

The Inclusive Playground

— *A Rewarding Challenge*

By Maria Feske

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Berliner Seilfabrik
Play Equipment Corporation
96 Brookfield Oaks Drive
Suite 140
Greenville, SC 29607

T + 1 864 627 1092
F + 1 864 627 1178

www.berliner-playequipment.com
info@berliner-playequipment.com

Inclusive Play versus Accessibility

Twenty-five years ago, the United States adopted the Americans with Disabilities Act (ADA). This law is a milestone, protecting people with disabilities from discrimination. It includes, among others, protected areas for workers and public transport, but also public squares, parks and playgrounds. It is a valuable law, protecting our human rights. The ADA changed something – in the minds, on the streets and in parks, but also in the design of individual play equipment.

Considering the diverse range of companies that manufacture playground equipment or play a part in planning a new playground area, it becomes clear that we must first understand what ADA compliant, and hence the law, means. Furthermore, what does it mean when we say that a playground is accessible and what should you take into account when you want to design an inclusive play area.

What does ADA compliant mean?



Referring to a playground as “ADA Compliant” is no longer meaningful. As of 2015, the ADA regulations are no longer just guidelines; they are the law. What that means is that all new and renovated parks must have an accessible path leading to the playground. There must be nothing blocking the path.

Playgrounds must meet all standards and rules of the ADA; thereby all play equipment of a certain size must have transfer stations installed. These stations enable a child to move, or transfer, from his or her wheelchair on to the play structure, providing an easy climbing challenge for the child. The use of a transfer station enables a child in a wheelchair to reach play equipment such as a slide.

Another aspect of the law regulates the number of play activities that are up high and the number that are at ground level.



To be protected by the ADA, one must have a disability, which is defined as a physical or mental impairment that substantially limits one or more major life activities; a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment.

A play area is defined in the standards as a “portion of a site containing play components designed and constructed for children. “A play component is defined as “an element intended to generate specific opportunities for play, socialization, or learning.”

Accessible Playgrounds versus Inclusive Playgrounds

A playground should be the center of attraction for the whole community.

A 100% accessible playground goes one step further than the ADA. It would offer no restrictions to any group of users, enabling everyone to get to and move all around the playground. Children in wheelchairs could, for instance, reach the highest point of a structure via ramps. A 100% accessible playground provides full access to a group of users, but it does not take into account the diversity of the community. Playgrounds must challenge a child, addressing not just accessibility but also age appropriateness, social development and stimulate the senses. Simply giving a child using a mobility device access to play equipment doesn't make it a fun and challenging experience.

We must also ensure inclusion, where different groups of children and teenagers, with or without disabilities, can meet, experience and get to know each other. The ramps alone would not make this connection possible; they are merely an accessibility device and do not by themselves lead to engagement with other children.

Accessible playgrounds are meant to be easy for children in wheelchairs or who use other mobility devices to maneuver to and around.



An inclusive playground contains human diversity; featuring barrier-free attractions while still offering attractions for children with ADHD – who, for example, experience great advancements when physically active such as when climbing – or children with Down's syndrome, sensory processing, visual impairments, or other physical and developmental issues.

An inclusive playground is accessible, but it is not continuously barrier-free in the traditional sense. An inclusive playground includes a balance of play experiences for all abilities, achieving parallel play as much as possible. These challenges for all parties are necessary for the development of social and cognitive skills.

This brochure provides practical examples and ideas to use when designing a global inclusive playground.

Designing an Inclusive Playground

Inclusive play spaces, accessibility, inclusive play; these words typically bring to mind an image of a child in a wheelchair.

Playgrounds surrounded by sand, with many high edges and without ramps, are simply inaccessible to such a child. And even if suitable play equipment is available, this child must rely on constant support. However, accessibility is only a small part of what really makes a playground inclusive.

Inclusive play spaces are actually quite varied and their design considers human diversity. They do more than merely compensate for "deficits."



Creating the ideal inclusive play space requires a wide range of play and usage options. When planning, you need to take into account all types of abilities, physical and mental, as well as developmental. For instance,

- The space should enable different sensory experiences and provide motor challenges in different gradations. This way, your design will address as many different capabilities as possible.
- Offer large and small, younger and older users alike the opportunity to pursue and build on their personal interests, skills, and strengths.

- Enable children to embrace and experience their commonalities and differences as autonomously as possible and in close proximity.

In this way, a playground can be a meeting place, space where people – children and their parents or caregivers – can learn from and with each other. Side by side, they compensate for or overcome social and structural barriers.

The planning and design process should address as many abilities as possible in addition to children using wheelchairs. It is not about "leveling down" nor is it necessary to remove every sandbox so that a child with limited mobility does not notice that he or she cannot run.

The opportunities of one child often present barriers to another. For example, a pull-up bar, accessible for a child in a wheelchair, can represent a barrier for a child who is visually impaired. Since the bar cannot be "touched" with the child's white cane, there might be a change in the floor structure to mark this activity. Or, a sensory pathway with different floor coverings – a fun experience for a child who is visually impaired – can create a barrier for those in wheelchairs, overcome by taking a different path.

Designing a play space to be inclusive means considering different needs. Barrier-free components can be part of an inclusive playground design, offering challenges and a more robust play experience.



Using Paths and Railings in the Inclusive Playground

A paved path and railing facilitates access for children with disabilities and helps meet ADA regulations. Yet, step-free access to paved paths on the playground site offers an advantage to many children.

Let's look at how paths and railings can enhance the play experience for a child with a visual impairment.

- A path that runs from one play area to another can provide orientation and autonomous play.
- A paved path increases the sense of safety for a child who is visually impaired.
- Integrating a railing – a very tightly stretched rope, for example – may make the use of a cane unnecessary, freeing the child's hands for climbing.
- Attaching tactile symbols to the railing can tell a child what play equipment he or she is standing next to, such as a swing, for example.
- The structure of the path can, for instance through a usual road traverse, have a signal effect for children who are visually impaired, or certain structures may point out risk areas, the demarcation of the climbing equipment, or the beginning of an open space.

A traverse means the lateral change of a path structure, which marks the beginning of the roads in cities; they can be "felt" with the white cane.



When smaller steps are used, these should be made recognizable with height contrast for children with severe visual impairment or other ability issues.

Railings offer so much more than simply providing something for children to hold. A railing enables different design options. For instance, railings can have an interesting, varied structure, with acoustic elements, turntables with interesting patterns or sliding elements made of different materials.

Such sensory elements bring added value to traditional equipment as well. They invite toddlers, people at the appropriate stage of development, and people with sensory impairments to play together, since the sensorimotor experience represents the beginning of active play. This calibrates various sensory functions (sight, hearing, and touch) as well as motor skills fine and gross (gripping, rubbing, and tapping).

Barrier-free Options in the Inclusive Playground

A wheelchair is a mobility aid, plain and simple, used for various disabilities. It has no compensatory or therapeutic purpose.

An inclusive playground should offer additional and active play options for children in wheelchairs. Paved paths that allow an autonomous access are helpful in this instance.

Barrier-free elements could include, for example, sand playing surfaces at different heights, rubber mats as bridges, and shallow ramps. The child can use these to access the higher levels of climbing equipment. Climbing devices that rely primarily on upper body strength are also possible.

Rope playground equipment with built-in seats is very accessible to children in wheelchairs. Nest swings, originally designed for therapeutic purposes, are popular, too. The

spacious lying area often enables children with and without disabilities to swing together. A majority of the children in wheelchairs can, want to and should leave the wheelchair during the games.

Playground equipment should encourage children to leave the wheelchair when possible.



The Inclusive Potential of Rope Play Equipment

Inclusive play spaces are not simply about eliminating barriers. They are meant to enable a variety of play encounters and challenges. Rope playground equipment combines different difficulty levels in a single play element. For instance,

- Younger children can test their motor skills in narrower sections of a game unit. Older children or young adults who like to climb (including those with mental disabilities) can romp in sections with larger distances between the ropes.
- Incorporating hammocks into the design enables children with strong physical impairments the opportunity to participate in the action. If the movements of the climbing children also transfer to a flat surface, a true sense of community can result.
- Another strength of this type of equipment lies in the motor challenge that they pose. For instance, children with ADD or ADHD benefit from the need to concentrate on their movements. At the same time, they can burn off a lot of their overwhelming energy by using their whole body.



ADD and ADHD are Attention Deficit Disorder and Attention Deficit and Hyperactivity Disorder. The characteristics include significant problems in maintaining the attention over a longer period of time (ADD), and an elevated, hard to suppress urge to move (ADHD). These conditions can lead children to long-term social and professional disadvantages. In the context of playing, or when there is a great interest in an activity, it is possible to observe a significant relaxation of symptoms. Such experiences do not work only as exercises related to the ability to concentrate; they also have a positive effect on the expectations of self-efficacy of these children.

Children with hearing impairments can move across the different levels while maintaining eye contact with the other children or their caretakers outside the equipment. The transparency of the rope playground equipment enables them to use sign language when playing and not feel obliged to speak to draw attention to themselves.



Many people who are deaf experience discrimination when they speak. Often, their mental capabilities are underestimated. The German Society for Sign Language and Communication of Deaf People ("Gesellschaft für Gebärdensprache und Kommunikation Gehörloser e.V.," or GGKG) advocates for the recognition of sign language as a minority language. Another stance of the GGKG is that the ability to communicate non-verbally promotes a positive self-image for those who are deaf.

"Entry Points" in the ground level facilitate getting in and out of the wheelchair. These should be between 11" (280mm) and 24" (610mm) tall so that children can leave the wheelchair and safely use seesaws, turntables, and swings, which often have backrests to stabilize the upper part of their bodies.

A 3D net structure has no prescribed entry or exit point; it is up to the child to decide where to enter, enabling decision-making and problem-solving skills. Traditional play equipment is much more rigid, having prescribed exit and entry points and a transfer module for children using mobility devices. Other side of the structure. If a child with limited mobility does not have the strength to get on the structure, he or she at a minimum can hold the rope and feel its movement. There is no opportunity to do this with traditional play equipment.

For children with a visual impairment, a low rope climbing course in which the individual climbing elements are connected, or a play net, could mean a new play experience altogether. They can climb close to the ground or in a space secured by net mesh without fear, leading to experiment and mastering greater challenges.

With rope play equipment, for every action, there is a reaction. As one child is climbing the rope structure, it causes a reaction to the other side of the structure. If a child with limited mobility does not have the strength to get on the structure, he or she at a minimum can hold the rope and feel its movement. There is no opportunity to do this with traditional play equipment.



Structure and Retreat Areas on an Inclusive Playground

Designing an inclusive play space means considering different needs.

There are children who find it difficult to be around other people, or require a longer break time, such as children with autism spectrum disorder (ASD). Children with ASD often find it difficult to get involved with new environments, people, and relationships. Often, they are more interested in playing with objects than with other children. Their body awareness is often described as subdued, and generally, they are fond of repetitive movements.

Children with ASD prefer to have social experiences as a silent observer. Using elements that allow auditory, visual, and tactile sensory experiences can increase this child's interest in activity.

- Provide experiences of a certain intensity, through very high swings, for example, or a seesaw or merry-go-round.
- Often children with ASD prefer clear, straightforward structures and sequences, which reassure them. A path can be advantageous.
- Separate climbing, sensory, digging, and refuge areas can help them get involved in this environment and to try out the game. Individuals with an intellectual disability also benefit from a clear structure and clarity since this facilitates orientation, danger assessment and information intake.

Small playhouses that enable a view of the outside and are located outside of the hustle and bustle can serve as a place of retreat. It is possible to integrate elements that appeal to the senses in a targeted manner here, as well. Playhouses are also a suitable platform for role-playing. Through the imitation of experienced scenes, or complex, even imaginary stories, role-playing reflects and promotes the capability to recognize, understand, and engage in social roles in the world.



Inclusive Playgrounds – a Place of Coexistence

Play expresses the development stage of a person, not just their age. Age levels that are assigned specific behaviors result mostly from rule-development and are fully justified. However, they do not necessarily apply to a person with a physical or mental disability. Different stages of development go hand-in-hand with different play interests. When planning and designing an inclusive play space, the big challenge is to enable the pursuit of different interests for different body sizes and mobility levels.

Designing an inclusive playground means creating places where the openness, curiosity, and impartiality of children – with or without disabilities – makes clear the richness of co-operation and togetherness. Creating an environment that considers human dignity does not mean finding the lowest possible denominator. Rather, it means enabling the potential of a society in its entirety to experience and to benefit. This is a rewarding challenge.



Planning Example



of impact protection offer a number of possible uses. A mud table, half of which is embedded in sand, the other in rubber impact protection, has surfaces of varying heights, which results, for example, in simplified access for wheelchair users. A classic net swing is also part of the plan, with rubber impact protection beneath. A play house is envisaged for another part of the playground. Not only can this serve as a refuge, but with its sensomotor elements it also stimulates various senses, as well as giving very small children the opportunity to gain their first experience of playgrounds.

Berliner Seilfabrik formerly manufactured steel rope for the Berlin elevator industry, but for the past forty years plus, the company has focused exclusively on the design and construction of playground equipment. During this period, this mid-sized family business has created a comprehensive product range offering interesting and distinctive designs covering every aspect of outdoor play. Among the team are ten individuals who make up the Berlin Creative Center – architects, landscape planners, engineers and builders whose daily brief is to create individual solutions for the design of playgrounds and playground equipment. Whenever a new playground is under consideration, the concept of “inclusion” forms an integral part of the decision-making process.

For a project in Nordrhein Westfalen, Berliner Seilfabrik was asked to come up with a design proposal centering on “inclusion”, which is in keeping with the “design for all” philosophy. The result has been a playground concept in which a number of separate “play islands” are both divided from each other and connected to each other by various paths. Different types



Another part of the playground comprises a low-level rope course. The challenging nature of the low-level climbing elements does not only lure older children and youths from indoors, but additionally offers visually impaired children the opportunity to climb safely, as well as allowing children with hearing impairments to use sign language without hindrance. Naturally, the concept also allows for classic playground elements such as a slide or swing. All in all, a neighborhood playground for all is envisaged, where children and youths of all ages, both with and without disabilities, can come together and play, overcoming social barriers in the process.



Maria Feske is a psychologist, B.Sc. Furthermore, she is a nationally certified Occupational Therapist with many years of experience in working with children and adults with disabilities. Maria Feske is head of the day care department for people with disabilities at a charitable institution in Berlin. She is the mother of an 8 year old child. As a consultant for Berliner Seilfabrik, she and the team located in Berlin, design playground concepts that are up to such special challenges.



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96 Brookfield Oaks Drive
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