	*				~	•	*		•	~	*				
2L.4. Children have chances to build a basic understanding of economic concepts.											•	4			
2L.6 Show or describe two ways you help children learn about people with differing abilities.		•													
2L.7 Show or describe two ways you help children learn about people of various ages (very young to elders) doing a wide range of jobs and/or activities.	•	•	-		-		-		•			•			
2L.8 Show or describe two ways you help children learn specific details about the actual community in which they live.	*				~	•	*		-	~	*	•			
2L.9 Show or describe two ways you help children learn about the physical and geographic characteristics of their local environment.	*				~		*		-	~	*	•			
2L.10 Show two examples of how you provide children with opportunities or materials that help them build a basic understanding of economic concepts.											•	7			



## Trees & Me Correlations to to NAAEE Guidelines for Excellence:

## **EARLY CHILDHOOD ENVIRONMENTAL EDUCATION PROGRAMS**

Project Learning Tree is committed to supporting educators in providing learning experiences that help to meet education standards. This document identifies correlations between *Trees & Me* and the *North American Association for Environmental Education (NAAEE) Guidelines for Excellence: Early Childhood Environmental Education Programs.* These guidelines outline six key characteristics of excellent environmental education programs for early learners. The chart below identifies the guidelines for each key characteristic and provides evidence for how Trees & Me meets each. For more information about the guidelines, see <u>Early Childhood Environmental Education Programs: Guidelines for Excellence</u>.







KEY CHARACTERISTIC & GUIDELINE	DESCRIPTION	TREES & ME: EVIDENCE OF GUIDELINE
KEY CHARACTERISTIC 1: PROC	GRAM PHILOSOPHY, PURPOSE, AND DEVEL	OPMENT
Guideline 1.1—Focus on nature and the environment	The program's philosophy, goals, and objectives related to nature and the environment are established and clearly articulated.	<ul> <li>Introduction articulates PLT's philosophy related to nature and environment (in sections titled About Project Learning Tree and Learning about Trees and Forests)</li> <li>Appendix G: Tips for Outdoor Learning and Appendix H: Bringing Nature Inside articulate philosophy regarding collecting.</li> </ul>
Guideline 1.2—Focus on education of young children.	Program philosophy, goals, and objectives related to the education of young children are clearly	<ul> <li>Introduction articulates philosophy related to young children learning about nature (see Nature and Young Children).</li> <li>Appendix A: Engaging Early Learners articulates philosophy of young children learning in and about nature.</li> </ul>
Guideline 1.3—Culturally appropriate goals, objectives, and practices.	The program's philosophy, goals, and objectives reflect the need for the early childhood environmental education program to incorporate, mirror, and accommodate the cultural traditions of the audiences served.	<ul> <li>Appendix B: Diverse Learners, Diverse Needs and Appendix E: Traditional Knowledge and Gratitude Walk identify approaches to incorporate and accommodate students with different cultural traditions and backgrounds.</li> <li>Appendix J provides American Sign Language cards for key words.</li> </ul>
Guideline 1.4— Environmental literacy: board, staff, and providers	The program's philosophy, goals, and objectives promote the environmental literacy of board, staff, and providers.	Each activity provides background information to deepen the environmental literacy of adult leaders.
Guideline 1.5—Health and safet	The program's philosophy, goals, and objectivesare designed to ensure the health and safety of the children served.	<ul> <li>Activities detail appropriate safety considerations to help adult leaders maintain a safe learning environment.</li> <li>Ten of the 12 activities provide activity theme-related suggestions for a healthy snack.</li> </ul>

KEY CHARACTERISTIC & GUIDELINE	DESCRIPTION	TREES & ME: EVIDENCE OF GUIDELINE
KEY CHARACTERISTIC 1: PROG	GRAM PHILOSOPHY, PURPOSE, AND DEVEL	OPMENT
Guideline 1.6—Ongoing evaluation and assessment	The early childhood environmental education program has an evaluation and assessment plan that is instrumental to teaching and learning, program, and facility improvement.	<ul> <li>Introduction articulates PLT's philosophy related to nature and environment (in sections titled About Project Learning Tree and Learning about Trees and Forests)</li> <li>Appendix G: Tips for Outdoor Learning and Appendix H: Bringing Nature Inside articulate philosophy regarding collecting.</li> </ul>
Guideline 1.7—Partnerships	Active communication is maintained with a variety of interested individuals and organizations to support networking, resource sharing, enhanced program development, and expanded audience outreach. Partnership activities strengthen their respective organizations.	<ul> <li>PLT's programs are distinguished by the commitment and extent of its national and state partners, as well as its international network of implementation and support. Visit plt.org/about-us/network-partners for more information.</li> <li>Support materials for each of the activities are available at plt.org/treesandme and highlight PLT partner efforts.</li> </ul>
Guideline 1.8—Interpersonal and intergenerational relationships	Positive relationships among children and between children and adults are essential for developing a sense of personal responsibility, building a sense of being a community member, and promoting a feeling of personal worth.	<ul> <li>All of the activities include Group Experiences, which enable children to develop positive relationships as they work with and alongside others in the group.</li> <li>All of the activities include a Family &amp; Friends page, which promotes positive relationships with adults in the family and others, including grandparents and other intergenerational segments of the population.</li> </ul>
KEY CHARACTERISTIC 2: DEVE	LOPMENTALLY APPROPRIATE PRACTICES	
Guideline 2.1—Based on research and theory	Early childhood environmental educators understand and apply appropriate research and learning theory.	PLT provides professional development to support educators in using its materials, including information about and practice applying appropriate research and learning theory. Visit <a href="ptt.org/trainings">ptt.org/trainings</a> for more information.
Guideline 2.2—Authentic experiences	The developmentally appropriate program responds to children's needs to explore, discover, and discuss their experiences in the environment.	All activities center around learning experiences where children explore the environment and discuss what they discovered
Guideline 2.3—Child-directed and inquiry-based	The developmentally appropriate program is child-directed and inquiry-based.	<ul> <li>All activities include a variety of child-directed and inquiry-based experiences.</li> <li>Experiences that incorporate a range of STEM skills are identified with a specific icon (see page 5).</li> <li>Several of the activities include an engineering challenge that invite learners to use problem-solving skills and design a solution.</li> </ul>
Guideline 2.4—The whole child	The developmentally appropriate program is planned with the whole child in mind.	<ul> <li>Activities use variety of teaching methods and strategies.</li> <li>Activities include indoor and outdoor explorations, snacks, music and movement, math, woodworking, and read-aloud books.</li> </ul>
KEY CHARACTERISTIC 3: PLAY	AND EXPLORATION	
Guideline 2.1—Based on research and theory	Early childhood environmental educators understand and apply appropriate research and learning theory.	PLT provides professional development to support educators in using its materials, including information about and practice applying appropriate research and learning theory. Visit <a href="https://plus.pitch.org/trainings">plus.pitch.org/trainings</a> for more information.
Guideline 2.1—Based on research and theory	Early childhood environmental educators understand and apply appropriate research and learning theory.	PLT provides professional development to support educators in using its materials, including information about and practice applying appropriate research and learning theory. Visit <a href="https://plus.pit.org/trainings">plus.pit.org/trainings</a> for more information.

KEY CHARACTERISTIC & GUIDELINE	DESCRIPTION	TREES & ME: EVIDENCE OF GUIDELINE
KEY CHARACTERISTIC 4: CURP	RICULUM FRAMEWORK FOR ENVIRONMEN	TAL LEARNING
Guideline 4.1—Social and emotional growth	Early-learner programs provide opportunities for young children to participate in a variety of social interactions, including play and exploration in the outdoors that allow them to grow as contributing members of their community.	All of the activities include experiences where children interact with each other and with the environment. Play and exploration are integral to each activity.
Guideline 4.2—Curiosity and questioning.	Early learning programs provide children with opportunities to develop curiosity, ask their own questions and begin to develop reasoning and problem-solving skills.	<ul> <li>All activities provide ample opportunities for children to explore and to ask and answer questions about the world around them.</li> <li>Section 1 activities focus on experiencing the natural world through the five senses.</li> <li>Several of the activities include an engineering challenge, through which children can use problem-solving skills to design a solution.</li> </ul>
Guideline 4.3—Development of environmental understandings	Early learning programs provide children with opportunities to develop knowledge related to environmental and social systems, including the place where they live.	<ul> <li>Each activity explores an environmental theme related to trees and forests.</li> <li>Activity 11: Community Explorers focuses specifically on the built environment and the people therein.</li> <li>Each activity also includes a forest-related career and age-appropriate suggestions for exploring the career.</li> </ul>
Guideline 4.4—Skills for understanding the environment	Early learning programs provide opportunities for children to experience a variety of environmental conditions and encourage them to investigate topics of their own choosing.	<ul> <li>All activities suggest a variety of opportunities for children to explore environmental conditions where they live.</li> <li>Section 2 activities emphasize experiencing trees through the four seasons.</li> </ul>
Guideline 4.5—A personal sense of responsibility and caring	Early learning programs model environmentally responsible actions and provide opportunities for children to make decisions about their own activities.	<ul> <li>Family &amp; Friends pages within each activity identify a Do Your Part! suggestion for actions they can take together to make a difference in their community.</li> <li>Activity 11: Community Explorers invites children to consider rules for being environmentally responsible.</li> </ul>
Guideline 4.6—Physical	Early learning programs provide young children with a wide variety of physically challenging experiences, including opportunities to run, jump, and climb in the natural environment. Early learning programs also provide young children with opportunities to explore ways they can improve their own health.	All activities incorporate Music and Movement suggestions as well as ideas for games and outdoor challenges.
KEY CHARACTERISTIC 5: PLAC	ES AND SPACES	
Guideline 5.1—Spaces and places to enhance development	Indoor and outdoor places and spaces provide opportunities for development across social, emotional, physical, and cognitive development domains.	<ul> <li>Each activity provides ideas for experiences that can be done in either indoor or outdoor spaces, or both.</li> <li>Appendix G: Tips for Outdoor Learning and Appendix H: Bringing Nature Inside provide suggestions for using indoor and outdoor spaces for exploring nature.</li> </ul>
Guideline 5.2—Natural components	The integration of natural components throughout places and spaces is essential if learning opportunities and development are to be maximized.	<ul> <li>Each activity provides ideas for experiences that can be done in either indoor or outdoor spaces, or both.</li> <li>Appendix G: Tips for Outdoor Learning and Appendix H: Bringing Nature Inside provide suggestions for using indoor and outdoor spaces for exploring nature.</li> </ul>
Guideline 5.3—Comfortable for both children and adults	Comfortable and inviting places and spaces are necessary for learning and development to occur.	Appendix G: Tips for Outdoor Learning provide suggestions for creating a comfortable and effective outdoor living space.
Guideline 5.4—Maintenance and usability	Places and spaces must be well maintained to provide a safe, exemplary environment for the program that complies with the Americans for Disabilities Act.	Activities detail appropriate safety considerations to help adult leaders maintain a safe learning environment.

KEY CHARACTERISTIC & GUIDELINE	DESCRIPTION	TREES & ME: EVIDENCE OF GUIDELINE
KEY CHARACTERISTIC 5: PLA	CES AND SPACES	
Guideline 5.5—Health, safety, and risk	In order to ensure the safety and health of the children, adequate planning, inspection, and vigilance are essential.	<ul> <li>Activities detail appropriate safety considerations to help adult leaders maintain a safe learning environment.</li> <li>Appendix G: Tips for Outdoor Learning includes information on "Keeping It Safe."</li> </ul>
Guideline 5.6— Environmental sustainability	Programs and facilities should model environmental sustainability and provide positive examples.	Experiences are designed to use minimal, simple, and natural materials.
KEY CHARACTERISTIC 6: EDU	CATOR PREPARATION	
Guideline 6.1—Foundations of early childhood environmental education	Early childhood environmental educators combine their understanding of child development and developmentally appropriate practice with a basic understanding of the goals, theory, practice, and history of the field of environmental education.	Project Learning Tree provides in-person and on-line training to support adult leaders and educators in providing the best-quality instruction, including professional development on how to use <i>Trees &amp; Me</i> . See plt.org/trainings for more information.
Guideline 6.2—Professional responsibilities of the educator	Environmental education is a profession that maintains high standards for instruction and professional conduct.	Project Learning Tree provides in-person and on-line training to support adult leaders and educators in providing the best-quality instruction, including professional development on how to use <i>Trees &amp; Me</i> . See plt.org/trainings for more information.
Guideline 6.3— Environmental literacy	Early childhood environmental educators possess the understandings, skills, and attitudes associated with environmental literacy and teaching.	<ul> <li>The Introduction, Appendices, and Background for Adult Leaders in each activity help to promote environmental literacy for adult leaders.</li> <li>Project Learning Tree provides in-person and on-line training to support adult leaders and educators in providing the best-quality instruction, including professional development on how to use <i>Trees &amp; Me</i>. See plt.org/trainings for more information.</li> </ul>
Guideline 6.4—Planning and implementing environmental education	Educators provide interdisciplinary, investigative learning opportunities that are central to environmental education and developmentally appropriate for young children.	Trees & Me provides developmentally appropriate activities to guide youth ages 1–6 in learning about the environment.
Guideline 6.5—Fostering learning	Early childhood environmental educators create a climate in which children are motivated to learn about and explore the environment.	Project Learning Tree provides in-person and on-line training to support adult leaders and educators in providing the best-quality instruction, including professional development on how to use <i>Trees &amp; Me</i> . See plt.org/trainings for more information.
Guideline 6.6—Assessment and evaluation	Environmental educators possess the knowledge and skills to assess learner progress and evaluate the effectiveness of their own programs. Through these assessment activities, educators can identify children who may need additional assistance as well as evaluate progress toward meeting goals.	Each activity includes an Assessing the Experiences section to help educators assess learning and evaluate the effectiveness of the experiences.



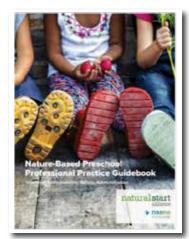
## Trees & Me Correlations to the Natural Start Alliance

## NATURE-BASED PRESCHOOL PROFESSIONAL PRACTICE GUIDEBOOK

Project Learning Tree is committed to supporting educators in providing learning experiences that help to meet education standards. This document identifies correlations between <u>Trees & Me</u> and the <u>Natural Start Alliance Nature-Based Preschool Professional Practice Guidebook</u>. This guidebook recognizes and describes professional practices that are important in a nature-based program where children spend a significant amount of time engaged in nature-based, outdoor play and learning. The chart below identifies relevant professional practices and how *Trees & Me* supports educators in each.







FOCUS AREA	PROFESSIONAL PRACTICE	TREES & ME: EVIDENCE OF PRACTICE
TEACHING		
Goals of the Curriculum	1. The curriculum is guided by best practices in early childhood education and environmental education.	<ul> <li>Trees &amp; Me meets many best practices standards for early childhood curriculum set by National Association for the Education of Young Children (NAEYC), Head Start, and the North American Association for Environmental Education. See <a href="pittorg/academic-standards">plt.org/academic-standards</a> for these and other correlations.</li> <li>PLT provides professional development to support educators in using its materials, including information about and practice applying appropriate research and learning theory. See <a href="pittorg/training">plt.org/training</a> for more information.</li> </ul>
Role of Nature in the Curriculum	1. Teachers familiarize children with the plants, animals, and natural features and phenomena in their surroundings.	<ul> <li>Each activity explores an environmental theme related to trees and forests.</li> <li>All of the activities invite children to explore organisms, features, and phenomena in their surroundings, particularly in the Exploring the Neighborhood, Outdoor Play, and Take It Outside! subsections, and in those experiences marked with an icon that identifies that they can be done outside.</li> </ul>
	2. Teachers support and encourage children's play and investigations with natural materials.	<ul> <li>All of the activities encourage children to investigate and play with natural materials. In particular, the Free Exploration experiences (Art, Outdoor Play, Discovery Table, Math and Manipulatives, Dramatic Play, and Woodworking) suggest ways to incorporate natural materials in the learning.</li> <li>Appendix G: Tips for Outdoor Learning and Appendix H: Bringing Nature Inside offer suggesting for incorporating natural materials into investigations and play.</li> </ul>
	3. Classroom activities cross boundaries between indoor and outdoor learning environments, and between different types of outdoor environments.	All of the activities use an icon to identify which experiences can be done outside, and also all include a Take It Outside! suggestion.
	4. Teachers promote learning from season to season, supporting children's understanding of patterns and changes through the seasons.	The four activities in Section 2: Experiencing Trees Through Seasons focus specifically on different seasons and the changes children may observe with seasons.
	6. Human communities are considered part of, and dependent upon, the natural environment.	<ul> <li>Activity 11: Community Explorers and Activity 12: Three Cheers for Trees! explore the ways that human communities both depend on and are a part of the natural environment.</li> <li>Many of the other activities include experiences that highlight the connections between people and the natural environment.</li> </ul>

FOCUS AREA	PROFESSIONAL PRACTICE	TREES & ME: EVIDENCE OF PRACTICE
Focus on Outdoor Learning	1. Outdoor learning is a central feature of the program, with frequent, regular opportunities for outdoor play and learning in natural spaces.	<ul> <li>All of the activities incorporate a variety of outdoor experiences, indicated with an icon.</li> <li>Each activity features a Take It Outside! experience for exploring the activity theme outdoors.</li> </ul>
	2. Teachers and children are dressed appropriately for the weather, and teachers demonstrate positive attitudes about experiencing various weather conditions.	<ul> <li>Activity 6: Evergreens in Winter includes tips on embracing outdoor teaching in cooler climes.</li> <li>Appendix G: Tips for Outdoor Learning includes "Dress for Success" suggestions.</li> </ul>
Emergent, Play-Based Curriculum	3. Children's inquiry is used to encourage higher-order thinking, and the inquiry process is allowed to continue for as long as children's interest remains.	<ul> <li>All of the activities include a variety of child-directed and inquiry-based experiences, including Outdoor Play and Dramatic Play experiences.</li> <li>All of the activities involve a range of STEM skills, identified with an icon.</li> <li>Several of the activities include an engineering challenge that invite learners to use problem-solving skills to design a solution.</li> <li>Appendix A emphasizes the importance of play and unstructured discovery.</li> <li>Appendix D defines 10 STEM skills for everyone, many of which support, promote, and practice higher-order thinking skills.</li> </ul>
Community of Capable Learners	4. Teachers provide opportunities for child-child interactions to promote collaboration and conflict resolution.	All of the activities include Group Experiences, which enable children to develop positive relationships as they work with and alongside others in the group
	5. Teachers provide an environment that values diversity and sustains children's cultural identities.	<ul> <li>Appendix B: Diverse Learners, Diverse Needs and Appendix E: Traditional Knowledge and Gratitude Walk identify approaches to incorporate and accommodate students with different cultural traditions and backgrounds.</li> <li>Appendix J provides American Sign Language cards for key words.</li> </ul>
	6. Teachers modify the curriculum and environment to individualize learning opportunities and scaffold learning for all children.	Appendix B: Diverse Learners, Diverse Needs identifies approaches to accommodate students with different needs to help individualize and scaffold learning.
Documentation and Assessment	1. Children's progress in both standard early childhood developmental domains and domains that relate to the development of environmental literacy are included in assessment measures.	All of the activities provide suggestions for assessing the experiences, including both early childhood development domains (such as vocabulary and questioning skills) and environmental concept development.
	2. Teachers document and assess children's learning through observation and artifacts so as not to interfere with children's learning experiences.	All of the activities provide suggestions for assessing the experiences through observation and artifacts.

FOCUS AREA	PROFESSIONAL PRACTICE	TREES & ME: EVIDENCE OF PRACTICE
ENVIRONMENTS		
Universal Elements	2. Environments are designed to accommodate the flexible and changing nature of the nature-based curriculum.	Appendix G: Tips for Outdoor Learning and Appendix H:     Bringing Nature Inside offer suggestions for setting up the learning environment and accommodating the changing nature of nature-based learning, both outdoors and indoors.
	4. Activity centers provide predictable spaces that promote learning in all developmental domains through interactions with natural materials, other children, and teachers.	All of the activities offer Group Experiences (social activities and exercises) and Free Exploration (independent learning and play). All Free Exploration experiences can be set up as learning centers, with options that include Art, Discovery Table, Math and Manipulatives, Dramatic Play, and Woodworking. See also Appendix I: Woodworking for Everyone.
Indoor Environments	2. Classrooms are arranged and decorated in ways that promote nature and the role of the child in the curriculum.	Appendix H: Bringing Nature Inside offers suggestions for arranging and decorating the classroom so that it promotes nature-based learning.
	3. Classroom materials encourage and support exploration of the natural world.	<ul> <li>All of the activities use a variety of teaching methods and strategies.</li> <li>Activities include indoor and outdoor explorations, snacks, music and movement, math, woodworking, and read-aloud books.</li> </ul>
SAFETY		
Pre-Program Planning	1. Regular site assessments of outdoor environments identify hazards and plan for the removal or mitigation of hazards in the environment.	<ul> <li>Where appropriate, activities point out safety considerations (indicated with an icon) to help adults maintain a safe learning environment.</li> <li>Appendix G: Tips for Outdoor Learning includes information on "Keeping It Safe."</li> </ul>
	6. Children and teachers are equipped with clothing that is appropriate to the activity and weather conditions.	Appendix G: Tips for Outdoor Learning offers "Dress for Success" suggestions for appropriate clothing.
ADMINISTRATION		
Equity and Inclusion	1. Programs maintain an inclusion policy that commits to meeting the needs of all young children.	Appendix B: Diverse Learners, Diverse Needs offers suggestions for meeting the needs of all learners.
	4. Programs are culturally inclusive and responsive, emphasizing the value of diversity and working to promote equity.	<ul> <li>Activity 12: Three Cheers for Trees provides information about how trees and nature are celebrated by different cultures all over the world, and Appendix F: Traditional Knowledge and Gratitude Walk embraces non-western ways of seeing and experiencing nature.</li> <li>All of the activities invite children to express themselves through art and language.</li> </ul>
Community Engagement	1. Programs employ a community-based approach that connects the school community to the wider natural and cultural community.	All of the activities offer a supporting Family & Friends page, which suggest ways that families and friends can enhance their child's learning experiences in the activity. Each page includes a "Do Your Part" suggestion for actions they can take together to make a difference in their community.
	2. The program develops positive relationships and communication with parents and caregivers.	All of the activities offer a supporting Family & Friends page, which suggest can be used to enhance communication with parents and caregivers and to enhance learning.



# **Trees & Me** Correlations to the Head Start Early Learning Outcomes Framework



Project Learning Tree is committed to supporting educators in providing learning experiences that help to meet education standards. This document identifies correlations between <u>Trees & Me</u> activities and Head Start's Early Learning Outcomes Framework (ELOF), which outlines what early learners should be able to do in each of five essential learning domains. The chart below identifies which *Trees & Me* activities provide learners with opportunities to develop skills and knowledge in these five domains. For more information about the five domains and the framework, see Head Start's <u>interactive Early Learning Outcomes Framework (ELOF) tool</u>.

Note that the aim of *Trees & Me* is to provide hands-on, learner-centered experiences that invite young learners to explore nature. While many of the experiences may support the ELOF domains of Approaches to Learning and Social and Emotional Learning, these domains are not their focus and are also more general, so explicit correlations are not included. Note also that the chart indicates which goals are addressed in the Featured Experience only, in the other activity experiences only, or in both the Featured Experience and other experiences in the activity. For ease of use, the color coding of the chart sections match the color scheme of the ELOF.

Visit plt.org/treesandme for additional *Trees & Me*, content correlations.

#### Head Start ELOF Goal Key:

- ▲= Infant/Toddler Goals
- = Preschooler Goals

#### PLT Correlations Key:

- ★ = Addressed in Featured Experience and other activity experiences
- = Addressed in other activity experiences only



DOMAIN &		TREES & ME ACTIVITY												
SUBDOMAIN	GOAL	1	2	3	4	5	6	7	8	9	10	11	12	
APPROACHES TO LEARNING ▲•														
Emotional and Behavioral Self-Regulation	M T 044													
Cognitive Self-Regulation (Executive Functioning)	Many <i>Trees &amp; Me</i> experiences may support learning in these domains. These Head Start goals are general in nature, and as such, explicit <i>Trees &amp; Me</i> correlations are not indicated here. You are invited to explore the													
Initiative and Curiosity	possibilities.													
Creativity														
SOCIAL AND EMOTIONAL DEVELOPM	IENT ▲•													
Relationships with Adults														
Relationships with Other Children	Many <i>Trees &amp; Me</i> experiences may support learning in these domains. These Head Start goals are general in													
Emotional Functioning	nature, and as such, explicit <i>Trees &amp; Me</i> correlations are not indicated here. You are invited to explore the													
Sense of Identity and Belonging	possibilities.													
LANGUAGE AND COMMUNICATION A														
LANGUAGE AND COMMUNICATION														
Attending and Understanding	Many <i>Trees &amp; Me</i> experiences may support learning in these domains. These Head Start goals are general in nature, and as such, explicit <i>Trees &amp; Me</i> correlations													
Communicating and Speaking	are not indicated here. You are invited to explore the possibilities.													
Vocabulary	▲ Goal IT-LC 7. Child understands an increasing number of words used in communication with others	*	*	*	•	*	•	*	*	*		*	•	
,	• Goal P-LC 6. Child understands and uses a wide variety of words for a variety of purposes.	*	*	*	•	*	-	*	*	*	-	*	•	
	▲ Goal IT-LC 9. Child attends to, repeats, and uses some rhymes, phrases, or refrains from stories or songs.			•					•		•			
Emergent Literacy	▲ Goal IT-LC 10. Child handles books and relates them to their stories or information.									-	-			
	$\   \blacktriangle$ Goal IT-LC 12. Child comprehends meaning from pictures and stories.									-	-			
LITERACY •														
Phonological Awareness	Many <i>Trees &amp; Me</i> experiences may support learning in these domains. These Head Start goals are general in													
Print and Alphabet Knowledge	nature, and as such, explicit <i>Trees &amp; Me</i> correlations are not indicated here. You are invited to explore the possibilities.													
	Goal P-LIT 4. Child demonstrates an understanding of narrative structure through storytelling/re-telling.										-	-		
Comprehension and Text Structure	Goal P-LIT 5. Child asks and answers questions about a book that was read aloud.	-	-	-	-	-	•	-	-	•	-	-	•	
	Goal P-LIT 6. Child writes for a variety of purposes using increasingly sophisticated marks.	•	-	•	•	•	•	-	-	•	•	•	•	
COGNITION A														
Exploration and Discovery	▲ Goal IT-C 1. Child actively explores people and objects to understand self, others, and objects		*			•		•	•		-	•	•	
Memory	▲ Goal IT-C 5. Child uses memories as a foundation for more complex actions and thoughts.					•		•				•		
Reasoning and Problem-Solving	▲ Goal IT-C 6. Child learns to use a variety of strategies in solving problems.		*						-					
Emargant Methometical Thinking	▲ Goal IT-C 9. Child uses spatial awareness to understand objects and their movement in space.				•	-		•	-					
Emergent Mathematical Thinking	▲ Goal IT-C 10. Child uses matching and sorting of objects or people to understand similar and different characteristics.	*	•			•								



DOMAIN &		TREES & ME ACTIVITY											
SUBDOMAIN	GOAL	1	2	3	4	5	6	7	8	9	10	11	12
MATHEMATICS DEVELOPMENT •													
	Goal P-MATH 2. Child recognizes the number of objects in a small set.				-			-	-	-	-	•	-
Counting and Cardinality	Goal P-MATH 3. Child understands the relationship between numbers and quantities.	•	*		•		•			-			•
	Goal P-MATH 4. Child compares numbers.		*					-					•
Operations and Algebraic Thinking	Goal P-MATH 7. Child understands simple patterns.						-	*					
Measurement	Goal P-MATH 8. Child measures objects by their various attributes using standard and non-standard measurement. Uses differences in attributes to make comparisons.							•					
Geometry and Spatial Sense	Goal P-MATH 9. Child identifies, describes, compares, and composes shapes.	*								•			
SCIENTIFIC REASONING •													
	Goal P-SCI 1. Child observes and describes observable phe-nomena (objects, materials, organisms, and events).	*	*	*	*	*	*	*	*	*	*	*	*
Scientific Inquiry	Goal P-SCI 2. Child engages in scientific talk.	*	*	*	*	*	*	*	*	*	*	*	*
	Goal P-SCI 3. Child compares and categorizes observable phenomena.	*		*	•	*	•	*	•			*	*
	Goal P-SCI 4. Child asks a question, gathers information, and makes predictions.	*	*	*	*	*	*	*	*	*	*	*	*
Reasoning and Problem-Solving	Goal P-SCI 5. Child plans and conducts investigations and experiments		*	*	*	*		*	•		*		•
	Goal P-SCI 6. Child analyzes results, draws conclusions, and communicates results.					•		•				*	
PERCEPTUAL, MOTOR, AND PHYSIC	AL DEVELOPMENT A.												
Perception	▲ Goal IT-PMP 1. Child uses perceptual information to understand objects, experiences, and interactions.	-		-		-	-	-	-	-			*
Gross Motor	▲ Goal IT-PMP 5. Child uses sensory information and body awareness to understand how their body relates to the environment.	*	*	*	*		*					-	
GIOSS MIDIOI	Goal P-PMP 1. Child demonstrates control, strength, and coordination of large muscles.	-		-		-		-	-	-	-		-
	▲ Goal IT-PMP 7. Child uses hands for exploration, play, and daily routines.	-	*	*		*			-	*	-		
Fine Motor	▲ Goal IT-PMP 8. Child adjusts reach and grasp to use tools.		*	*	*	-	•					•	-
	Goal P-PMP 3. Child demonstrates increasing control, strength, and coordination of small muscles.				*								
Health, Safety, and Nutrition	▲ Goal IT-PMP 11. Child demonstrates increasing interest in engaging in healthy eating habits and making nutritious food choices.	٠		•	*	•	•	•	•	•	•	•	•
, 25.25, 2	Goal P-PMP 5. Child develops knowledge and skills that help promote nutritious food choices and eating habits.	•		•	*	•	•		•	•	•	٠	



## K-2 Early Learning Standards: NGSS, Common Core, and C3 Framework

To help educators link instruction to academic requirements, each <u>Trees & Me</u> activity includes an Early Learning Standards graphic, which lists practices and concepts addressed in the activity for four subject areas: Science, English Language Arts, Math, and Social Studies. In addition, the following chart details K–2-level standards connections for all the activities.

In the United States, each state defines its own education mandates for schools, so exact curriculum connections vary by jurisdiction. However, many states use national standards as the foundation for their state-specific standards. The Early Learning Standards connections in this guide are based on the following national standards:



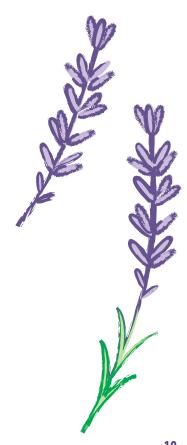






The following K-2 early learning standards connections are replicated from Appendix E: Connection to Standards in *Trees & Me*.

- Science, Next Generation Science Standards (NGSS)
- English Language Arts, Common Core State Standards-ELA
- Math, Common Core State Standards-Mathematics
- Social Studies, C3 Framework for Social Studies



# K-2 Early Learning Standards: NGSS, Common Core, and C3 Framework

						TREE	S & N	IE AC	TIVITY					
SCIENCE	K-2 SPECIFICS	1	2	3	4	5	6	7	8	9	10	11	12	
PRACTICES														
Asking Questions and Defining Problems	Ask questions based on observations to find more information about the natural and/or designed world(s).				•	*			•	•	•	*		
Asking Questions and Defining Problems	Ask and/or identify questions that can be answered by an investigation.	*			•	*	•					*		
Developing and Using Models	Develop and/or use a model to represent amounts, relationships, relative scales (bigger, smaller), and/or patterns in the natural and designed world(s). [Models may include diagrams, drawings, physical replicas, dioramas, dramatizations, or storyboards.]		*		•	•	•			*		*	~	
Planning and Carrying Out Investigations	With guidance, plan and conduct an investigation in collaboration with peers.		*	*	*	•				*	•	•		
Analyzing and Interpreting Data	Record information (observations, thoughts, and ideas).		•									*		
Analyzing and Interpreting Data	Use and share pictures, drawings, and/or writings of observations.		•						•	•		*		
Using Mathematics and Computational Thinking	Use counting and numbers to identify and describe patterns in the natural and designed world(s).	*				•			•			~		
CONCEPTS														
Wave Properties	Sound can make matter vibrate, and vibrating matter can make sound. (PS4.A)		*											
Structure and Function	All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, more from place to place and seek, find, and take in food, water, and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (LS1.A)		•	•		•	•	*	*	*	•			
Organization for Matter and Energy Flow in Organisms	All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow. (LS1.C)						*		•		•		•	
Interdisciplinary Relationships in Ecosystems	Plants depend on water and light to grow. Plants depend on animals for pollination or to move their seeds around. (LS2.A)								•		*		•	
Biodiversity and Humans	There are many different kinds of living things in any area, and they exist in different places on land and in water. (LS4.D)	•				•					*			
Natural Resources	Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (ESS3.A)			*	*							*	*	
Weather and Climate	Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time. (ESS2.D)					*	*	*	*					
Patterns	Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.	*	*	*					*					
Scale, Proportion, and Quantity	Students use relative scales (e.g., bigger and smaller; hotter and colder; faster and slower) to describe objects.								•					
System and System Models	Objects and organisms can be describe in terms of their parts and systems in the natural and designed world have parts that work together.			*				•						
Structure and Function	The shape and stability of structures of natural and designed objects are related to their function(s).	*										•		
Stability and Change	Some things stay the same while other things change. Things may change slowly or rapidly.							•	*	•				

<sup>★ =</sup> Addressed in Featured Experience and other activity experiences

<sup>✓ =</sup> Addressed in Featured Experience only

<sup>■ =</sup> Addressed in other activity experiences only

# K-2 Early Learning Standards: NGSS, Common Core, and C3 Framework

NGLISH		TREES & ME ACTIVITY											
ANGUAGE ARTS	K-2 SPECIFICS	1	2	3	4	5	6	7	8	9	10	11	12
PRACTICES													
Speaking and Listening: Comprehension and Collaboration	Participate in collaborative discussions with diverse partners about Grades K-2-appropirate topics and texts with peers and adults in small and larger groups.	*	*	*	*	*	*	*	*	*	*	*	*
Speaking and Listening: Comprehension and Collaboration	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.	*	*	*	*	*	*	*	*	*	*	*	4
CONCEPTS													
Speaking and Listening: Presentation of Knowledge and Ideas	Describe familiar people places, things, and events and, with prompting and support, provide additional detail.	*	*	*	*	*	*	*	*	*	*	*	*
Reading: Key Ideas and Details	Ask and answer questions about key details in a text.				•		•	*					
Writing: Text Types and Purpose	Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.	*		•	•	•		•		•		•	•
							S & M	E ACT	TIVITY	,			
МАТН	K-2 SPECIFICS	1	2	3	4	5	6	7	8	9	10	11	1
MATH PRACTICES	K-2 SPECIFICS	1	2	3	4	5	6	7	8	9	10	11	1
	K-2 SPECIFICS  Reason abstractly and quantitatively.	1	2	3 ★	4	5	6	7	8	9	10	11 ★	1
PRACTICES  Reason abstractly and		1			4		6	7	8		10		1
PRACTICES  Reason abstractly and quantitatively.		1			4		6	7	8		10		1
PRACTICES  Reason abstractly and quantitatively.  CONCEPTS	Reason abstractly and quantitatively.	1			4	•	6	7	8	•	10	*	1
Reason abstractly and quantitatively.  CONCEPTS  Counting and Cardinality	Reason abstractly and quantitatively.  Count to tell the number of things.	1			4	•	6	7	8	•	10	*	1
PRACTICES  Reason abstractly and quantitatively.  CONCEPTS  Counting and Cardinality  Measurement and Data	Reason abstractly and quantitatively.  Count to tell the number of things.  Describe and compare measurable attributes.	1			•	•	6	7	8	•	10	*	1
Reason abstractly and quantitatively.  CONCEPTS  Counting and Cardinality  Measurement and Data  Measurement and Data	Reason abstractly and quantitatively.  Count to tell the number of things.  Describe and compare measurable attributes.  Represent and interpret data.  Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple puttogether, take-apart, and compare problems using information	1			•	•	6	7	8	•	10	*	1
Reason abstractly and quantitatively.  CONCEPTS  Counting and Cardinality  Measurement and Data  Measurement and Data  Measurement and Data	Reason abstractly and quantitatively.  Count to tell the number of things.  Describe and compare measurable attributes.  Represent and interpret data.  Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple puttogether, take-apart, and compare problems using information presented in a bar graph.  Classify objects into given categories; count the numbers of	*			•	-	6	7	8	•	10	* *	1

		TREES & ME ACTIVITY											
SOCIAL STUDIES	K-2 SPECIFICS	1	2	3	4	5	6	7	8	9	10	11	12
PRACTICES													
Constructing Compelling Questions	Construct compelling questions.											*	
CONCEPTS													
Economics: Exchange and Markets	Describe the skills and knowledge required to produce certain goods and services.											•	*
Geography: Geographic Representations	Construct maps, graphs, and other representations of familiar places.							*	•			*	
Geography: Human– Environment Interaction	Explain how weather, climate, and other environmental characteristics affect people's lives in a place or region.					•	•	•	•			-	

<sup>★ =</sup> Addressed in Featured Experience and other activity experiences

<sup>✓ =</sup> Addressed in Featured Experience only

<sup>■ =</sup> Addressed in other activity experiences only