



Jupiter   
play & leisure

6 SENSES OF INCLUSIVE PLAY





## 6 SENSES OF INCLUSIVE PLAY

What are the six senses of inclusive play and how can they be used effectively when designing outdoor play spaces



### Proprioception

An awareness of self and joints; it enables us to know where our limbs are without having to look.



### Vestibular

A response to change in your head position or having your feet lifted off of the ground.



### Touch

Touch allows us to differentiate between pressure, texture, traction, pain and temperature.



### Sound

To collect, amplify and transduce sound waves into electrical impulses allows the brain to perceive and localise sounds.



### Sight

Our Sight is our most dominant sense and allows us to arrive at the appropriate motor and cognitive response.



### Smell

Smell (and taste) contribute to our enjoyment of life by creating a desire to eat which enhances our social activities.



Every child needs nature. Not just the ones with parents who appreciate nature. Not only those of a certain economic class or gender or sexual identity or set of abilities. Every child.

Think about a regular playground, what are the main play activities? How accessible are these play activities?

Children with disabilities and special needs, often require more play experiences as it becomes part of their therapy and development, facilitated by Occupational Therapists, Play-workers and Support workers.



**1 in 5**

There are around £14.1 million disabled people in the UK. Almost 1 in 5 people (21%) in the UK have a disability.

7% of children in the UK are disabled and 10% of children in the UK live in a family with at least one disabled child.


**7%**

**5%**

In the UK there are 800,000 children living with a disability. That equates to 1 in 20 children (after the age of 16).







Proprioception - An awareness of self and joints; it enables us to know where our limbs are without having to look.

Why is it useful?

Proprioceptive activities engage both the body and the brain and are highly beneficial to people of all ages as it keeps body and mind engaged.

This can be a key area of development for a child with a Sensory Processing Disorder (SPD) or with any neurological damage or development disorder.

What play equipment can be used?

- Totally inclusive: trampolines
- Mostly inclusive: space nets, monkey bars (at different heights) ground games like hop-scotch, sand play etc.
- Activities: push/pull and joint loading.









Vestibular - A response to change in your head position or having your feet lifted off the ground.

Why is it useful?

The vestibular sense is necessary for healthy brain development as well as helping all maintain balance and trunk control. It helps with visual motor skills like tracking objects while moving. Some children are unable to engage their vestibular like others, for example, children who are blind or have a visual impairment, physical disability or have an SPD.

What play equipment can be used?

- Totally inclusive: trampolines, wheelspin and orb
- Mostly inclusive: revolve, moonwalker, nest swing, iswing, hammock infinity bowl and hammock.
- Activities: rolling, swinging, roller coaster, lying down and moving.









Touch - Tactile sense helps us to differentiate pressure, texture and traction and is an important way for us to monitor temperature and pain.

Why is it useful?

Touch is a key sense (our 2nd most dominant) that helps us to build confidence and is also a key way for us to form bonds with one another; a handshake or a hug means more than a simple hello.

Having a functioning tactile system is beneficial as we will not get distracted by the ongoing tactile information we receive everyday (Like the clothes we wear getting washed, eating etc.).

What play equipment can be used?

- Totally inclusive: orbs, gamenetic, mezzo, topiary, scribbler, daisy doodle, sand play, water play and messy play.







Sound - To collect, amplify and transduce sound waves into electrical impulses allows the brain to perceive and localise sounds.

Why is it useful?

Sound play, whether via musical play or making noise, helps children to learn how to concentrate and focus on a sound. Musical play has the added benefits of developing gross motor skills, coordination, language and even has been linked to an increase in IQ.

Sound crucially engages children who cannot rely on visual cues in play.

What play equipment can be used?

- Totally inclusive: music box series, chimes, bongos, audionetic, music ball, story ball orb, mezzo, rainmaker, microsphere rainwheel and exosphere.









Sight - Our vision is our most dominant sense, taking up to 50% of our brain's resources and allows us to arrive at the appropriate motor and cognitive response.

Why is it useful?

Our sight is far more than looking and seeing, it relates to perception, memory, tracking an object in motion, coordination (hand-eye) and spatial awareness amongst many other.

For a child visual play is often the start of literacy, identifying objects, patterns, movement which all relate to how we learn language.

What play equipment can be used?

- Totally inclusive: microsphere, mezzo, fun reflections, colourfly, minisphere, exosphere, 3-to-connect and collider.









Smell - Our sense of smell and taste contribute to our enjoyment of life by stimulating a desire to eat, which enhances our social activities.

Why is it useful?

Smell and taste warn us of dangers, such as fire, poisonous fumes and spoiled food. Studies show that 75% of emotions are triggered by smell which is linked to pleasure, well-being, emotion and memory.

For people who are deaf/blind the sense of smell plays a key role for identifying people, places, objects and memory.

What play equipment can be used?

- Totally inclusive: none ... YET! This is where the landscape is important, identifying plants by smell, form important play activities.









Height - This is not a sense but it is just as important as the six senses. Experiencing the sense of height should be possible for everyone.

Every child should be able to experience height and experience a playground at a different perspective. Designing accessible height into a playground is one of the most important elements of design.

Research has shown that it is not enough for a child to see, they must also be able to touch to be engaged. They should be able to interact with the play features and the surrounding environment with their hands for a tactile experience. Not just watching others, this is critical to a child's engagement.

Large platforms were designed to enable children in wheelchairs to move around and use the play elements provided. However, this design element also allows for parents to become more active participants whilst their children are playing.







# Generations - When we think about an inclusive space, we often think of children with Special Educational Needs (SEN) but we forget about their families or the older generation.

Designing an inclusive play space, shouldn't just be product focused as it isn't always the child playing on the equipment who has the disability. A parent or grandparent could, which is why designing inclusive spaces must be done at the beginning of a project. Think about the play

Parents, grandparent or carers who may have a disability, including seating and shelters nearby is key and ensuring that there is good access from the seating into the play area, so they can support their child.



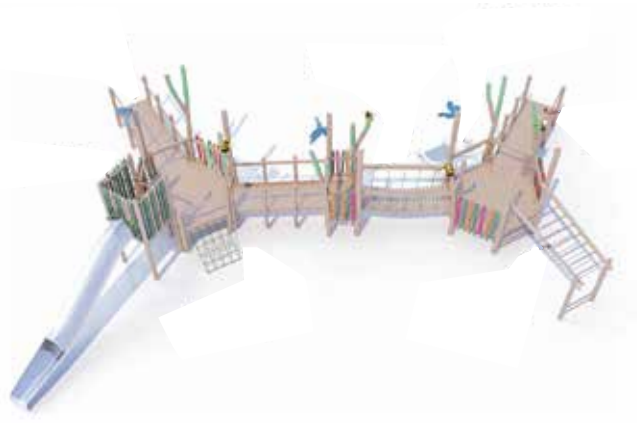


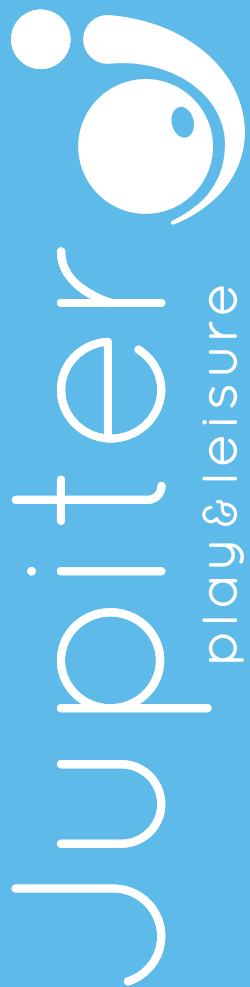


# Design examples

An inclusive strategy has to be implemented at the beginning of a project, a design with an inclusive after thought is tokenistic. Designing inclusive play structures is more expensive than regular large scale structures with lots of climbing: The benefit is worth a lot more!

Sensory rich environments designed for all ages that celebrate and enhance nature and greenspace is THE best type of play space.





☎ 0115 969 9859

📍 23 Rectory Road  
West Bridgford  
Nottingham NG2 6BE

✉ info@jupiterplay.co.uk  
sales@jupiterplay.co.uk

🌐 [jupiterplay.co.uk](http://jupiterplay.co.uk)

☎ 0131 445 7989

📍 9 Ainslie Place  
Edinburgh  
EH3 6AT