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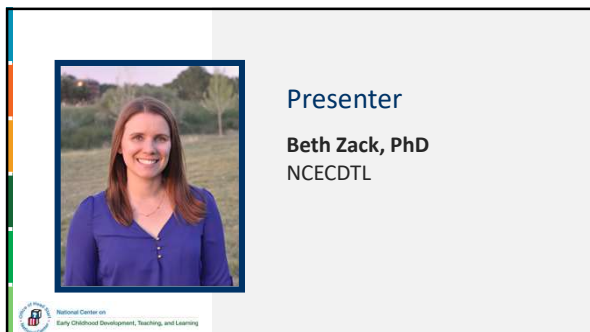
Thursday, April 1, 2021

Connecting with Nature: Using the Natural World to Support Children's Development Across Learning Domains

Host
Beth Zack, PhD


Guest Expert
Renetta Goeson, MEd

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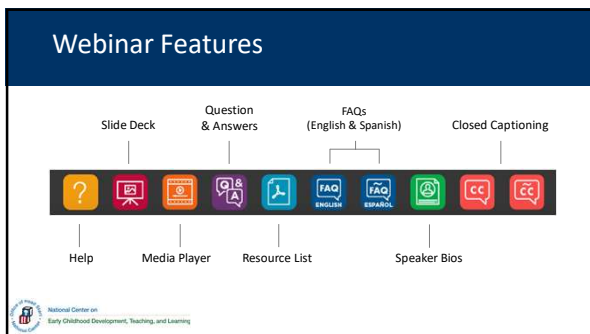
Presenter

Beth Zack, PhD
NCECDTL



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Webinar Features

Slide Deck Question & Answers FAQs (English & Spanish) Closed Captioning

Help Media Player Resource List Speaker Bios

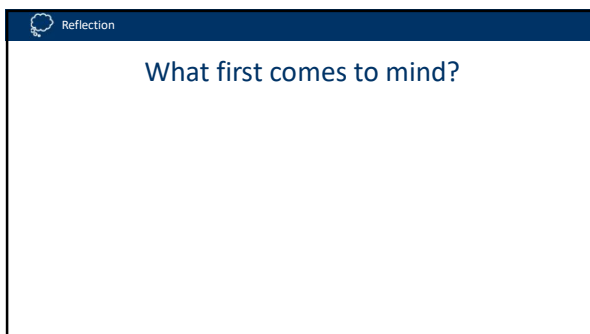


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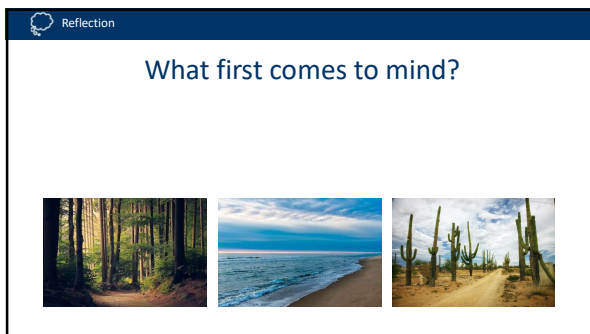
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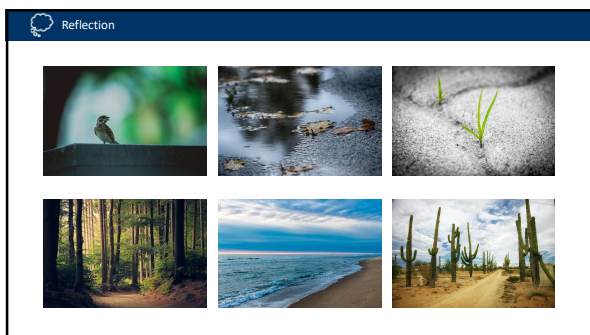
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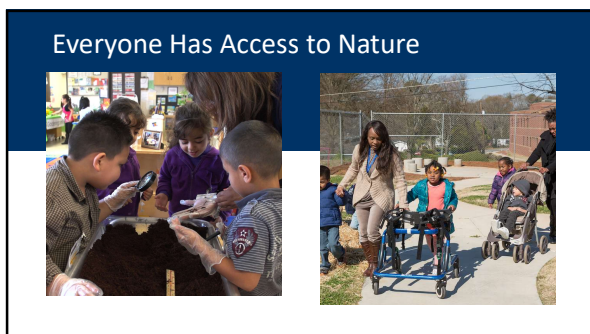
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Learning Objective

Use nature as a tool to support all children's learning


1. Ways to Connect
2. Research and the ELOF
3. Strategies



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Ways to Connect



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We Connect to Nature Through Our Senses



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Beyond the Playground

- Learning *in* nature
- Learning *about* nature
- Learning *with* nature

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Learning *in* Nature

- Bringing an indoor activity outside
- Benefits to time outside
- Doesn't require nature for actual learning to occur

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Learning *about* Nature

- Some aspect of natural world
- Often adult-directed
- Inside or outside

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Placeholder for Video 1: Feeling the Wind



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Learning *about* → Learning *with* Nature



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Learning *with* Nature

- Hands-on exploration
- Informal learning
- Freedom of choice
- Accessible to all




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Placeholder for Video 2: I Found an Ant

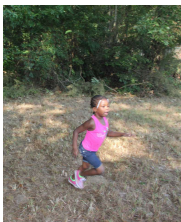


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Learning *with* Nature




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Benefits of Learning with Nature



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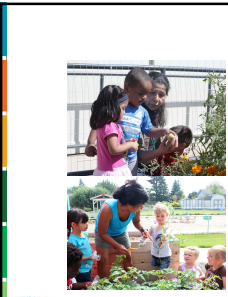


Benefits of Nature

“Nature is important to children’s development in every major way—intellectually, emotionally, socially, spiritually and physically.”

~Kellert, 2005

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Grow Your Own Food

- More likely to eat fruits and vegetables
- Better understanding of nutrition
- More likely to follow healthy eating habits

What other skills might this support?

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Grow Your Own Food

What other skills might this support?

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What Research Says

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Using the ELOF to Support Learning from Nature

	CENTRAL DOMAINS				
	APPROACHES TO LEARNING	SOCIAL AND EMOTIONAL DEVELOPMENT	LANGUAGE AND LITERACY	COGNITION	PERCEPTUAL, MOTOR, AND PHYSICAL DEVELOPMENT
▲ INFANT/TODDLER DOMAINS	Approaches to Learning	Social and Emotional Development	Language and Communication	Cognition	Perceptual, Motor, and Physical Development
● PRESCHOOLER DOMAINS	Approaches to Learning	Social and Emotional Development	Language and Communication Literacy	Mathematics Development Scientific Reasoning	Perceptual, Motor, and Physical Development

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ELOF - Approaches to Learning

Preschooler Approaches to Learning Sub-Domains

Emotional and Behavioral Self-Regulation	Cognitive Self-Regulation (Executive Functioning)	Initiative and Curiosity	Creativity
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Self-regulation

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Self-Regulation and Nature



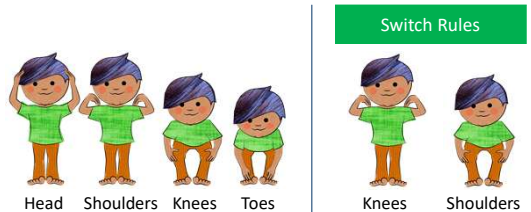
- ½ spent time in outdoor learning environments **daily**
- ½ spent time in outdoor learning environment **once a week**
- Recorded amount of time spent outside

(Taylor & Butts-Wilmsmeyer, 2020)

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Measures of Self-Regulation



Head Shoulders Knees Toes

Switch Rules

Knees Shoulders

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Self-Regulation and Nature



- Daily curriculum in outdoors related to better self-regulation
- More time outside related to better self-regulation

(Taylor & Butts-Wilmsmeyer, 2020)

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ELOF – Approaches to Learning


Goal P-ATL 2. Child follows classroom rules and routines with increasing independence.

Goal P-ATL 9. Child demonstrates flexibility in thinking and behavior.



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Your Own Observations

Have you noticed similar changes in children's behavior after you spend time connecting with nature outside?

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Nature Inspires Creativity and Cooperation



ELOF Approaches to Learning



ELOF Social and Emotional Development

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Natural Playscapes



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Natural Playscapes



(Kuh, 2013)

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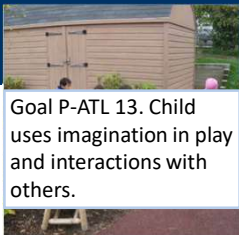
Natural Playscapes



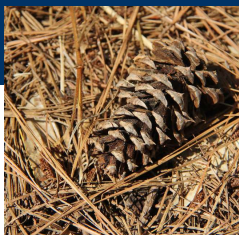
(Kuh, 2013)

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Findings: Pathways and Loose Parts



Goal P-ATL 13. Child uses imagination in play and interactions with others.



(Kuh, 2013)

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Findings: Cooperative and Constructive Play



Goal P-SE 4. Child engages in cooperative play with other children.



(Kuh, 2013)


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Language and Communication

- Opportunities to practice language
- Meaningful connections
- Hands-on experience
- Follow their own curiosity

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Language and Communication

- Adults: more diverse nature terms exploring park
- Preschoolers: more nature terms exploring park

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Language and Communication

- Adults play important role in supporting language development

Goal P-LC 6. Child understands and uses a wide variety of words for a variety of purposes.

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ELOF – Literacy



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ELOF – Literacy Development



The slide features two photographs side-by-side. The left photo shows a squirrel on a log with a large blue letter 'S' overlaid. The right photo shows a tree trunk with a large green letter 'V' overlaid.

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ELOF - Literacy




Goal P-LIT 4. Child demonstrates an understanding of narrative structure through storytelling/re-telling.

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Cognition

- Mathematics Development
- Scientific Reasoning



The slide includes a list of two bullet points: 'Mathematics Development' and 'Scientific Reasoning'. To the right is a photograph of two children, a boy and a girl, looking at something in a garden.

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Little Scientists



- Hands-on experience
- Exploration
- Asking questions
- Finding patterns
- Collecting “data”

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Math in Nature

Goal P-MATH 9. Child identifies, describes, compares and composes shapes.




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Scientific Reasoning in Nature

Goal P-SCI 9. Child observes and describes observable phenomena (objects, materials, organisms, and events).




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ELOF – Perceptual, Motor, and Physical Development

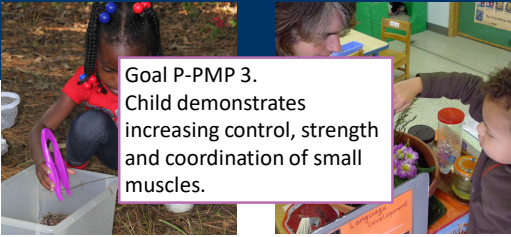
Preschooler Perceptual, Motor, and Physical Development Sub-Domains

- Gross Motor
- Fine Motor
- Health, Safety, and Nutrition



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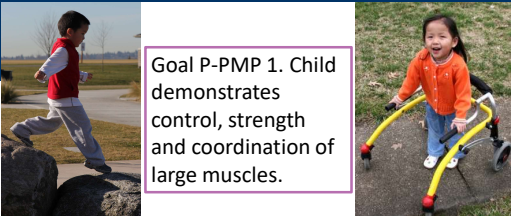
Fine Motor Skills



Goal P-PMP 3. Child demonstrates increasing control, strength and coordination of small muscles.

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Gross Motor



Goal P-PMP 1. Child demonstrates control, strength and coordination of large muscles.


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Perception



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Physical Health


- 3000 children in Head Start classrooms
- More outdoor play → lower BMI

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Physical Health


Goal P-PMP 5. Child develops knowledge and skills that help promote nutritious food choices and eating habits.



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Using the ELOF to Support Learning from Nature



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Connecting with Nature: Strategies

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Guest Expert

Renetta Goeson, MEd
Senior Training and Technical Assistance Specialist, AIAN
NCECDTL

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Placeholder for Video of Guest Expert



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"If the environment is the third teacher, there is no better classroom environment than the outdoors."
~Daniela Silver, NAEYC, 2019



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Connecting with the Outdoors



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Materials

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Based on Interests

- Child-directed
- They choose how to interact

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Natural + Tools

- Encourage innovation
- Connect with culture

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Open-ended

- Loose parts
- Promotes skills across the ELOF domains

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Placeholder for Video 3: Making Letter “M”

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Adult Role

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What do you notice about these tree roots?




Adult Role - Language

- Ask open-ended questions
- Think out loud together
- Use intentional language

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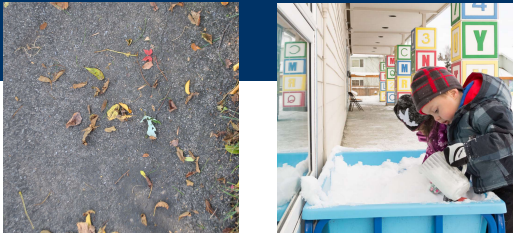
Adult Attitudes

- Obstacle or opportunity
- Curious mindset
- Positive attitude
- Level of comfort and accessibility

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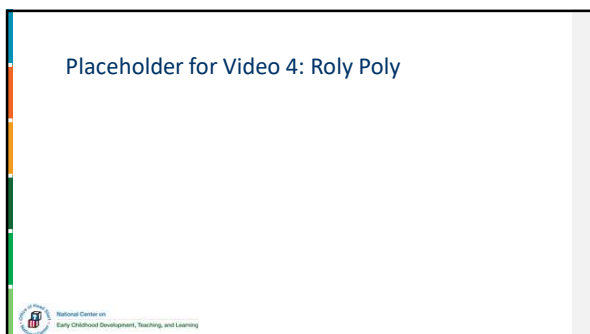
Adult Attitudes and Comfort Level



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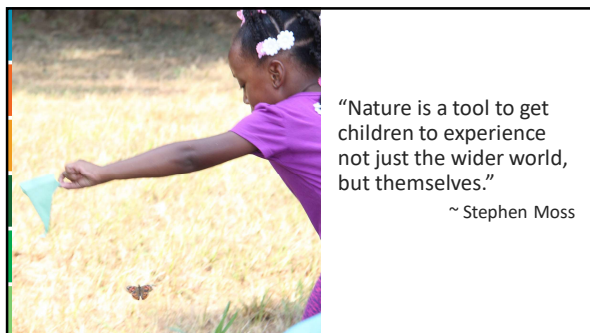
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