

HCLUSIVE

Design Manual



A guide to creating play spaces which welcome children of all abilities

Acknowledgements

This book would not have been possible without the careful and diligent work of so many:

Renet Korthals Altes, for allowing me to interview her in regards to her general process and her thoughts on inclusive design; Jowonio School, for their efforts to create an inclusive learning environment and providing documents that describe this; Rick Hansen Foundation, for their creation of documents that informed this document; Freedom by Design, for the strategies that they developed to design for inclusive spaces; and Elizabeth Moreno, for her guidance and editing of this document.

- Brian Luce

Illustrations by Alejandra Gómez



Please note:

These materials are offered as concepts only, to be used in close conjunction with:

- **1.** Your local playground safety standards/ guidelines (as some of these ideas may not be suitable in your location).
 - **2.** Your local experienced builders, engineers, and/or NGO's (as materials, construction styles and cultural norms will be unique in your location). It is your responsibility to ensure that the playground equipment you construct complies with the relevant laws, regulations or standards in your location.

Lastly, maintenance of equipment is extremely important; any material will degrade over time, especially with heavy use from children, so maintenance over time is as important to children's safety as the initial construction to reduce the inherent risks of a playground. In locations where no standard applies, please refer to our safety manual at www. playgroundideas.org and the Public Playground Safety Handbook prepared by the US Consumer Product Safety Commission (http://www.cpsc. gov/cpscpub/pubs/325.pdf) and the United States technical performance standards that relate to playgrounds.

Important: Read Terms and Conditions (http://playgroundideas.org/terms-ofuse) for use of these materials before commencing construction - they contain, among other things, important information about the risks involved in construction of playground equipment and the limits of Playground Idea's liability. Designs and equipment made based on this website do not conform to any standard, law or regulation.



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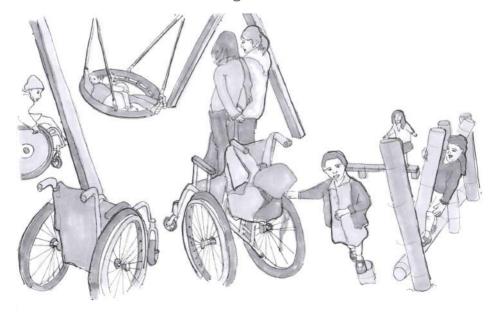


Intro

Introduction

This manual is meant to supplement Playground Ideas' Five Step Manual. The Five Step Manual guides you through the process of building a custom playground from start to finish. The "Play for All: Designing Spaces of Inclusion" Manual is intended to introduce you to helpful ideas and guidelines for designing play spaces that are inviting to children of all abilities. We'll investigate the idea of inclusive design and explore how to design a space that all children, regardless of their particular set of strengths, can enjoy.

While they are often used interchangeably, "Inclusive Design" is different from "Handicap-Accessible Design." The latter begins by looking at a child's disability first and then designing spaces to compensate for that challenge. While this perspective is often well-intentioned, it can result in playgrounds that are exclusively designed for children with limited abilities and in doing so can further ostracize children with disabilities from their peers. In addition, when design only seeks to compensate for disability, it ignores children's unique strengths and misses the opportunity to create a space that can encourage children to engage in challenging, even reasonably risky activities that build resilience, mastery, and a positive image of self.





In this manual you will learn about "Inclusive Design." Design that is inclusive begins by looking at children's strengths, instead of their disabilities. All children have strengths and by taking into consideration the range of different strengths within a community, you'll be better equipped to design a fun, safe, and beautiful playground that brings children together, instead of dividing them by ability. By designing for inclusion, and beginning from a perspective of "strengths," you can create play space that is designed with everyone in mind and that challenges and supports children with a wide range of abilities. For example, a blind child's strengths are their heightened sense of touch, hearing and smell, How could these senses be better use in a playground for both sighted and non-sighted children?

One last point on inclusion is that children of different ages have wildly varying abilities. For example, a ladder or fireman's pole that is used with ease by a 7 year old may be a neckbreaking deathtrap to a toddler. So regardless of whether you have children with 'disability' in your community, all playgrounds have to deal with children whose abilities are very different.

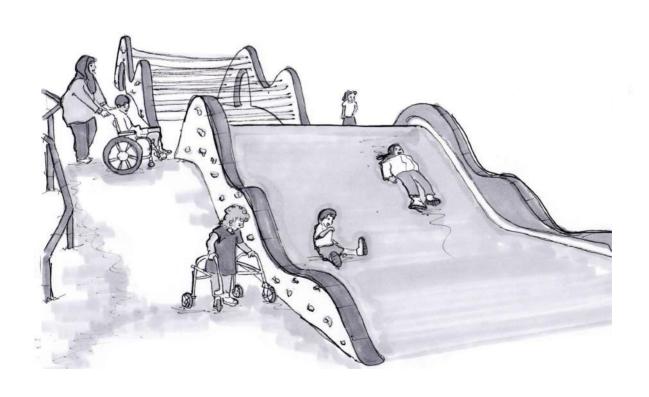
In this manual you will discover tips and strategies that you can deploy while following the process laid out in The Five Step Manual.





Designing for Intersections

It is human instinct to try and categorize and differentiate. This can be helpful in some areas of our life, but when we categorize people by ability, it can lead to isolation and exclusion – and this can manifest as bad playground design. A playground with a handicap-accessible slide and a regular slide conforms to a bias we have to categorize people of different abilities and separate them. It is easier to build two slides than it is to think of a way to build a new form of slide that allows children of all abilities to play together on the same playground equipment. We want to look for ways that children of different abilities can interest with each other. When a feature has different challenges associated with it and a rage of difficult, children with different levels of ability will interact with it and each other. When designing for inclusive play, consider how you might create spaces of "intersection" on the playground. "Intersections" create opportunities for children of all abilities to interact and play together.





Jowonio School, an all inclusive elementary school located in Syracuse, New York, likes to say they make things "only as special as necessary." This is a good way to think about the design of an inclusive playground. Determining what needs you will have to accommodate and then making them blend into the design is very important

www.jowonio.org

"When working with students, it is often easier to categorize than to spend the time and treat everyone as an individual. However, everyone has their own abilities and disabilities. To create an inclusive classroom, take the time to identify the individual needs of all students."

- Rick Hansen Foundation

www.rickhansen.com

In designing spaces of "intersection", it's helpful to think about ability on a scale, instead of categorizing children as "disabled" and "able-bodied". "Toddler", "tween" When you think about the strengths of children on a scale, you can design spaces where features have a range of difficulty instead of a distinction like the handicap slide. Looking for "intersections" within a design where children of different abilities end up interacting and playing together is essential. Van Campenvaart, a playground designed by Carve in Amsterdam, deals with the idea of intersections very well. The design employs a ramp that allows children who use wheelchairs to ascend into the playground. The ramp crosses the playground back and forth on its way up. This in turn creates triangular sections of the playground populated by whimsical features that children with a wide rang of abilities can play on. As children move throughout the playground they interact with other children with different ranges of abilities.

Opportunities for play exist at these intersections.





Source: www.carve.nl/en/item/22



Each triangular section of the playground can be seen as having a scale of ability from the ramp on one corner to a feature such as a rope ladder on the other. It dissolves categories by placing similar features with different ability levels on the same triangular section and intersecting them with the ramp.



Source: www.carve.nl/en/item/22

Every child does not need to access every inch of a playground for the playground to be successful, but the more intersections there are, the more that the differences between children become strengths and stimulus for games.

But what if children with low physical ability are confronted with an element that is too challenging? Firstly, children develop very fast and need constant boundary pushing activities to progress. If given enough time to experiment, children are very good at managing the line between something being challenging as opposed to being dangerous. Try to create elements that have a range of challenge where children have the option to get off or stop at the level they feel is challenging enough, e.g., an angled balance beam that gets narrower and higher on a gentle slope so children can assess as they go.

Listen

Step 1: Listen, of The Five Step Manual includes more information and activity ideas about gathering design inspiration from children, teachers, and parents.

Talking to parents of children with a wide range of abilities is very important. These parents have watched their children grow up and have developed ways to make their lives easier. They may have developed specific play equipment for their homes and they will have advice for you with regards to how their child move throughout the world and what will make it easier for them to get from place to place. While talking to parents remember to ask for practical dimensions and spatial characteristics. "The room should be 5 feet by 4 feet," is an example of a guideline. "The space is tight and hugs the child," is an example of a characteristic.

Example: "Passageways need to be at least 3 feet wide for his wheel-chair to be able to pass through"

Example: "When she is feeling overwhelmed, she needs spaces that are tight and hug her"

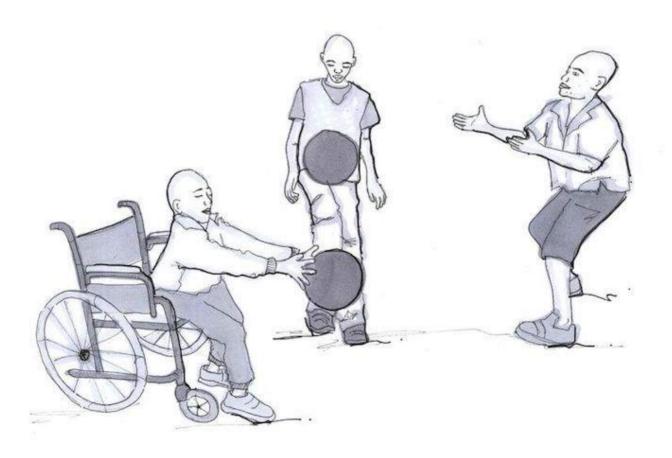






Opportunities Over Problems

Design is about seeing opportunities where others see problems. When you run out of a particular material it is an opportunity to shift the design and make your material palette more interesting. When something is cut too short, it is an opportunity to celebrate that spot and add detailed design to where there previously wasn't. When children in your community do not have use of their legs, it is an opportunity to think about the world with a new constraint. If you see someone without the use of their legs as a problem, you might simply tack on a ramp wherever there is a change in level and expand every inch of the playground to accommodate the size of a wheelchair. If you see this as an opportunity you may design new ways for that person to interact with people who have full use of their legs. Everyone in a community has strengths, and these strengths lead to opportunities for interesting design choices.





Finding opportunities where others see problems is mostly about changing your mindset, but there are some concrete steps you can take that will make your job easier. As you listen to the community you are designing for, create a list of the disabilities you find are prevalent in your community. A good starting list may include:

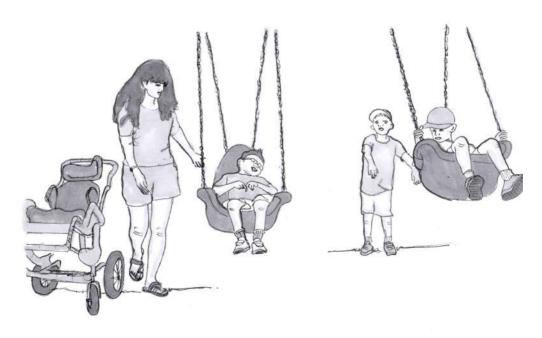
- + Visually impaired
- + Children with reduced mobility (check all diverse type of reduced mobility: wheelchairs are just such a small percentage; besides, they want to get out of the wheelchair if possible)
 - + Hearing impaired
 - + Mentally disabled

See what those children are good at and note their strengths in the list you are developing. Someone without full use of their legs may have developed extra strength in their arms to compensate. This extra strength could allow them to climb in areas of the playground that are specially designed for this purpose. You may choose to look at climbing walls as a starting point in the design process and see how they can be a great equalizer when it comes to ability: the expert next to the novice, and the person normally bound to a wheelchair next to the star athlete. This is an opportunity for cross pollination of experiences and may lead to an understanding among children who lead very different lives.



But I'm Designing Handicap Playground for a Certain Handicap

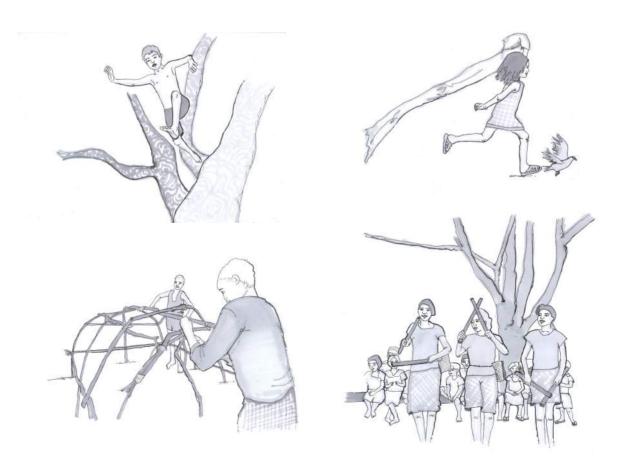
Depending on the situation you find yourself in you may be designing for a specific group of children with a shared range of ability. In this case there are two things to think about. First all the steps that have been laid out so far can be used no matter what the make up of your "community" is. Your community may be a school, a neighborhood, or a section of a city. The second thing to keep in mind is it is not a bad idea to allow other children from the surrounding community to join in. If at all possible, opening the playground up and allowing the children to interact with different people in a safe environment will benefit both the children you oversee and the larger community.



Tips and Strategies

Diversity in Types of Play

Make sure that there are many types of play. A list of these types can be found in the Five Step Manual in the design section. Diversity is the key in designing a good playground. Children are all explorers and they are learning about their world. The more types of exploration that can happen on the playground the more excited children will be to explore it and the more often they will return. Some forms of play require a separate space and others can be mixed together. It is best to try and overlap as many of the types of play as possible. The more the types of play overlap, the more opportunities for children to interact with each other. (Renet Korthals Altes)



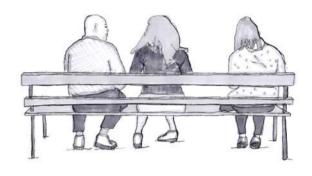


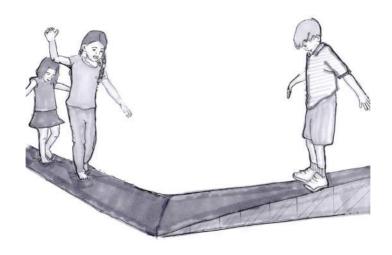
Each Feature Should Have a Scale of Difficulty

The way we think about the world influences the way we design. Humans think in categories in order to make it easier to deal with the diversity of the world, but if you look around, you will find that diversity and difference reign. The rainbow may look like 8 colours, but actually it's just a million shades right through the spectrum. All children exist on a spectrum of abilities, and as you design the playground, think about scales of difficulty. Each feature should be designed in such a way as to have several overlapping scales of difficulty. A rock climbing wall is a good example of a feature with a scale of difficulty. A rock climbing wall has several levels of difficulty all existing on the same wall. a beginner and a pro will be climbing next to each other and learning from one another. The features in an inclusive playground should have this same effect. Children on different spots on the scale of abilities should be able to play next to each other and learn from one another. If each element has something for everyone, then children will have more opportunities to interact and develop play that incorporates everyone. (Renet Korthals Altes)

Seats for Caretakers

Include seats for caretakers that are comfortable, located where they have a good view of everything happening on the playground, and close enough so they can intervene in case of emergency. These seats allow the caretakers and parents to have a moment of rest while the children are independent and exploring the playground.





Use Site Features to your Advantage

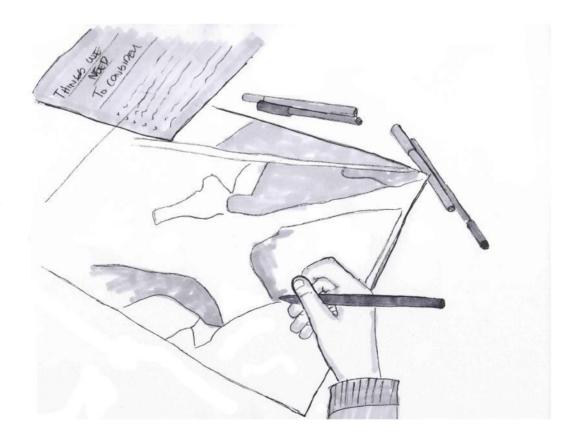
Make a list and map of:

+ Changes in the level/ slope
These can add interest and allow you to make portions of the playground accessible without a lot of extra money.

+ Location of trees and other natural features on the site.

+ Built elements like walls, concrete slabs, etc.

These features should be looked at as gold to mine instead of obstacles to avoid and or remove.





Design

You are now ready to take what you have learned from the members of the community you are working for and turn it into an inclusive playground. There are some things you should keep in mind when you sit down to design.

Zoning and Routing

Zoning and routing- create zones and routes within the design that are logical and straight forward.

Once you have a site plan and a concept that is inclusive, it is time to create play zones and routes within your playground. These zones and routes should be logically placed so that everyone, regardless of physical or mental ability, will be able to navigate the playground. Remember what we learned earlier about designing for "intersections" – create routes that facilitate interactions between children of all abilities.

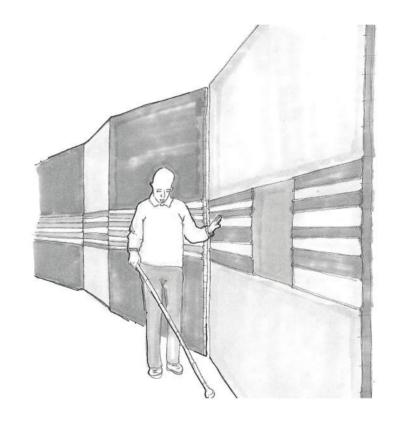
Having said this, there is often a randomness about children playing, and taking the long route can sometimes be more fun if it passes through a tunnel or over a hill.

When creating zones and routes, think back to the listening portion of the Five Step Manual and the things you learned while talking to local students, parents and teachers. What types of play did you find the community is looking for and how are they related? These zones should overlap to create a more inclusive feel. Do not split the site up into the different levels of ability. This will create a playground where children of different abilities are separated from each other.



Overlapping zones and different levels of ability on every feature within the playground will lead to a more inclusive playground that encourages intersections.

Once you have zones picked and roughly placed on the site (they will move and shift), it is time to create paths or routes through the site. Routes should be at once fun interesting spaces for play and a way for caretakers to move to a child in need. Creative problem solving is needed to make these spaces both fun for play and efficient for emergencies. Using textures, grade changes and width changes can lead to interesting routes as long as views and movement of caretakers are taken into account.



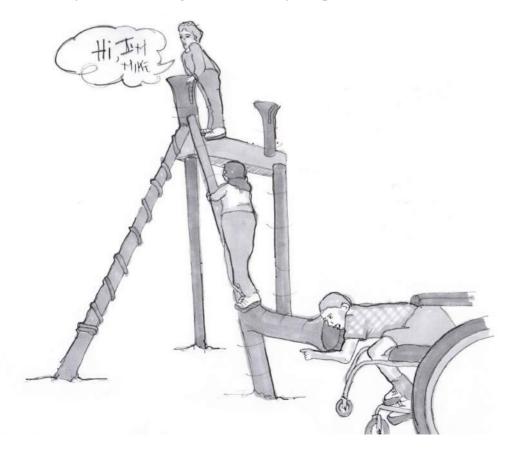
Be logical when creating routes through different zones. The simpler the routes through the site the easier it will be for children to find their way and for caretakers to intervene incase of emergency.

Consider colors and textures when designing paths. A child with limited sight should be able to tell when they have left the path and are in a zone of the playground. This can also be a fun place for design and should add to and strengthen your concept.

Paths should also be wide enough for a child or caretaker in a wheelchair to comfortably get from place to place. A good dimension to start with is 1.5 m. These paths should also be as level as possible to make traveling them easier. As It is a playground, you can create reasonable levels of challenge and fun in the design, access.



Get creative with how children interact with the site and each other within the zones you have set up. A speaking tube can allow climbing activities on a slope, possibly changing over the length of the slope, can of ability to climb a slope together.



It is not that each student needs to touch the same exact spot but being close enough to each other to interact audibly and visually is very important to creating an inclusive abilities to interact with one another.



The Zones and Routes can appear on a map at the entrance of the playground. This map should be easy to read and easy for caretakers to relay to children who can not read it. The planning you have done so far will make creating this map easier.

Feedback

Be sure to bring your designs back to the community you are designing for to get their input. Ask them if the design is working and if there are problems they can for see with what you have produced.

Repeat

Design is an iterative process. You have to work through a few versions of the same playground to get to one that everyone enjoys. By repeating the steps above you will refine each aspect of the design and discover what the children and caretakers in the community like best about your design. You will also learn what to avoid in future iterations. There is no perfect design and remember that you can always renovate and add to the space over time.

Conclusion

Throughout this manual we have been discussing the importance of rethinking what it means to design a playground and looking at it through the lens of inclusion. We imparted several strategies that are employed by professionals in the field when they design inclusive playgrounds and laid out a process for you to follow. By combining this manual with the Playground Ideas' Five Step Manual you are now ready to design, fund, and build a playground that every child in your community can enjoy.



"Things are not always going to be easy for you, the students or the parents. The best way you can handle a situation is to be supportive. Come to the table with a solutions-based approach and a positive attitude." -Rick Hansen Foundation

