



Nature Preschools in the United States

2022 National Survey

Photo: South Mountain Nature School

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for Environmental Education

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Early Childhood Environmental Education: Time in Nature and More

Researchers from Stanford University examined the research literature and found that a variety of approaches in early childhood environmental education can lead to positive outcomes for children.



Family Connection



Play & Movement



Time in Nature



Social Interaction



Action Taking



Creative Arts



Time to Reflect, Think & Observe



Knowledge & Skill Development



Personal Connection

Nature Supports Early Childhood Education



Nature Is a Positive Setting for Learning

- Calmer and quieter settings
- Warmer relationships, cooperation
- Loose parts and autonomy promote creative, self-directed play

Kuo Ming, Barnes Michael, Jordan Catherine. 2019. Do Experiences With Nature Promote Learning? Converging Evidence of a Cause-and-Effect Relationship. *Frontiers in Psychology*. Volume 10, Page 305
DOI=10.3389/fpsyg.2019.00305

Nature Acts Positively on Learners

- More attentive
- Less stressed
- More self-disciplined
- More engaged and interested

Nature Promotes Children's Health

- More physical activity
- Better mental health

Amber L. Fyfe-Johnson, ND, PhD; Marnie F. Hazlehurst, MS, PhD; Sara P. Perrins, EdM, PhD; Gregory N. Bratman, PhD; Rick Thomas, MESM, MS; Kimberly A. Garrett, MPH; Kiana R. Hafferty, BS; Tess M. Cullaz, BS, BS; Edgar K. Marcuse, MD, MPH; Pooja S. Tandon, MD, MPH. *Nature and Children's Health: A Systematic Review*. *Pediatrics* (2021) 148 (4): e2020049155.

Counting Nature Preschools

- Nature preschools are not necessarily members
- Staff make a quick determination based on public information
 - Is it a "school" and is it "nature-based?"
- Including is not an endorsement
- Not including does not reflect program quality



Photo: Secret Forest Playschool



What is a Nature Preschool?

Photo: Secret Forest Playschool

Key Characteristics of Nature Preschools

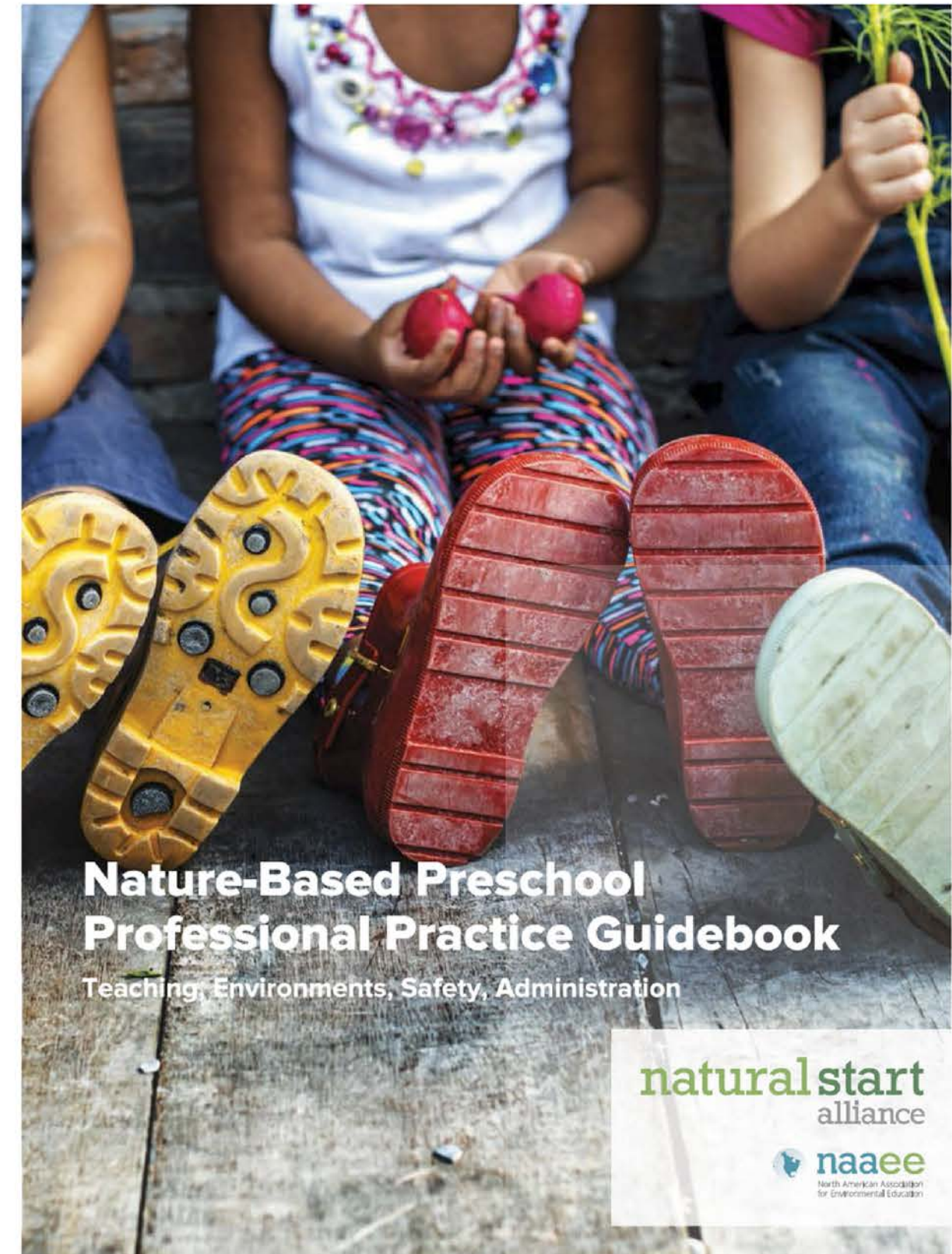
- Goals for child development *and* environmental literacy
- Nature central in curriculum, "nature-based" program
- Child-led, play-based approach
- Significant time outside
- Appropriate risk taking



Photo: Secret Forest Playschool

Nature-Based Preschool Professional Practice Guidebook

- Describes practices in
 - Teaching
 - Environments
 - Safety
 - Administration
- Download the introduction at naturalstart.org



Early Programs at Nature Centers



New Canaan
Nature Center
Connecticut



Dodge
Nature Center
Minnesota



Schlitz Audubon
Nature Center
Wisconsin



Chippewa
Nature Center
Wisconsin

Farm-Based



Drumlin Farm Community Preschool - MA

Home-Based



Little Schoolhouse in the Woods - OH

Zoo School



St. Louis Zoo Nature Preschool - MO

Lab School



University of Delaware Lab School

Wide Variety in Program Types

Public School



Y-Koda Nature School - WI

Head Start



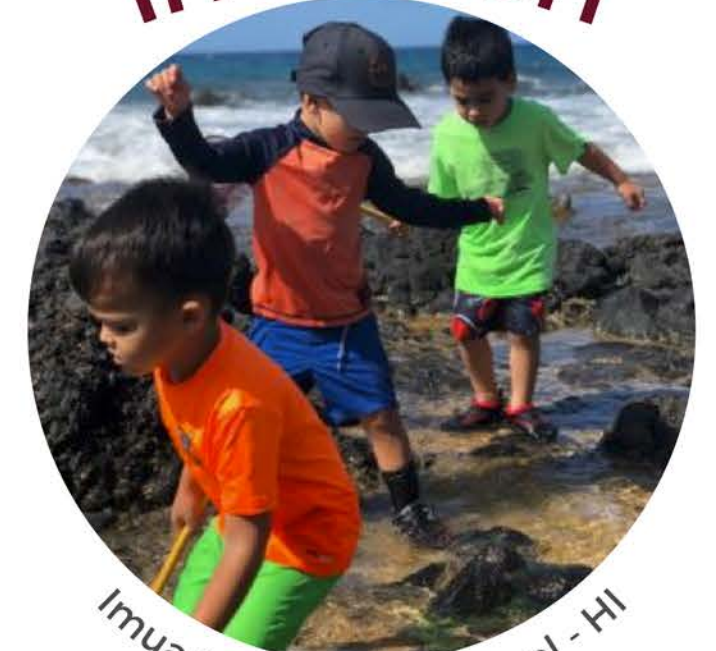
Mid-Columbia Children's Council - OR

Language Immersion



Aventuras Forest School - CA

Inclusion



Imua Inclusion Preschool - HI

Past Reports



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Washington Nature Preschool Association

Nature Preschools and Forest Kindergartens 2017 NATIONAL SURVEY

Nature-based preschools and kindergartens continue to rise in popularity in the United States. A national survey of nature-based early childhood educators conducted in 2017 identified more than 250 nature preschools and forest kindergartens operating across the country. The programs serve approximately 10,000 children every year, and eight out of ten programs report that they started a waiting list in the previous twelve months. However, the survey also suggests that the nature-based programs do not reflect the cultural and linguistic diversity of our nation.

The survey was jointly conducted by the Natural Start Alliance, the Eastern Region Association of Forest and Nature Schools, the Northern Illinois Nature Preschools Association, and the Washington Area Nature Preschools Association.

Suggested citation: North American Association for Environmental Education (NAAEE). (2017). *Nature preschools and forest kindergartens: 2017 national survey*. Washington, DC: NAAEE.

2017



Nature-Based Preschools in the US

2020 SNAPSHOT

2020

2022 National Survey

- Program Count
- Program Operations
- Children's Characteristics
- Staff Characteristics

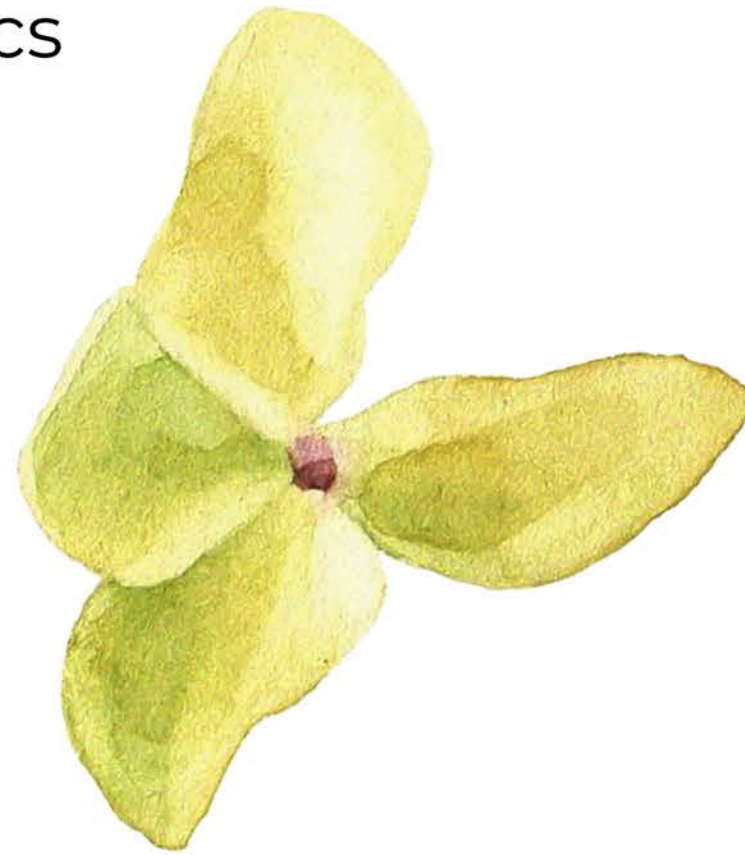


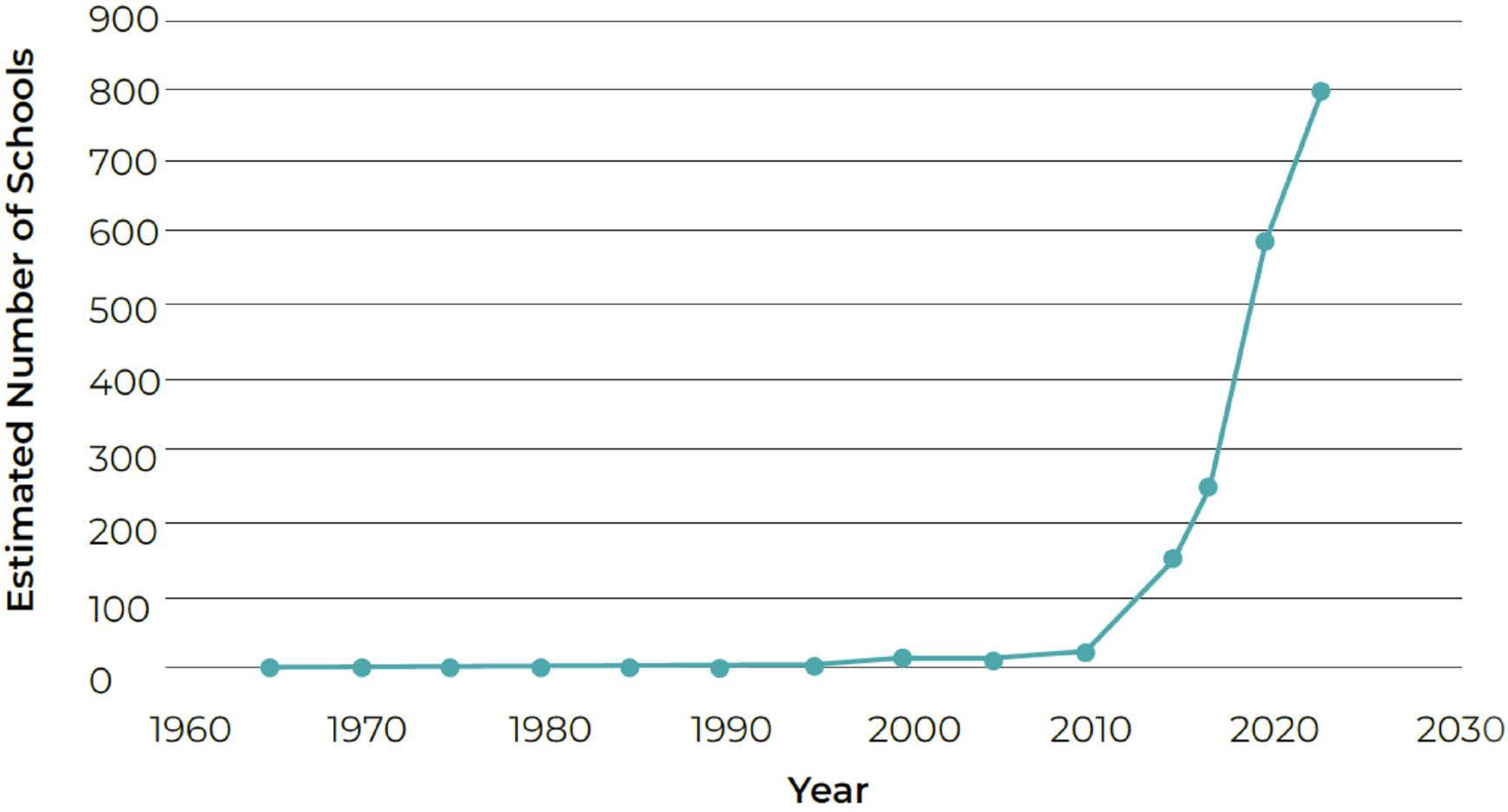
Photo: South Mountain Nature School



A wooden abacus toy with several vertical rods. The rings are stacked in a sequence of colors: blue (1 ring), green (2 rings), yellow (3 rings), orange (4 rings), and red (5 rings). The background is a blurred indoor setting.

How Many Nature Preschools?

Estimated Number of Nature Preschools in the United States, 1965-2022



Highest Number of Nature Preschools by State



California



Washington



Minnesota

Highest Number of Nature Schools Per Capita



Vermont



Maine



New Hampshire





Wind Ridge Schoolhouse Duluth, Minnesota





**Will Smith Zoo School
San Antonio, Texas**



A photograph of a turtle on a forest floor covered in brown leaves and twigs. In the background, the lower legs and feet of several people are visible, wearing various colored boots (blue, black, red, and green). The text "Program Characteristics" is overlaid in a white, sans-serif font within a semi-transparent dark grey rounded rectangle.

Program Characteristics

Time Outside

- Most of the school day is spent outdoors: 70% of programs spend 70% or more of their school day outside
- Time outside increased from 75% of school day in 2017 to 80% in 2022
- Nearly a third (30%) of programs spend the entire school day outside
- Full-day programs spend 5 hours per day outside and half-day programs spend 3 hours outside on average



Covid Impacts

- Half of programs say pandemic increased time outdoors
- 80% say it increased demand (survey did not include closed programs)
- Brought mental health challenges for children and staffing challenges for programs



Durham Community Preschool

Durham, North Carolina

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"The children are so strong from playing outside – it's incredible! Their laughter, curiosity, and excitement has blessed us every day. As teachers, we have grown stronger too. We are learning a different way of teaching."

-Rose Volponi, Executive Director

Public Lands

- More than half of nature preschools (55%) operate on or visit public lands
- Public lands may include municipal parks, county parks, national forests, or national parks





Appalachian
Forest School

How Programs Use Public Lands



Northeast LA
Forest School



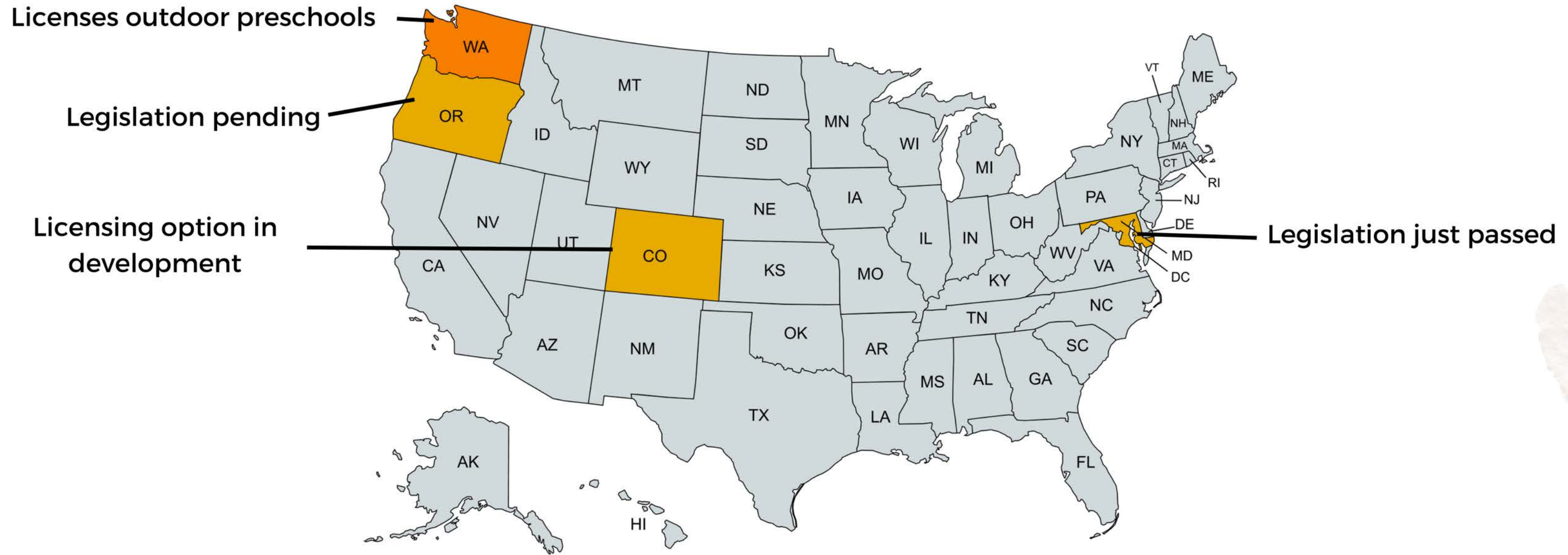
Licensing

- Licensing can be challenging for outdoor programs
- Without licensing, no public funding for programs
- 58% of nature preschools are licensed
- Just 15% of all-outdoor programs are licensed
- Licensing rates haven't changed since 2017



Photo: Durham Community Preschool

States with Outdoor Preschool Licensing or Pending Legislation





Washington State Department of
CHILDREN, YOUTH & FAMILIES

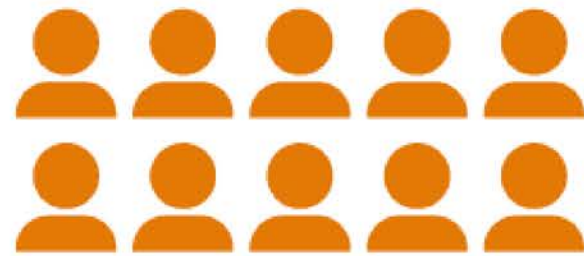
Outdoor Nature-Based Child Care Licensing



A photograph of three children participating in an outdoor activity in a forest. They are standing on a series of wooden logs arranged like a staircase. The child on the left is wearing an orange t-shirt and camouflage shorts. The child in the middle is wearing a blue long-sleeved shirt and dark pants with yellow stripes. The child on the right is wearing a white t-shirt and blue jeans, and is holding a long wooden pole. The background is a dense forest with green and yellowing leaves, suggesting an autumn setting. A semi-transparent dark banner with white text is overlaid across the middle of the image.

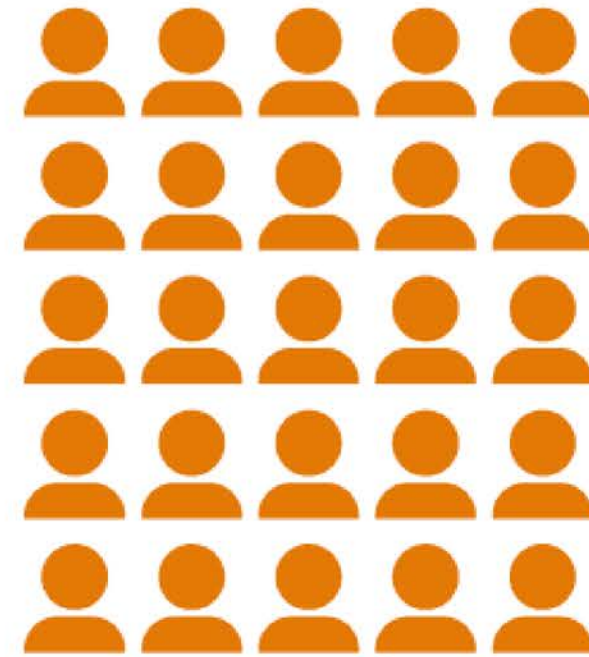
Children's Characteristics

Total Number of Children Served



10,000 Children Annually

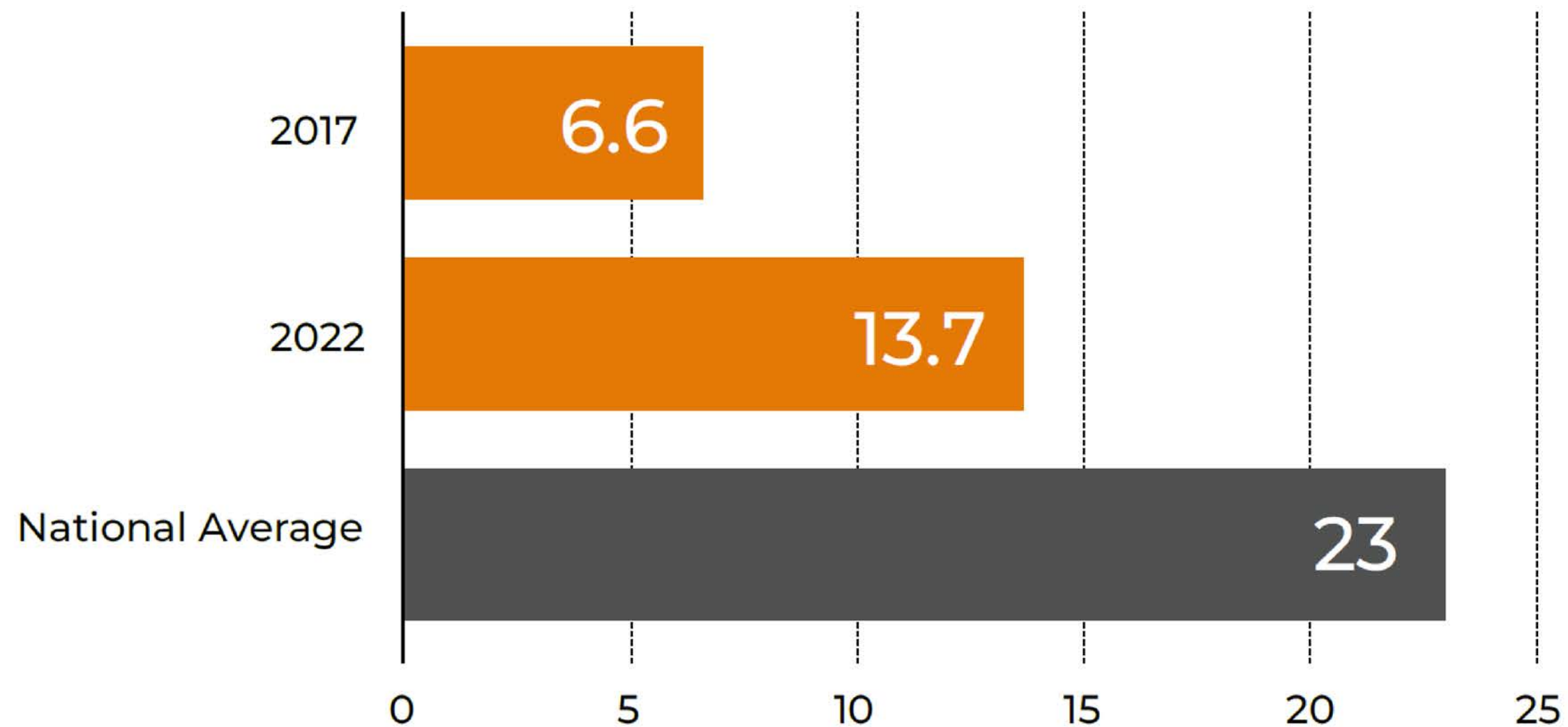
2017



25,000 Children Annually

2022

Average Percent of Multiple-Language Learners in Nature Preschools (2017 and 2022) and the Overall U.S. Population



Dual Language, Language Immersion



Chavitos
Nature School
Washington



Amigos del
Bosque
Minnesota



Aventuras
Forest School
California



My World Mandarin
Nature School
Washington



Rainbow
Mandarin
Nature School
Washington

Children with Disabilities and Special Needs

- Nature preschools serve children with disabilities at similar rates as public schools
- Average percent of children with disabilities in programs is up from 2017:
 - 4.7% in 2017
 - 8.3% in 2022



Photo: Squaxin Island Child Development Center

Secret Forest Playschool

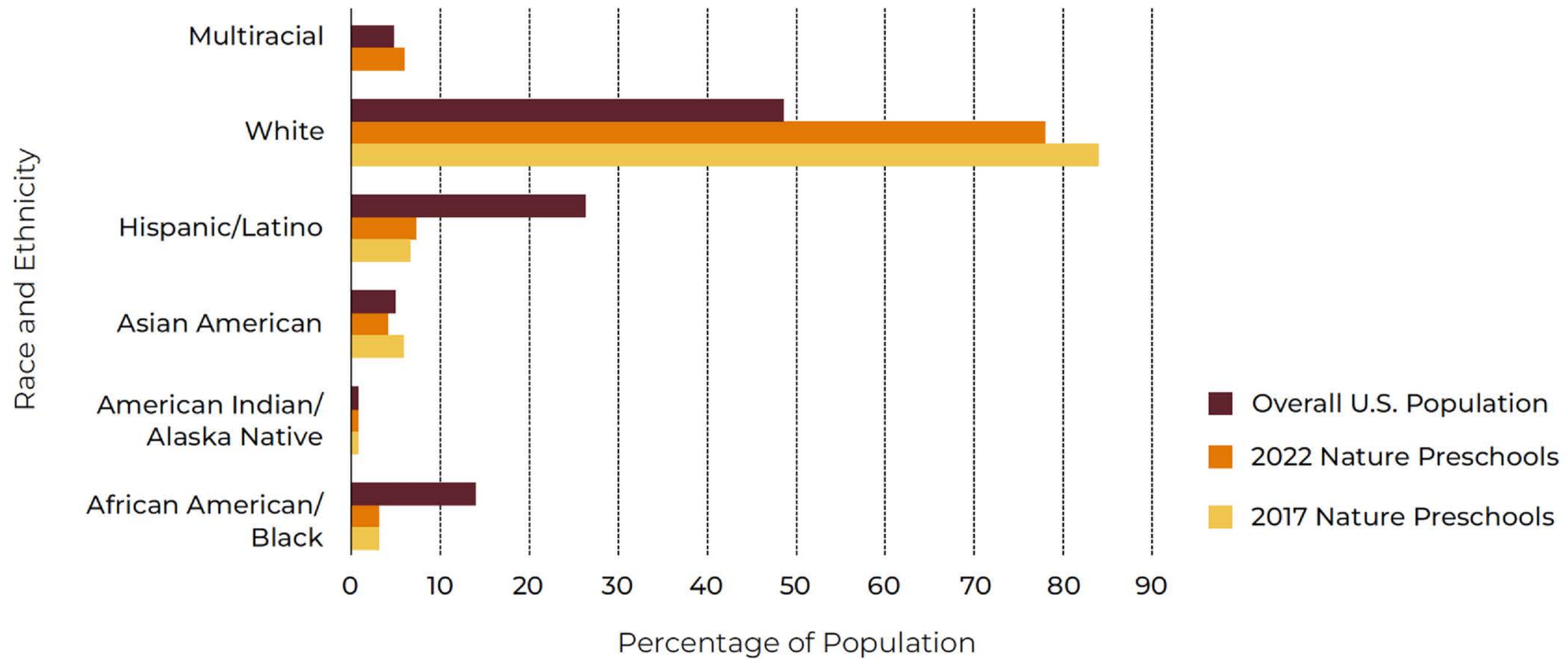
Duluth, Minnesota

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Percentage of Children by Race and Hispanic Origin in Nature Preschools (2017 and 2022) and in the Overall U.S. Population



What is Driving Differences in Participation?

- Cost?
- Program Location?
- Program Length?
- Educational Preferences?
- Safety Concerns?
- Staff and Child Representation?
- What Other Factors to Consider?



Photo: University of Delaware Lab School

A man with a beard and glasses, wearing a blue beanie and a blue jacket, stands in a forest holding a map. He is addressing a group of four children whose backs are to the camera. The children are wearing backpacks. The scene is outdoors on a paved path surrounded by trees and fallen leaves.

Staff Characteristics

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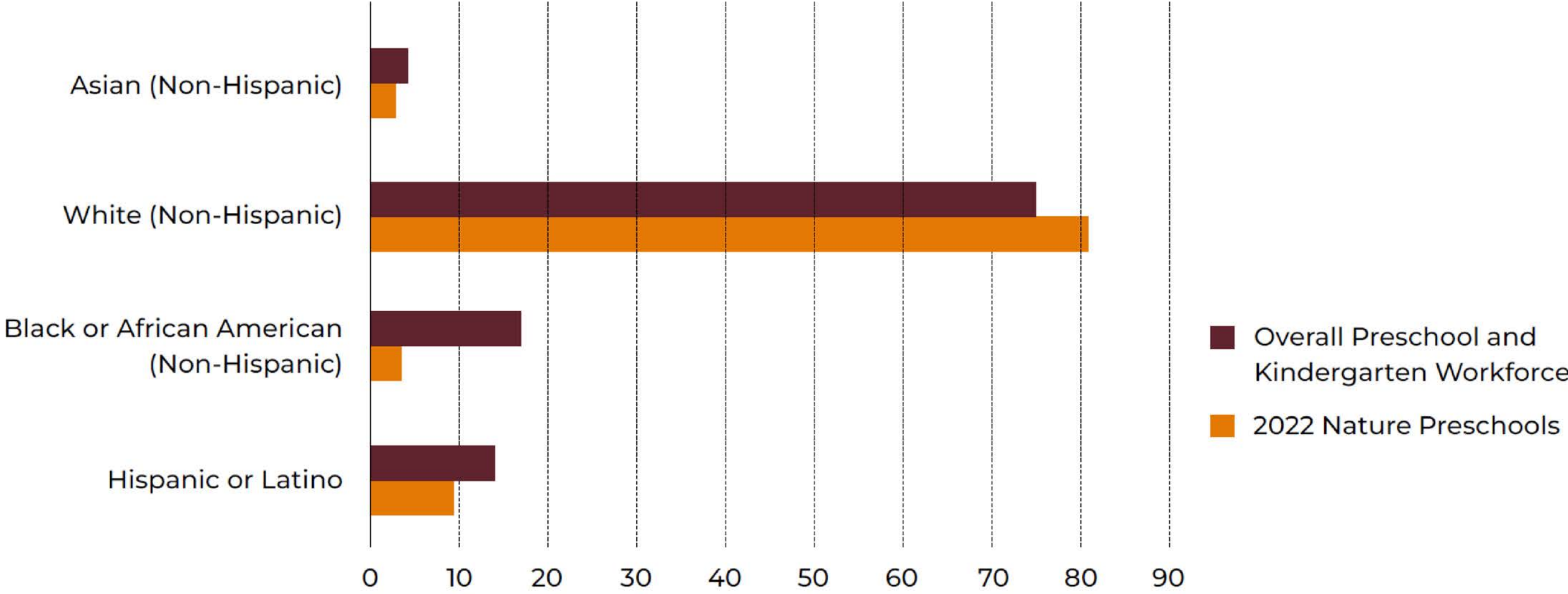
Total Staff

- Total Workforce:
 - 2022: 6,000 professionals
 - 2017: 1,500 professionals
- Average staff per program largely the same
- Growth in workforce due to growth in programs



Photo: Appalachian Forest School

Nature Preschool and Overall Preschool and Kindergarten Workforce by Race/Ethnicity



Backyard Basecamp

Baltimore, Maryland

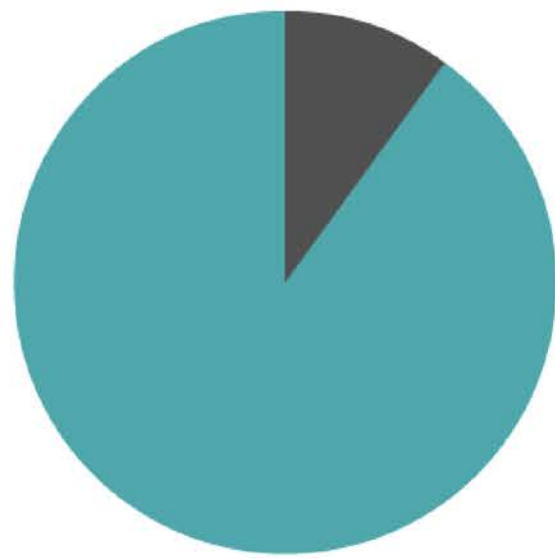
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 Backyard Basecamp

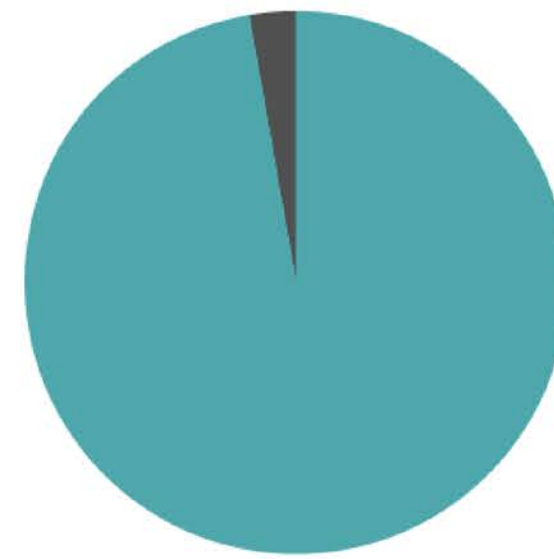
 backyard_basecamp

Gender in the Workforce



**Nature
Preschools**

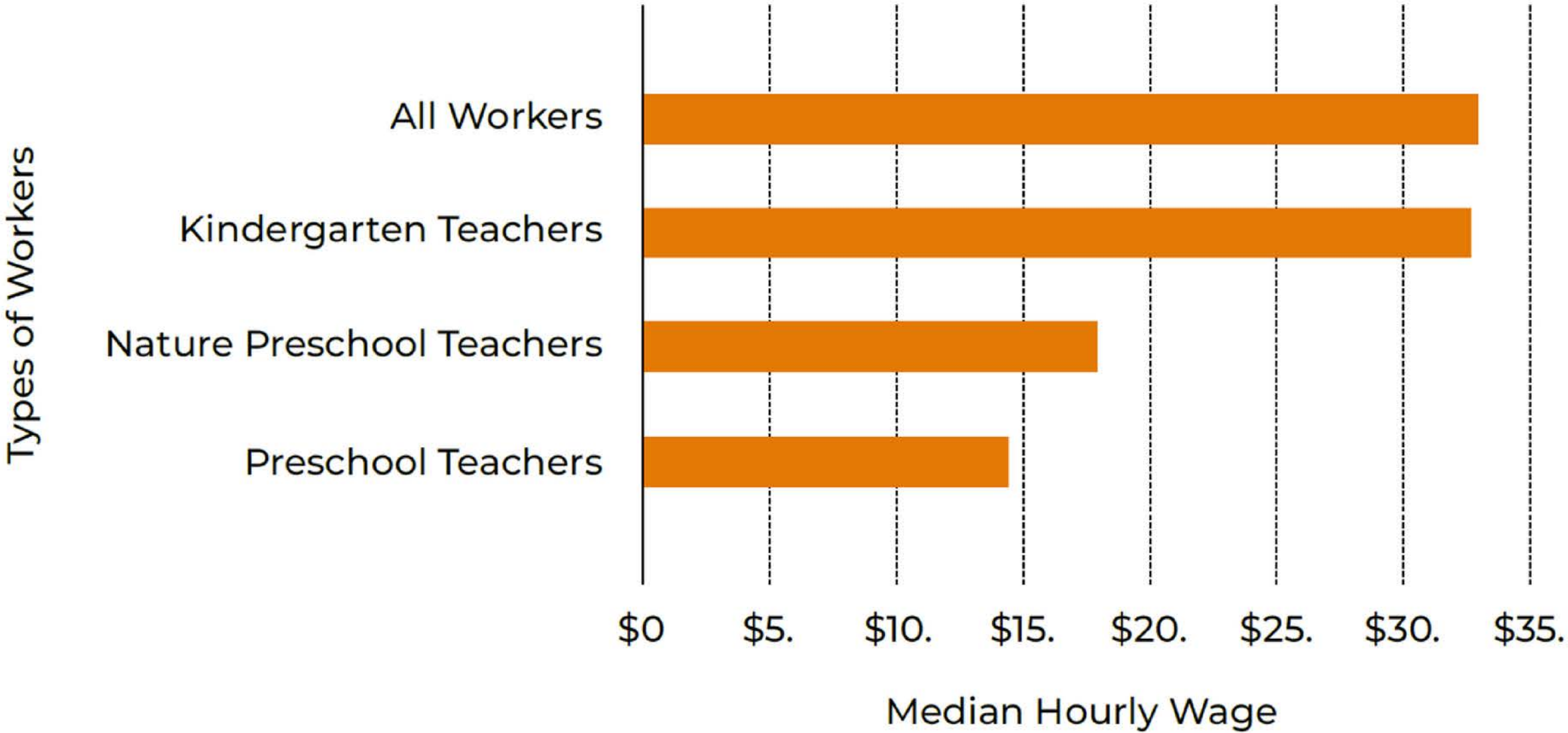
- Female
- Male, Nonbinary, Other



**Overall Preschool
and Kindergarten**

- Female
- Male, Nonbinary, Other

Median Wages for Preschool Teachers, Kindergarten Teachers, and the Average U.S. Worker





Propelling Future Growth

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Photo: Appalachian Forest School

Professional Training

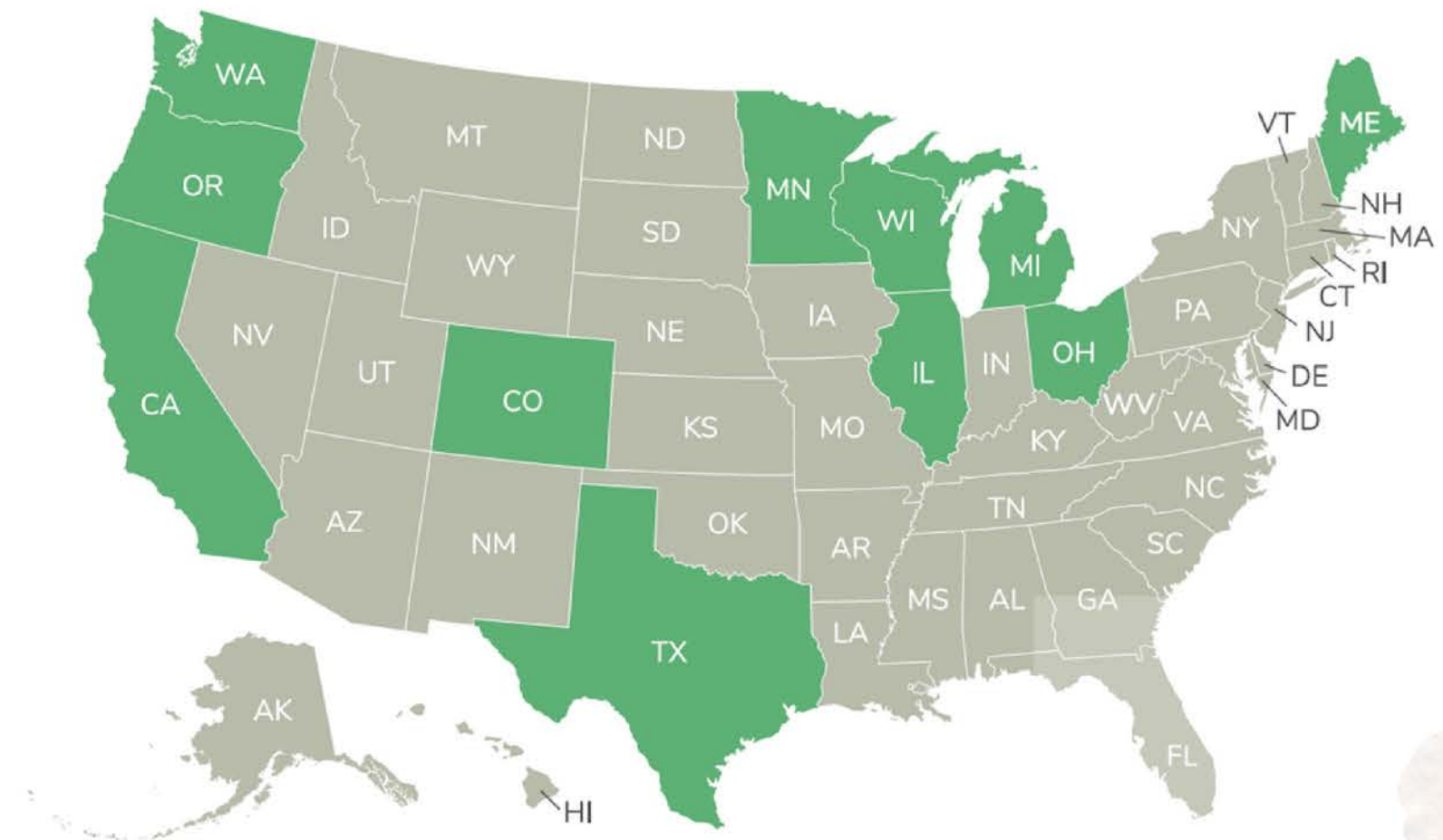
- Unique practices and considerations, particularly around safety
- There are now degree programs, certificates, and certification programs, but more is needed to support growth
- Professional development programs can specifically address racial and ethnic disparities in the workforce



Professional Networks

- Growing national network of state and regional nature-based early education groups
- Groups focus on professional training, professional connection, and advocacy
- Most are volunteer-run with limited capacity

Natural Start Alliance Regional Network



Policy Change for Outdoor Learning

- Licensing for outdoor preschools can add capacity to the early care and education system
- Public funding can help make outdoor learning more accessible for families
- Licensing regulations can elevate the importance of outdoor environments



Nature for Every Child

- Diffusion of nature across the early childhood landscape is the goal
- Every school need not be a nature preschool
- Every child deserves a high-quality education and opportunities to play and learn in nature



Photo: Appalachian Forest School

Thank You!

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Photo: Appalachian Forest School