

# The Good Play Space Guide: “I Can Play Too”





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# Minister's Message



The State Government is committed to building stronger sport and recreation environments which are inclusive of and accessible to people of all abilities.

Through the Access for All Abilities (AAA) Program, the State Government is supporting local communities to build the capacity of the sport and recreation sector to provide participation opportunities for people with a disability, including the play space environment.

Since 2000 the Victorian Government has contributed more than \$4.4 million towards the construction of 88 play space projects through the Community Facility Funding Program. This level of commitment demonstrates the value of play spaces to Victorian communities.

There are many benefits for children through participation in play. They learn about themselves, other people, roles, society and their environment. Good play spaces can facilitate this development.

The Victorian Government promotes accessibility to play experiences for all children in the planning, design and construction of play spaces.

Sport and Recreation Victoria together with the Playgrounds and Recreation Association of Victoria initiated a project with the aim to ensure key stakeholders are aware of the importance of the benefits and opportunities of incorporating 'access for all' to play experiences in play spaces.

Within this context, I am very pleased to present The Good Play Space Guide, a resource which will assist in understanding accessibility in play spaces, and guide the planning, design, construction, maintenance and management of play spaces. It will be a valuable resource for all organisations committed to inclusive sport and recreation environments for people of all abilities.

A handwritten signature in black ink that reads "James Merlino".

**James Merlino MP**  
Minister for Sport, Recreation  
and Youth Affairs

# About this Guide

The Good Play Space Guide is about play and its benefits for everyone.

Many children and adults who have a disability are not able to use public play spaces for a variety of reasons.

The purpose of this guide is to examine the reasons why play spaces can limit access to some children and identify how improvements can be made to increase participation by all children in play.

This guide helps providers meet the needs of parents and children through the planning, design and management of accessible play spaces.

It is intended primarily for providers of public play spaces, and is largely aimed at local government, although some information may be helpful to providers of supervised spaces, schools and early childhood centres.

The guide aims to:

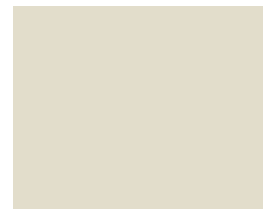
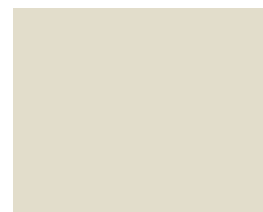
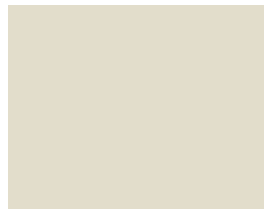
- outline the benefits of play for all children, and discuss the general characteristics of quality play spaces;
- investigate the subject of access, inclusion and participation in play for people with a disability, in public play spaces;
- demonstrate what makes a play space accessible, and what improvements might be achievable; and
- provide guidance on how to develop accessible public play spaces.



# Planning for Accessible Play



# 1. The benefits of play



All children need to play. All children have the right to play. When children play they are not just filling in time, they are learning to interpret their world.

Play facilitates the learning of life skills, and for this reason, the provision of quality outdoor play spaces is vitally important in local communities.

Through play children develop the qualities necessary in adulthood, such as:

- problem solving;
- independence;
- self awareness;
- creativity;
- resilience;
- spatial knowledge; and
- flexibility and ability to deal with change.

Play is a vehicle for self-expression and social interaction. It is often described as active, spontaneous, free, self-generating, purposeful, voluntary, fun, exploratory, and intrinsically motivated.

Play provides important motivation for children to become active, engage with others, extend themselves and adapt and learn skills.

There are many physical, social, cognitive and emotional benefits which accrue from play, and these are just as significant to a child with a disability as they are to all children.

Play is a critical part of growth and learning, and provides the opportunity for a child to reach their individual potential.



*A child is naturally curious*

## 1.1 Types of play

Play is discussed in this guide according to developmental areas. This approach is chosen to highlight the many ways play contributes to children's development.

In terms of accessibility, it is important to recognise that children with disabilities may vary significantly developmentally from children of the same chronological age. Also, children with disabilities may be very capable with respect to some developmental areas and not so capable in other areas. A typical approach to categorising play according to developmental areas is:

- **physical or active play:** all kinds of physical movement and motion including climbing, balancing, hanging, running, swinging, and rocking.

# 1. The benefits of play

- **cognitive play:** using the imagination, ordering, categorising and manipulating objects to construct or create, sensory experience, and problem solving.



- **social play:** experiences which involve another child or a group of children, often involving games of the imagination, dramatic role play, rules, and creative or physical activity.

While a developmental approach is used in this document, it is useful to note that play may also be categorised according to the following criteria:

- the materials/equipment used (e.g. waterplay, sand play);
- the social aspects of play (e.g. solitary, associative, cooperative);
- the setting of play (e.g. indoor or outdoor); and
- symbolic aspects of play (e.g. imaginative, dramatic play).

Agencies responsible for play spaces should remember that play has many dimensions. Play is not only physical, and play spaces are usually only the means to an end for children who use imagination and a range of other skills to create their own 'play experience'.

This is particularly important for encouraging participation by children with a disability, because while some children may not be able to swing from monkey bars, they may be able to participate in games of the imagination, role play or with creative elements.

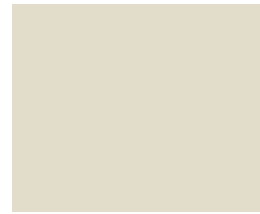
For more information about how to design for different types of play see *Section 4: Play behaviour and play spaces: effective design for maximum participation.*



*Enhancing play opportunities by providing elements that can be manipulated*



# 1. The benefits of play



## 1.3 Playing with other children

Playing with other children (or being with other children at play), can provide major benefits for all children. These include:

- modelling behaviour;
- a sense of social belonging;
- enjoying laughter and fun; and
- developing the skills necessary to play.

For children with a disability, these benefits are especially significant because they enable the development of other skills and encourage further activity.

If children with a disability are able to participate in play with other children, all participants can develop an understanding of the full spectrum of human abilities. These experiences powerfully shape children's tolerance to difference, especially when positively interpreted by adults.<sup>iii</sup>



Opportunities to play independently and without the presence of an adult can be rare for children with a disability, but are no less important for them.

An accessible, inclusive environment makes it safer and more feasible for children to assist another child, reducing the need for adults to be constantly present.

## 1.4 Why provide play spaces?

Local government provides play spaces because the community values the benefits which come from play and recreation.

Councils and other organisations also recognise that in increasingly urban environments children's access to free play are rapidly shrinking.

There is also growing concern in the wider community about childhood obesity and other health and social issues. As play is integral to growth and learning for human development, providing play spaces assists children to fulfill their potential as individuals.

For many children, designed environments are their main opportunity for outdoor play. This provides an increased responsibility for local government to ensure they provide supportive play spaces which reflect the needs of all children.



## 2. Providing quality play spaces

There are three essential factors which determine successful public play spaces:

- play value;
- accessibility/inclusion; and
- safety.

A play space is more likely to be successful if all three factors are considered together. Through use of materials, structures and the environment, children gain more value from their surroundings.

Quality play spaces offer:

- an accessible environment which supports inclusion and participation;
- choices in the types of activities that interest children of a range of ages and developmental stages;
- cognitive and imaginative play opportunities as well as physically active play;
- opportunities for people to meet and play together;
- sensory qualities which provide interest to children;
- a comfortable physical environment (shade, possibly shelter, winter sun);

- risk and challenge, as well as a reasonable degree of safety;
- a combination of built and natural elements (i.e. cubbies amongst vegetation, sand, logs), and spatial qualities which enhance activities (i.e. partial enclosure, or a sense of elevation);
- a balance between fast and slow; light and shade, loose materials and fixed equipment, noisy and quiet spaces, smoothness and texture, enclosed and open spaces, opportunities to move up and down; and
- amenities which are easy and comfortable to use.



## 2. Providing quality play spaces

### 2.1 Elements of play spaces

In any environment, both the degree of inventiveness and creativity, and the possibility of discovery are directly proportional to the number and kind of variables in it.<sup>iv</sup>

Children derive pleasure and satisfaction from engaging with their physical environment in many different ways. Some of the things that stimulate play may be purpose-built play activities such as sand diggers, climbing equipment, ball courts, cubbies or swings. Other things which stimulate play may be interesting spaces or surfaces that suggest particular games, or encourage activities such as rolling, hiding or running. Alternatively play can be triggered by vegetation, sand or loose materials that invite building, collecting or creative/ imaginative play.

The wider the choice of play elements, the more likely it is that a child will find something in a play space they can enjoy.



Most play has:

- **a physical element:** what the child is physically doing, where they are doing it, and what they are playing with;
- **a symbolic element:** what game the child is actually playing in their head, and
- **a social element:** who they are playing with, if they are not playing alone.

As play providers, local councils usually only have influence or control over the *physical* environment<sup>1</sup>. A key aspect of this guide is the link between the physical play space and the play which takes place there, and how children with a disability can participate in that play.

### 2.2 Access and inclusion

Inclusive communities are those where all people are equally valued and have the same opportunities for participation.<sup>v</sup> A culture of inclusion implies an environment where all people are welcome.

In an inclusive environment all children are given the opportunity to develop their skills, interests and abilities and are supported to reach their full potential.

Universal design means that environments, services and products are useable and accessible for people of any age and ability. Universal design improves the quality of life for everyone. Conventional design caters for the 'average' person, while universal design recognises that people have a range of capabilities.

<sup>1</sup> unless the play spaces are supervised, or have leaders.

## 2. Providing quality play spaces



### Access, inclusion, participation, equity, and dignity

The following points describe how a user of a play space might define each term.

#### Access

- Able to physically get there from the street and from the car.
- There is seamless access to the main activities and through the space.
- There are contrasting elements and landmarks that help me find my way around.
- There are manageable grades at level changes.
- There is enough headroom to fit underneath.

#### Inclusion

- Welcomed by signage and details that make me think others want me here.
- Able to be included with everyone else, although I might not be able to do what others can do.
- There is space for me at tables and drinking fountains and in swing seats and at things that move.

#### Participation

- Able to take part in activities alongside and equally with everyone else, and do them to the best of my ability. I can:
  - reach movable items, and main points of interest;
  - get my knees under counters, tables and the like;
  - use gadgets; and
  - choose what I can do and where I can go.

#### Equity

I am:

- able to use the same entrance as everyone else;
- able to sit where everyone else sits, next to my friends;
- not excluded by the design; and
- able to play with other children in my neighbourhood just like they can.

#### Dignity

I am:

- not made to feel uncomfortable and that all attention is on me, or that anyone has to make a fuss to let me do things;
- able to go to the toilet in privacy, and have my pants changed; and
- not made to feel embarrassed.

## 2. Providing quality play spaces

### 2.3 Safety

#### Safety and risk in play spaces

Feelings of safety, and conversely of risk or danger, are very subjective. People respond to hazards very differently. Although many hazards to children are physical, parents are also conscious of social risks and undesirable behaviour which could put their children at risk. For some children there is considerable challenge in touching something new, or in engaging with new people.

Playgrounds have many inherent physical challenges which pose risks to some users. As challenge is a crucial element in play, the elimination of risk-taking is highly undesirable.

Risks and challenges are necessary for children to test their abilities, to learn new skills, and to experience a sense of adventure. Opportunities for risk-taking in unsupervised play help build self-confidence and resilience, which are two key protective factors for mental health.<sup>vi</sup>



*Some children can climb anything.....*

#### Graduated challenges

A play space should have risk and challenge and allow new things to be encountered. This enables a child to experience adventure and learn new skills, including adaptability and resilience.

As danger relates specifically to developmental age and ability, some specific areas/or pieces of equipment may be designed to target a specific age or ability group. However, these would generally be sited in conjunction with facilities and setting attributes that appeal to a range of users.

The principal age group categories should be the same as those used in equipment design, on the basis of ergonomic and typical skill differences. Age group categories are:

- under three years;
- three to seven years (which can be broken down to three to five years and five to seven years to reflect the way they visit play spaces);
- eight to 12 years; and
- 13 years and over.

As the range of abilities in any population will be wide, graduated physical challenges should be provided (where a child is able to try out things at a level they feel safe with). This ensures that challenge is not inadvertently designed out to meet accessibility objectives.

## 2. Providing quality play spaces



Children of varying ages and abilities need to be able to find the right degree of challenge in the physical environment, but should not be exposed to undue danger which they are unable to deal with.

Dangers are risks which cannot be overcome by learning or through experimentation, because they are beyond the physical and perceptual abilities of the child.<sup>vi</sup>

'Hidden' dangers place a child at risk of injury because they are unable to perceive the hazard in advance.

Variation in cognitive, physical and perceptual skills affects the ability of children to avoid injury. Very young children are frequently placed at risk because their inherent curiosity and sense of adventure may lead them to situations where they are exposed to danger, through climbing, running or exploring.

Children with a disability may also be vulnerable to similar hazards. At the same time they are often over-protected from opportunities to learn to deal with risks and challenges themselves.

### 'Positive' challenge

Children need to be able to make deliberate choices to undertake particular challenges, and have access to graduated challenges which motivate them to have a go.

Some challenges encountered in play spaces make a positive contribution to children's learning of new skills. These include:

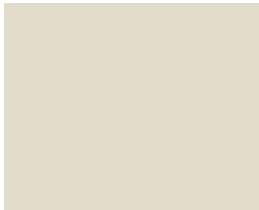
- learning to deal with various types of movement;
- activities which require particular cognitive ability, strength, endurance, skill or size be able to undertake them;
- learning to deal with increasing height; and
- learning to touch unfamiliar textures or to explore a complex space.

### Unacceptable risks

There are other types of hazards or dangers in play spaces which do not contribute to play or to children's development or learning. These include timber that splinters, sharp protrusions, crush points, entrapment, hazardous ground surfaces and trip hazards. Inherent design faults can also be hazardous such as poorly placed swings where children can run across their path.

Fortunately, most of these hazards are well known and easy to prevent. Compliance with current Australian Standards for Playgrounds makes it less likely that children will be exposed to these kinds of dangers. For a list of current playground safety standards, see Attachment one.

## 2. Providing quality play spaces



Children using mobility aids, or children who have limited muscle control or an intellectual disability, can be exposed to higher risk in play spaces due to their inability to perceive a hazard, or to avoid hazards.

While the Australian Standards for Access and Mobility do not apply to play spaces, and were not prepared with play spaces in mind, they do contain information that is useful in thinking about the accessibility of play equipment and spaces.

Due to the risk of UV radiation exposure in outdoor play spaces, it is also desirable to create well-shaded play spaces.



*Natural shade*



*Shade structure*



### Unintended access to hazards

When developing play spaces, planners and providers need to be aware that in trying to provide challenges for some children, and catering for all ages and abilities, there may be instances where a child can reach heights or openings which present a hazard to them.

There is a need to assess risk to unintended users: the toddler, or the child using a mobility aid who can now reach the top of a deck via a ramp that may fall through a wide opening. There is also the risk of misuse, where a child on a bike can reach the top of a high slide.

These challenges are not difficult to overcome if they are addressed early on. However, they should not be used as an excuse to avoid providing challenges in a play space. For more information about design issues and solutions, see *Section 6.2: Ramps*.

# 3. Planning and upgrading play spaces

## 3.1 The value of planning

Before undertaking any detailed design of a play space, it is important to look at the network of play spaces within a municipality, and determine whether they provide a diverse set of opportunities for children and parents.

Understanding the play qualities and accessibility offered by each space ensures better decisions can be made about priorities for development and available resources.

A strategic approach to planning ensures sites are used to their best advantage and the needs of residents are met, while avoiding duplication and over-investment in the wrong places.

This approach can also help councils decide how to make existing play spaces more accessible to a wider range of people. Likewise, if access issues are considered from the outset on new projects, costly rectifications will not be needed down the track, saving money and time.

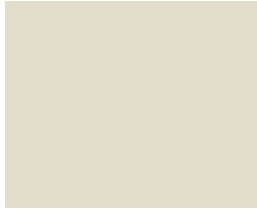
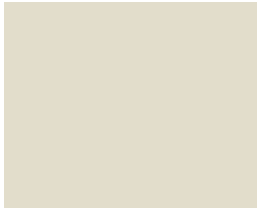
Decisions about play spaces should also take into account the safety and condition of existing facilities, how they contribute to the network of play spaces, and which if any facilities need to be removed, modified or replaced.

### Planning steps

There are a number of steps involved in planning for more enjoyable, accessible and safe play spaces. These include:

- assessing existing play spaces across a municipality including their distribution, adequacy, character, and degree of accessibility;
- establishing a framework for future provision (i.e. find a balance between what is needed and what is manageable and affordable);
- establishing a budget which recognises not only the cost but the value of play spaces and ongoing maintenance;
- involving local residents and stakeholders;
- identifying a clear vision of the function and objectives for individual spaces;
- selecting a site using some clear criteria;
- designing and constructing the space;
- managing the space - monitoring and maintenance; and
- marketing the space and distributing information about available opportunities.

# 3. Planning and upgrading play spaces



## 3.2 Providing diverse play spaces

It is not practical to provide a full range of services and facilities at every play space. Play spaces need to vary in size, play value and degree of accessibility because they are designed to serve different types of users travelling varying distances to meet different objectives. Differences may also exist due to the history of each play space and the level of resources available for development.

The nature of planning and the scale of development and community consultation should generally be in line with who the space is designed to serve and how far people are likely to travel to get there.



*Smaller spaces in local areas*

Regional or 'destination' play spaces tend to serve a wider catchment than local play spaces and provide for longer visits. They generally offer car parking and more specialised equipment or features to provide for a wider range of abilities and age groups. They also attract larger numbers of people who stay for longer periods of time, and often need to include picnic areas, toilets and change facilities which cater for children and adults with a disability.

### Regional or local?

Large regional play spaces are important as special places for family outings and occasional visits. However, local or neighbourhood play spaces which are accessible to children from home may be more significant in children's lives because they visit these spaces more often. These are also the spaces that many children can learn to use independently.

Investing in quality and accessibility at a local level makes a big difference to the lives of many children, particularly those with a disability.

There are many factors which influence whether a particular space is suitable for development as a play space. These include: the location of the park; its size and other characteristics; the type of space; and the catchment it serves.



### 3. Planning and upgrading play spaces

In addition, site selection criteria are different for a regional play space in comparison to a local neighbourhood play space. In general, a regional play space should be:

- prominent;
- free to access;
- central to the population it serves;
- positioned strategically in relation to other similar facilities;
- accessible via public transport; and
- served by a shared pathway.

The best play space sites are also likely to provide:

- a choice of seamless routes around the space and to the activities;
- enable parents and carers to support children playing;
- accessible amenities; and
- clear and logical relationships between activities.



#### 3.3 Establishing a vision for a play space

It is important to identify the role of the play space within the surrounding network of parks and other facilities. This is best achieved through a strategic plan for play spaces across a municipality.

It is also important to integrate the interests and concerns of the local community with the role of the proposed play space, and to develop a vision and objectives for the new play space.

This vision will guide management once the play space is built, and can be used as the basis for decision-making and future development.



*Caloundra City Council successfully achieved their vision for an accessible play space*

## 3. Planning and upgrading play spaces

### 3.4 Deciding on the degree of accessibility, inclusion and participation

There are varying degrees of accessibility in the physical environment. What is an 'accessible' space for one person will not necessarily be accessible to another. For example:

- Some designs that make access easier for some people create complications or even hazards for others.
- Some people have very specific requirements and these cannot always be met, especially in smaller local play spaces.
- Some 'access' solutions may be technically and physically accessible but don't encourage play, and may be inconvenient, segregating or undignified.

A key goal is to provide accessible play spaces that lead to social inclusion and participation in play by children with a disability.

Design improvements can always be made that will make a significant difference for many people.

Determining how accessible to make a play space is best done by thinking about municipal play spaces as a whole, and examining how each one contributes to a diverse 'package' of opportunities for the community. It is also important to determine if a particular type of play space is suitable for a particular location.

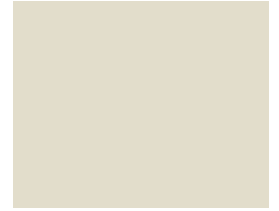
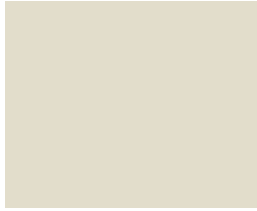
There is no one way to provide access for every person and there is no set of rules to make a play space accessible. The best outcomes will occur when decision makers have a high level of awareness about different abilities; have access to a wide range of information; and can use this information strategically in the context of a municipal plan for play.

#### What to aim for

When planning a new play space or modifying an existing one it is good to aim for:

- physical access to a choice of activities;
- opportunities for all children to join in socially with others;
- a range of accessible play activities and settings within a site and across a variety of parks, to maximise choice. This choice should include:
  - various types of movement possibilities;
  - different degrees of challenge and scale within the play activities (rather than a distinct age separation);
  - creative and sensory play;
  - opportunities that foster social interaction and imaginative/ role play;
  - artistic and natural elements; and
  - opportunities to manipulate the environment.

## 3. Planning and upgrading play spaces



### 3.5 Design stages

#### The concept

The design of most play spaces starts with a sketch or diagram indicating the relationships between activities and spaces, overlaid with an accurate site plan, preferably with contours or spot levels.

This is progressively refined and enhanced with more detail through various stages.

The degree of detail depends on the size and complexity of the project, the budget, and on how the play space will be constructed.

Sometimes play equipment manufacturers supply concept plans for equipment and these are approved for construction without the need for more detailed drawings. At other times a fully documented landscape plan is required.

#### Analysing accessible features during design

Once a concept has been prepared for a play space, it is important to ask the designer or supplier about the accessible features of the design.

Although it is not realistic that every play space is fully accessible to all children, the following features should be examined when designing play spaces:

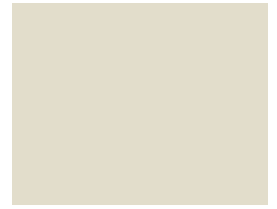
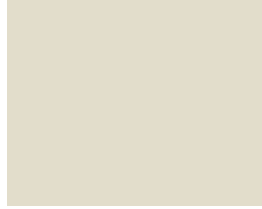
- safety and play value in general;
- accessible paths of travel into the park, to the playground, and to specific activities;
- how a child with a sensory or intellectual disability might use the space;

#### Access Advice

There is an increasing industry of people described as Access Auditors who can provide advice on how best to solve some of the issues concerning the provision of access in an urban environment. However, strict observance of Access and Mobility Standards can conflict with Playground Standards, and can often require very expensive solutions that add nothing – or even contradict – play value.

If there is an understanding about their areas of expertise, access *advisers* can be an asset to good play space design development. When engaged in this way, it is suggested that this expertise is most useful at the beginning of the planning process, so that planning and design can reflect their contribution. Their advice can assist with access to the play space, general amenities, and possibly movement through the play space. They may also assist in specific design solutions for particular points of interest.

### 3. Planning and upgrading play spaces



- activities that are accessible front-on from a wheelchair;
- activities that encourage social interaction, and allow children with a disability to have an opportunity to play alongside other children;
- connection between accessible elements of the play space at ground level and elevated elements;
- elements that can be manipulated by the hands, feet and even the head;
- how loose materials, natural elements and sound experiences can be accessed.

The way play spaces are designed sends a message to people about how welcome they are.

#### Design and construction

Design details need to be clearly conveyed to those constructing the works and not left open to interpretation. The most important details are those that affect:

- the play value and qualities of the space;
- the accessibility of the play opportunities; and
- safety.

Any special design details need to be clearly shown.

Access and inclusion should be considered from the outset at concept stage so that accessibility is not an expensive 'add-on'.

Problems may arise when there is a lack of understanding of accessibility issues by those constructing the play space, and when universal design elements have not been interpreted correctly.

Encouraging dialogue between designers and building contractors during the construction of a play space can avoid misunderstandings. Small details can make a big difference to the accessibility of a play space. Therefore, it is a good idea to:

- encourage the contractor to liaise with the design team during the construction phase;
- ensure the designer is able to brief the building contractor and 'walk them through' the drawing to identify critical details;
- invite the designer to undertake contract administration or regularly inspect works in progress to pick up any expensive mistakes.

Play space providers are required to ensure the design, construction and installation of a play space conforms to Australian Standards, and should provide the responsible authority with a written statement to this effect before the space is opened to the public.

### 3. Planning and upgrading play spaces

#### 3.6 Modifying existing play spaces for accessibility

In recent years there has been a trend across Victoria towards building large, 'all ability' play spaces that are accessible for a wide range of children.

However, for most Councils and communities, an equally important issue is what to do with existing playgrounds, many of which have been provided before there was widespread understanding of, or community pressure for, inclusion and access.

Faced with a number of existing play spaces that are inaccessible for some children, there are a number of options Councils can consider. These include:

- building one big accessible play space – before improving the accessibility and value of other spaces;
- addressing key issues across all play spaces (eg. providing an accessible path of travel to most spaces, adding more natural elements, or adding a new wing of equipment);
- identifying where the population of children with a disability live, and seeking to improve their key local spaces;
- identifying a package of key spaces (eg. all district play spaces) for redevelopment/retrofitting over time); and
- negotiating with schools to upgrade and use their playgrounds and incorporate them into Council's strategic planning processes for play areas.

Parents of children with a disability highlighted the following issues when attempting to access some play spaces. These included:

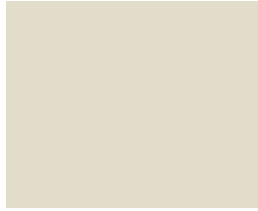
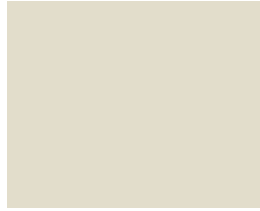
- not feeling welcome or belonging, and not being included in social activities;
- facilities not designed to include parents and carers;
- inappropriate surfaces;
- difficulty navigating or lack of 'landmarks';
- lack of accessible support facilities such as accessible toilets, change areas, seats, car parking, fencing and drinking fountains; and
- not being able to participate due to the design of equipment.

Priorities for parents of children with disability include: an accessible path of travel to the park and in and around the space; features or things to do that are designed to be usable, age-appropriate and enjoyable for children with a range of ages, abilities and sensitivities; and accessible amenities and support facilities.



*This play space is welcoming in its design*

### 3. Planning and upgrading play spaces



#### Opportunities when upgrading

Common reasons for upgrading an existing play space are that all or some of the existing assets are ageing, may be unsafe, or lack play value or amenity.

There are several opportunities for planners and providers when upgrading play spaces for accessibility. These include:

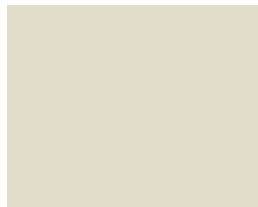
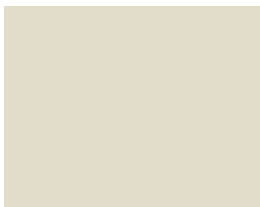
- enhancing the play value of the space for all children. Especially consider natural elements and loose materials as these are typically under provided in playgrounds, and provide these in an accessible way;
- including accessible paths of travel to and through the space, and providing access to any special activities that all children will want to enjoy;
- increasing social opportunities, and enabling a wider range of children to play together. For example, choosing items with multiple seats or places side by side;
- only modifying structures that are suitable and cost effective to modify; and
- retaining items and features that offer children good play value, are safe and valued by residents, even if they cannot be made accessible.

When considering options, it is important to consider the role of the space in relation to others, who it serves, how long people will stay, and the distribution of play spaces across the broader region.

Sites with the following features may provide considerable advantages and cost saving in terms of meeting a wide range of needs:

- existing accessible toilets;
- sealed pathways;
- some shade, drinking fountains/water supply and BBQ/ picnic facilities;
- minimal potential for conflict with residents/other users;
- a slope to enhance cost effective ways to reach elevated play opportunities;
- an absence of special heritage/ planning considerations that may prolong the planning process or compromise the design; and
- established vegetation for shade, amenity value and sensory exploration.

### 3. Planning and upgrading play spaces



#### The concept of 'reasonable adjustment'

When considering upgrading play spaces for accessibility, the cost effectiveness of these upgrades needs to be assessed in terms of the value of the play space, and what alternatives are available for local children with a disability. This is often called 'reasonable adjustment'.

Modifications are usually only worthwhile if:

- they are a better option than starting again;
- they can achieve multiple goals at once (i.e. improve social inclusion, participation, safety and play value);
- there is already considerable play value in the item or space to be modified;
- the modified area will provide long term value; and
- it does not compromise an existing feature that is highly valued.

#### 3.7 Consulting residents and stakeholders

Play space projects are more likely to succeed if families and other stakeholders contribute to the planning process, and are involved in meeting their own needs. Children's involvement is particularly valuable.

As people with a disability have very specific requirements, their contributions to such processes are vital.

The degree of consultation required for any project depends on the importance of the project, the sensitivity of the site, and the kind of information Council officers might be seeking. The best consultation processes are two-way processes that involve ongoing dialogue and mutual learning.

Effective community consultation offers the following benefits:

- a sense of ownership by the community;
- a better understanding by Council of the potential users' needs, and how to design for them;
- an understanding of the local context and culture impacting upon the space; and
- forming relationships that can benefit other projects.

Most consultation processes involve engaging a local community, through a variety of techniques (such as surveys and public meetings) or asking groups to publish a request for interested parties to become involved.

Input can also be requested from any of the following:

- disability support groups and peak bodies (e.g. Association for Children with a Disability);
- access workers;
- Access for All Abilities (AAA) Program providers;

### 3. Planning and upgrading play spaces

- MetroAccess and RuralAccess workers;
- services provided by councils (e.g. children's services, disabled parking scheme, respite care and community care services and recreation programs for people with a disability);
- local schools (including specialist schools); and
- early intervention services.

#### Involving children

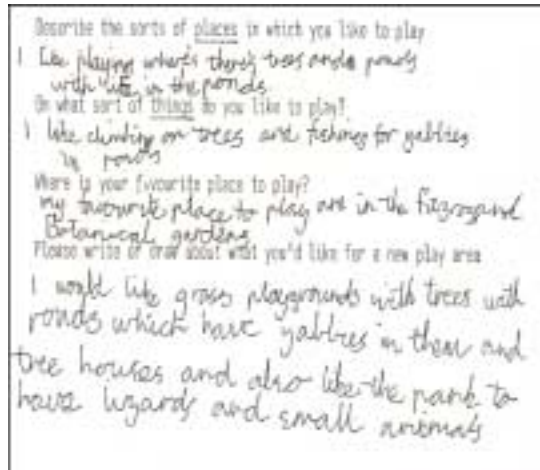
It is important to engage children in the planning and design of play spaces, wherever possible.

As the major users of play spaces, children have a wealth of experience and opinions. Watching children at play is another good way to find out what they like to do.

Engaging children in other ways is also valuable. Some children may be able to respond verbally or in writing or drawing, while others may prefer to construct their responses from a range of 3D materials such as clay, playdough or collage items.

Instead of simply asking what children want, it is sometimes more useful to ask:

- what they like to play;
- the kinds of spaces they like;
- what features and activities interest them; and
- what their siblings like to do, and what they like to do as a family.



#### Tips for consulting

Before designing or upgrading any place space, it is a good idea to collect information from the local community about the patterns of use of existing places, as well as specific needs and interests. It is preferable to use open questions such as:

- How do you or your family use the park at present?
- What kinds of activities would you and your family enjoy?
- Are there any particular themes that you think would suit the character of the park?
- Do you or your family members have any particular access requirements that would affect the design?

Questionnaires are useful when seeking feedback on a concept plan.

In addition, people can be asked if they would like to receive more information about a project or be invited to a public meeting.

## 3. Planning and upgrading play spaces

When running a public session to include people with a disability, material needs to be both visual and audible, and someone may be required to sign for those who are deaf or hard of hearing. In addition, it is a good idea to leave plenty of time for proceedings, to cater for people with complex communication needs.

### 3.8 Management of play spaces

After a play space is constructed, it needs to be marketed, monitored and maintained to ensure it continues to meet the needs of users. It is also a good idea to put aside a budget for minor improvements.

#### Monitoring

Maintaining open dialogue with key stakeholders and play space users is important after any play space is completed.

Monitoring a play space involves observing how the space is used, and talking to users about what they like and don't like. This can help identify any items that may need to be modified, or the kinds of activities that are missing and could be added in the future.

The best observers of play spaces are people who work in parks or use them. Councils are encouraged to involve maintenance staff in the monitoring and assessment of play spaces.

#### Marketing and promotion

Marketing play spaces to potential users is an important part of managing them.

Information which is readily available and accessible helps users make informed choices about how to get there, what to bring and how much assistance they may need. This information is particularly important for families who are looking for play spaces that meet their particular needs such as a play space with wheelchair access, a fence, or is suitable for toddlers.

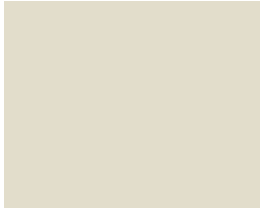
For many people with a disability, considerable effort is required to go out at all. For a trip to be successful and enjoyable, information about access, public transport and accessible facilities is very important.

Marketing material about play spaces should include:

- a brief description of the space and its major features;
- the address and a location map;
- classification/type (i.e. is it a regional play space or a local space?);
- proximity to public transport and shared trails;
- car parking facilities;
- whether the space is fenced;
- nature and accessibility of support facilities such as toilets, picnic shelters;
- suitable age groups; and
- nearby facilities such as a lake, boardwalk, ball play area or café.

If resources allow, a 'virtual tour' could be provided for very special spaces. For example, see [www.boundlessplaygrounds.org](http://www.boundlessplaygrounds.org)

### 3. Planning and upgrading play spaces

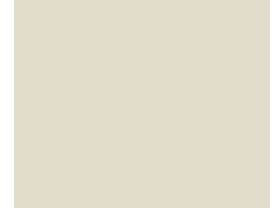


#### Ongoing maintenance

All playgrounds require ongoing management and maintenance.

Maintenance tasks include: regular inspections and cleaning; rubbish removal and repairs; graffiti removal; raking and topping up loose surfaces; mowing and maintaining garden beds and vegetation.

The more intensively a play space is used, the greater the need to budget for regular maintenance. For regional play spaces, inspections sometimes need to be daily at busy times of the year. Routine visual inspections should be supplemented by regular operational inspections and detailed annual inspections.



#### Managing risk

The concept of risk is often interpreted in terms of hazards or negative impacts. Organisations which manage risk effectively are more likely to achieve their objectives and do so at lower overall cost.

Risk management of play spaces involves the systematic application of management, policies, procedures and practices. All authorities responsible for play spaces are expected to operate in accord with relevant Australian Standards. See Attachment one.

# Design Issues and Solutions



## 4. Play behaviour and play spaces: effective design for maximum participation

The most effective play spaces are those which engage and stimulate children, and that they can access and move through.

Play spaces that provide settings for children (regardless of their age or ability) to play in different ways each time they visit, are extremely valuable. Such spaces may be small and simple or large and complex. For example, planting, sand, rocks, logs and other terrain are endlessly adaptable for many activities.



As mentioned earlier, play takes many forms. It is important for planners and providers to recognise that physical activity on play equipment is only one of many ways that children like to use their environment. This is particularly important for encouraging participation by all children. While some children may not be able to swing from monkey bars, they will be able to be included in imaginative play, role play or creative play.

Children use typical items or areas within play spaces for different purposes. An understanding of how play spaces are used helps planners and providers to address the difficulties some children face when trying to participate fully in play.

The following discussion is based around five key themes listed below:

- Mastering particular skills or challenges.
- Enjoying particular types of physical activity and movement.
- Experiencing the sensory qualities of the outdoors.
- Using the environment as a prop for play.
- Engaging in social play as an end in itself.

Each of these themes offers certain challenges for planners and providers in terms of maximising potential play value and learning, increasing participation by children of all ages and abilities, and minimising the risk of injury.

## 4. Play behaviour and play spaces: effective design for maximum participation

### 4.1 Mastering particular skills or challenges

The physical environment provides many challenges for children. Mastering a challenge can appear to be an end in itself. At other times, a challenge needs to be overcome in order to get somewhere, or to play with something else.

A child's sense of achievement and independence can be derived from:

- operating something successfully (cause and effect);
- completing a complicated sand castle or construction;
- reaching the top;
- making it to the end;
- maintaining balance;
- finding the way through a maze;
- completing a circuit; or
- doing it faster, higher or in a different way.

All children gain satisfaction from learning to deal with challenges and from developing skills as they get older, and this is a critical part of learning for life.

For some children it will be very difficult to ever achieve mastery over certain physical challenges. Therefore, play spaces need to provide alternative opportunities for children to master skills on their own terms. It may be they can compose something on a musical panel; they may learn to accurately press a button which activates a mini traffic light on a bike path; or they may learn to sit independently on a rocker, given the appropriate hand or back support.

The richer and more flexible the play setting, and the greater the range of ways the space can be used, the more likely any child will be able to find something they can master.



*Cause and effect – contributes to a sense of achievement.*

## 4. Play behaviour and play spaces: effective design for maximum participation

Different types of challenges include:

### Critical heights

Children may wish to use equipment which involves hanging by the arms (i.e. monkey bars or horizontal ladders, track rides, overhead rings). However, these items are often provided too high for inexperienced, smaller or younger children to reach them. These children often ask adults to lift them up to heights that may be unsuitable. Or, if on their own, they can jump, miss the rungs and fall. Clearly older children require height so they can use the item effectively. But if such items, which are usually quite inexpensive, were duplicated at different heights, children could practice these activities at appropriate heights.

### Routes along or up

Reaching the top of something can be challenging, especially if children need to do this in order to play in something such as an elevated cubby or use a slide.

By providing a choice of ways up, a child can choose the kind of access that suits them.

- Make sure exciting things are not reachable only via very challenging access points (unless the design deliberately intends this) Note: many children find rungs or flexible materials difficult to use.
- Many children, as well as adults helping a child climb to the top, need firm predictable treads such as stairs. However, stairs may be less interesting to some children seeking more of a challenge so it is important to include a range of ways to get up and down.

- A ramp makes it easier for everyone to reach the top but ramps have disadvantages as well as advantages. See *Section 6.2 Ramps*.

### Other challenges

For many children it is challenging to make sand come out of a mould cleanly or to make a small stick house stay up. Children find challenges in many aspects of their play and this changes over time. If loose materials, creative play options and a variety of spaces and materials are available to children they often find their own challenges.

## 4.2 Physical activity and movement

Many types of movement are not only enjoyable for children but also are considered essential to physical, sensory, cognitive and emotional development.

Many physical therapies involve movement and giving children the opportunity to experience movement in a variety of ways to promote their development and sense of achievement. In addition, physical activity is necessary for health and is particularly important for preventing cardiovascular and related diseases.

Gross motor skill development (e.g. running, jumping, climbing, hanging) is not only important for motor sensory development but it is necessary to help a child join in socially.

## 4. Play behaviour and play spaces: effective design for maximum participation

Motion is important in many types of play. Children may enjoy motion for the inherent physical pleasure it offers, and they may also use it to:

- have fun with others (such as a small group playing on a carousel or swinging together);
- challenge themselves or others (swing higher, spin faster);
- support an intimate conversation while gently rocking together; and
- learn about how their body moves and to experiment with different movements.

Good play spaces provide a range of opportunities for movement and should be flexible enough so that children can engage with moving objects in different ways, depending on their mood, interests, abilities and the degree of support they need.

The more ways a piece of equipment or a space can be used, the more value it offers to children of various ages and abilities.



## 4. Play behaviour and play spaces: effective design for maximum participation



### Movement as it affects development

Children need to experience certain types of movement for body and brain development. Motor sensory development depends on sequential progression through several stages of growth. If the progress is interrupted or incomplete, learning difficulties, poor social skills and / or poor coordination can result.

Movement influences the following types of development:

#### **Vestibular development**

Vestibular development is linked to the development of the inner ear, balance and coordination. To promote this type of development, children need opportunities for spinning, rocking, swinging, rolling, bouncing and balancing.

#### **Proprioceptive development**

Proprioceptive development is connected to the sense of where the body is in space; the sense of the extremities and spatial awareness and how to move the body within a defined space. To promote this type of development children need the experience of:

- receiving or applying pressure;
- being underneath;
- squeezing into tight spaces;
- being on top or looking out;
- hanging upside down; and
- balancing.

#### **Gross motor development**

Gross motor development involves using the large muscle groups, and promotes strength and coordination. It may include walking, running, jumping, hopping and skipping. It also includes kicking, stepping, sliding, wheeling, hanging and climbing.

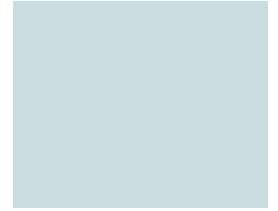
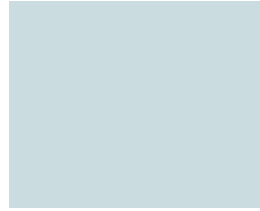
#### **Fine motor development**

Fine motor development involves the use of fingers and hands for finer tuned tasks such as pressing buttons, turning handles, scratching, rubbing, grasping, poking and patting.

#### **Hand/eye coordination**

Hand/eye coordination involves activities such as throwing and catching, reaching, accurately grasping handles or grips, and coordinating movements such as climbing a ladder.

## 4. Play behaviour and play spaces: effective design for maximum participation



### 4.3 Supporting physical activity and movement for all children

Many children with particular types of impairments miss out on play experiences, which can impact on their overall skill development.

To enable all children to experience movement, specific adaptations of standard play equipment may be required in terms of size and support mechanisms.

It is important in all neighbourhoods or communities for there to be choices so that everyone is likely to find somewhere to play that suits them.

As a general principle, planners and providers should select those items that can be used by the most people, especially for small play spaces where multiple items are not feasible.

When designing or upgrading play spaces, it is important to support and promote a wide range of physical activities.

Opportunities for improving physical access for all children are discussed below under the following categories: rocking and spinning; swinging; wheelchair swings; sliding; tunnels and squeeze experiences; activities promoting gross motor skills; and activities promoting fine motor skills.

#### Rocking and spinning

It is a good idea to provide rocking and spinning items that can be used by adults as well as children. Other design opportunities include:

- backrests, footrests, and good hand support to make these items easier to use for many people;
- double rockers with side-by-side seats and back support to allow more people to use them;
- rockers with different width seats to accommodate a range of sizes;
- longer/deeper seats to allow a child to sit in front of an adult; and
- rotating equipment that allows a large group to play together and to use the item in numerous ways.



## 4. Play behaviour and play spaces: effective design for maximum participation

### Swinging

Swinging is a very popular activity in public play spaces. If swings are accessible by wheelchairs, stable enough to get onto and offer a choice of seat designs and support, they can be accessible for many children. When providing swings in a play space, it is worth considering a variety of seats such as:

- small, enclosed, toddler seats;
- flat firm seats;
- wide, flexible seats large enough for an adult;
- seats with back support, that are high enough for an older or larger person not to get their feet caught underneath, and/or low enough to make transfer out of a wheelchair easy; and
- seats with handles to assist the motion of swinging (by the child in the seat).



### Wheelchair swings

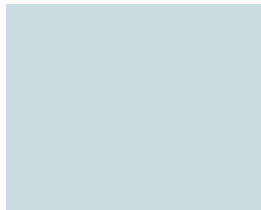
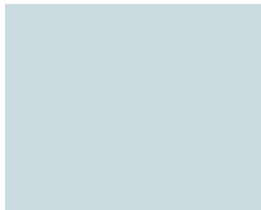
Wheelchair swings provide a valuable opportunity for some children with a disability to experience the sensation of swinging. However, there is some debate in the industry about whether they promote segregation and are not all-inclusive.

Due to their size and weight, wheelchair swings are generally fenced and the ramp locked to minimise the risk associated with incorrect use. They are also expensive. Things to consider before/during installation of a wheelchair swing are:

- Carefully weigh up the cost effectiveness and benefits of a wheelchair swing compared to other alternatives.



## 4. Play behaviour and play spaces: effective design for maximum participation



- Place the wheelchair swing on an interesting route within the play space, and close to where other children are swinging.
- Provide shade and orient to avoid sun in the eyes of users.
- Ensure any sign on the swing indicates it is for everyone but care needs to be taken is in use. Signs may also indicate correct use.
- If fenced, use material that does not block the swing from view, and consider a lower fence that still protects bystanders from the momentum of the swing and crush risk.<sup>viii</sup>



### Sliding

Sliding is exhilarating experience for children and helps them to develop balancing skills and confidence.

Consider providing different ways of sliding, and slides at varying degrees of height and challenge.

Slide poles, tube slides, spiral slides, double slides, curved slides and wave slides all provide varying degrees of challenge and sensory experience. They can be attached to structures, fixed into mounds or moulded out of solid forms. Sliding can also form part of a social experience if the activities are connected.

Take care at the run-out where children may exit at speed. Slides should not exit into a sand play area or other sedentary activity area and paths of travel should not cross a slide exit point. The run-out of a slide should be long enough to slow the child as they reach the ground.

Tube slides offer containment although some children find the enclosed space frightening. For other children, climbing on the outside of a tube slide can be dangerous. Things to consider when installing slides are:

- mound slides may require careful design to prevent children using them on skates or bikes;
- wide or double slides with relatively high sides enable a child and carer (or sibling) to slide together for support, security or chase one another;

## 4. Play behaviour and play spaces: effective design for maximum participation

- deep slides contain a small child; and
- suitable hand grips or rails, and an accessible transfer deck (approximately 450mm above the deck height) at the top of slides so children with mobility aids or a carer with a child, can transfer on to the slide.



*A choice of ways up and down*



*Double slides allow for more social play, as well as helping with supervision or aiding a child*

### Tunnels and squeeze experiences

Experiences such as squeeze passages, rollers and tunnels encourage proprioceptive development or sensory input that tells us about movement and body position.

When tunnels are provided in a play space, you may want to consider a choice of diameter that allows access for a wheelchair. In addition, different sensory experiences such as light and colour, and places to look out, are important. A planted tunnel provides a special kind of enclosure.

Padded poles placed closely together or close planting to squeeze through provide particular benefits to some children and add another interesting experience for all children.



*Squeeze experiences encourage proprioceptive development*



## 4. Play behaviour and play spaces: effective design for maximum participation

### Activities promoting gross motor skills

Equipment which promotes gross motor skills includes things such as climbing up a ladder or stairs, walking on uneven surfaces, clambering up a rock wall or sliding down a slippery dip.

Choices in scale, challenge and in how to hang on or sit on an item make them more adaptable and usable for a wide range of children. Things to consider when installing items that promote gross motor skills are:

- investigating an associated space for ball games and kick-to-kick activities that promote social cooperation and skill development;
- providing a sealed path network and ball play area where it may be an advantage to have wheels;
- including an adjacent grassed area space for ball play where a child may lie and watch from a distance;



- providing accessible routes up and around equipment;

- offering opportunities to leave a wheelchair out of the way at activities (e.g. at swings and beside climbing structures) so that children with limited mobility are still able to participate in physical activities; and
- providing graduated challenges such as low, wide, and flat balance beams and those that are higher, narrower and with curved or more challenging surfaces. Also provide some wide steps with low rises and others with smaller treads and higher rises.



*This clutter bridge presents a challenge to a small child, and enhances gross motor skill development*

## 4. Play behaviour and play spaces: effective design for maximum participation

### Activities promoting fine motor skills

All children enjoy the challenge of manipulating smaller objects as well as more active play. However, for children with limited muscle control, great enjoyment comes from practising and accomplishing small movements that many of us take for granted. Things to consider when installing items that promote fine motor skills are:

- items that move - that can be turned, struck with an arm (instead of a hand), with a fist or by feet;



*Items that can be struck to make a sound*

- experiences which promote upper body strength and/or hand skills such as pulling on a rope to lift buckets of sand or water, pulling on rope(s) to move themselves (e.g. a wheeled trolley), pulling on levers to activate motion;
- activities using vertical or sloping surfaces promote increased wrist extension, shoulder strength and stability;

- interactive, movable items and panels provided within reach of a child in a wheelchair (front on, with legs underneath) that do not require great physical strength or fine motor skills to operate such as steering wheels with adjustable columns, musical elements, levers, pulleys and gadgets, and things to pull up;



*This could be more successful if the panel allowed the child to sit facing it*

- elements at different heights or, where possible, with height adjustable supports;
- opportunities to get out of a wheelchair or sit in supported way to reach elements such as sand, water or small items that can be manipulated by hands or feet.

## 4. Play behaviour and play spaces: effective design for maximum participation

### 4.4 Sensory play

For some children, the sensory qualities of a space are all-consuming. Others depend on particular senses for pleasure, for orientation and to learn about their world.

Play spaces can provide opportunities to enhance children's experience of texture, sound, colour, pattern, light, smell, space and motion. These sensory qualities are very important to particular children.

Sensory experiences can be used in a play space to engage a child who may be unable to use other physical elements. If there is room for a carer to help, or for more than one child to play, these activities can be particularly satisfying.



*Sound is made by stepping on the button*

A range of sensory items can provide interesting and engaging alternatives to physical challenges. Such items include:

- sound and musical activities;
- small elements that move and respond to touch such as abacus beads, planting and interactive sculpture;
- patterns along which children can run their fingers, follow and explore;
- planting that provides smells, shapes and forms and sounds.

Sensory qualities can also create a distinctive and memorable character through things such as light shining through leaves or something transparent, the smell of particular vegetation or materials, planting that indicate seasonal change, or a story told through art works.

Sensory qualities can be used as a reward for effort, or invite further exploration such as a special sound that occurs when a child reaches the top or an appealing texture that may encourage a child to feel their way along a route.

These qualities can also help children orient around a space, enhance safety and act as a warning. Examples of this type of use of sensory items includes textured paths, coloured contrasts in ground surfaces, strong smells or sounds at particular locations, and coloured hand grips which contrast with the surroundings.

## 4. Play behaviour and play spaces: effective design for maximum participation

However, it is worth remembering that enhanced sensory perception in some children can mean that some sounds, noises and textures are very aggravating to them. Care should be taken so that musical play elements, for example, are placed where they can be avoided if required.



*Each tube contains different dried native seeds and leaves. A puffer underneath blows the seeds to release the scent through small holes in the tubes. The panel can be raised or lowered to a suitable nose height.*

### 4.5 The physical environment as a 'prop' for play

Children frequently use the physical environment, play structures or play materials as a 'prop' in their activities. The play really occurs in the player's mind and the physical environment is just a means to an end for a child rather than the end itself.



This kind of play can be quite physical or social, involving groups of children running, wheeling or chasing. Or it may be solitary, based on imagination and fantasy. It may have well defined rules, implicit or explicit, and these may change according to the player's involved. This play is strongly influenced by the qualities available in the environment.

To engage at any level with the physical elements in a play space, and to participate in play with other children, children need to be able to physically move around as the game progresses and to be able to use at least some of the 'props' (or play elements, whatever these may be).

## 4. Play behaviour and play spaces: effective design for maximum participation

Some children have more difficulty than others moving, using or finding their way around a space due to:

- difficulty seeing;
- not being able to reach an item or fit into spaces where they want to be;
- not having the physical skills to climb, hang, sit unaided, or balance; and
- not being able to use loose materials, or they are not provided within reach.

Complex spaces, with spatial arrangements that encourage play between different items – and combine this with an overlay of loose objects such as leaves, sand or water – provide maximum possibilities for play and engagement. This is equally achievable in a small play space as it is for larger projects.

The following ideas are intended to help planners and providers ensure their play spaces are used by as many people as possible.



*Horatio and Henrietta Hippos, commissioned by Knox City Council and the joint creation of Peter Corlett and Aludean (Lu Skacej and Dean Colls).*



*A creative environment can spark any amount of play.*



*Sometimes the simplest things can be played with by everyone.*

### Natural elements

Natural elements such as trees, shrubs, grasses and bark as well as soil, sand, water and rocks offer important experiences that influence a child's cognitive and creative development.

Natural areas offer a great deal of amenity, beauty, changeability and unpredictability. They add to a child's understanding of ecology and the world's natural systems.

## 4. Play behaviour and play spaces: effective design for maximum participation

Children with a physical disability often find access to the natural world difficult because the terrain can be physically inaccessible and many elements such as leaves or flowers on trees may be out of reach.

Young children need exposure to and experience in environments that provide learning opportunities in and about nature. Constantly changing natural environments provide complex variations of texture, sound, light, smell, colour and temperature that challenge children to approach each interaction with the natural environment in new ways. Such interactions include experiencing wet and then dry surfaces, noticing the difference between wind blown and still branches and responding to bird calls. There is potential for a new discovery with each visit to the play space.



Natural play spaces also provide the 'loose parts' of play. Play materials such as leaves, twigs and gum-nuts can be used in a variety of ways according to the abilities and interests of the player. Such play is uniquely satisfying as there is no pressure to conform. Various ability levels and strengths, whether they are physical, imaginative, sensory or social, can be applied to loose natural elements to promote meaningful play.

A natural setting also has a degree of complexity, plasticity and manipulability which allows children to experience many developmentally significant play behaviours, such as role playing, cause-effect actions and constructive play.<sup>ix</sup>

Other possibilities for incorporating nature into play spaces include:

- a range of planting types to encourage play, such as tree climbing, weaving through dense planting and hiding in bushy cubbies;
- specific planting that encourages birds, native mammals and insects;
- a diversity of vegetation in the play space rather than having a separate sensory area provides access for all;
- paths which meander through vegetation as well as raised garden beds;



## 4. Play behaviour and play spaces: effective design for maximum participation



*Paths that meander*



*A journey that is an adventure...*

- a selection of plants that create interesting 'loose parts' such as casuarina cones and leaves, flowering gums and deciduous trees;
- a variety of soft natural surfaces such as tanbark, grass and leaf fall; and
- different smelling plants (although not so many that it is overpowering and confusing).

### Water

Water is a fundamental sensory element that is fun and easy to manipulate. Its form, colour and temperature can vary, and it can be used with other elements to extend play opportunities (e.g. mud pies, floating leaves or rock dams).

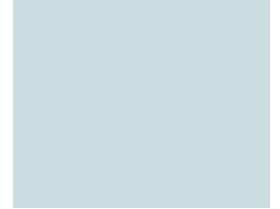
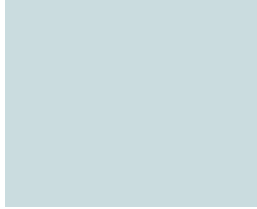
Water is attractive because it provides risk and challenge. It can be used as a construction agent for play in the sand pit, or for use with a wide range of other materials.



The safest way to incorporate water is with sprays or a flow that does not pool.

Water can also be incorporated into play areas via ponds, shallow wading pools, flowing water channels, bridges over water, water jets in the pavement, hand pumps, channels (that can be blocked), taps, sculptures in shallow water, water walls, or via simple mechanisms such as a tap and hose in the sand pit.

## 4. Play behaviour and play spaces: effective design for maximum participation



Most children enjoy playing with water so it is important to ensure it is accessible to all. Consider making water play accessible to as many children as possible by:

- providing a tap with a flexible hose end that any child can reach;
- providing levers on taps, drinking fountains or water pumps so they do not require fine motor skills to operate;
- placing water features or fountains where the sound may act as an orientation cue or landmark;
- providing a water wall, feature or drinking fountain accessible to a person using a wheelchair (i.e. located on an accessible path of travel with knee room, manoeuvring space, and a design that avoids wetting the person); and
- combining water with other loose materials such as sand.

Play can also occur on water (e.g. floating boats, racing 'pooch sticks') and in water. However, factors such as cost, supervision, surveillance, water restrictions and maintenance can affect viability. If including water in the design of a play space, it is important to consider:

- the need for ongoing cleaning, or reuse of the water productively;
- on-site collection or places where water can collect temporarily;
- controls such as timers that prevent wastage; and
- drainage and how to treat runoff.



*Water play is timeless when you can manipulate it*



## 4. Play behaviour and play spaces: effective design for maximum participation

### 4.6 Designing for participation, social play and interaction

Social interaction is the most important element for all children and adults in play spaces. For this reason it is critical for children to be able to physically access social spaces and feel they are part of the action.

Social interaction is important to all children for:

- belonging and doing things just like everyone else;
- minimising social rejection;
- providing role modelling so children can learn skills, how to behave or copy the behaviour of others;
- encouraging children who are deaf or with complex communication needs to practise communicating with each other;
- providing a sense of participation for children who are not able to do physical activities;
- promoting cooperation and practicing social skills;
- promoting awareness of diverse needs and interests; and
- promoting a sense of self in relation to others.



Opportunities for improving social interaction in play spaces for all children are discussed below under the following categories: cooperative play; places to sit; and complex spaces for social play.

#### Cooperative play

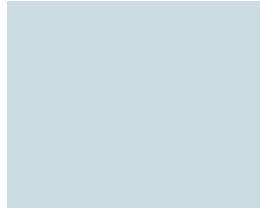
Combinations of loose materials (such as sand and water), moving items and carefully placing elements help create cooperative opportunities for children at play. Things to consider when designing play spaces for cooperative play are:

- pulleys and scoops on upper and lower levels which rely on someone at ground level as well as someone above;



*The child on the upper deck relies on someone below to fill the scoop with sand*

## 4. Play behaviour and play spaces: effective design for maximum participation



- pulleys and conveyor belts which are accessible for all children;
- a source of construction materials or building blocks; mulch, milk crates leaves or twigs; and
- items of equipment that can do additional things when there is more than one player.
- ensuring seating has summer shade, winter sun, and visual interest;
- providing seating around play tables, picnic tables and BBQs that is wheelchair accessible, with space beside to enable a carer to help;
- providing double seats on play elements (e.g. trains, boats, cubbies) and ensure a driver's seat can be used by a child in a wheelchair;
- ensuring wheelchair accessible items have an accessible path of travel; and
- provide park benches with back supports and arm rests.



*Social interaction is the most important element for all children*

### Seating

Seating in play spaces is very important for social interaction, watching and rest.

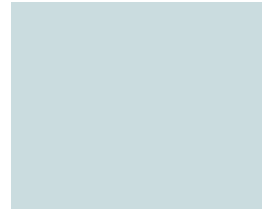
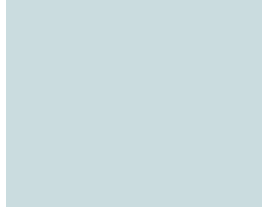
Seating can be provided not just in formal seating areas but also along ledges, at different levels and in areas where people socialise. Things to consider when designing seating in play spaces are:

- ensuring access to seating is at the same level as paths;
- providing seats in groups and leave indents/ spaces for wheelchairs so a seated person can sit level with a person in a wheelchair;



*This simple seating allows space for wheelchairs and prams, and people to sit together in a shaded space.*

## 4. Play behaviour and play spaces: effective design for maximum participation



### Complex spaces for social play

Arranging three-dimensional elements in a complex way encourages games of chasing, running, wheeling through and hiding, as well as games which use the imagination. When designing play spaces, consider the following to aid participation:

- If a child cannot reach every space, try to make sure they can connect with others and engage in play on adjacent items.
- Use communication links and physical connections such as seamless paths, speaker tubes, 'peek-a-boo' holes and windows.
- Place sculptures, logs, tree stumps, carvings, walls or any other items with open-ended play possibilities in social areas.
- Provide an accessible path of travel between social elements to enable 'chasey' and other games to develop.

- Provide some spaces large enough to manoeuvre through.
- Provide choices through easily-negotiated routes within climbing structures up to elevated levels, including wide step decks, flat treads and stairs as well as or instead of rung ladders and other climbing elements.
- Where possible, provide more than one way in and out.



*A range of ways to get to the same place*

## 5. Design ideas based on the nature of ability



Every child or adult using a play space is different, with different strengths and abilities. Play spaces that offer choices in terms of physical access, encourage social interaction and pay attention to sensory stimulation enable all users to build on their strengths.

This section covers the major types of impairments affecting the ability of some children to access play spaces. It also recommends some basic design solutions for maximising accessibility while ensuring all children are stimulated and challenged.

### 5.1 Including children with vision, hearing or other sensory impairments

Impairments to vision, hearing and touch have several implications for children's access to play, depending on their severity and whether children have a combined sensory loss.

Children with varying degrees of vision impairment need other cues to orient themselves around a play space, to find and use activities that interest them and to communicate with others. They may also be more vulnerable to some hazards.

For children who are deaf or hard of hearing, communication and social engagement may be more challenging, and sometimes their balance can be affected.

Some children are very sensitive to touch or have difficulty integrating sensory information. Others may be particularly sensitive to light, temperature and other environmental conditions.

Sometimes these children have complex communication needs, or are not able to speak. They may rely on communication devices such as signing, Braille or other means for communication. This is likely to affect their ability to play with others and find their way around.

The sensory qualities of play spaces are very important for navigating and pleasure, but take care not to bombard or overload children with different sounds, colour, images and scents which may confuse them.

The following ideas may be useful for including children with vision, hearing or other sensory impairments:

- a hierarchy of paths using different but consistent materials to help children to orient around a space. Consider texture codes or coloured patterns on paths which are consistent across the site to give meaning and pleasure;
- raised edges, patterns and textures on paths which meet at right angles (instead of curves) may assist children who use canes to position themselves and gain a sense of direction;
- an obvious space to leave a cane at the entry to the play space;
- strong coloured cues on key parts of structures such as on steps and at level changes;
- hand grips with high luminance contrast (such as the colour light yellow, when viewed against a contrasting background);

## 5. Design ideas based on the nature of ability

- shiny, reflective surfaces should be avoided at ground level as they can confuse people with a vision impairment;



*This has good handrail definition, but the bright background surface might be difficult*

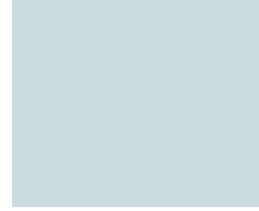
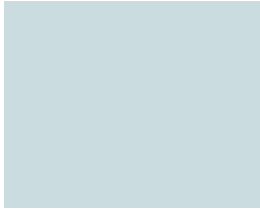
- mown 'pathways' across lawns to assist children to find their way around an otherwise featureless area of grass;
- tactile indicators placed at entries to help some children find where they would like to play;
- communication for children who are hard of hearing may be easier on quieter sites away from traffic noise;
- sound, texture, light, different spatial qualities/echoes/acoustics, and activities with interactive sound and movement can be used provide interest and rewards for effort. These might be used at the end of a ramp or journey, or may be valuable in a central social space to attract children and encourage interaction;
- use of a limited palette of scented plants can help distinguish between spaces, and assist with orientation;

- some children who are deaf or hard of hearing, whose balance may not be well developed, may prefer access to elevated areas by ramp, rather than ladders and stairs;
- fencing or partial enclosure may provide a reference point for movement, and help children who have a vision or hearing impairment; and
- narrow paths meandering through areas of taller grass or vegetation invite exploration and provide a route to guide movement.



*The landscape provides cues to find the way in*

## 5. Design ideas based on the nature of ability



### 5.2 Including children with a range of intellectual and cognitive abilities

Children have a wide range of perception, judgement and social abilities, which have many implications for the way they can enjoy play.

Some kinds of intellectual or cognitive impairments affect a child's ability to perceive a challenging situation or potential hazard in a play space. For example, some children take an interest in objects in the distance and run towards them, making them vulnerable to hazards such as water or traffic.

Sometimes children who are physically older enjoy activities typically provided for younger children, and therefore require larger seats or equipment.



*The seat allows for a range of sizes. Having more than one item gives the opportunity to play along side one another*

In addition, some children have difficulty 'reading' social situations and may find it harder to play with a group. Others find it difficult to create their own imaginative play.

The following ideas may be useful for including children with intellectual and cognitive impairments:

- Consider fencing some play spaces, especially those close to hazards.
- Provide good protection from falls, especially at the openings on elevated decks. This may require additional handgrips, a change of direction before encountering the opening, or a hurdle or a barrier over which children must climb before they can exit the deck.
- Eliminate the risk of inadvertently running across the path of moving hazards such as swings and the bottom of slides.



*The orientation of the ramp prevents a child running across the swing fall zone*

- Provide a good range of physical challenges and plenty of variety of activities; so all children can find their own level of comfort with height and movement.
- Provide adult-sized seats on play components to allow older children and adults to use them.

## 5. Design ideas based on the nature of ability

- Consider making elevated decks reachable by stairs as well as by any other more challenging climbing equipment. This enables a greater range of children to access elevated activities, and makes it easier for adults to help a child, or to rescue a child.
- Provide a choice of balancing and stepping activities.
- Provide items and activities side-by-side (e.g. double slides, two-seater rockers, two steering wheels at a time).
- Provide 'retreat spaces' where a frustrated child can have 'time out' with dignity.

### 5.3 Including children with a range of physical abilities

The physical abilities of children and adults vary widely, from full movement of arms, legs and torso to very little movement at all. This has various implications for accessing play spaces.

Different types of physical ability that need to be considered when designing play spaces are:

- ambulant (i.e. able to walk) but possibly with some balance impairment and needing physical support such as rails;
- ambulant, and using mobility aids such as walking frames or sticks;
- dependant on a wheelchair, and including those needing support in sitting and head control;
- restricted in the use of their arms and hands.

Limited ability to move freely often affects independence, access and participation. It also limits which parts of a play space a child can use, and the speed at which they can move around and play with a group.

For children who use mobility aids such as sticks, wheelchairs or walking frames, there are minimum requirements for them to be able to fit into spaces. Designs may also need to accommodate someone to assist them. In addition, sometimes children who use a wheelchair want to sit or lie somewhere without their wheelchair and they may need someone to assist them to transfer.

## 5. Design ideas based on the nature of ability

Frailty and limited muscle control affects some children's stamina, balance and coordination. Some children who have physical impairments may also have a sensory or intellectual disability.

The following information provides some ideas to make play easier for children with physical disabilities.



### Including children who use wheelchairs

Children who use wheelchairs often have significant problems using standard play equipment. Some of the ideas below may provide additional opportunities for their play and development.

- A seamless path of travel into the park and to the play space from the footpath, street or car park into social areas (i.e. picnic shelters, BBQs) and into the play space and to a choice of activities.

- Impact absorbing 'wheelable' surfaces in key areas allowing access to and under play structures, especially to social activities.
- Items that can be reached from a wheelchair such as a shelf, shop counter, steering wheel, drinking fountain, musical items and other play things.



- Head room underneath decks for a child and carer to get to activities at ground level;
- Room to manoeuvre/ turning spaces large enough for wheelchair use, especially in or around cubbies and social spaces.
- Decks to transfer on to slides, to enable easy transfer out of chairs onto activities.
- Access to key activities in the play space that don't require major physical challenge such as ground level items that can be manipulated, and sensory opportunities.
- A place for someone else to sit at picnic tables, park benches and interactive play items.

## 5. Design ideas based on the nature of ability



- Adequate space to park the wheelchair or mobility aid (out of the way) at activities such as at swings and beside climbing structures.
- Opportunities to get out of a chair and lie or sit in an alternative, supported position to reach elements such as sand, water or small items that can be manipulated by hands or feet.
- Surfaces that make wheeled play interesting and fun.
- A variety of swing types that:
  - accommodate a wheelchair;
  - are low enough and stable enough to transfer onto;
  - provide back support; or
  - can be operated by hand.
- Steering wheels or speaking tubes that are height-adjustable to suit a seated person.



*A variety of surfaces to wheel over creates interest and fun*



*Places to wheel through that stimulate the senses*

- Ramps to elevated areas to enable children to look down.
- Access to natural elements such as dirt, sand, flowers, wildlife.
- Tunnels/ soft material shapes that a person using a wheelchair can be wheeled/squeeze through.
- Items that provide interaction, particularly at wheelchair level (front on) such as musical elements.

## 5. Design ideas based on the nature of ability

### Including children with limited arm and hand function, frail children or with limited muscle control

For some children with limited muscle control, practicing and achieving small movements provides challenge and a sense of accomplishment. This may include stepping up and down, grasping objects or moving something with their hands or feet, or interacting with objects that can be used in a variety of ways.

Children who are frail or have limited muscle control are more vulnerable to being knocked down by others. They may need more support and time to use certain activities, and spaces to relax or gain their composure at intervals during play. For these children, a very busy play space may be daunting.

It is also worth considering the degree of exertion required to reach special parts of a play space. While exercise is important for all children, for some it may be too difficult to reach play activities if they are situated too far away.

Rails and grips on ramps, access ways and some play equipment provide added security for children with limited balance or muscle control. Hand support is critical in helping children keep their balance and preventing falls. Hand rails on and through parts of the play space also help children who are learning to walk or are unsteady on their feet. For children with mobility issues, these make a huge difference in providing confidence and support to access play activities.

Adaptations such as seats with back support and good handgrips enable frail children or those without good muscle control to sit independently, hang on or get on and off safely.

Some of the ideas below may provide additional opportunities for children with limited arm and hand function, frail children or those without good muscle control.

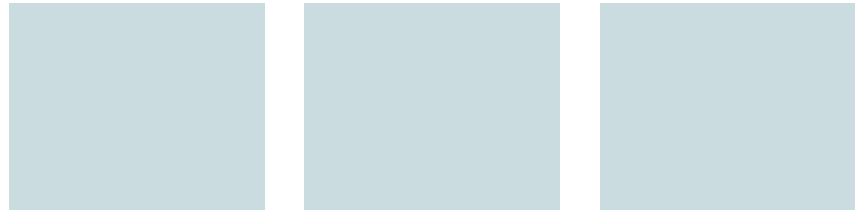
- Elements which are easy to manipulate for creative play and do not require great physical strength or fine motor skills.
- Wheels, spinning items and steering wheels with spokes or knobs to grasp (rather than a solid wheel). These assist children with limited hand function to turn the wheel.



*An open steering wheel is able to be used with the arm to promote movement, when grasping the wheel might not be possible*

- Play panels and musical instruments which can be struck and continue to move for some time, or that generate a response such as a funny sound.

## 5. Design ideas based on the nature of ability



- Musical elements such as gongs, chimes and large key pianos.

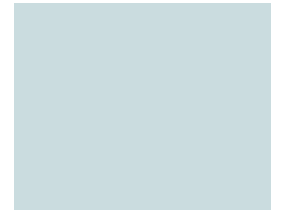
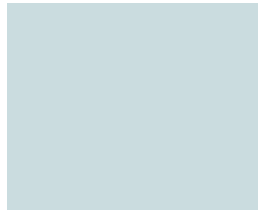
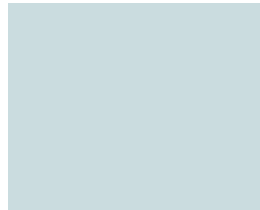


- Drinking fountains and water pumps that can be operated by a lever (rather than a tap, or a small button which may be difficult to use).
- Easily-negotiated choices of route within climbing structures up to elevated levels, including ramps, wide step decks, flat treads and stairs.
- Back support on swings, spring rockers/ see saws, rocking and spinning items and sand pit edges.

- Levers, pulleys and other gadgets.
- Falling water that can be brushed by a hand.



## 6. Accessible paths of travel



Providing a continuous, accessible path of travel through a play space is one of the most important design elements for making it more accessible.

It enables children and adults in wheelchairs, parents with prams or strollers, grandparents, and anyone requiring seamless, predictable surfaces to enter the space and to play.

Children using wheelchairs often cannot reach activities due to the space taken up by their wheels, and the need for additional space to manoeuvre. Their seated position and reach also limits access to other items, including natural elements.

Due to the growing range of different types of wheelchairs and walkers, it is important to seek up to date information on dimensions and turning circles when planning to make a play space more accessible.<sup>2</sup>

### 6.1 Paths

To obtain maximum benefit from paths, they should enable access for all children to key areas within the play space, such as:

- to and under play structures, especially to social activities (playing shops, driving vehicles, using cubbies);
- focal points of the play space where every child would want to play; and
- to different levels of structures so children can look down on their peers.

When designing accessible paths, it is also important to avoid stepped level changes or barriers which might bar the way for children with physical impairments.

There are many materials that can be used for paths. Surfaces for paths can be concrete, asphalt, well-compacted gravel, timber sleepers or decking, stone, pavers, or a host of other materials. They must be well formed, compacted, properly constructed and maintained.



<sup>2</sup> Refer to Norris, B. and Wilson, J. Consumer Safety Unit Childdata. The handbook of child measurements and capabilities data for design safety, Department of Trade and Industry, Institute for Occupational Ergonomics, Department of Manufacturing, Engineering and Operations Management, University of Nottingham, Nottingham.

Also refer to Access and Mobility Standards, Part 1

## 6. Accessible paths of travel

Other key considerations for paths are kerb crossings to allow access into the play space from the street, and places to sit and rest along paths to the play space.

Refer to the Australian Standard: Access and Mobility AS 1428.1 for more information about accessible paths of travel.



### 6.2 Ramps

Ramps within a play space enable people using wheelchairs, mobility aids or who are unsteady on their feet to access areas that would otherwise be impossible.

Ramps enable all children to reach an elevated position and look out over a space, which is rare for some children. They also enable children to reach structures such as slides and tree houses.

The gradient of a ramp in a play space can vary significantly, depending on the risk and challenge required. Building Codes and Access Standards consider that 1:14 provides independent wheelchair access. Play value for wheelchair users also means that 1:8 and gradients of varying measurements can be appropriate. There is no one measurement to meet all play needs, and therefore this issue needs to be considered during the planning process.

Ramps are a significant cost item, and there are many instances where they are not feasible in a play space. When investing in a ramp it needs to be designed and placed with great care to maximise its value to children. There should be adequate activities provided at the top of a ramp to reward users for their effort.

Landings can also be used to link with other climbing or play features, rest areas, lookouts and pull off zones.

As well as being an accessible path of travel, ramps can also be a play item. For this reason, ramps need to have kerbs along their edges (100mm in height) and hand and guardrails on both sides. For more information, refer to Standard AS1428.1 (Australian Standards: Access and Mobility).

## 6. Accessible paths of travel



*The slope has been used to advantage in this ramp design*



*Ramps can allow other interesting spaces to be created underneath*



*No bikes.....*

### Problems with ramps

Sometimes ramps can have unintended effects that need to be managed carefully.

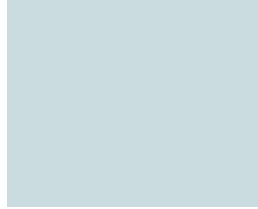
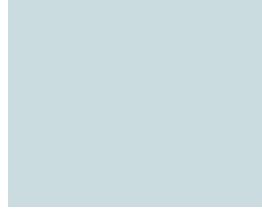
For instance, they can effectively block a space to cross-traffic, and block views. Often this can be resolved by creating convenient points where pedestrians can go underneath or step over a ramp.

To minimise risks:

- ensure the ramp provides cues to users as to where they are going and how high they are;
- ensure any opening of an elevated deck accessible by ramp (e.g. net, slide, pole) is designed at a steep angle (too steep to turn a chair into), and with a kerb or a step up to prevent a chair or toddler inadvertently toppling through;
- ensure there is adequate space for an adult to retrieve a child; and
- use advisory signs to prohibit bikes on play equipment and explain suitability for different ages and abilities.

For more information, see *Section 2.3 Safety*.

## 7. Surfaces and fences



There are a variety of surfaces with differing qualities used in play spaces, and all have a role in accessibility, and creating a range of diverse play experiences.

Surfacing can comprise a substantial proportion of a play space budget, so it needs to be designed carefully for maximum effect.

There are strengths and weaknesses in all surfacing materials. Surfacing requirements need to be considered according to the needs of users, the diversity of play experiences to be provided, as well as the availability of materials and the cost involved (including maintenance). A variety of play surfaces may be required, given their different qualities and purposes.

Impact absorbing surfaces need to be provided under and around any play items with fall heights above 500mm in height; and can also provide access for users to the play experiences within a play space.

A range of issues need to be considered when choosing surfaces for a play space. More than one type of surface is often required because it is unlikely one surface will meet all requirements. Surfaces need to perform two main functions:

- Provide impact absorption in a fall zone under and around play equipment.
- Provide an accessible path of travel that will help people to access the space and play activities.

### 7.1 Loose surfaces

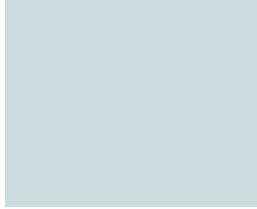
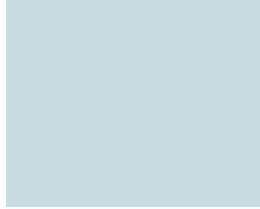
Loose materials such as mulch and sand have been traditionally used under play equipment to cushion falls.

Loose surfaces, and the borders required to contain them, have the advantage of being readily available and cost effective. Loose surfaces can look attractive and have a soft, natural appearance. They can also be played with or manipulated.

Loose surfaces have some disadvantages. They can:

- require frequent topping up, raking and will be ineffective without this regular maintenance;
- contain fouling by animals, glass or syringes;
- blow or wash away;
- require a relatively flat space, sometimes contained by a border; and
- make it difficult for some children and adults to approach play areas.

## 7. Surfaces and fences



### 7.2 Synthetic surfaces

These surfaces provide predictable landing and take off, under and around equipment, and they wear reasonably well in high use areas.

Synthetic surfaces can incorporate colour, patterns and texture. They can be used on slopes, and they can enhance orientation in a play space. Where accessible paths of travel are required in fall zones, impact absorbing synthetic surfaces are frequently used to best effect.



Synthetic surfaces have some disadvantages. They can:

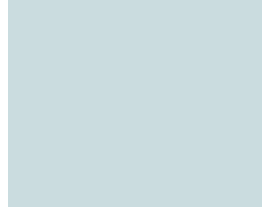
- have a generally higher initial cost;
- be complex to repair;
- have a strong odour on hot days and can burn the skin if exposed to heat;
- have the effect of uniformly 'plasticising' children's spaces and seal off the less predictable world of dirt, weeds and nature; and
- be susceptible to degradation if covered by sand/ dirt and water.



*A variety of surfaces can be used to enhance access*

There are a wide variety of synthetic surfaces on the market, and each surface has particular qualities that need to be understood by the provider and designer of the play space. Synthetic surfaces are sometimes best used in combination with materials such as mulch.

## 7. Surfaces and fences



### 7.3 Fences or barriers

#### Why fence a playground?

There are many families and groups who are unable to visit playgrounds unless they are fenced because their children run off, are unable to hear or understand their name, are easily distracted, or become absorbed in an activity and do not notice they have moved away from their carers. For these groups, and families with multiple births, a high fence with a gate is important.

When a site is close to a hazard such as a water body, busy road, or steep cliffs, a fence makes many adults more comfortable about their children's safety.

Fences help contain balls and separate play spaces from neighbouring park uses such as dog-off-leash areas. A fence can also prevent fouling of sand or mulch in a play space by animals.



#### Disadvantages of fencing

A major disadvantage of fencing a play space from the rest of a park is that it limits where play activities can take place, or effectively 'cages' play into a contained space.

It is virtually impossible for people who use wheelchairs to reach child-proof locks on gates, making fenced spaces with these systems inaccessible to some users. In addition, gates and child-proof locks regularly fail in public parks and the cost of replacing locks can be expensive over time.

Fences can also be used as an excuse not to supervise children properly.

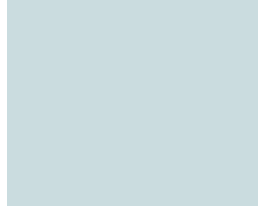
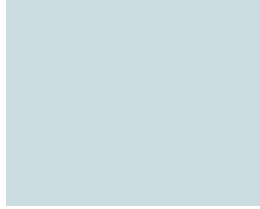
#### Design of fences or barriers

When considering a fence for a play space, it is important to think clearly about its purpose and make sure its design is consistent with that purpose.

Every municipality should aim to provide a few fenced play spaces, so there is a variety of options for parents and carers whose children require additional security.

However, natural barriers such as hedges (or another type of planting or design feature) can provide the same sense of containment as a fence, especially for small children. These options should be considered in the planning process.

## 7. Surfaces and fences

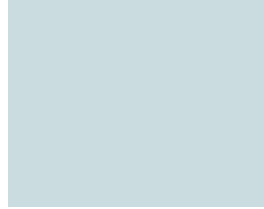


Things to consider when designing fences for play spaces:

- Provide double-width gates for maintenance access.
  - Provide an alternative to locks to ensure gates are accessible to wheelchair users.
  - Use single rail fences for visual definition, but not to contain children.
  - Avoid horizontal components that can be climbed, entrapment spaces and sharp components.
  - Avoid cables or wire fencing that is not easily seen at night or by a person with a vision impairment.
  - Provide planting and earthworks to help disguise a fence and make it more attractive. However, planting should not block views into a space.
  - Consider designs that make the fence a playful feature of the space.
- Consider partial fencing that deters children from a quick run out into a hazard in one direction.
  - Provide seats near fence openings to make supervision easier for adults.



## 8. Including parents and carers

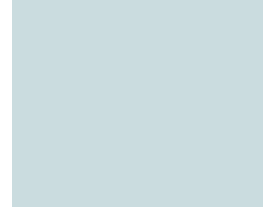


Most children, especially young children, are accompanied by a parent or carer when they visit a play space.

Supportive adults often choose the site for the visit, assist the child during play and with other personal needs, provide rest and respite, and ensure the child is safe and protected.

In addition, adults like to be involved in play spaces in a variety of ways, including as active facilitators in a play space, supporters in play, or supervisors from a safe and comfortable position.

At times adults want to relax and socialise with others too.\* Poor or inconvenient design places an unnecessary burden on adults and carers.



### 8.1 Neighbourhood paths

In residential areas, being able to walk, cycle or wheel to local parks and play spaces is valuable for many reasons. It is inexpensive, provides exercise and offers the possibility of meeting neighbours and friends on the journey. It is often less hassle than getting in and out of a vehicle.

To help children of all ages and abilities access play spaces, the following ideas should be considered by planners and providers when upgrading neighbourhood paths:

- Providing paths that are wide enough for at least two people to move along side by side. They need a firm, well-drained, predictable surface that is non-slip and free of trip hazards. Ideally they should have no steps or level changes. Trees with low overhanging branches, or with drop gum nuts or berries, should be planted away from paths.
- Providing paths that are free of spoon drains, grates and pit covers so that people do not trip over them or catch canes, small wheels or heels in them.
- Designing paths with a suitable gradient and cross fall. Steep sections need hand rails or protective barriers, and kerb rails.
- Providing park entry points that are wide enough for a wheelchair or double pram to pass between gateposts or bollards.
- Enabling chicanes or barriers at park entrances to be used by a wheelchair or a bicycle.
- Providing kerb crossings where the path crosses a road.
- Installing seats along footpaths at the same level as the path.

## 8. Including parents and carers

### 8.2 Proximity to public transport

If there is a choice of locations for a play space, choose one with easy access to public transport. Make sure there is a safe and fully accessible route from the bus, train or tram stop to the play space. Good signposting will make the play space easy to find.

Ensure pedestrian crossings serving the play space have audible signals and preferably infrared sensitive buttons at a suitable height to be operated from a wheelchair.

### 8.3 Car parking

Drivers using wheelchairs or mobility aids may have vehicles that are larger than the average car, and include hoists or ramps to help them get in and out of the car.

These vehicles and devices require varying amounts of space. Sometimes unloading can be difficult and even dangerous. To aid safety and convenience for people using wheelchairs at play spaces consider the following:

- Convenient parking close to the facilities.
- Plenty of designated accessible car parking spaces close to regional parks and play spaces.
- Large accessible parking spaces that allow the vehicle to park with room at the back or on the side for unloading.

- Room for a person in a wheelchair or with a large stroller to manoeuvre around the vehicle on either side, or at the end, without having to enter the roadway.
- An accessible path of travel forward from the car space directly onto the path into the play space.
- Where there are kerbs; generous kerb crossings direct from car park to footpath.



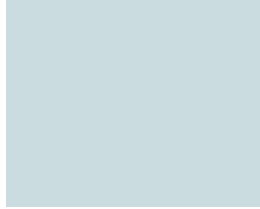
### 8.4 Arriving by bus

Groups of children and adults often arrive at play spaces by bus.

In these situations, the driver or other helpers often need to help people off the bus, and then park the vehicle. For play spaces likely to attract large groups consider providing:

- a drop-off zone big enough for a bus;
- direct access straight to the path from the drop-off point; and
- a seating area close to the entrance where groups can gather.

## 8. Including parents and carers



### Assisting parents and carers

There are several ways of assisting parents and carers in play spaces. These include:

- grouping activities close to one another and to seating;
- providing space for a carer to manoeuvre a child with a wheelchair around and next to play items;
- clear and unambiguous signage;
- being able to sit next to a child to be able to assist them;
- having play features that all children enjoy;
- providing spaces big enough for adults to access so they can follow their child and retrieve them. This includes space on elevated platforms or ramps;
- back support, hand grips, things to lean on, and spaces big enough for two;
- convenient and fast alternative routes through a complex space to reach; children in a hurry. Steps are easier than rungs;
- adequate seating, shade and shelter; and
- social opportunities so that parents and carers can interact with others.

### 8.5 Amenities

The quality of amenities at play spaces will vary between sites depending on the type of space and its position in a hierarchy of parks.

At district or regional level parks, toilets, change facilities, car parking and picnic facilities are likely to be required. Amenities to consider for all play spaces include:

- adequate shade and shelter;
- an accessible water tap (to fill a cup) as well as a drinking bubbler or fountain;
- drinking fountains that can be operated by a lever;



## 8. Including parents and carers



*Drink fountains need to be able to be reached, without wetting a person in a wheelchair. They should be able to fill a cup or drink bottle and have levers that are easy to operate*

### Accessible toilets and change facilities

Toilets make a major difference to the length of stay in a park, especially considering the time and effort that may be required to get a child with a disability to the park. Things to consider when designing or upgrading toilets for play spaces are:

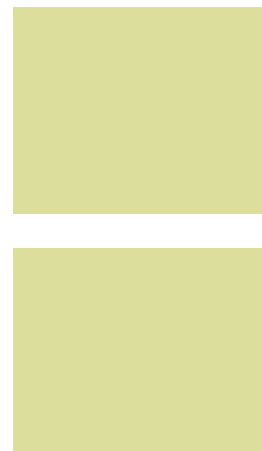
- an accessible pathway, wheelchair access, good signage and a change facility;
- tactile signage and Braille; and
- an adult-sized change bench included in at least one unisex cubicle so that a single parent or carer of any gender can change an older child.

Refer to Australian Standard AS 1428.1 for more information about the construction of accessible sanitary facilities.<sup>xi</sup>



- comfortable seating;
- square, round or hexagonal shaped tables to suit wheelchair users so everyone can sit together;
- seats with backs for older adults and people with a disability;
- spaces at the end of bench seats to enable a person in a wheelchair to sit next to a their family members or carer; and
- seating and picnic areas with accessible paths of travel from the play space and adjacent car parking and other facilities.

# Attachment 1. Legislation, policy and standards



## Federal and State legislation

Key legislation and policies that protect and promote the rights of people with a disability in Australia include:

- United Nations Conventions
- Australian Disability Discrimination Act 1992 (DDA)
- Victoria Equal Opportunity Act 1995

The Human Rights and Equal Opportunity Commission has responsibility for promoting, monitoring and developing policy on a number of relevant United Nations Conventions. These include:

- Convention on the Rights of the Child
- Declaration of the Rights of the Child
- Declaration on the Rights of Disabled Persons
- Declaration on the Rights of Mentally Retarded Persons

## The UN Convention on the Rights of the Child

In the federal context, Australia was signatory to the **UN Convention on the Rights of the Child** in 1991.

Article 12 asserts the right of children to be consulted on matters that concern them. Children, who make up nearly a quarter of the population,<sup>xii</sup> have a right to expect that their needs and wishes will be taken into account in the provision of local services paid for by public funding.

Article 23 of the Convention states that “a child with a disability should enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance and facilitate the child’s active participation in the community.....”

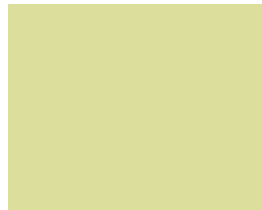
Article 31.1 commits the Government to recognise the child’s right to play and to participate fully in cultural and artistic life.

Article 31.2 commits the Government to respect and promote appropriate provision and equal opportunities for cultural, artistic, recreational and leisure activities for all children.

Article 31.2 commits the Government to respect and promote appropriate provision and equal opportunities for cultural, artistic, recreational and leisure activities for all children.

This convention provides the platform for Federal and State human rights and equal opportunity policy as they relate to children.

# Attachment 1. Legislation, policy and standards



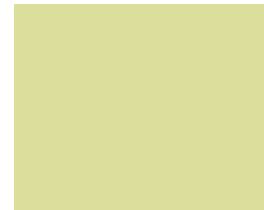
## Disability Discrimination Act 1992 (DDA)

The Federal Disability Discrimination Act 1992 (the DDA) prohibits direct and indirect discrimination on the grounds of disability and makes it unlawful to discriminate on the grounds of disability in a wide range of areas including: sport, access to premises, accommodation, education, employment and the provision of goods, services and facilities. The DDA also protects the associates of people with a disability (their partners, relatives, friends, carers and co-workers) against discrimination because of that association.

The objects of this Act are:

- (a) to eliminate, as far as possible, discrimination against persons on the ground of disability; in the areas of:
  - (i) work, accommodation, education, access to premises, clubs and sport;
  - (ii) the provision of goods, facilities, services and land;
  - (iii) existing laws; and
  - (iv) the administration of Commonwealth laws and programs;
- (b) to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law as the rest of the community; and
- (c) to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community.

The Human Rights and Equal Opportunity Commission (HREOC) administers the provisions of the Act.



## Victoria Equal Opportunity Act 1995

This Act states that it is against the law to discriminate against someone on the basis of their actual or assumed disability/impairment in relation to accommodation; clubs; education; employment; goods and services; selling and transferring of land; sport. The Equal Opportunity Commission assists to resolve complaints of discrimination.

# Attachment 1. Legislation, policy and standards



## Victorian Policy Context

The Victorian Government has developed the Victorian State Disability Plan 2002 – 2012 to support the provisions of the Disability Services Act 1991 and the Intellectually Disabled Persons' Services Act 1986.

The Plan states that by 2012, Victoria will be a stronger and more inclusive community - a place where diversity is embraced and celebrated, and where everyone has the same opportunities to participate in the life of the community, and the same responsibilities towards society as all other citizens of Victoria.<sup>xiii</sup>

The State Disability Plan aims to help people pursue individual lifestyles and build inclusive communities. It recognises that the essence of living in a community and having a sense of belonging is being able to pursue a lifestyle of choice.

The change in philosophy in the current plan is that people with disabilities are seen as participants in, not recipients of, services. Further, people with disabilities are being given more personal control of decision-making.

The challenge for the community is to accommodate diversity and become inclusive, rather than being disabling. The community needs to understand how to include people with a disability by eliminating the creation of settings that exclude.

Principles enshrined by The Plan are the values that underpin the vision and all other elements of the State Disability Plan. They are:

**The Principle of Equality** recognising that people with a disability are citizens who have the right to be respected and the right to have equal opportunities to participate in the social, economic, cultural, political and spiritual life of society.

As citizens, people with a disability also have equal responsibilities towards Victorian society and should be supported to exercise these.

**The Principle of Dignity and Self-Determination (Choice)** is about respecting and valuing the knowledge, abilities and experiences that people with a disability possess, supporting them to make choices about their lives, and enabling each person to live the life they want to live.

**The Principle of Diversity** is about recognising and valuing individual difference. Inclusive societies are strengthened by the diversity of their populations and by the contribution that each person makes to the social, economic, cultural, political and spiritual life of society.

**The Principle of Non-Discrimination** implies that all people have the right to live their lives free from discrimination. This means that society must set right all forms of discrimination – including both active and passive forms of discrimination, and unfair and outdated standards, laws, policies and practices.

It also means recognising and valuing people's differences. Failing to embrace these differences is itself discriminatory.

# Attachment 1. Legislation, policy and standards

## Australian Standards

### Australian Standards for Playspaces

Playspaces in Australia are generally supported by Australian Standards for Playgrounds and Play Equipment. They do not have the status of law, but when adopted by Councils or other government authorities, they assume the status of regulation, and form the basis of Council's risk management operations throughout Victoria.

#### **AUSTRALIAN STANDARDS FOR PLAYSPACES**

AS 4685	2004	Playground Equipment This Standard has six parts: Part 1 General safety requirements and test methods Part 2 Particular safety requirements and test methods for swings Part 3 Particular safety requirements and test methods for slides Part 4 Particular safety requirements and test methods for runways Part 5 Particular safety requirements and test methods for carousels Part 6 Particular safety requirements and test methods for rocking equipment
AS/NZS 4422	1996	Playground Surfacing - Specifications , requirements and test method, including amendment No. 1, 5th May 1999
AS/NZS 4486	1997	<b>Playgrounds and Playground Equipment</b> Part 1 Development, installation, inspection, maintenance and operation.
AS 2555	1982	<b>Supervised Adventure Playgrounds</b>
AS/NZS 4360	2004	<b>Risk Management</b>

# Attachment 1. Legislation, policy and standards



## Access Standards

A suite of Australian Standards address access and mobility.

Australian Standards relating to Access and mobility provide important guidance and should be used as a key reference in the planning of play spaces when designing for accessibility.

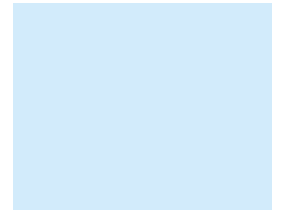
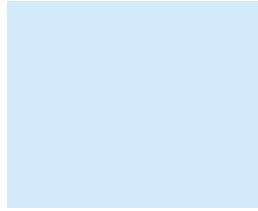
Relevant access standards are:

- AS 1428 (Set) - 2003: Design for access and mobility

These include:

- AS 1428.1-2001: Design for access and mobility – General requirements for access – New building work
- AS 1428.2-1992: Design for access and mobility – Enhanced and additional requirements – Buildings and facilities
- AS 1428.3-1992: Design for access and mobility – Requirements for children and adolescents with physical disabilities
- AS/NZS 1428.4:2002: Design for access and mobility – Tactile indicators

## Attachment 2. Consultation



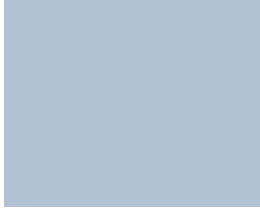
The Good Play Space Guide was prepared through an extensive process of research and consultation. Consultation was held with associations and individuals representing:

- children with a disability;
- parents and carers;
- local government;
- play space equipment suppliers, designers and manufacturers;
- the education sector;
- other government stakeholders; and
- community groups and non-government groups.

Those consulted expressed a desire for improvements to play spaces to make them more accessible for all children. Some of the themes which emerged from the consultation centred on the importance of accessible support facilities, of seamless connection between spaces and surfaces, of the adequacy of things to do, and of welcoming environments.

From the consultation, it appears the critical elements that define an accessible play space are that children can: get into the play space and move freely around; play with others; find enjoyable, stimulating things they can do; and be supported by amenities and facilities suited to their needs.

# Attachment 3. Acknowledgements



The Good Play Space Guide was developed with funding from the Department for Victorian Communities' Access for All Abilities (AAA) Program and managed through the Playgrounds and Recreation Association of Victoria (PRAV).

PRAV would like to acknowledge the support and assistance of the project Steering Committee and Reference Group (see below), and a wide range of organisations and individuals that provided input, participated in telephone interviews or contributed towards the development of this guide.

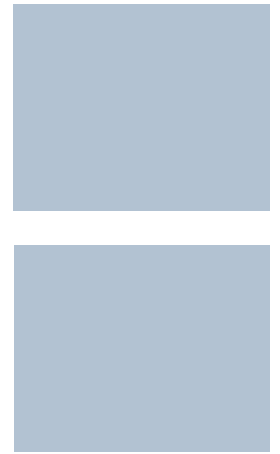
PRAV would like to acknowledge the advice, support and assistance of the consultant, Sally Jeavons from @Leisure, who was commissioned by PRAV to research and prepare this document to the draft stage. The document was edited and further developed for publication by David Crofts from Agile Communications and Cathy Kiss, City of Melbourne.

## Steering Committee

The Steering Committee for the project included:

Jenny Vizec	Department for Victorian Communities
Barbara Champion	Executive Director PRAV
Phillip Carlton	Department for Victorian Communities
Sue McGill	Department for Victorian Communities
Ben Bainbridge	Department for Victorian Communities
Samantha Leeke	Department for Victorian Communities
Cathy Kiss	Project Manager/ President PRAV/ City of Melbourne

# Attachment 3. Acknowledgements



## Reference group

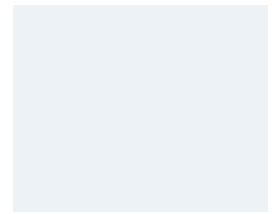
The reference group for the project included:

Judith Geraghty	VICNORD
Mick Bergin	Father of a child with a disability
Sue Campbell	Warragul and District Special School
Peter McLennan	Forpark Australia, SafePlay Systems
David Fox	Allplay Equipment Pty Ltd
Ian Latchford	Allplay Equipment Pty Ltd
Felix Hemingway	City of Whitehorse/ PRAV
Sue Elliott	RMIT University/ PRAV
Dale Sheppard	Access Solutions National Pty Ltd / PRAV
Robin Low	SCOPE Victoria
Megan Kerr	VicHealth
Kathleen O'Hara	Department of Human Services (Office for Children)
Angela Healy	Department of Human Services (Disability Services)
Melissa Bryan	Australian Association of Occupational Therapists Victoria
Mary Jeavons	Mary Jeavons Landscape Architects

PRAV would also like to thank Don Wark of The Play Works, Queensland for his expert advice and assistance in this project.

Thanks also to Leanne Winters of The Play Works, Queensland for her assistance regarding images in this guide.

# Web resources



The Playgrounds and Recreation Association of Victoria	<a href="http://www.prav.asn.au">www.prav.asn.au</a>
Access for All Abilities Program	<a href="http://www.sport.vic.gov.au">www.sport.vic.gov.au</a>
Community Facility Funding Program	<a href="http://www.sport.vic.gov.au">www.sport.vic.gov.au</a>
IPA International Play Association	<a href="http://www.ipaworld.org">www.ipaworld.org</a>
RuralAccess and MetroAccess	<a href="http://www.dhs.vic.gov.au">www.dhs.vic.gov.au</a>
The Children's Play Council UK	<a href="http://www.ncb.org.uk/cpc">www.ncb.org.uk/cpc</a>
Free Play Network UK	<a href="http://www.freeplaynetwork.org.uk">www.freeplaynetwork.org.uk</a>
Planet Earth Playscapes	<a href="http://www.planetearthplayscapes.com">www.planetearthplayscapes.com</a>
Learning Through Landscapes	<a href="http://www.ltl.org.uk">www.ltl.org.uk</a>
National Centre on Accessibility	<a href="http://www.ncaonline.org/playgrounds">www.ncaonline.org/playgrounds</a>
Network of Community Activities	<a href="http://www.netoosh.org.au">www.netoosh.org.au</a>
Boundless Playgrounds	<a href="http://www.boundlessplaygrounds.org">www.boundlessplaygrounds.org</a>
PLAYLINK, Places for Play	<a href="http://www.playlink.org.uk">www.playlink.org.uk</a>



# References

- <sup>i</sup> Personal communication with Sue Elliott PRAV.
- <sup>ii</sup> Pippa Murray, *Hello! Are You Listening? Disabled Experience of Access to Inclusive Leisure*, YPS (2002).
- <sup>iii</sup> Carter Good (Ed), *Dictionary of Education*, McGraw-Hill, NY, p 331 as cited in Darrell Wills, *Including Children Who Challenge Us Most: An A-Z list of Inclusionary Issues*, Professional Edition, Patchwork Publications (1993).
- <sup>iv</sup> Simon Nicholson. *The Planning And Design Of The Recreation Environments*. University of Davis (1970).
- <sup>v</sup> According to the UK Centre for Studies on Inclusive Education (CSIE)
- <sup>vi</sup> Colin Hooker, *Planning for Play: Guidance on the Development and of a Local Play Strategy*, Children's Play Council and Big Lottery Fund UK (May 2006).
- <sup>vii</sup> Hart Roger A., *Exploring the Environment*, Ekistics, 272, 387-390 (1978).
- <sup>viii</sup> Burke, J. 'Liberty on the Swings', University of Ballarat, Kidsafe Conference, Sydney, 2006.
- <sup>ix</sup> Kirkby, M. 1989, 'Nature as refuge in children's environments,' *Children's Environments Quarterly*, Vol 6 No 1, Spring pp 7-12.
- <sup>x</sup> Office of the Deputy Prime Minister UK. *Developing Accessible Play Space. A Good Practice Guide 2003*.
- <sup>xi</sup> AS 1428.1-2001 Design for access and mobility – General requirements for access – New building work.
- <sup>xii</sup> 22.5% of people are aged 0-17 years in Australia, Source: 3222.0 2006 Australian Population Projections, Bureau of Statistics.
- <sup>xiii</sup> *Report on the Implementation of the Victorian State Disability Plan 2002-2012*, Victorian Government Department of Human Services (March 2006).



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