

Teaching Outside the Classroom: Charting the Course for an Enhanced **Outdoor Learning** Experience

Presentation link: https://tinyurl.com/ mrpc83kt



Presented By



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Learning Objectives

- Understand diverse teaching concepts and activities such as sound mapping and mini-campus field hikes and how they can enhance the learning activities in traditional classrooms. New concepts and examples will be explained and learning outcomes identified.
- Understand the benefits that outdoor environments can have on wellbeing and social emotional learning, for all students and staff. Participants will be able to apply knowledge gained to design evidence based outdoor environments.
- 3. Understand how to design evidence based designed outdoor environments and will be able to diagram a space as part of the presentation.
- 4. Gain knowledge on organizations working to publish research on outdoor learning environments and learning



Objectives

Review some emerging trends affecting elementary schools Consider our outdoor spaces as ways to meet student and staff needs of today

Explore and apply the 'floor/ceiling' model to our outdoor spaces

Lens Elementary schools Outdoor area Students, teachers, & staff



The last normal school year

for students in	was
Grade 7	Grade 4
Grade 6	Grade 3
Grade 5	Grade 2
Grade 4	Grade 1
Grade 3	Kindergarten
Grade 2	never
Grade 1	never
Kindergarten	never

@weareteachers

Commonly Seen Trends

- Social and Emotional Learning (SEL) for students and staff
- Child development in the elementary grades
 - Emotional: changing development timelines; trama-coping mechanisms
 - Social: isolation from peers even when physically together; reluctance to engage
 - Physical: less active overall; difficulty sustaining traditional instruction
- Increased gaps in learning
- School staff facing problem-solving and decision-making fatigue



Trends on the Horizon

- Recalibrating Blended Learning
- Teacher turnover will continue to increase = more new teachers each year = need for ease of implementation
- Veteran teachers are moving more toward 5-8 years vs. 15-20+ years
 - Statewide preK includes several components of outdoor learning spaces & certifications



Trends on the Horizon

- Ranges of child development (emotional, social, physical) trending wider at more ages and for longer in the school year
- Increased need for calm spaces and calm experiences for both students and staff
- Decrease in overnight camping field trips

Why Focus on Outdoor Learning?

Outdoor Areas are Available Everywhere

Almost every campus has an outdoor space that can be used more effectively, creatively, and efficiently

Benefits: Outdoor Learning

SEL

Brain breaks and emotional breaks outside

Reduces stress levels and promotes a sense of place and well-being Provides social interactions in a

less-formal

environment

Structured Play

Play with a purpose; very young children learn primarily through play

Opportunity for increased activity levels

Connection to Natural Phemonemon "Is the moon visible only at night?" "How do shadows change during the day?"

"Where did that puddle go?"

Barriers: Outdoor Learning

Safety

"It's not safe - ants and bugs will bite the kids." "What if our kids run off?"

Comfort

"It's hot and there's no shade." "Lots of my students don't like to sit on the ground." **Design** "There's nothing out there except playground equipment, cement, dirt, and a fence. Honestly, ours (campus) looks like a prison yard."

Time

"I don't have extra time to take them outside." "When I try to take students out, they think it's recess and just want to play."

Control

Use How do I take students outside for

instruction/SEL/ structured play?

Ceiling



Floor

Chess has a very high floor: it's harder to learn how to start and may appear so complex that some may never attempt it.

The game of tic-tac-toe has a low floor: it's easy to understand how to get going.

Floor level tells us how easy it is for a student to jump in to an experience.

Floor

Ceiling

Ceiling level represents the potential room for growth.

Chess has a very high ceiling: life-time players continue to learn; it can be rewarding to those who are determined to play.

Tic-tac-toe has a very low ceiling: it's so easy to master and players get bored.



High Ceiling



High Floor

Lots of potential, but not easily started and frustrating for many.

Easy to do, but uninspiring and does not offer much potential for growth.

Low Ceiling

Low Floor

High Ceiling

This is a highly desired design: meeting students where they are and increasing their range of success.



Design Pieces Educators Use To Lower Floors

I Model, We Try, You Do: Gradual Release Method

Start with a Sandbox: Play Around Before Doing the 'Real' Work

Simplify: Reduce Complexity: Try This or That

Feedback: Praise the Successes and Gently Guide Toward the Goal





Design Pieces Educators Use

To Lower Floors

I Model, We Try, You Do: Gradual Release Method

Start with a Sandbox: Play Around Before Doing the 'Real' Work

Simplify: Reduce Complexity: Try This or That

Feedback: Praise the Successes and Gently Guide Toward the Goal









Has many right answers, including ones never seen before

Many paths to get to the right answer

Participants who are good keep going and get better Others are interested and asking "What is going on over there?"



The Environment





Applying the Concept

Low Floor & High Ceiling

How can design lead to big benefits?

Can we develop design ideas that start at a low floor and can go all the way to a high ceiling?

Outdoors = Engagement

- A recent (2018) study of children ages 9 and 10 revealed that hands-on lessons in nature produce students who are more engaged in their other academic studies.
- Moreover, a report from UC Berkeley points to more than 100 studies that demonstrate how exposure to nature can have positive impacts on thought processes, as well as our physical and mental health.



- Outdoors = Wellness
 - There is no question that being in nature reduces the physiological symptoms of stress in our bodies.
 - What this means is that we are less likely to be anxious and fearful in nature, and thereby we can be more open to other people and to creative patterns of thought.



Does outdoor education benefit students?

EVIDENCE-BASED DESIGN STUDENT AND TEACHER PERCEPTION

BEFORE OUTDOOR LEARNING INTERVENTION

Outdoor Learning Could Engage Students Academically

> TRUE Sometimes Not True 78% 22% 0%

Outdoor Learning Could Engage Struggling Students Academically

TRUE Sometimes Not True 50% 50% 0%

* Lisa Strong, "Classrooms without Walls: A Study in Outdoor Learning Environments to Enhance Academic Motivation for K–5 Students" (master's thesis, California State Polytechnic University, Pomona, 2019).

SOURCE: Schools that Heal

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Does outdoor education benefit students?

EVIDENCE-BASED DESIGN STUDENT AND TEACHER PERCEPTION

HOW DO STRUGGLING STUDENTS FACE SETBACKS?



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SOURCE: Schools that Heal

"There I feel that nothing can befall me in life—no disgrace, no calamity (leaving me my eyes), which nature cannot repair."

Ralph Waldo Emerson

The reality too often











 Today, technology has emerged as a primary frontier of childhood exploration.

And, this is also a reality...

The International Bestseller That Launched a Movement In the WOODS Saving Our Children from Nature-Deficit Disorder RICHARD LOUV AUTHOR OF OUR WILD CALLING and RECIPIENT OF THE AUDUSON MEDAL

Disengagement from the natural environment results in "nature-deficit disorder," which, correlates with attention difficulties, greater rates of physical and emotional illness, and reduced use of our senses.



- In the United States, the percentage of children and adolescents affected by obesity has more than tripled since the 1970s.
- We are witnessing a general decline in fundamental movement skills in children.
- Children as young as 9 show a lack of physical literacy.
 - Physical literacy is the ability to move with competence and confidence.



Claire Latane, Schools that Heal



Nurture Belonging

- Welcoming entry and edges
- Organize space by activity level
- Honor students' lived experiences
- Create quiet places and cozy spaces
- Let them sit, lie down, swing, rock, walk

Nurture Belonging Welcoming entry and edges


Nurture BelongingWelcoming entry and edges



► Welcoming entry and edges



Nurture BelongingOrganize space by activity level



Honor students' lived experiences



• Create quiet spaces and cozy places

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Let them sit, lie down, swing, rock or walk





Let them sit, lie down, swing, rock or walk





Let them sit, lie down, swing, rock or walk





- Design for all species
- Work with natural processes
- Locate trees and gardens strategically
- Provide natural experiences
- Create natural activities



Design for all species







Locate Trees and Gardens Strategically



Locate Trees and Gardens Strategically





Provide Natural Experiences





Provide Natural Experiences





Provide Natural Experiences





Create natural activities







Create natural activities







Create natural activities







Claire Latane, Schools that Heal



Inspire Awe





Inspire Awe









Inspire Awe





Inspire Awe





Bringing it all together

Low Floor & High Ceiling

- What designs can be considered "low floor" simple to implement?
- Can you build on the "low floor" designs to arrive at "high ceiling" designs?





Bringing it all togetherLow floor





Add:

- Movable stools & tables
- Display Spaces
- Trees & Landscaping
- Cover
- Storage



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- Movable stools & tables
- Display Spaces
- Trees & Landscaping
- Cover
- Storage



Bringing it all togetherLow floor





Bringing it all togetherLow floor - High ceiling





Bringing it all togetherHigh Ceiling





The lens for our work today Outdoor areas Elementary schools preK-5th grade *teachers & staff*




Closing Thoughts

References & Valuable Resources

Slide References

WeAreTeachers, (unknown date). [Image] "[The last normal school year]". Facebook.

McInery, C. (2022, February 23). These first-graders may be acting out, but they're also acting like 6-year-olds. Texas Standard.

https://www.texasstandard.org/stories/these-first-graders-may-be-acting-out-but-theyre-also-acting-lik e-6-vear-olds/?fbclid=lwAR0vZcSM2hG_zdDrDKQtF_khlvYignD1-R9uC05KrblCq0N4V2TEfsGY11E

Horn, Michael B. & Staker, Heather. 2014. *Blended Using disruptive Innovation to Improve Schools*. Wiley & Sons.

Texas Education Agency. (2022, February). *High Quality Prekindergarten.* Texas Education Agency. <u>https://tea.texas.gov/academics/early-childhood-education/high-quality-prekindergarten</u>

Texas Children in Nature Network. 2022. Outdoor Learning Environmentts - OLÉ! Texas. Texas Children in Nature Network.

https://www.texaschildreninnature.org/outdoor-learning-environments-ole-texas

Latané, C. (2022, February 17). Schools That Heal: Design with Mental Health in Mind Collaborative for High Performance Schools. Collaborative for High Performance Schools. <u>https://youtu.be/zl1S0uKP964</u>

Oltman, M. (Editor). (2002). *Natural Wonders A Guide to Early Childhood for Envrionmental Educators*. Minnesota Early Chioldhood Environmental Education Consortium. <u>https://www.pca.state.mn.us/sites/default/files/p-ee5-04.pdf</u>

Byrdseed. (2009). Aim for High Ceilings and Low Floors. https://www.byrdseed.com/to-differentiate-lower-floors-and-raise-ceilings/

Resources by Topic

Outdoor Learning for Formal Education

Nair, P. (2021). Outdoor Learning Leave the Classroom Behind Special COVID-19 Issue. Association for Learning Environments. <u>https://media.a4le.org/COVID/Outdoor%20Learning.pdf</u>

Prekindergarten Outdoor Learning Design and Certification OLÉ! Texas Outdoor Learning Environments Deisgner Network through Texas Tech

Texas Nursery & Landscape Association Best of Texas Plant Database: searchable online database by native, child-firendly, and region

Children and Community Experiental Nature Activities

Louv, R. (2016). The Essential Guide to a Nature-Rich Life Vitamin N 500 Ways to Enrich the Health & Happiness of Your Family & Community* *and combat Nature-Deficit Disorder*. Algonquin Books.

Sharing Nature Worldwide. 2022. Sound-mapping Activity: <u>https://www.sharingnature.com/</u> https://youtu.be/JQiHwewNUt0



Thank you for joining us!



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