

What makes a good play area for children?

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Playgrounds provide space and structure for children's socialisation, imaginative play and physical activity. However, not all playgrounds are created equal, and it seems that adult designed spaces are increasingly unsuccessful in meeting children's needs or expectations in relation to outdoor play. This brochure summarises playground characteristics most enjoyed by children and those which encourage socialisation, imaginative play and physical activity.

Function

Playgrounds should encourage physical activity, social interaction, creativity and problem solving as well as contact and interaction with nature.

Promote physical activity

Encouraging active play among children may help combat rising childhood obesity levels¹⁻⁴, promote emotional well-being, positive mood, resilience^{4, 5} and enhance the learning process⁶. Redesigning playground equipment in the school environment has been shown to increase children's moderate to vigorous physical activity, particularly for less active children⁷⁻¹⁰.

Encourage social interaction

Play is an important mediator for developing social skills^{4, 11}. Through play, children learn skills such as sharing, negotiating, leadership and empathy^{11, 12}. These social skills are important because they improve self confidence⁴ and reduce the likelihood of bullying¹³. Play is also important in the development of language comprehension and production. In a child's early years, symbolic play (play reflecting real life social scenarios) is positively correlated with language acquisition^{14, 15}. Play settings not only provide social opportunities for children, but also improve social cohesion between families and community members^{4, 16}.

Support creativity & problem solving

High-quality play experiences contribute to children's cognitive development^{4, 17, 18}, indeed evidence indicates that children who do not engage in high-quality play may have diminished cognitive abilities¹⁷. Play promotes problem solving, creativity and initiative and can increase a child's ability to concentrate; skills important later in life⁴. In younger children, play is also important for improving sensory stimulation; in adolescents, creative play is correlated with coping skills, indicating play helps develop flexibility towards problems^{1, 19}.



Figure 1: Teardrop Park, New York City children can play on rock formations, hills or in sand and water filled areas. The only constructed formation is a slide built in a rock^{1, 20}.

Encourage interaction with nature

Natural playgrounds have the additional benefit of providing children with more opportunities than typical pre-formed playgrounds to develop gross-motor skills (e.g. climbing)^{21, 22}. Contact with nature has been associated with a number of health benefits for children, such as improved cognitive function, increased creativity, improved interaction with adults, reduced attention deficit hyperactivity disorder symptoms and reduced rates of aggression²³⁻²⁶.



Figure 2: Wombat Bend Playground, Melbourne.



Figure 3: School garden in pre-primary area.

Kitchen gardens are increasingly in popularity, this is not surprising with current research indicating that gardening can have a positive impact on student achievement and behaviour²⁷.

Form

Ideally, play spaces design needs to support the preceding functions.

Specifically, effective playgrounds;

- ❖ include natural elements (e.g. sand, water);
- ❖ supports that encourage interaction and socialisation;
- ❖ are highly accessible and cater to a variety of demographics and backgrounds;
- ❖ provide risk and challenge, however are safe and free of hazards;
- ❖ have pleasing aesthetics;
- ❖ stimulate children's imagination and creativity; and
- ❖ include space for active play.

Provide contact with nature

Children prefer and are more likely to use nature-based playgrounds (e.g. Teardrop Park) than typical preformed playgrounds because they perceive them as challenging and less boring^{21, 22, 28}. One study estimated levels of play for children and adults in barren areas is as much as 50% less compared to greener settings²⁹. Some research suggests that less managed play spaces are more appealing³⁰ and spaces designed by adults without children's input are increasingly unsuccessful in meeting children's needs or expectations in relation to outdoor play.

Over-landscaping of children's play areas may diminish active play options. Research has indicated that students from schools with "advanced" landscape features had higher body mass index values than students from schools with "low" landscape features³¹,

suggesting that children may be more active when there is less landscaping. Children often provide very positive comments about bushland areas within parks, even when these areas are not large (see Figure 4).

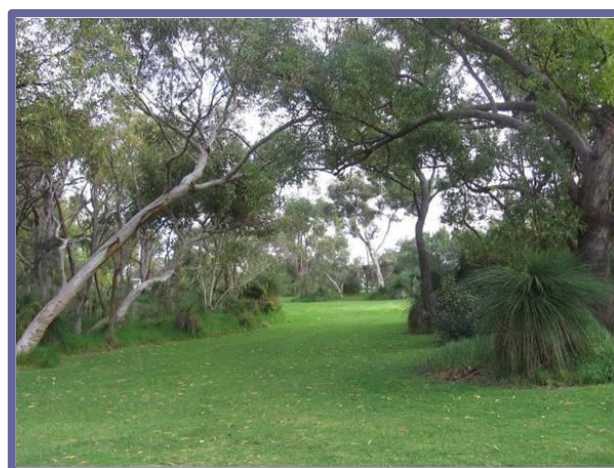


Figure 4: Noel Gannon Park, Duncraig, WA

'There are good cubby making trees and stuff. You get bored after a while on the playground, but in the bush you can make new stuff out of branches and leaves- which is fun.'

boy 10 years

'....it is a good hide and seek park and there are a lot of places to hide and everyone enjoys it. It has bushy areas that are good for cubby houses and if you get a really good area you can make a tree house. There are good places to hide so you can play a game.'

girl 12 years

'Forest—because you can do lots of stuff in there. You can get lots of logs and make really good stuff.'

Tessie³²

One study³³ reported the responses from schools about the impact of 'greening' their schools (by adding nature play areas and extra grassed play areas) in Canada;

- 50% reported that their grounds promote more vigorous activity,
- 70% reported more moderate and/or light activity,
- 90% reported that their grounds appeals to a wider variety of student interests,
- 85% reported that their grounds now supports a wider variety of play activities, and
- 84% reported there has been more exploration of the natural world.

Interaction & socialisation supports

A play setting should encourage children to interact. A Sydney study showed that an effective way of promoting creative play was to provide children with materials that had no 'fixed purpose' (e.g. boxes). This allowed the children to decide for themselves how the materials could be used¹⁹. An example of playgrounds that use this method are the Imagination Playgrounds in the United States. Children are provided with an assortment of loose materials and are encouraged to problem solve, cooperate and build things with one another³⁴ (see Figure 1).



Figure 6: Sand tube, Beaconsfield Primary School, Western Australia

Playgrounds with fixed structures can become boring for children, whereas loose materials are always changing.

'..you could spend \$15,000 - \$20,000 on equipment and within a couple of years they are not touching it again- because they have done it- and they have been there- and it's not as interesting'

Principal³⁵

'The playground at the park is pretty basic so we use it as a base for 44 home[a hide and seek game].'

girl, 12 years

High accessibility

Children are more likely to use play areas if they are situated close to their home^{36, 37} ideally within a 5 minute walk or 400m from the furthest house in the neighbourhood³⁸. In addition, parks should be situated away from high traffic density, evidence indicates this decreases the likelihood of adolescent girls travelling to the park and thus their physical activity participation³⁹. Zebra crossings and traffic lights should also be used where appropriate to make parks more accessible to children⁴⁰. While fencing and padlocking is used to prevent vandalism of play areas, it also reduces accessibility to children⁴¹.

Cater to a variety demographics & backgrounds

A play area should offer facilities catering to different age ranges. For example, younger children like to walk, play ball games, and play on the equipment, whereas older children prefer to play informal or organized sport games and socialize⁴². A playground should also aim to cater for different abilities by offering a wide range of activities⁴³. Physical barriers should be reduced through the use of ramps, suitable parking, shaded rest areas, good travel surfaces and easy access to amenities like toilets^{44, 45} and water. To reduce social barriers, activities should be provided that encourage interaction and cooperation. Facilities designed for special needs e.g. Braille signs should be spread throughout the entire park and not isolated to one area because this can facilitate further stigmatization⁴⁵. Figure 7 displays the South Perth Foreshore in Perth that isolates wheelchair bound children due to fencing.



Figure 7: The South Perth Foreshore, Perth incorporates a Liberty Swing (for children using a wheelchair). While a good facility, the swing is separate from the main playground in a fenced area creating further isolation of those with special needs.

Safe, but with some risk...

It is important that a playground offers a certain degree of safety because perceived safety influences the likelihood that parents will let their children play outside^{4, 46-49}. However, it is necessary that playgrounds still offer a degree of risk, otherwise children perceive them as 'unexciting and unchallenging'⁴⁸, which decreases the likelihood they will use the park and therefore decrease their levels of physical activity⁴⁹. Providing children with risk is also important because it is by being exposed to risks that children learn how to assess and manage risks e.g. Berkley Adventure Park, Figure 8. This not only teaches them skills they will use as adults, but builds resilience, adaptability and self-confidence^{50, 51}. 'Reasonable risk' is a term now being used by groups such as Kidsafe and Scouting Association.



Figure 8: Berkeley Adventure Park, Berkeley: children build forts, boats and towers using real hammers and saws, but the injury total is surprisingly low. Operators attribute this to no hidden risks and children are forced to assess the possibility of risk thus play safer⁵².

A Sydney study confirmed these benefits when new playground material was provided to a group of 5-7 year olds. Although no injuries occurred, teachers perceived there to be an increase in risk with the addition of the new material. This highlights a need to address the over-zealous concerns about risk from both teachers and parents so that children can experience the benefits of being exposed to some risk¹¹.

When asked if there was play equipment they would like to play on but were not allowed children responded:

'The trees, yeah the trees, climbing trees and the swings, you're allowed to play on them but you're not allowed to do crazy stuff.'

'You're not allowed to do crazy stuff on the swings'

'But we do. When the teacher's not looking we do it.'
Year 6 focus group³⁵

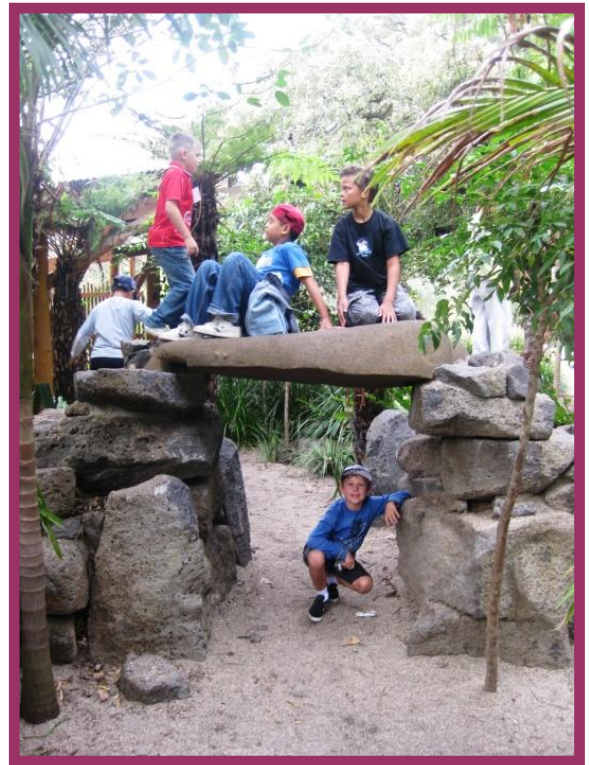


Figure 9: Botanical Gardens, Melbourne
..children learning risk assessment and management.

Aesthetically Pleasing

Children prefer clean and attractive environments when playing outdoors³⁶ and aesthetic factors appear to influence whether parks are used and the associated physical activity of children⁵³.

'The park is well looked after- there is not much rubbish in it.'
boy 10 years



Figure 10: Botanical Gardens, Melbourne...
children enjoying the stream and bridge.

Stimulates the imagination and creativity

Incorporating features to stimulate children's imaginative and creative play are key components of an effective playground³².

Children prefer and use playgrounds with high degree of challenge, novelty and complexity⁵⁴ and a modifiable and malleable environment offers more environmental stimulus⁵⁵. Sensory stimulation can come from a variety of sources; touch, sight and sound- some play areas have been developed to incorporate musical sounds (see figure 11); nature can also provide sensory stimulation (see figure 12).

'Well chasey is fun, but if there was better things we would have more options and we wouldn't have to play chasey all the time.'

Year 4 focus group³⁵

'when I go on it I like to run to the horizontal bar in the middle and jump off. You could also pretend it was an old, rickety bridge over a boiling cavern of lava

Beaconsfield Primary School



Figure 13: Musical instrument designed by Kidsafe NSW, Playground Advisory Unit.



Figure 13: BaekeSchule kinder, Berlin

Space for play

Increasing evidence points to the importance of sufficient play space for children, particularly for supporting greater physical activity⁵⁶.

Specifically, grassed space is supportive of higher moderate- to- vigorous physical activity³⁵, and it is necessary to ensure that park and play areas are large enough to accommodate sports and play activities. This is particularly important in schools that need to accommodate high numbers of children using the grounds during the school day.

'It is really big and there is lots of grassed area to play on.'

boy 10 years

Oval, because it's really big, you can do lots of things.

Charlie, Orana school

'There's basically only five girls that play [skipping]'

'Yeah we like skipping'

'And there's no room on the oval for them [girls]'

'Yeah cause like, because one half all the boys are playing football and on the other half they are playing soccer.'

'And you can only move around the edges.'

Year 2 focus group³⁵



Figure 14: Expansive oval, Glengarry Primary School, Western Australia... suitable for their 300+ students to play sport, tag or just run around during breaks



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