

S P R I N G 2 0 1 6

Natural Playscapes for Children

A guide to creating the ideal playground for your school



About this document

This guide is prepared by the Golestan Colab with the purpose of helping and inspiring schools and educators in designing their outdoor spaces

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What are natural playscapes?

The natural playscape (or natural playground) is defined as a space with as little man made components as possible. Using native plants, rolling hills, and trees, playscapes represent a natural space to explore and learn, much like in a forest.

Playscapes are designed with the intent to bring children back to nature so that they may experience the wonders of adventure, discovery, and physical awareness – among many many other important things.



The playground here uses natural elements like tree logs and rocks to create a landscape that allows for children to climb, balance, jump and navigate uneven surfaces.



Why create natural Playscapes?

There are many benefits to creating a natural playscape. Here are some of the benefits gathered from various resources:

- More creative play: Natural playgrounds offer more space for creativity than pre-built/plastic play structures because they are open-ended and unstructured, allowing the children to develop their imagination and make use of their resources in creative ways.
- Increased participation rates and decreased absenteeism, decreased bullying, decreased injury rates, increased focus and attention span and help with social skills in schools (Fjortoft 2000, Wells, 2000 and Malone, 2003).
- Increase in children's level of physical activity and motor ability (Fjortoft and Sageie, 2000).
- Benefit mental and physical growth of children: cognitive development, focus, attention span and social skills are all improved (Wells, 2000 and Malone, 2003).
- Provide a foundation for environmental stewardship.
- Improve motor coordination.
- Enhance emotional coping and reduce stress.
- Foster more environmentally conscious attitudes and behaviors in adulthood.

Safety: Natural Playscapes vs. Traditional structure based playgrounds

There is an emerging belief that children suffer more injuries in “safer” environments because they take more dangerous risks. Overly baby proofed homes are resulting in children that are unable evaluate risks and proper limits, both inside the “safe” environment and outside in the “real” world.

Now that more data is available on child safety and development, it is becoming increasingly popular to use boulders, gravel, tree trunks and all sorts of other natural materials in safe playscapes for children as young as toddlers.

Playscapes are designed to eliminate fall heights while providing children the opportunity to climb and jump from varying topographies. They have rolling hills and fallen logs rather than a central play structure with monkey bars, for example and have been found to have much lower injury rates than standard playgrounds (Fjortoft and Sageie, 2000). By eliminating fall heights playscapes offer a safe alternative to conventional play structures while increasing gross motor development and conditioning.

Playscapes have a fraction of the number of child injuries compared to standard playgrounds with play structures. The most frequent injury to children on playgrounds is a fracture of the upper limb resulting from falls from climbing apparatus's (Fissel, 2005). The second most common cause of injury to children on playgrounds is falls from slides (Fissel, 2005).



Source: Chambanamoms.com

Even though rocks have sharp edges it is good to have these large boulders in a playground. They teach children to avoid danger and develop healthy risk aversion. Boulders, like the one pictured above, also allow for good worktables where kids can participate creative activities.

These natural playgrounds mitigate the risk of fall height by using topography changes for children to climb and experience changes in height much like in the natural world.

"Risk management is an important life skill, and risk aversion in playgrounds is unhelpful in the long term." Gill Tim (2007). Tim Gill studies child development and the over-protective bias in provision for children, particularly in playgrounds. Mr Gill observes that when playgrounds are made of padded materials, children often take more unmitigated risks. Conversely, children that play in an area with uneven surfaces and hard edges are better able to learn to interpret the complexity and signals of their environment while engaging and exercising their bodies and their brains.

The biggest drawback of traditional playground structures is their lack of flexibility and transformability; the children cannot design or rearrange their playspace to adjust to their gross motor needs. Natural playscapes that don't have fixed structures provide for more creative input and transformation. Dynamic parts also promotes creativity and problem solving for children, while large heavy pieces help children participate in collaborative projects that provide the opportunity to build core strength.



Source: earthwrights.co.uk

The above structure is made of natural materials that are dynamic and allow for the “structure” to be continuously re-arranged.

Guidelines for developing effective playscapes:

A well-designed playscape is multi-purposed and should have different components and “zones”. Five of the essential play zones are:

- Nature zones: Although the entire playground is a nature based, certain zones can be designated for closer contact with nature like a vegetable patch or flower garden, a dirt and worm pit, bird baths and bird feeders.
- Active play zone: These zones provide adequate gross motor activity such as running, jumping, sliding, climbing, swinging, and playing ball. Open spaces are needed for the active play zones
- Adventure zone: You can create adventure zones by providing rich opportunities for construction and building dynamic obstacle courses: building blocks, lumber, old tires, etc.
- Quiet play zone: Quiet play zones are the opposite of active play zones. These spaces are suitable for kids who want to play calmer games like: pretend play, outdoor painting, clay, drawing with chalk- this space should include art materials and work area or tree stumps and logs to be used as work spaces
- Quiet retreat zone: A quiet retreat zone is a safe and calm space for kids to retire to if they want a break from over stimulation, time for reflection, or simply to have some alone time. These spaces can also be used for reading and storytelling. It can offer attractive niches and small sitting areas in secluded and shadier spots.



Source: Golestan Kids

A little hut like the one above can be a lovely quiet retreat zone or a quiet play zone.

Native Materials

Using material that is native to your region is important. They are more sustainable and will endure in all weather conditions.



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Pathways

Pathways help to transition from one play area to the next while the uneven surfaces support gross motor development. They can also be playful and fun.



Esthetics

An esthetically beautiful playground awakens the sense of wonder and joy and appreciation for nature's beauty. Things that help promote beauty are: not overcrowding a playscape, flower gardens and decorative trees, use of harmonious materials, use of natural colors (no artificial bright colors or materials).



In the above landscape they have used a combination of stone, gravel and grass to create separate spaces. The general feeling of the space is also esthetically beautiful.

Recycled materials can be decorative & beautiful, while flowers bring beauty and wildlife.

Gardens

A garden is an essential part of an effective and inviting playscape: children nurture growing plants from seed to harvest, they learn the importance of responsibility by tending to the garden, it surrounds them with beauty and bounty which is both calming and rewarding, and it attracts wildlife (birds, insects, squirrels...). A working garden also encourages teamwork, the development of empathy for all living things, and a greater understanding of environmental stewardship – our role in appreciating, nurturing, and preserving the world we live in.

Another benefit to a working garden is that children tend to enjoy eating vegetables when they've participated in growing them.



Water

Being near water reduces a person’s heart rate, respiration and blood pressure. In addition to its calming influence, water seems to heighten the senses” (from a Child’s Garden). Integrating water in the playscape can be as easy as having a large bucket of water available for play. Other ways are adding ponds and fountains.



Source: Golestan Kids



Source: Golestan Kids

Being near water and playing with it helps lower heart rate and respiration. It is soothing and solacing and there are so many different way for kids to play with it, like painting walls with water:



Source: play-scapes.com

Above is a flexible and hands on way of integrating water into the playscape, where the kids have the opportunity to shape their environment themselves.

Loose parts and rearrangeability

Loose parts are an essential aspect of an effective playscapes because they allow children to manipulate and play with their environment which helps develop their creativity and problem solving skills. Loose parts can include but are not limited to: lumber, tires, fat ropes, bricks, wooden blocks, dirt, shells, river rocks, sticks, leaves, pinecones...

Core strength and muscles:

It is good to have heavy materials available for children to play with. Rolling or moving heavy materials like tires and wooden logs, help children develop core muscles and strength. Naturally light plastic materials do not have these benefits.

Slabs of wood and benches



Source: Golestan Kids

Slabs of wood and benches create versatile zones for art and creative play: (photos from Golestan playground)



Source: Golestan Kids

Tires

Tires are a very versatile loose part to use in playscapes. Moving them around helps develop core strength. They are re-arrangeable and thus allow for creative play as you can see in the photos below from Golestan



Source: Golestan Kids



Source: Golestan Kids



Source: Golestan Kids

Bins and Baskets

Have bins designated for loose parts to keep the play area from looking too messy while helping the children to learn responsibility – they should all participate in cleaning up at the end of playtime.

Haystacks

Haystacks are a seasonal element to add to playscapes. They can be arranged and rearranged to provide changing heights and also mazes and quiet nooks, while also helping the children develop core strength.





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Sounds

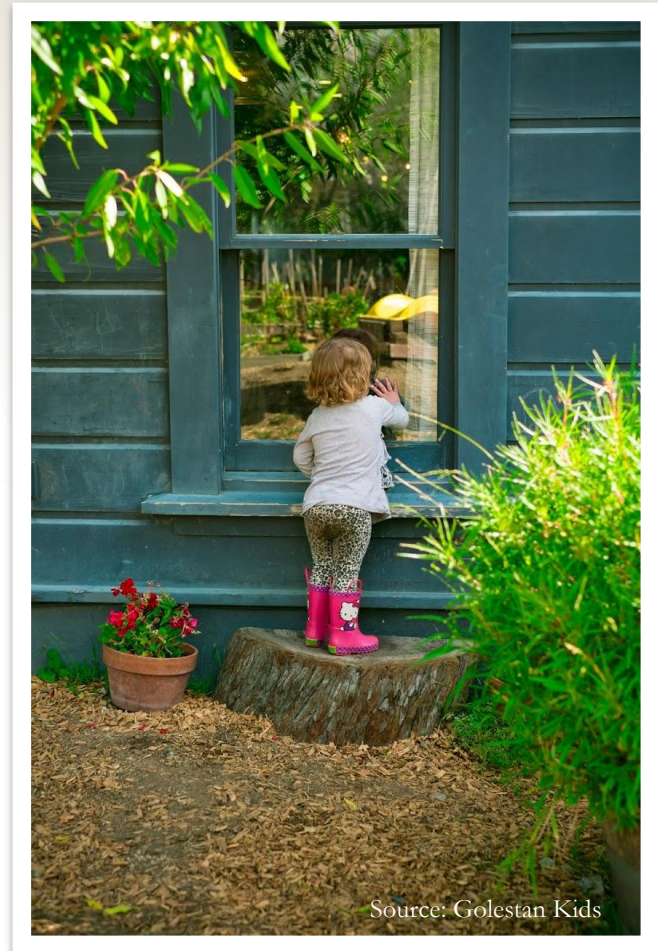
You can bring music and natural sounds into the play area by using wind chimes, makeshift instruments, even singing...



Guidelines for Plant Selection

(Developed by Moore (1993))

- Vary the form, size and shape of plants. Some should be kids sized and others huge.
- Use of native plants is also suggested. They are hardier than important plants and they provide food and shelter for local wildlife.
- Select plants that change with the seasons.
- Select plants for fragrance
- Avoid plants with poisonous parts.
- Select plants that produce fruit, flowers, cones and seeds to attract wildlife such as birds, squirrels, butterflies, and insects.



Source: Golestan Kids

Resources: Books



- Nature and Young Children: encouraging Creative play and Learning in Natural Environments (Ruth Wilson)
- Asphalt to Ecosystems (Sharon Gamson Danks)
- A Child's Garden (Molly Dannenmaier)
- Last Child in the Woods (Richard Louv)