



As Nature Intended: Bringing nature into play in the 21st Century

- **Background, research & support for nature play**
- Criteria & guidance for nature play
- Case Studies - Bringing nature & play together on playgrounds

Designing for Active Nature Play

Background Research: Historic and Contemporary Roots of 'Nature Play'

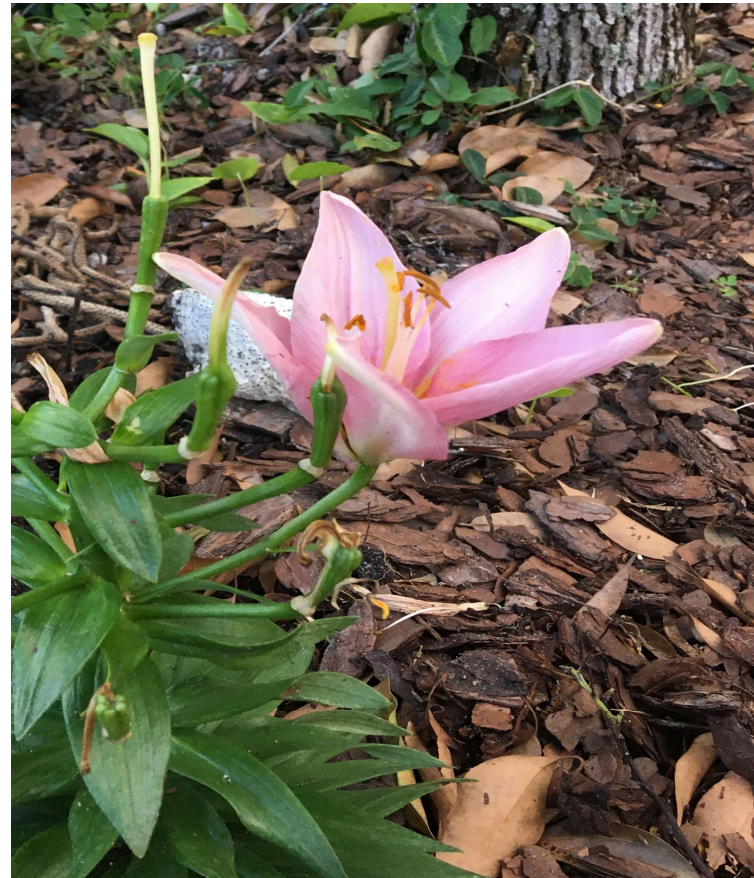
“ In childhood there is a four-fold development of life – the child’s own inner life; his life in relation with parents and family; his life in relation with a higher invisible Being; and, especially, his life in relation with nature, regarded as endowed with life like his own”

(Froebel, trans 1912, p. 50)

“ The future will belong to the nature-smart—those individuals, families, businesses, and political leaders who develop a deeper understanding of the transformative power of the natural world and who balance the virtual with the real. The more high-tech we become, the more nature we need”

(Richard Louv (2019)

<http://richardlouv.com/>



CONNECTEDNESS WITH NATURE

Attention Restoration Theory (ART) (Kaplan & Kaplan, 1989).

- Nature replenishes attention (more than urban environments)

Stress Reduction Theory (SRT) (Ulrich, 1993)

- Healing power of nature to reduce stress

Common-worlding

- We live in and with nature, in a 'common world' (see Common Worlds Research Collective)

<https://commonworlds.net/feminist-common-worlds-methods-publications/>

THE IMPORTANCE OF ACTIVE PLAY IN AND WITH NATURE

Benefits of nature for people

- Health, wellbeing, and cognitive function (Bratman et al, 2012)

Benefits for nature when people play outdoors

- Affinity for nature will help to protect it (See Hughes et al, 2018)
- Affinity for nature is developed over time (Meidenbauer et al, 2019)

What do we mean by 'Nature'?



The Providence Peregrine Cam



What do we mean by play?



CHARACTERISTICS OF PLAY

(Burghardt's criteria, 2005):

- Voluntary activity
- Autotelic – done for its own sake
- Modifications of functional behaviors
- Repetition with variation
- Enjoyment, satisfaction, fun



How do we bring 'nature play' into built environments?



Over 90% of Australian's live in 'urban' environment

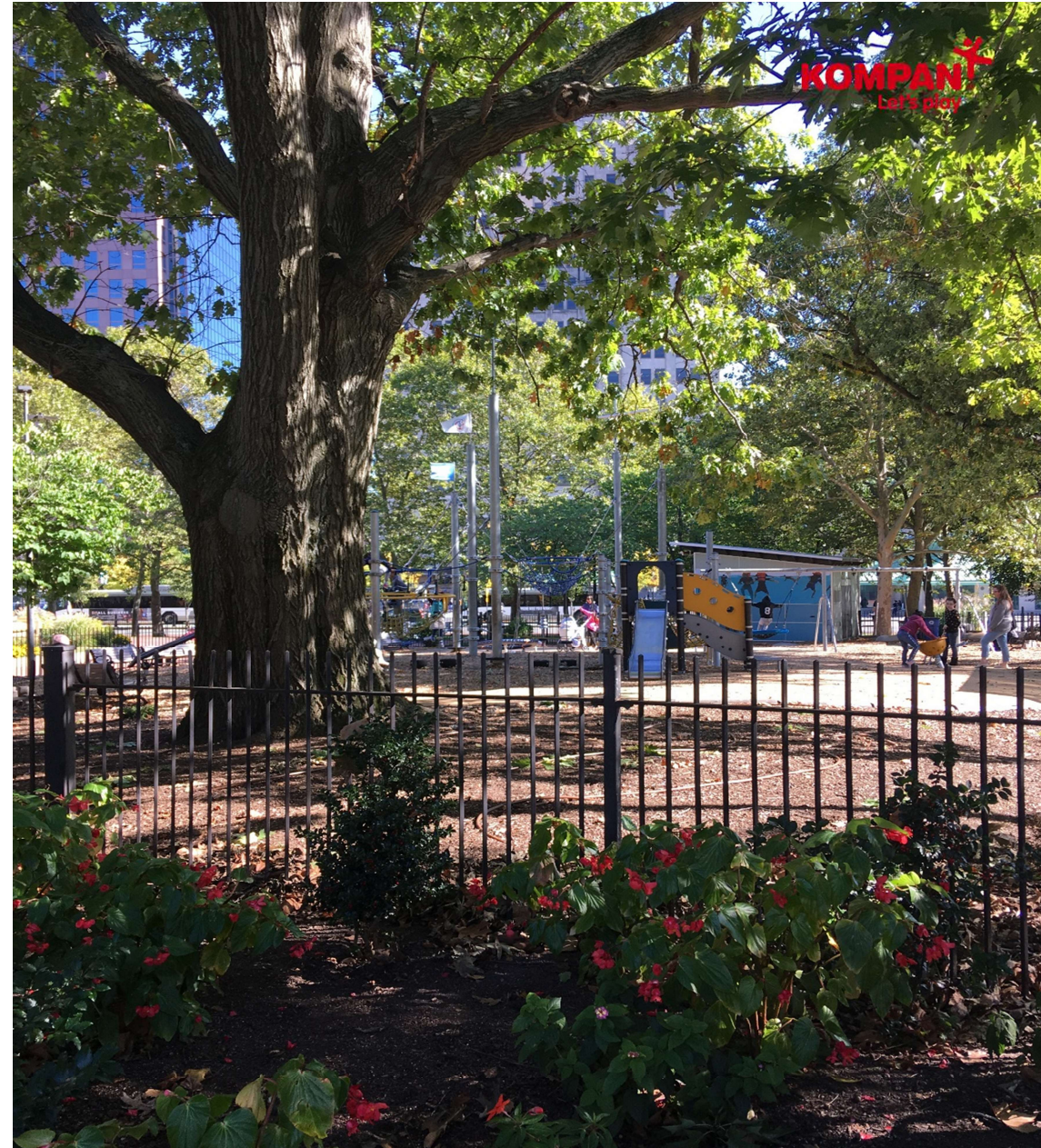


Critique: 'Nature Play' in an urban environment



Examples of 'Play in Nature' in an urban environment

- Urban Nature/above
- Transparent playground structure
- Sensitive enclosure
- Urban Nature/ground level



Designing for how children play in nature and with natural materials



"While adults perceive landscape forms, children interpret functions of the environment and qualities and possibilities offered for activity. A rich environment for children contains many positive 'affordances' (Gibson, 1979) to be actualised by children (Heft, 1989)" (Jansson, 2010, p. 65)



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Assessing the outdoor Learning Environment

POEMS: Preschool Outdoor Environment Measurement Scale (2005/2014)
DeBord, Hestenes, Moore, Cosco & McGinnis (Natural Learning Initiative)

Developed in consultation with a team of child development experts, and
is based on observations of children

Higher quality outdoor play and learning environments = positive
outcomes for children with regard to learning and well-being



What does the POEMS recommend?

- Variety of species of trees, shrubs, plants
- Logs/wood
- Topographic variation & variety of ground surfaces
- Smooth rocks/stones (loose parts)
- Sand & water play
- Stepping stones
- Rolling/climbing mound
- Cosy nook
- Flower or vegetable garden
- Stage
- Sound panel
- Markers, chalk, crayons
- Props for dramatic play
- Storytelling area
- Labels on materials
- **EQUIPMENT TO ENCOURAGE ACTIVE PLAY**



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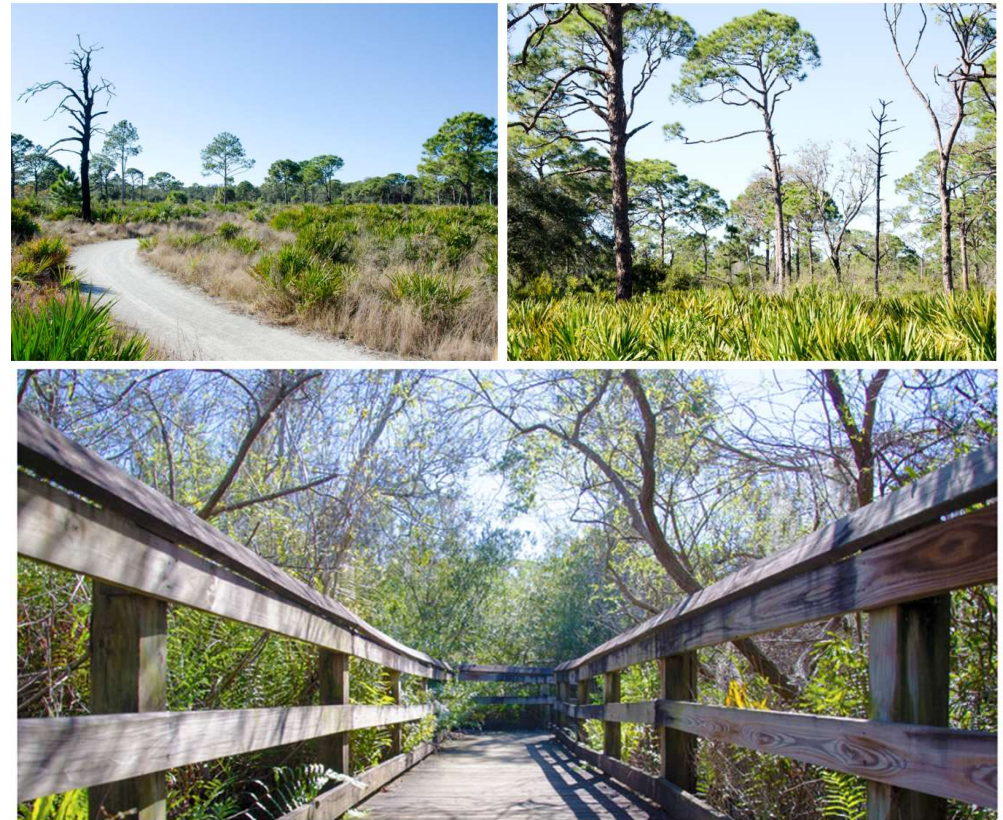
Designing for Active Nature Play

Case Study

Bringing nature & play together in a public space

The Boyd Hill Nature Preserve is a 245 acre protected area in St Petersburg, Florida. It is home to the Lake Maggiore Environmental Education Center. On site there are trails as well as picnic sites, and the education center hosts nature camp and educational programs. The ecosystem includes Lake Maggiore, marshland, swamp, pine flatwoods, sand scrub & hammock

<http://www.stpeteparksrec.org/boydhillpreserve/>



Lake Maggiore
Environmental...

Boyd Hill
Nature
Preserve

Google

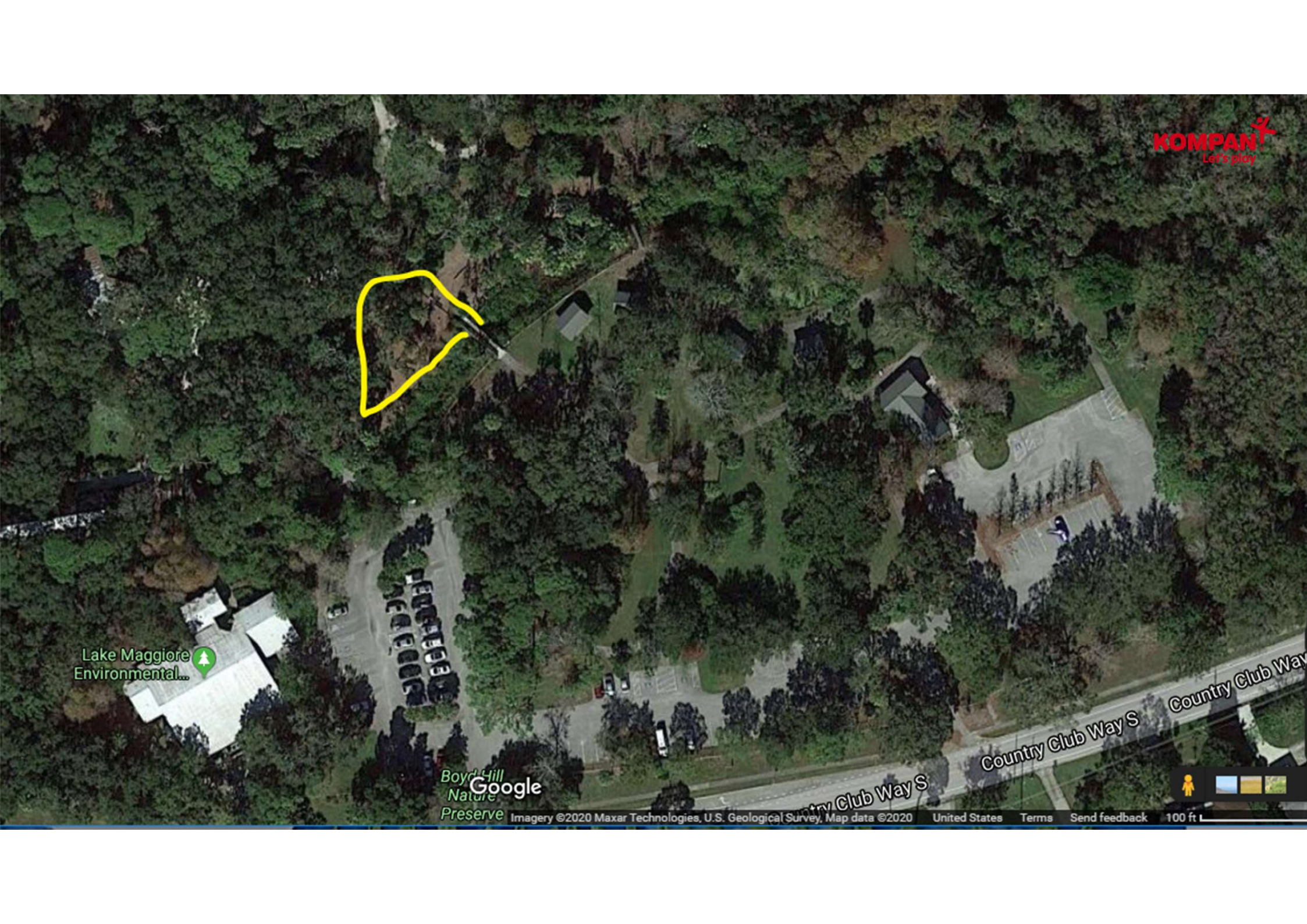
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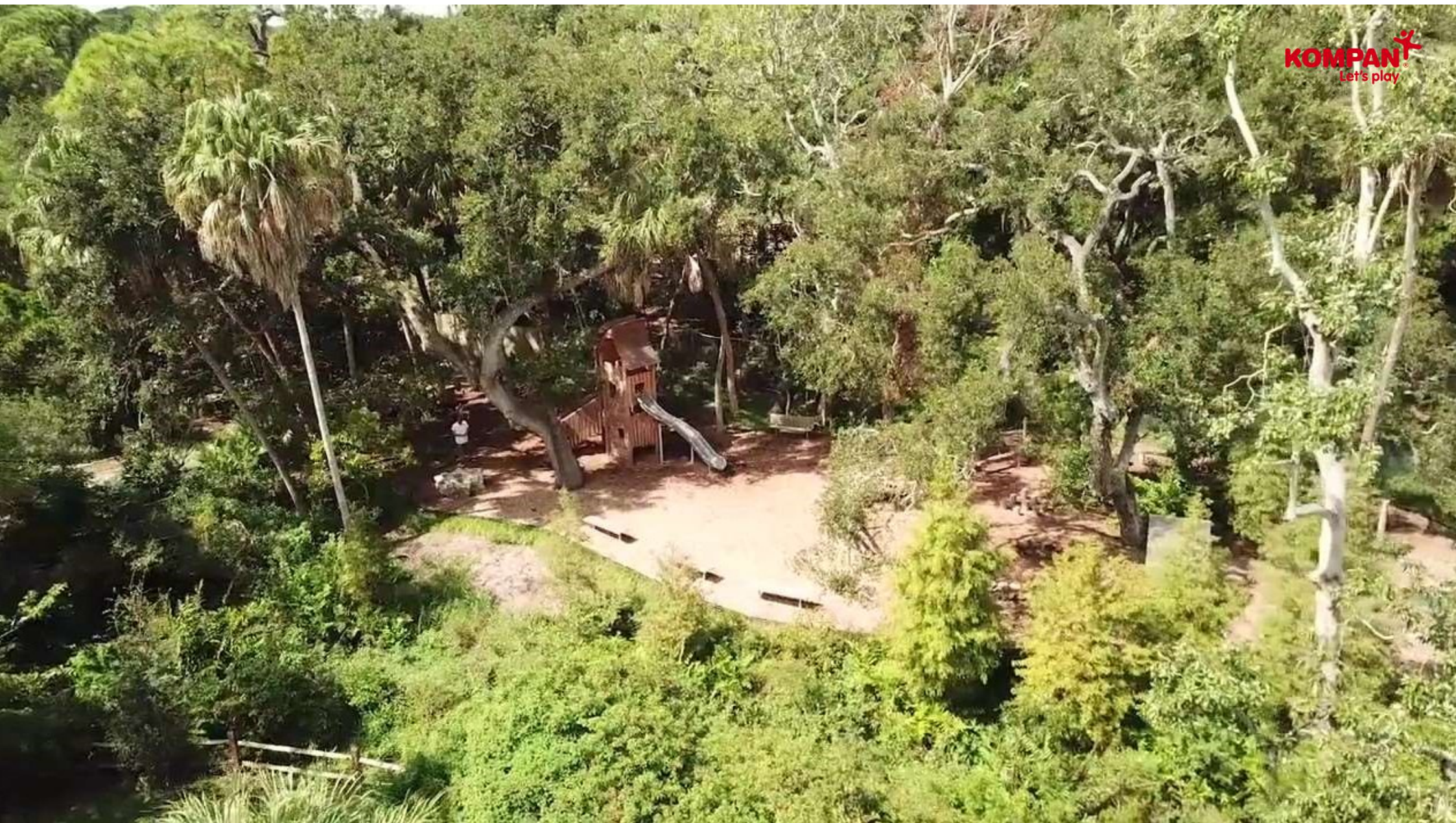
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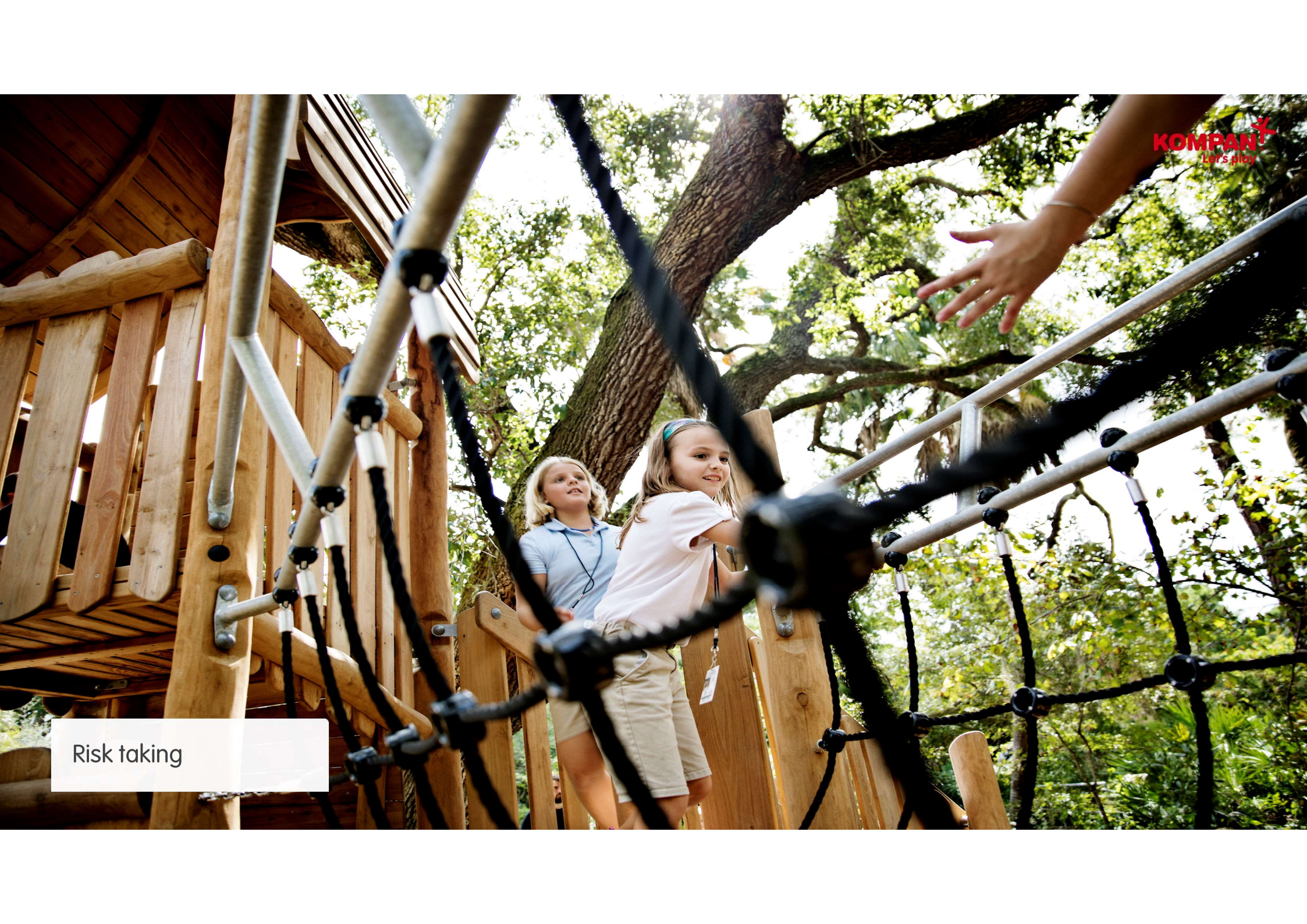


KOMPANI
Let's play





KOMPAN
Let's play



Risk taking

Thrill: physical and emotional

Case Study: Westminster Schools

Bringing nature & play together in a school space

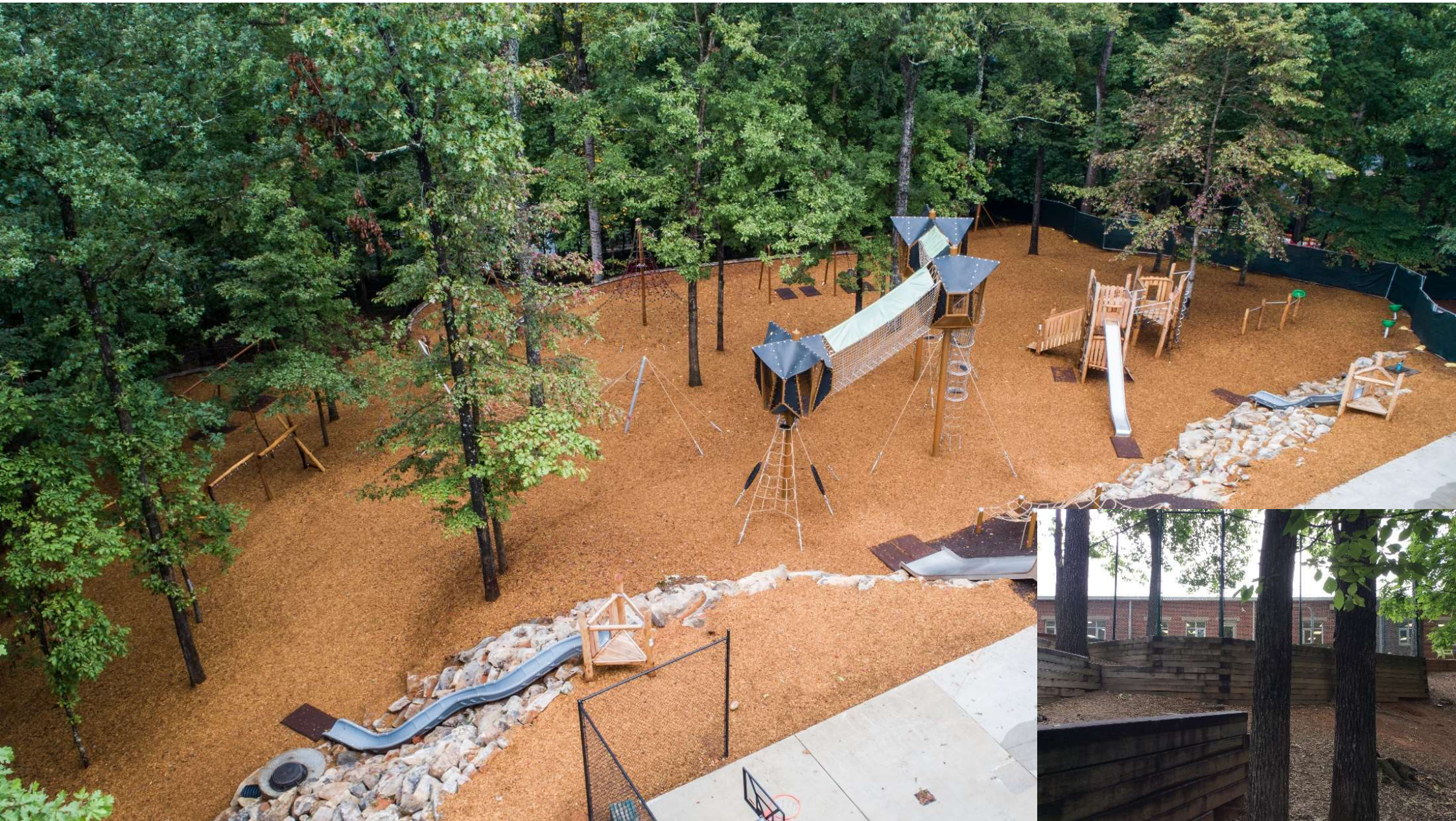


Westminster Schools, Atlanta, GA:







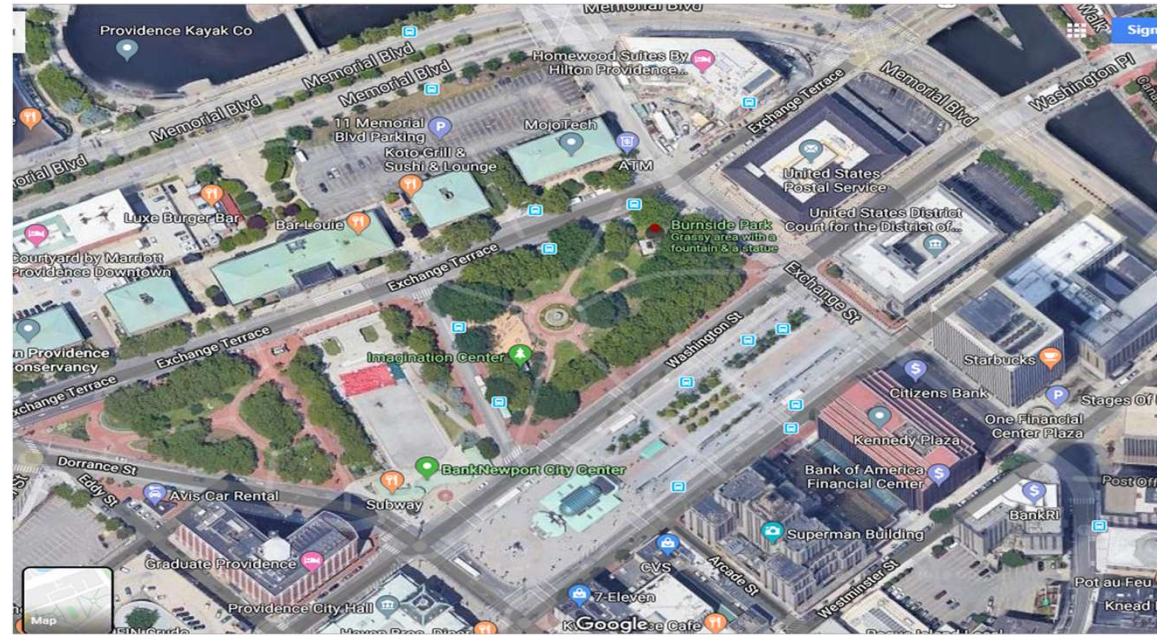






BEFORE

Case Study: Nature play in a dense urban environment



- Urban density/skyline
- Urban Nature/ above
- Transparency in play structure
- Child's eye view



A sense of hanging
in the trees



Surfacing appropriate for the needs of the location



Equipment encourages
play & does not dominate
the environment









Goomboora Cairns



Munnagai Park, ACT



Summary

- Urbanization continues to increase globally
- With less access to nature we see detrimental effects on our health
- Research has shown that connecting with nature restores attention and reduces stress
- Children more connected with nature tend to be more protective of nature
- The concept of nature may hold a range of meanings
- Play, specifically “active play” have many benefits for children both physically and mentally
- We can create great nature play sites by using the natural environment and play equipment providing physical, social, cognitive and create development for children

