

Creating Inclusive Play and Community Spaces

An out-of-the-box approach to social and emotional inclusion

by Helena Liedtke Allen C. Crocker Fellow, 2015/2016

This project was co-sponsored by the Massachusetts Developmental Disabilities Network.













"We are not defined by where we live or who our neighbors are, but by how we treat them."

Helena Liedtke is a speaker, advocate for children with special needs, and founder of Space2Thrive, an organization that connects children with and without disabilities through play and interactive activities.

As a mom to two spirited little girls, one of whom was born with spinal muscular atrophy, Helena became aware of families' great need for support and services that many communities lack. Her background as an architectural designer inspired her to design inclusive playgrounds and living spaces for children with disabilities.

In 2015, Helena was awarded the Allen C. Crocker Family Fellowship at the Institute for Community Inclusion at the University of Massachusetts Boston. The fellowship gave her the chance to create this document, where you'll learn about the newest research on the importance of play and social and emotional inclusion within communities.

Helena is a parent representative for the Massachusetts Interagency Coordinating Council, and is passionate about ensuring that future planning and policy decisions for the Early Intervention System in Massachusetts serve all residents at the highest level.

In 2007, Helena immigrated from Germany to the U.S. She became an American citizen in 2012. This experience alone taught her that we are not defined by where we live or who our neighbors are, but by how we treat them.

Creating Inclusive Play and Community Spaces An out-of-the-box approach to social and emotional inclusion

by Helena Liedtke Allen C. Crocker Fellow, 2015/2016



"By definition creativity requires 'out-of-the-box thinking'. If it's 'out-of-the-box thinking' that we want, than perhaps we should spend less time and money marketing to children what's inside the box and place more real value on open-ended creative play with a box."

- Dr. Laura Jana, Pediatrician & Author

Table of Contents

7	Acknowledgements
9	Goal and Introduction
10	Defining a Play or Community Space
11	What is Inclucion?
12-13	Access versus Inclusion
15-17	Findings about Benefits of Peer Interaction and Play Spaces Research contribution by Denise Galford-Koeppel
19-23	Conclusions to 'Findings about Benefits of Peer Interaction' and the Importance of Designing Play Spaces in Support of Positive Outcomes
25	Existing Play Spaces: "At Least" Environments
26	Design Approach
27	Considerations when Planning an Inclusive Community or Playspace
28	Creating an Inclusive Space Demonstration with the help of a maze
29 30 31	Why are Mazes so Fascinating? Dream Big / Features to Consider Dream Big / Maze Example
32	Inclusive Spaces - Considerations
33-40	Inspirational Design Ideas to Create Inclusive Spaces
41-50	Design Considerations when using Pre-Manufactured Play Structures
51	Wish List
51	Fundraising Thoughts
52	Afterword

Acknowledgements

With gratitude, respect and special thanks for all the support and contribution to this document:

Many special thanks to the Massachusetts Developmental Disabilities Network, which consists of the Institute for Community Inclusion at UMass Boston, Disability Law Center, Inc., Massachusetts Developmental Disabilities Council and the E.K. Shriver Center at UMass Medical School as well as to my mentor Dr.David Helm for recognizing the importance of creating truly inclusive community and play spaces, and for granting me the Allen C. Crocker Fellowship in order to create this document.

Many heartfelt thanks to Denise Galford-Koeppel*, who volunteered her time to support this study with her expertise as an educator and a thorough researcher on the importance of peer interaction.

Thanks to Anya Weber from the Institute for Community Inclusion at UMass Boston for proof-reading this document.

Many thanks to Janine Fitzgerald ** from the Fitzgerald Institute for her input and opinion on the content of this document.

Last but not least, many thanks to my husband, Helge Liedtke, for proofreading many times along the way, and to my children, Vivienne and Lara, for being my inspirations and guides. Without them showing me, I would never have known what is needed and important to create inclusive play and community spaces.

^{*} Denise's career as an educator has focused on supporting families, children, and educators through advocacy, training, and consultation. She has a passion for spreading the word about the importance of fostering peer interactions in young children and building social and emotional capacities in people of all abilities across the lifespan. Denise knows first-hand how it is to raise a family that includes a child with differences. She believes in being intentional as we guide others to learn how to overcome the evolving challenges of inclusion in all of our changing communities.

^{**} Jeanine draws on more than 35 years of professional experience to empower teachers and parents to achieve more with children "at risk." With experience as a certified teacher, mental health professional, and mother of three grown children, she understands the promise of every child, as well as the diversity of their needs.

GOAL

The goal of this paper is to inspire and spread awareness, to eliminate common fears, and to show what is not only possible, but desirable, achievable, and affordable, for our children and communities.

It's not the quantity or the price tags of objects that create inclusive, happy, and socially healthy and wealthy, empathetic, and supportive communities. Instead, it's the passion and willingness of each individual to embrace diversity and to see the potential it holds for himself and the greater good.

"... parks are such an essential component of livable, sustainable, communities that it is difficult to imagine a truly livable sustainable community without parks, trails, and other recreational resources and the positive changes such parks create for the entire neighborhood."

From Rejuvenating Neighborhoods and Communities Through Parks - A Guide To Success by National recreation and Park Association www.NRPA.org

"There is no greater disability in society, than the inability to see a person as more." – Robert M. Hensel

Our heritage and culture define our character, and we become a reflection of the environment we grow up in.

We cannot choose where we grow up, or what abilities we were born with. But we do have a choice about how we build and design our communities and environments, whom we include,

and how we treat each other. These choices can result in the prosperity, wealth, wellness, and goodness of a community and its individuals. We have the power to create an environment for our children to become independent, resilient, responsible, empathetic, and mindful members of our society.

"Why would we separate, segregate & alienate children from one another while at the same time teach them to look after the world around them, respect differences & take a stand at injustice?" –Nicole Eredics

INTRODUCTION

A playground can do more than just offer opportunities for a number of children to play outdoors.

A playground is a space where children can learn important social and emotional skills on their way to adulthood. It is a space to meet, interact, grow, and learn from each other. The more diverse the interactions are, the more experiences will be made, and skills will be acquired.

All children have the right and should have the opportunity to engage in those experiences.

All children regardless of ability have the right and should have the opportunity to interact with and befriend peers regardless of color, gender, race, or ability in the way children understand best: through play.

This is only possible if the designed environment

allows for barrier-free peer interaction and integration.

Every child has a unique gift and should be encouraged to reach their full potential. The potential is different for each individual. The rules to DREAM BIG should apply for everyone as BIG means something different for everybody.

To DREAM BIG should not be associated with the size or quantity of goals or achievements, nor should it put pressure on children to achieve certain expected standards and feel defeated and disoriented if those standards fail to be met.

To DREAM BIG means to be allowed to fully spread one's wings fearless of social judgement and exclusion. It means to thrive and develop and reach for the own soul's potential in a judgment-free and embracing environment.

DEFINING A PLAY OR COMMUNITY SPACE

A play space may not be limited to play components for children, but can strive to meet family and community needs as a whole. It can offer communities multigenerational meeting and exchange spaces to connect and learn from each other regardless of ability.

When planning a play or community space, it is helpful to create a target-diagram. Whom is the space supposed to serve? The diagram below is an example for determining who needs to be taken under consideration for planning and design purposes.



A play space can be part of a greater rec- the local social and cultural life. The opportunities reational and community enrichment goal. It can offer meeting opportunities, as well as support the purpose of an inclusive space can be determined.

are grand. Please refer to the diagram below on how



What is



 $i \ n \cdot c \ l \ u \cdot s \ i \ o \ n \ {\it The Action or State of INCLUDING or of BEING INCLUDED within a group or structure.}$

Inclusion is an universal matter, not just a local one. Keys to Inclusion, a U.K. website, states:

is a bit more complicated than that... It is used by disability and outcomes for disabled people including treating people rights activists to promote the idea that all people should be with dignity and respect and ensure that society no longer disfreely and openly accommodated without restrictions or lim- ables its citizens. itations of any kind.

It is described by some as the practice of ensuring that people feel they belong, are engaged, and connected. It is a universal human right whose aim is to embrace all people, irrespective of race, gender, disability or other attribute which can be perceived as different.

Miller and Katz (2002) defined inclusion as: ".. a sense of belonging: feeling respected, valued for who you are; feeling a level of supportive energy and commitment from others so that you can do your best."

It is about valuing all individuals, giving equal access and opportunity to all and removing discrimination and other barriers to involvement.

From an ethical point of view, human rights are fundamental to overcoming disabling barriers and promoting inclusion.

"Inclusion at its simplest is 'the state of being included' but it A human rights approach should ensure positive processes

Respecting human rights in the delivery of services is not an optional extra but a set of core values and fundamental to public sector reform. Human rights extend to economic, social, cultural, civil and political rights.

Work towards inclusion must be active, involves imagining better and understanding that we all have something to contribute. It encompasses people having control over their own support and making their own decisions (personalisation), participation and presence in their own communities."

"We know it can be hard work, but the job has to be figuring it out, not justifying whether or not to begin or to continue including someone.

We dream just as did Martin Luther King... a dream of inclusion, full inclusion, where the answer to who do we include becomes: All means all." Colin Newton, Inclusive Solutions.

http://www.keystoinclusion.co.uk/what-is-inclusion-2/

All means all.

All those aspects Keys to Inclusion is mentioning are things every individual is thriving for and which come naturally to children. Children are curious in a very neutral and innocent way. It is on us adults how we foster and support their curiosity. It is on us how we build our environments to include all individuals within our communities.

If children grow up in an inclusive and inviting environment where we support people's strengths instead of weaknesses, all children will naturally learn that "we all have something to contribute." We will not have those discussions about "economic, social, cultural, civil and political rights" to the extent we had in the past and still have today.

It will just happen as a result of the culture we created.

Nelson Mandela stated that "Poverty ... is man-made and can be removed by the actions of human beings." The same goes for exclusion.

Society has the choice to include or exclude, to build inclusive or exclusive environments, and to not only teach a nation to be indivisible, with liberty and justice for all, but practice it and lead by example.

"The ADA specifically requires that each service, program or activity conducted by a public entity, when viewed in its entirety, be readily accessible to, and usable by, individuals with disabilities."

The law covers "both indoor and outdoor areas where human-constructed improvements, structures, equipment or property have been added to the natural environment."

Paper on Playground Accessibility – ADA Compliance by Assistive Technology Partners

What does that mean?

For a playground to be ADA-compliant, it must provide a minimum amount of play components that are accessible. This is based on the total quantity of such elements, differentiating between elevated and ground-level components.

With all its good intentions, in reality this rule runs the risk of causing humiliation, segregation, and exclusion.

Although a child in a wheelchair may have access to an elevated play structure, all she can do is go up and down ramps and then watch the other children head down slides and climbing elements, unable to follow and keep up with her peers.

Additionally, most ramps are 36" wide, the minimum required by law. This has the effect of peers either jumping or caregivers pulling their children out of her way in fear of being 'run over'. Just by making ramps 5ft wide instead of 3ft, we start crossing the line between accessibility and inclusion. In this new scenario, children can pass each other or even hold hands while walking and rolling side by side, up and down the play structure.

Another example of accessibility versus inclusion is described in the scenarios on the right.

While Scenario 1 offers access to the activity for the child in a wheelchair, it still doesn't allow for her to interact with her peers on the same level. The different levels of seating alone create a physical separation, which also leads to social and emotional separation. It clearly identifies the child as "different" or "the other."

Scenario 2, on the other hand, places the child among her peers. This allows her to interact on eye level and be part of the group and its interactions, physically and socially and emotionally. The child is **among** her peers and "one of them."

Scenario 1: Making an activity accessible

A child in an integrated classroom uses a wheelchair for mobility.

The art class teacher decides on a sunny day to move the class outside to draw.

While all the children are sitting down in the grass, the child in the wheelchair is provided with a table high enough to approach it with the wheelchair and participate in the activity.

Scenario 2: Making an activity inclusive

A child in an integrated classroom uses a wheelchair for mobility.

The art class teacher decides on a sunny day to move the class outside to draw.

All the children are sitting down in the grass. The child using the wheelchair is transferred by her aide out of the wheelchair, and is seated among her peers on the ground. She receives a tray-type drawing underlay so that she can complete the art assignment, as her peers are doing.



Access to content within a playhouse by providing a picture-box outside



Inclusion by providing a ramp and inviting all children to join the fun

"I could not, at any age,

VS.

be content to take my place by the fireside and simply look on. Life was meant to be lived. Curiosity must be kept alive. One must never, for whatever reason, turn his back on life." - Eleanor Roosevelt

Findings about Benefits of Peer Interaction and Play Spaces by Denise Galford Koeppel

The UN Convention on the Rights of the Child (1989) declared that all children including children with disabilities should enjoy active participation in the community with opportunities to play. Play with peers is a vital, developmentally appropriate experience for all children (Brazelton & Greenspan, 2000).

Acceptance by peers is a key element in the development of peer relationships across early childhood, from infancy to age 8. Peer relationships have long-term effects on children's future success, both academically and socially (National Scientific Council on the Developing Child, 2004; Shonkoff & Phillips, 2000).

Positive peer relationships influence school adjustment, while peer rejection predicts externalizing problems such as delinquency and internalizing problems such as loneliness and depression (Rubin, Bukowski, Parker, & Bowker, 2008).

Without positive early social interactions, young children can show negative consequences in later adjustment such as anxiety and withdrawal (Bovey & Strain, n.d.; Ostrovsky & Meaden, 2010).

Peer rejection has been determined to predict social competency and adjustment, including early withdrawal

from school (Coie, Lochman, Terry, & Hyman, 1992).

Through longitudinal studies, it has been determined that children who attended childcare and had more positive interactions from age 24 months to 54 months showed better social competence in the third grade (NICHD Early Child Care Research Network [ECCRN], 2008).

Conversely, negative peer interactions were associated with fewer friendships and higher ratings of aggression by third grade teachers. Early relationships with peers are also associated with future academic competence (National Association for Education of Young Children [NAEYC], 2009; National Scientific Council on the Developing Child, 2004).

A recent longitudinal study followed children from age 5 years until age 23 and found that the quality of peer relationships showed stability across childhood and into young adulthood (Lansford, Yu, Petit, Bates, & Dodge, 2014).

Furthermore, the authors concluded that peer interventions directed to young children have long-term effects into social acceptance and support when they reach adulthood.

How Children Play

In 1932, sociologist Mildred Parten delineated the levels of children's interactive play (Berger, 2012).

Lowest levels of play begin with unoccupied, solitary, and onlooker play and proceed up to parallel play, associative play, and cooperative play. For parallel play, children are near and next to one another using the same type of materials, but the children do not interact. For associative play, children begin to interact with one another, talking and giving and receiving materials. In cooperative play, the children are playing together to create a drama involving turn taking.

Peer interaction skills begin to develop in infancy and throughout toddlerhood, and increase in complexity as children enter the preschool years. The research of the last 20 years has shown that infants at 14 months and even as young as 12 months exhibit peer processes such as offering and taking objects (Williams, Mastergeorge, & Ontai, 2010).

Responsive relationships between infants/toddlers and adults promote emerging relationships with peers (Dunlop, Wilson, Strain, & Lee, 2013). The foundational skills for social competence with peers are established before age 3 (Guralnick, 2001).

Children with developmental delays

Young children with disabilities are at risk for difficulties with peer interactions (Brown, Odom, Conroy, 2001; Guralnick, 2001) and for peer rejection (Odom, et al., 2006). Through observation and measurement, young children with disabilities and developmental delays are least preferred by peers in social opportunities (Shonkoff & Phillips, 2000).

Children with physical disabilities are especially at risk for exclusion as young children can identify motoric difficulties in others and this influences their play decisions (Diamond & Hong, 2010).

Children with developmental challenges may show challenging behaviors which can interfere with the ability to engage in positive relationships, to form friendships, and to learn expected skills for play with others (Dunlap, Wilson, Strain, & Lee, 2013).

Additionally, Guralnick (1999) described that even children with delays described as "mild" show substantial difficulty in building friendships.

Even young children understand that children with physical disability have limitations in their motor skills. Diamond, Hong, and Tu (2008) explained that children tend to include peers with physical disability for activities requiring nominal motor skills.

Preschool children with and without special needs engage in the same playground areas completing the same types of activities (Nabors, Willoughby, & Badawi, 1999). However, children with special needs were more likely to play alone. (Nabors, Willoughby, & Badawi, 1999).

Importance of Play Spaces and Outdoors

Outdoor play is uniquely stimulating for children. It allows them to challenge their physical skills and connect in play with other children through cooperation and construction.

Peer interaction allow children to develop social skills and the ability to form relationships (Shim, Herwig, & Shelley, 2001). Playground time is valued as a place to support social interactions (Yuill, Stieth, Roake, Aspden, & Todd, 2007).

According to Barbour (1999) there are three general types of outdoor play spaces: traditional, adventure, and contemporary.

Children prefer adventure spaces that include movable materials, followed by contemporary structures consisting of multipurpose linked structures with fixtures suggesting dramatic play, and lastly traditional play spaces made of individual pieces such as a sling and swingset. (Hayward, 1974, as cited in Barbour, 1999).

Shim, Herwig, and Shelley (2001) described simple playground equipment as pieces with a single use, complex as consisting of juxtapositions allowing improvisation by the child, and "super units" as single pieces of equipment with multiple play materials available, such as a sandbox or climbing structure with moveable boards and fabric. High-quality outside play spaces consist of challenging and moveable parts and children show the most complex peer play during outside play (Shim, Herwin, & Shelley, 2001).

Federal law (IDEA Part C) addresses the need to educate children in natural environments with the inclusion of children with and without developmental disabilities.

Simply including children with disabilities or weaknesses in social skills does not create connections amongst those children (Yu, Ostrovsky, & Fowler, 2015), and so, peer interactions should be scaffolded and supported with roles for the adults and peers (Leach, Pratt, & Roberts, 1990).

Just putting two toddlers together does not mean positive peer interactions will happen (Shonkoff & Phillips, 2000).

Environments that are carefully crafted can increase positive peer interactions (Bovey & Strain, n.d.; Hull, Capone, Giangreco, & Ross-Allen, 1996).

Leach, Pratt, and Roberts (1990) found that there was no significant difference in the behaviors and play of children with and without disabilities on playground.

Efforts to create a playground space with a clear circuit to connect equipment, observation points, and props for imaginary play, such as a railroad-type track, resulted in increased group play and social initiations (Yuill, Strieth, Roake, Aspden, & Todd, 2007).

One of the most important factors in whether or not a child will play with a child with a disability is the social perception of the child with the disability.

Yu, Ostrovsky, and Fowler (2015) found that preschoolers are aware that other children are different and show knowledge of disability.

They also found that it is a typically developing child's attitude and perception of the likeability of the child with developmental differences that predicts how a child will play with others. Liking to play with another child created more associative and cooperative play.

This confirmed the earlier findings of Leach, Pratt, and Roberts (1990) showing that children with disabilities initiate social bids as often as their typically developing peers, but that they are viewed as less competent or less desirable by those peers.

The 2007 final report of the National Early Intervention Longitudinal Study (Hebbler et al., 2007) indicated strong findings about the importance of early identification of social emotional issues such as peer interaction skills.

Adults in the 21st century must expand their skills to ensure that children master the precursors for academic achievement, which include fostering peer relationships (Bowman, 2011).

Efforts to train teachers to support peer interaction have shown increases in the number of pro-social behaviors in classrooms (Girard, Girolametto, Weitzman, & Greenberg, 2011) and statistically significant improved social outcomes (USDOE Institute of Education Sciences, 2012).

Hence, peer interactions are a preventative intervention (Guralnick, 2001).

Opportunities for healthy peer relationships are essential to helping children prepare to become successful students and citizens.

Conclusions

to 'Findings about Benefits of Peer Interaction' and the

Importance of Designing Play Spaces in Support of Positive Outcomes

According to the literature findings (see page 12), there is strong evidence supporting the benefits and positive outcomes of peer interactions between children with and without disabilities for all children and the communities they grow up in into adulthood.

In 2010 the Arc conducted a study, called the FINDS Survey, "to obtain perceptions of people with intellectual and developmental disabilities and their families on a range of life-span issues." The top findings are summarized in a report called "Still in the Shadows with Their Future Uncertain."

The title of the report brings it down to the point. Individuals with disabilities are still not integrated nor perceived as part of the community. We are still in the pioneer stages of inclusion and integration.

It has been established that peer relationships have long-term effects on children's future success, both academically and socially (National Scientific Council on the Developing Child, 2004, Shonkoff & Phillips, 2000). Early intervention and public schools have come a long way toward creating integrated classrooms, and are continuously improving their policies since the Americans with Disabilities Act was enacted in 1990. General education is picking up on ideas developed for children with special needs as it shows that the ideas are beneficial for ALL children and their education. But there is still a long way to go.

There are still too many physical and social barriers preventing individuals with and without disabilities from sharing activities and spaces of daily living. Too many people still simply do not know how to interact with individuals with disabilities, and feel uncomfortable in their presence.

Many facilities and recreational opportunities are still not accessible to individuals with disabilities, and many attempts at inclusion often create greater exclusion and even unintended humiliation.

These findings go along with reports from the United States Bureau of Labor Statistics that the percentage of working-age people with disabilities in the labor force is about one third that of persons with no disability.

The Department of Labor released new data based on a survey conducted in November 2015, which reveals that the unemployment rate for Americans with disabilities grew by 1.6% to 12.1%. No change for the overall unemployment rate during the same time frame has been stated, and the rate remained at 5%.

"Individuals with developmental or intellectual disabilities are either unemployed or underemployed, despite their ability, desire, and willingness to work in the community." (The Arc)

Inclusion, positive peer interaction, and friendships among children with and without disabilities will change the course of these statistics. The environment the children are interacting within plays a significant role in determining whether the interactions will be perceived positively by peers, or will lead to more exclusion.

"My disability exists not because I use a wheelchair,

but because the broader environment isn't accessible." - Stella Young

As we learned in the previous section, Children with developmental disabilities are least preferred by peers in social opportunities and at high risk for exclusion; even those with "mild" delays. Children identify motoric difficulties in others, which has a great effect on their play behaviors and decisions.

Building friendships is challenging. Especially for today's consumer generation, having to make and share space, can create great fears. A sense of needing to give up freedoms and choices grows almost naturally.

The question arises where to look for the cause of these feelings and behaviors – in the children or in the designed environments they live in?

What if we strive to design spaces where inclusion comes naturally and doesn't take away or limit any children? Spaces and environments that make it easy for all children to interact and reduce risk for peer rejection? Spaces that support and help parents to guide their children?

By taking the findings of Diamond, Hong, and Tu (refer to page 12) into consideration, we can conclude that children would include their peers with disabilities in activities beyond those requiring typical motor skills, if the environment would support this.

By creating barrier-free environments that support positive peer interaction and inclusion, we can directly influence the quality of the interactions.

For example: If a playground segregates children by abilities, children learn that there are boundaries to the level of friendships and interactions they can engage in.

If a child in a wheelchair is physically not able to participate in the most desired and frequented areas of play due to the designed environment, he will automatically become a less desirable playmate for his peers.

"No amount of smiling at a flight of stairs has ever made it turn into a ramp. No amount of standing in the middle of a bookshelf and radiating a positive attitude is going to turn all those books into braille." - Stella Young

Research has established that positive peer interaction and "connections amongst those (children with and without disabilities)" will not happen by simply bringing children of different abilities together. (Yu, Ostrovsky, & Fowler, 2015)

However, "Environments that are carefully crafted can increase positive peer interactions." (Bovey & Strain, n.d.; Hull, Capone, Giangreco, & Ross-Allen, 1996)

Thus, if we design play spaces more carefully and more in tune with the needs of all children, positive peer interaction will naturally arise. Friendships will not solely form based on the grade of ability, but more likely by common chemistry and interests.

To give an example from my own experience:

My daughter has a power wheelchair. She is very popular or "so cool" when she gives kids rides on the back of her chair. Children are fighting over who gets the next ride.

Friendships should not be based on materialistic values, and giving a dozen children rides on her chair will certainly not create a dozen friends. However, the activity helps to connect the children, break the ice, and start communication and interaction.

It helps children to lose fear of the unknown, and creates willingness to engage in activities together. This in turn creates a basis and potential to form friendships and teaches social skills.

Would my daughter be included in a group of children by simply seating her on a chair, unable to move and participate in any way? No. In fact, she likely would be undesired by her peers or receive pity and negative attention. This is another example of access vs. inclusion.

The environmental opportunity, in this case her power chair with enough space for peers to sit at the back, created a platform and promoted positive peer interactions. It made her part of the group and its activities, with the potential to build friendships.

This goes along with Yu, Ostrovsky, and Fowler's finding (2015) that "the most important factors in whether or not a child will play with a child with disability is the social perception of the child with the disability."

This makes us wonder what we can achieve by designing and creating, facilitating and encouraging environments and spaces where children are not limited and restricted by external circumstances to just see disabilities in their peers but opportunities instead.

"When one is disabled, the problem is not really that they have impairments and social skill deficits. The issue at stake is that they live in an 'ableist' culture that rarely affords them the space or opportunity to make their unique contribution to society and does not lift up the value of choosing them as friends." – Ben Conner

We also learned that outdoor play is uniquely stimulating for children and "allows children to develop social skills and the ability to form relationships." (Shim, Herwig, & Shelley, 2001)

And "Playground time is valued as a place to support social interactions". (Yuill, Stieth, Roake, Aspden, & Todd, 2007).

This, outdoor play with peers supports better inclusion in adulthood through learned social skills.

Every child should be given the RIGHT to experience this opportunity to the fullest.

"Our problems are man-made, therefore they may be solved by man. And man can be as big as he wants. No problem of human destiny is beyond human beings." – John F. Kennedy

It is safe to conclude that if integration in childhood fails, social integration in adulthood will be extremely challenging.

Children with disabilities do not learn necessary skills to socialize, apply for jobs, enter the workforce, and participate in daily living.

Beyond that, children without disabilities who didn't get a chance to unbiasedly interact with children with special needs may be less motivated to interact, work with or for, or hire individuals with disabilities as adults.

ALL children who grow up with a sense of significance and empowerment will more likely become confident adults, regardless of their abilities and disabilities.

Children without disabilities who get the chance to interact and play with children with disabilities in a barrier-free unbiased environment will develop a greater sense of understanding and compassion for all the people they will meet throughout their life, regardless of their ability.

They develop strong and important social-emotional skills and grow their self-confidence, supporting their own well-being as well as that of the people around them. This also applies to children with disabilities interacting with children without disabilities.

"Children who develop strong social and emotional skills will be more resilient and better prepared to cope with unexpected misfortune and more likely to overcome odds. They will learn necessary skills to navigate successfully through life."

(Socially Strong, Emotionally Secure, by Nefertiti Bruce, Karen Cairone)

Together, all children and their families can learn from each other and create a future where everybody is welcome to participate.

"Play is often talked about as if it were a relief from serious learning. But for children, play is serious learning." - Mr. Rogers

Education is another area which will benefit from positive outdoor early childhood interactions and their long-term positive effects.

In recent years, research suggests there is a critical link between social-emotional competence and academic performance and lifelong learning.

Furthermore, general education is picking up on ideas developed for children with special needs. More and more research shows that these ideas are beneficial for all children and their education.

"Opportunities for healthy peer relationships are essential... to become successful students..."

If children with and without disabilities, early on, get opportunities to interact in a positive way, for example, through inclusive outdoor activities, it is likely they will demonstrate improved social behaviors when entering the school system.

Positive social behaviors in classrooms will improve social outcomes. "Hence, peer interactions are a PREVENTATIVE intervention" (Guralnick, 2001) ... and will support teachers in their efforts to "expand their skills to ensure that children master the precursors for academic achievement." (Bowman, 2011)

In short, there are great benefits and impacts to ALL from positive early childhood interactions, greatly supported by the way we design the environments children interact in.

Amongst others, 3 key areas of positive outcomes are:

- Social competence
- Education
- Employment amongst people with disabilities

Inclusion concerns ALL children, and it never really was about children with or without special needs. What does "special needs" mean anyway? We all have different abilities, and we all have individual needs as a result of the environment we grow up within.

There are more than just the obvious physical or mental disabilities children may experience from birth. Children also can develop disabilities through sickness or getting into an accident.

Children who bully others have a special need of belonging and significance. Although they may never have been diagnosed with a "special" condition, the environment they are growing up in imposes special needs upon them.

Children who are being bullied experience a significant special need of their own. They may even be pushed into depression with fatal consequences, as seen on the news too many times.

Behavioral challenges as a result of domestic violence, abuse, etc. can disable and negatively impact children for the rest of their lives. Inclusion benefits all children, regardless of the special level of their needs.

All children seek the sense of belonging, inclusion, and significance.

These are ALL our special children with natural needs. One and all, they should be seen, treated equally, and integrated.

In order to create change, we need to stop seeing children with disabilities as the "other" children and as a thread to the "rest" of the children without disabilities. We need to develop outdoor play opportunities that include ALL children, not to pay them off with a percentage or number of play components they can access in the shadows of their peers.

"Those of us who have seen children live in the shadows know that a country as rich as ours cannot possibly justify this neglect."

-John F. Kennedy

It is the challenges and differences in our lives that make us wiser and stronger. These differences teach us valuable lessons that enable us to succeed in life and to create a better future in which everyone can thrive.

"Friendship among very young children and children with disabilities is not only possible, but beneficial. With support and encouragement from adults, young children with and without disabilities can form connections that not only provide enjoyment, but help promote their growth and development in multiple domains." - from "Friendships in Very Young Children" by Barbara Goldman and Virginia Buysse

Existing Play Spaces: "At Least" Environments

Many communities still facilitate playgrounds that are not accessible. ADA regulations do not apply to existing playstructures. If a play space undergoes an improvement or renovation, the upgraded space needs to comply with current standards. So do new playground projects.

New ADA-compliant playgrounds are being constructed all across America. Many claim to be inclusive.

But what do those playgrounds look like? Are they just accessible, or truly inclusive?

Within the scope of the Gopen Fellowship through the Massachusetts Developmental Disabilities Network, Marie Saldi, who has been in a wheelchair since she was 6 years old, conducted a study visiting playgrounds across Massachusetts. She created a booklet showcasing her results;

All kids have the right to play together - A Guide to All-Inclusive Playgrounds in Massachusetts

(http://www.mass.gov/anf/docs/mddc/guide-to-all-inclusive-playgrounds.pdf)

"I visited twenty-one different playgrounds that claimed to be accessible. I found that although most of the playgrounds are accessible some of the playgrounds weren't like they claimed to be." Marie Saldi

"Despite gains in many areas, overall the results show that our efforts as a nation have fallen short of the vision of an America where people with intellectual and developmental disabilities are accepted and have the supports they need to live to their full potential in the community." FINDS survey

Just as the FINDS study discovered shortage in efforts of inclusion throughout America, Marie's work analysing playgrounds throughout Massachusetts does the same.

After a brief general description of each chosen playground, Marie assessed the playgrounds she experienced as accessible based on 6 key factors.

- 1) At least one swing with a safety harness
- 2) At least three accessible ground components
- 3) Learning boards
- 4) Swing chair
- 5) Sensory slides
- 6) Established in honor of an individual

I am very grateful for Marie's efforts and the work she has done establishing the level of inclusion on playgrounds throughout Massachusetts. Looking at many playgrounds across the country, the findings can be applied beyond Massachusetts' state lines.

Here are some highlights from Marie's findings.

The choice of key factors and the wording "At least" already signalize what is typical about current playground designs and their categorization in terms of accessibility vs. inclusion.

The key factors consist mainly of a list of elements children with diverse abilities have access to. Current designs are basically assigning a number of selected elements to specific abilities, creating "At Least Environments." There is little choice for the children with what or even with whom they would like to play and interact with.

Often, these design principles are mistaken for inclusion when what they truly do is granting limited access. Many times they create segregation. Out of the 14 selected playgrounds, 5 playgrounds offer 3 out of the 6 key factors chosen in Marie's study, 6 offer 2 key factors, and 3 offer none.

There may be something great on each playground, but instead we should strive to make each playground great.

It is not surpring for the FINDS study to reveal that our "efforts have fallen short" in terms of inclusion, when we have been creating "At Least Environments" all along. "At least" is not enough!

Design Approach

What do we need to do to create an inclusive environment that empowers individuals with disabilities to live to their fullest potential?

A thorough "NEED versus WANT" and "BENEFIT and OUTCOME" assessment is crucial for a successful determination and decision making process.

These days, countless articles can be found around children being over-stimulated, under-exercised, spoiled, ungrateful, exposed to excessive screen time, and so on.

For some reason, society came to believe it is beneficial for our children to offer them an overwhelming number of toys, movies, and computer games (even outdoors), through creating small amusement parks with every possible piece of outdoor play equipment.

Why are we so afraid of offering less? Partially it may be the fear of coming up short in today's affluent society.

We are in a constant competition of creating "more than," which is mistakenly viewed as "better," by focusing on the quantity rather than the quality of what is being created. At the same time, we disregard the consequences of always seeking "more".

There is so much significance and so much to take away from the phrase "Less is more."

"When we focus on doing less and doing it well, instead of doing more and assuming it's better, we're less scattered, more deliberate, less harried, and more present.

And really, isn't that what we want? It may be the biggest advantage to doing less: we create more space to enjoy those things now." by author Lori Deschene

Dare to create less, but dream BIG!

Dreaming big isn't measured in quantities. I dream of all children having access to play in an inclusive and welcoming environment. It is not the size that matters, it's the existence of such a space!

I am not suggesting that we stay away from creating a large play space if the determination process has revealed its benefits for a cummunity. Again, it is not the size that makes a playground great. It is the level of inclusion and the benefits it provides to all.

When starting my work on this paper, my intention was to create a master plan for inclusive play spaces. Soon I realized that it is not the master plan that is important, but the right concept. It is not about "a playground" but meeting the needs individuals and communities are experiencing.

There are many external factors that will determine the appearance of a space. In one instance, it may be a play space for a school. In another, it may be a community space serving not only children, but multiple generations at the same time.

Budgets and the size of available spaces may vary as well.

What all those scenarios have in common, however, is the need for accessible and inclusive designed environments fostering healthy relationships and positive interactions regardless of abilities and within reach throughout communities.

Instead of creating large-scale spaces for a limited number of individuals, let's think large-scale and create a grid of inclusive community spaces of different size within neighborhoods, granting access to all the people living in those areas regardless of ability.

We do not have to choose everything from the menu of possibilities. It's not the quantity in one place that will provide inclusion for all, it's quality and availibility.

Once the need for a cummunity or play space has been established and the execution style has been decided on (e.g., manufactured or natural structures), an "inclusion plan' should follow.

What are the critical areas? What needs to be modified, why, and how? What abilities call for what measures? and so on.

Considerations when Planning an Inclusive Community or Play Space

The following diagram is an example of what a thought process may look like. It is not limited to the points listed as the needs are specific to each location.

People Involved

When determining the type and use of the future space, make use of the sample diagrams on page 7.

Characteristics
Identify historical and demographic background of town or district.
Determine drive and need for space.
What is the goal?
Whom is the space geared towards?
What are the needs?
Location:
A) Has a location been determined?
What is the size?
B) Which (alternate) locations come into consideration?
What is the desired size?
Is it a multi-generational community space?
Is it public or private?
Who is being addressed?
Or is it a play space only? If it is solely a play space, will it be private or public?
Is it a school playground? If yes, will it only be used by the school or be open to the public after school hours?
Which ages are being addressed?
Is pre-manufactured playground equipment desired?
Or is natural equipment intended?
Or is it a mixture of both?
What materials and surfaces are being used?
What does the space intend to support?
social-emotional development
physical health and exercise
mental health
teaching and education
etc.

. copie involveu
Identify successfully planned and executed
inclusive playground projects and
reach out to the committee.
Who should be part of the committee?
Who should be further involved and
reached out to for planning purposes?
Identify possible partners, supporters,
and beneficiaries.
Consider community involvement.
Consider involving community in fundraising,
building and maintenance.

Organizational Needs
Create wishlist of desired equipment, items, and
areas.
Identify and distinguish between needs
and wants and call out benefits and costs.
Classify the type of play the chosen play
equipment supports. (see page 11)
Establish a budget.
Create a marketing plan, calendar & materials.
Fundraising
Identify fundraising types and ideas and
Establish fundraising steps and goals
What rules and regulations apply to the
specific type of Inclusive space chosen and
the determined location (e.g. neighbors)?
Identify necessary steps and create a task,
time and responsibility chart.

Aspects to Consider
What challenges can be forseen short-term and long-term?
What are possible approaches and solutions ?
How can we account for and create inclusion?
Are there any legal concerns or consideraions?
Durability vs. cost analysis of chosen items
Maintenance and liability

Based on the diagram above, the write up for an example space may start as follows:

Example Space

Data & History: Historically the town/district has... The main population in the district consists of... There are X public

spaces that serve...

Drive/Need: There is no inclusive play or meeting space in town/district.

Goal: The intended space aims to create a possibility for all community members, regardless of ability, to

engage in recreational outings without having to leave their town/district. It aims to

strengthen the community and...

Location & Size: Possible locations are ... and their sizes are ...

Type: The space will serve multiple generations and will be accessible to the public. The park will include a

play space, walking trails, a picnic area and a gathering pavilion...

Creating an Inclusive Space Demonstration with the help of a MAZE

Communities have different budgets, opportunities, and possibilities based on factors like location or wealth. What they all have in common is the need for community spaces. Why don't we start with that simple approach and work our way up?

Let's identify and provide spaces, and then determine what is possible, needed, and enough. Community involvement can help keep the costs down, while at the same time building up pride and ownership.

A space can be as simple as that: a space to meet and interact, if that is what the circumstances allow and call for.

The maze example is being used to point out how simply a community space can be approached, and how the idea can grow and evolve into a full play and community space.



Example A: Simple Approach

Example A provides a space where a simple 2-dimensional maze can be created. A bucket of paint is all that is needed. Make sure to leave some space for children to bring chalk to add on to the maze if they feel inspired to.

Many skills are fostered and promoted through making a maze: creativity, sharing, and communicating. Many play styles are addressed, especially associative and cooperative play, by creating an imaginary world of ways, dead ends, turns, traps, and goals.

Using bricks to create maze borders offers fundraising opportunities by printing names of donors on bricks.



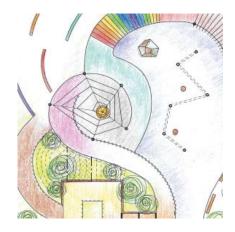
Example B: Raised Approach

In Example B, the maze theme has been taken to the next level.

The maze is raised above ground level. Some borders can stay 2- dimensional, while others can use fences or walls with openings to allow for visual exchange and interactive play.

Materials can vary from bricks and hedges to stumps and wooden walls. Check for regulations on what is possible for private or public playgrounds in your area.

Pre-manufactured wall components with openings and sensory elements can be used as well to create borders of a maze.



Example C: Full Approach

Example C demonstrates how a theme can grow and create a full play and community space.

Areas with swings and sensory and auditory elements can be placed along the way.

Designing an inclusive play space doesn't create boundaries or threatens conventional designs and components if those are desired. Practically anything can be integrated along the way. Pre-manufactured elements as well as natural ones can be used.

A play space like this supports all individuals in a community so that everybody can reach their full potential.

Why are mazes so fascinating?

Mazes are daring, challenging, and mysterious—and so much fun. The way ahead isn't always obvious, and the way out not necessarily in sight.

This sounds just like life itself. More than the end goal, the journey itself is the reward, with all the decisions along the way.

What we achieve in life is the sum of the choices we make while walking, not the act of reaching the end of the journey.

Children of all abilities learn skills they need in life to succeed through play. A maze offers countless opportunities for **unstructured play**.

With today's busy schedules, packed full of structured activities after children get home from school and on the weekends, unstructured time is missing.

However, that is exactly what children need to explore their personalities and learn important skills they will need in life to succeed.





Excerpt from "The Importance of Unstructured Play for Children," University of Stony Brook

Outdoor exploration and free play are among the most passionate and liberating joys of childhood. Giving children the opportunity to engage in open-minded, unstructured activities with minimal rules and boundaries allows them to gain new perspectives. ... It is widely accepted that unstructured outdoor activity is an appropriate outlet for children to grow developmentally.

Children express and work out emotional aspects and conflicts of everyday life through unstructured play. ... Children allowed to play freely with peers develop skills for seeing things through another's point of view by cooperating, sharing and solving problems.

Children who are less restricted in their access to the outdoors, and to resources in the world around them, become more independent and gain confidence that will allow them to move through the larger world. We all set goals in our lives. Along the way, we face many choices with many consequences. There are obstacles to conquer and easy rides to take. Sometimes we need a break, and sometimes we need to get off the road entirely.

We need to keep our mind open along the way as we never stop learning and circumstances may change.

One of the most important lessons we can teach our children is to follow their hearts and be open and fearless on their way to reach their full potential. There is no right or wrong. There always will be ups and downs, no matter of ability.

Encourage children to "dare to fail." This may teach even more than success ever could. Resilience is not a trait received at birth, but one that's acquired through experience. When we fall, we have the choice to get up and try again, or to continue in a different direction.

DREAM BIG

The maze on the next page is an example for a real built maze.

It sends children on their way to explore diverse choices alongside their peers.

While children can just simply play, they have the choice either by themselves, as a group or guided by a teacher or parent to explore, take side roads, be creative, take turns, and much more. Most importantly, they can create their own DREAMS!

While children can simply play at this maze, they also can chose to halt and take in the messages and lessons it suggests — lessons on how to thrive in life and encouragements to DREAM BIG!

Features to Consider:

- The ways should be min. 5 ft wide and can narrow or widen in places or have passing islands if the road is narrower.
- Consider sensory elements on the ground where it makes sense. Changing surface materials with diverse textures could cover parts of the walkway through the maze (bypass for inclusion): Marked "I" on next page

-flat surface -bumpy

-soft -grooved (shallow grooves)

-metal -wood

-wavy -up and down in low slopes

-grass (artifical) -etc.

• Consider a handrail for vision impaired people. The handrail can have joints where a change of surface or direction is to be expected.

The maze surface texture and structure could be also incorporated in the handrail for the vision impaired person to feel it.

At the same time it offers sensory opportunity for many other children to explore.

- Signs in braille along the way
- Zones at ground level with the potential to have donated bricks as boundaries.
- Low walls or fences/railings with applied play elements
- Maze has different areas of learning by providing suggestion signs with games, missions or challenges
- Dream and Thrive Wall with 'opportunity and rest benches' (Marked "P" on next page);

This area can be used for example by caregivers to sit down and have a great overview over the play space. Freestanding inspirational or chalk boards could line the way. It is also a good place to incorporate the "Exchange Spots"-Idea as described on page 31.

- "Create your own dream" zone, where children can use chalk and/or loose object to create their own ways and challenges. (Marked "O" on next page)
- Include Health, Wellness and Exercise area's (Marked "L" on next page)

Note: The maze is flexible and can be expanded to any size adjusting to budgets and the general idea of what communities would like to see part of their spaces. Any kind of play element can be added to the flow along the way, like swings, sensory elements, slides etc.

DREAM BIG - Example

- A Open Door & The Road Beyond Beyond the open door awaits a road, it is not always a straight line, but most likely with turns and sharp corners. In life many doors open, others close. Some doors open only once. Dare to step through and start your journey.
- **Side Road** Taking it doesn't mean to miss the goal, it may lead back to the main road or offer unforeseen opportunities.
- **C** Shortcut/Tunnel Taking a shortcut may cut the time to reach a certain goal, but it also can cut opportunities.
- **D** *Obstacles* They are not to fear, they teach resilience and creativity. There is no growth without challenges in life.
- **E** *Narrow/Wide Passages* The road may narrow at times and there will be a need to make room to let others pass, at other times the road widens and we can walk and roll side by side, hand in hand.
- **F** *Crossroad* Many ways and opportunities will present itself; Opportunities to continue, explore or even take the way back to start all over again and that's ok!
- G Act of Balance Respect and consequences make us consider choices and influence decisions.
- H *Getting to the core* Reaching a destination isn't always the end of the journey.
- I Unknown ground The ground under our feet may change; We need to learn how to adapt and keep on walking.
- J Rain & Cover At times it rains and we need to seek shelter...
- **K** Rainbow Bridge ... But when the sun comes out a beautiful rainbow appears.
- L Rest & Relax Take a break. It is important to take care of yourself, excercise, live and eat healthy and re-energize. Invigorated and restored don't hesitate to resume on your way.
- M Crossing a Line Following rules is important but it is important to know and learn when it is neccessary to cross a line and step into the unknown.
- Chair Yoga Wellness corner

 Covered Path N

 Change in Surface material O

 Dream Big B Quote B Garden boards and benches
- **N** *Moving Mountains* Let go of prejudice & fear, respect our environment and each other regardless of ability and you will make a difference.
- O *Create your own Dream* We always have the choice to leave the mainstream and follow our passion and purpose in life. Make sure to be open, kind and creative; Get help and help others. We have a lot to learn from each other.
- **P** Dream Big Dream big and dare to fail, as there is no such thing as failure, there are just lessons to be learned.

Inclusive Spaces - Considerations

To create inclusive play and community spaces, we need to change the way we approach the creation of such spaces.

We need to change the way we think about and truly understand the needs and the benefits of inclusion for all regardless of ability.

We need to distance ourselves from minimum numbers and requirements ("If an elevated play structure has less than 20 play components, ramps leading onto the structure are not required").

While certain design considerations are not required, they aren't prohibited either.

Rules like this one promote exclusion, and while certain design considerations are not required, they aren't prohibited either. They still leave us with a choice. Communities can choose to create inclusive environments to allow equality for all members.

While it seems challenging for society to naturally embrace and implement diversity, if we start to foster those traits in our children early, diversity will come naturally to them throughout their life.

"What happens in early childhood, does not stay in early childhood." - Dr. Laura Jana

Laura Jana, a pediatrician and author, talks about the need to focus on early skill building. She lists skills that need to be fostered in children. These include communication, collaboration, curiosity, critical thinking, questioning, adaptability and ability to fail.

Dr. Jana suggests communicating these skills with phrases such as "Use your words," "Put your listening ears on," "Take turns," "Don't give up," "Learn to play nicely," and "Play with others and in the same sandbox."

"In the same sandbox"

While we are saying this, we often fail to create means and ways for all to reach the sandbox. At the same time, we take away opportunities for those in the sandbox to learn skills from those watching the sandbox. There is increasingly talk about children being over-stimulated, being exposed to too much screen time, and having too much structured time. In response to this trend, countless studies about unstructured and natural play are being conducted and published.

NC State University published a study called "Benefits of Connecting Children with Nature." They explain the following benefits of doing so:

Supports creativity and problem solving

Enhances cognitive abilities

Improves academic performance

Reduces Attention Deficit Disorder symptoms

Increases physical activity

Improves nutrition

Improves eyesight

Improves social relations

Improves self-discipline

Reduces stress

Every child should have the right and the choice to receive those benefits. This will not be the case if we continue segregating children by abilities and follow minimum requirements in creating exclusive places.

The only way to ensure inclusion is to create environments welcoming all individuals to play in the same sandbox.

The following pages list examples and design ideas that can inspire or be implemented and adapted in creating inclusive spaces.

Some of the examples may not be suitable for public spaces due to rules and regulations. Nevertheless, they may inspire the thinking process and help understand the nature of inclusion.

Before planning a space, gaining clarity about the type of space as suggested in diagram on page 7 is highly recommended. Private spaces offer greater flexibility than public spaces.

The following examples are ideas and considerations intended to inspire you. Solutions often need to be determined on a case-by-case basis, as the needs of and possibilities for each play and community space will differ greatly. Rather than for all ideas to be present in one space setting, the idea is to make individual choices and create a space that supports the values and planned outcomes, as opposed to trying to exceed in quantity but missing the goal.

It is almost impossible to create a space which will meet everybody's needs. While different aspects can and should be represented in common spaces, the idea of creating a network of smaller spaces with the focus on inclusion rather than separation should be considered. This approach creates choices for a more diverse population.

Public and private spaces may be subject to different regulations. All ideas and inspirations listed below, when executed, need to follow and are subject to any applicable national and local codes and safety regulations.

Climbing

Fact: Climbing is an important and desirable activity for children.

Problem: Children with physical impairments in many cases will not be able to particiate in this activity in the traditional way.

Approach: When planning climbing elements on a playground there are many ways to include children with physical impairments in such an activity. The goal should be for all children to reach the highest point and be part of the activity. The climbing element could be part of a structure all children have access to. Single climbing elements that create separation can be avoided.

Tunnels

Fact: Children are curious and like to explore and go on adventures. Tunnels provide a good opportunity for imaginative play and exploration. They also support interactive and inclusive play if done right.

Problem: Unfortunately, whether on ground or part of an elevated structure, tunnels often are not accessible to all childen.

Approach: A tunnel can be created practically anywhere using different techniques. Some things to consider are making sure the diameter is large enough and having a smooth floor surface to roll or walk over without obstacles.

Tunnels can:

- lead through a mount
- be created using large rings
- be created with plants
- be integrated in a raised structure (on both levels)

Swings

Fact: Swings have always been an essential part of play spaces. But there is more to swings than just having fun experiencing the motion.

Swinging supports physical (core strengthening and balance), emotional (calming), intellectual (stimulates brain), and social (peer interaction) abilities.

Swings

Problem: Not all children can access or use traditional swings. In some cases where accessible swings are placed, the pathway leading to them isn't accessible, or they were placed in a separate area of the playground leading to segregation.

There is also a large variety of swings available. Chosing the right swing for a play space can be rather difficult.

Approach: Regular and accessible swings should be placed in close proximity to another to ensure peer interaction.

It is important to explore the options and visit playgrounds to see what works best.

There are many kinds of accessible swings where children need to transfer in order to use them. There are also wheelchair-accessible swings that enable a child or individual with a disability who can't leave their chair to roll on. Local codes may prevent some swing types on public playgrounds.

Balance Beams

Fact: When picturing balance beams, it is hard to imagine how these elements could possibly be explored by non-ambulatory, physically challenged, or visual impaired individuals.

Problem: Balance beams are usually placed in the traditional way, elevated and single standing with no side support.

Approach: Instead of a single elevated balance beam, a balance area could be created with a set of balance beams as sketched in the maze example on page 24.

The set, for example, could include the following elements:

- traditional elevated balance beam or logs or hanging beam
- traditional balance beam, but with one or two side railings with grab bars in two heights (for walking children or children scooting on their bottoms)
- slightly elevated beam (with or without railings)
- a simple line on the ground
- a rocking balance log on ground level to sit or walk on, etc.

The set could be placed in context with a stage and also used as additional seating.

High and Low Monkey Bars

Fact: Another play feature impossible to reach by mobility-impaired children are monkey bars.

Problem: Too high to reach for individuals in wheelchairs.

Approach: Low-mounted monkey bars could be considered. They could either be an element of their own, or they could be part of another play structure, e.g., mounted under a raised structure with accessible openings.

Obstacle Course

Fact: Obstacle courses challenge gross and fine motor skills, and offer both sensory opportunities and opportunities to practice sequences.

Problem: Obstacle courses usually are not planned to be doable for all children.

Approach: When planning obstacle courses, place the elements in a way all children can follow and participate at their own ability level. There could be parallel pathways and elements that intersect and connect.

Elements with multiple levels of challenge can be chosen. For example, while one child can jump from one log to another, a second child can slalom around these obstacles. Both children would engage in the same activity and do not have to play separately.

Obstacle courses for vision-impaired children could be a good exercise to practice walking over different ground surfaces or navigating around elements.

Drawing with Chalk

Fact: Children in general love to draw outside with chalk. It is a great imaginative and creative play opportunity. It also supports all levels of play: children can draw by themselves, draw next to each other, or interact and be creative together.

Problem: This idea may be easier incorporated on private rather than public playgrounds due to the supply of chalk needed. However, it is still possible for both types of play spaces.

Approach: Designated chalk areas, or freestanding boards that children in wheelchairs can roll under, can be created.

Another space-saving idea is to integrate chalk boards or areas into an existing structure or space design.

Example: Walls and sides of play structures, both on ground level and elevated.

Private play spaces may supply the chalk. Public play spaces may have the opportunity for people to bring or donate chalk.

Water Play

Fact: Children love to play with water where they can get wet and messy. It is a perfect activity for hot summer days and allows for joyful imaginary play opportunities. It encourages cooperative play and enhances social skills.

Problem: It can be challanging for some children to access water play opportunities:

- It could be too noisy and crowded for some children.
- It could be too slippery for vision-impaired children.
- The water could damage mobility equipment, etc.

Water Play

Approach: There is no reason for any child to miss out on water play. Water play can happen by creating accessible and elevated water streams and water structures. Several access points will allow children to spread out and not fight over one spot at the water structure.

Water splash parks do not have to be a taboo for children with sensitive equipment, as long as the water doesn't come uncontrollably from all directions. By creating transparent walls, tunnels, and covered pathways or spaces with openings, all children will be able to participate in this activity.

Slides

Fact: Just like swings and climbers, slides are basic playspace elements: a must on playgrounds. Sliding is not only fun but also beneficial to children. "Sliding contributes to vestibular stimulation, which simply means that it stimulates the ear canal and the fluids in it. This stimulation helps develop a sense of balance. Through sliding, children learn to keep their torsos balanced as gravity pulls them down the slide." Eric Strickland, PhD

Problem: For mobility-impaired children, access to slides and sliding itself can be challenging.

Approach: Make sure to create appropriate transfer stations and paths leading to slides. Consider installing wide slides at ground level. There is a safety risk for children with mobility impairments or low muscle tone when the end of a slide is elevated off the ground.

The Santa Barbara Zoo has a beautiful example of a slide mount, covered with artificial turf (see page 41). Another slide alteration example is shown on page 40.

Quiet Spaces

Fact: Children like to run, scream, and get their energies out in any way. However, quiet time and rest is just as important to children. Creating quiet spaces is therefore not only beneficial for children with sensory overload disorders, but for all children. As in real life, there are spaces we need to act respectful in. Creating quiet and "slow-motion" spaces on playgrounds gives children with any kind of challenges and typical developing children a greater opportunity to meet and interact.

Problem: Often there isn't a quiet zone available, or a quiet zone isn't understood or respected as such. Sometimes it may be an enclosure with only one way out, which may create an anxiety problem for some children.

Approach: A quiet zone should be easily identified and should have more than one entry or exit.

If kids have fun being quiet and gentle and see it as a game, they will follow the rules or call other children's attention to the quiet space rules. Instead of separating a zone and making it into a quiet zone, it should be part of the accessible and common play experience. Along the way leading to the area should be big and visual signs with pictures and words such as "Slow down,", "Stop," "Tiptoe," "Hush," "Red light," etc.

Quiet Spaces

Leading out of the zone, signs with the opposite meaning such as "OK to yell" or "Ready, set, go" etc. can be placed. The design of the zone itself should reflect the purpose. It could be a garden, or the colors chosen could be calming. Sensory and calming games or experiences can be part of the design in such an area.

Exchange Spots

Fact: Taking turns, trading, and sharing are important skills for children to learn. These skills are important in many parts of life. For example, individuals who think of others' feelings will not bully them.

Problem: Taking turns and sharing requires discipline.

Approach: There are ways to support children in aquiring those essential skills while playing. Sharing and taking turns is inclusive for all.

Book or Toy Exchange

A traditional exchange spot is the "bring one, take one" Book Exchange Box. Why not have one on a playground or in a community space? Encourage books in braille, as well as typical books, to be placed in the box. Another idea would be a "bring one, take one" toy box.

Good Deed Exchange

A different kind of exchange box could encourage children to write down something nice they did and put it in the box for another child to pick up and read.

A child places one good deed of their own and takes one from another child. The kids could be challenged to write down how the good deed made them feel and how it made the recipient feel. A template parents could take a picture of could be mounted to the outside of the box with simple instructions. The good deed can be written on anything available to them at that point or could be prepared at home.

The activity may encourage interaction when asking a peer (or the guardian) for a pen or a piece of paper.

Good Deed Challenge Exchange

The good deed exchange could be expanded to write down a good deed challenge for another child to pick up and execute.

Once fullfilled, the child writes down his good deed and a new challenge on a paper for another child to pick up.

Surfaces and Environments

Fact: Community and play spaces are as accessible and inclusive as the designed environment allows them to be.

Problem: There are still too many barriers and obstacles of many kinds, from steps to the choice of surfacing materials and the built components, to allow all individuals to use spaces side by side. As long as we keep on thinking in minimal requirements, minorities and majorities, we will not reach full inclusion. Separate spaces designed for specific abilities are well meant, but often lead to more exclusion and humiliation.

Surfaces and Environments

Approach: Spaces can be designed inclusively by chosing smooth surfaces like poured-in-place rubber. However, this can be very costly. To minimize cost, rubber surfacing can be used in designated spaces, and a mixture of materials can be chosen, like concrete walkways, wooden boardwalks, woodchips, shrubs and plantings, etc.

An accessible path of travel should be continuous and should lead to each play element and area.

A more natural play scape invites a more natural play behaviour. For example, children love to play hide and seek. A child in a wheelchair has difficulties hiding behind trees, in narrow openings, etc., but can hide behind shrubs or walls.

Attention should be paid to openings all throughout the designed space. There is no reason a child in a wheelchair should stay behind because an opening under a playstructure is just an inch too narrow.

If an opening is too narrow, it needs to be designed either wider and taller, or a second, bigger opening should be offered.

Examples: Openings under elevated structures, doors to play houses, tunnels

If ramps are necessary, the material chosen for the access-way leading to ramps cannot be made out of materials that can wear off or erode with time (like woodchips), as this can create a step at the bottom of the ramp. A concrete or rubber walkway would be more appropriate.

Playing and Learning / Games

Fact: Play is the child's work. Children learn while playing. Playing supports the development of physical, social-emotional, cognitive, and language skills.

Problem: If environments are not designed to be inclusive, children with disabilities do not have equal access to learning opportunities through play.

Approach: Beyond simply granting access to community and play spaces, play opportunities need to be inclusive, not just accessible.

Next to the typical play components, boards across the play space can call for different activities, like these:

Find friends and play hide and seek!

Find shapes, colors, numbers, and words scattered on the playground. Start a scavenger hunt!

Games on the floor or ground surface can include a maze, a giant boardgame with spinners, or simply a multi-use space with the possibility for structured and unstructured play opportunities.

Pathways across the space can imitate real roads and have traffic signs.

Playing and Learning

Instead of games like tic tac toe, which are not very popular on playgrounds, replace these elements with new ones.

Example:

- Not all shadows are grey. Play with light. By including colored translucent plastic sheets and boards in play structure walls, children will explore that shadows have different colors, too. If the elements are movable, children can mix colors by overlapping different sheets. The idea can be incorporated and translated into individual playground themes and designs. Walls, roofs, and canopies can have translucent colored patterns that reflect on the ground below or beneath. **For more examples, see pages 42 and 43.**
- Provide information tables and boards teaching about local flora and fauna, telling the names and characteristics of trees, shrubs, birds, and insects, and talking about weather, shapes of clouds, and light and color phenomena in the sky. Encourage children to hunt for these items on the playground or when they spend time outdoors.
- Gardening: Although difficult to execute on a public playground, private and school spaces may explore a vegetable garden to support healthy eating habits and teach about where food comes from. Possibilities on how harvested food could be consumed can be explored.

Wellness & Health

Fact: The technology made available to kids these days is so vast that too many children spend an excessive amount of time watching TV, playing video games, or using cell phones, even at a very early age. Countless studies prove the negative consequences children following such routines are facing.

Problem: Spending too much time in front of a screen damages eyesight, supports aggressive behavior, and leads to sleep disturbances. Children who spend a lot of time sitting in front of a TV are more likely to be overweight than children engaging in active play.

Electronic media can interefere with imaginative play, exploring, interacting with peers and family members, being physically active, reading, and homework, and can lead to depression. All of this is in the way of a healthy social-emotional and physical development.

Children often do not have the knowledge yet on how to deal with the overflow of stimuli.

Approach: Community and play spaces can offer opportunities for mind and body.

Examples:

- Health and wellness trails or areas can be installed for all ages.
- Chair Yoga Corner with an stationary chair and space for wheelchairs.
- Signs and boards with progressive relaxation and breathing exercises.

Natural Loose Parts

Fact: Loose parts are materials that can be used in multiple ways. They can be moved, carried, taken apart, stacked, and grouped.

Some examples are:

Branched and sticks, pine cones, stones and rocks, sand and gravel, logs, ropes, boxes, shells, leaves, buckets, tires

Children can use loose parts in any way they choose to. Among many other benefits, they enhance creativity and imagination.

Problem: Loose parts may not be allowed on public play spaces. However, public play spaces can encourage playing with loose parts.

Approach: Open-ended play with loose parts may be the most benefiial types of play for all children. It also is easily made inclusive for all. Items should be in reach and accessible. Tables can be provided, so children in wheelchairs have easier access to playing with small loose parts. Unassigned upstanding elements can be placed, which can be used as store fronts or puppet theaters, etc.

Gatherings and Friendships

Fact: Opportunities for people to meet and interact enhance communication and social skills.

Problem: For some children, it is a challenge to approach peers to connect and make new friends. In trying to support peer interactions, some spaces put up "make a friend" benches. Although well-meant, these initiatives run the risk of singling children out and putting them on the spot, which can lead to further separation and bullying.

Approach: When designing spaces, rather than creating areas specific to a challenge - like a designated area for a wheelchair somewhere on the side or a specific play element for children with Down syndrome - coming up with spaces embracing diversity is desirable.

For example:

The seating in front of a stage or a storytelling pavilion can provide spaces for wheelchair users or strollers in multiple locations in every row, not just at the end of the row or all the way in the back. Also consider creating access to the stage. All children like to volunteer in a show!

Community and play spaces can benefit from designated gathering areas. These areas could be simply open fields or spaces like storytelling pavilions or stages. In these spaces, children can dare to find new friends and play classic games like I Spy, Truth or Dare, Telephone, Red Light Green Light, Simon Says, etc.

They also could be used for:

- Community events, like storytelling, music, arts and crafts, and book clubs. Local artists could volunteer their time and get exposure to the community in return
- Birthday parties (proceeds from renting could support space maintenance)
- Concerts and theatre performances

All picnic tables should allow spaces for strollers and wheelchairs.

Design considerations when using pre-manufactured play structures

After creating a wish list of items and components, the chosen items should be checked for opportunities to make them inclusive if they aren't already.

The following pages provide ideas and suggestions on how to alter components when the chosen type of play space consists of pre-manfactured play components.

	Existing or Minimum Requirement			
1 Ramps and raised ways of travel	In most cases 36" wide. (min requirement)	5' throughout, incl. turning spaces		

Benefits and why is it important?

Although 36" are enough to allow for a wheelchair to access and use the component, the experience can be guite frustrating and disappointing for children with and without special needs. For children in wheelchairs, the experience can even be humiliating. This happens when ambulatory children jump out of the way of their peers on wheels in fear of being wheeled over, or when parents quickly run to help and pull their children out of the way of the child approaching in a wheelchair. This in particular is often accompanied by a fearful facial expression if the chair is powered.

5' -wide ways of travel make it safe for children to pass by each other. Furthermore, they promote and allow for inclusion. Two peers could walk and roll alongside, holding hands or connecting and chatting with each other.

VS.

Visualization



standard 36" wide ramp / way of travel component



5' throughout the entire play structure, ensuring comfortable, inclusive, and safe play travel

		Existing or Min Requirement	The Way to Go
2a.	Tunnels - modified	In most cases not considered to be inclusive	Diameter big enough for wheelchairs to pass through, no steps

Tunnels in general, but in particular as part of an elevated structure, are not constructed to be either wheelchair-accessible or suitable for visually impaired peers.

By increasing the diameter of the tunnel and possibly creating a flat surface to roll or walk on at the bottom of the tunnel, this play element will now be available for all children to enjoy. Children with special needs will not have to stay behind or turn around unable to follow their peers.

VS.

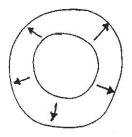
Visualization



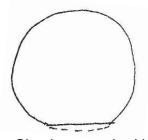
Standard tunnels used on ground level and elevated play structures; often with steps leading to them and not accessible to all children



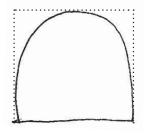
Examples of tunnels built to fit all children



Increase diameter



Circular tunnel with round or flat surface to walk 'n roll



Wagon vault tunnel, (or square/rectangle) flat surface to walk 'n roll

		Existing or Min Requirement	The Way to Go		
2b.	Tunnels - alternate way	In most cases not considered to be inclusive	2nd way of travel		

If using the standard tunnel, an alternate way of travel alongside the tunnel is needed so all children are provided with the means to reach the other side with their peers.

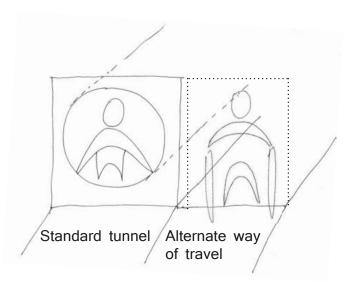
This can happen in the form of an open bridge, an alternate tunnel as described in section 2a, or similar play components of the same purpose.

VS.

Visualization



Standard tunnels used on ground level and elevated play structures; often with steps leading to them and not accessible to all children



Create an alternate way of travel alongside a non-accessible tunnel for all children to reach the other side with their peers; e.g. a bridge or an alternate tunnel

		Existing or Minimum Requirement	The Way to Go
3a.	Slides / Descending Components	Not accessible to all children	

Slides are fun, partly because most children enter the structure using stairs or ramps, but exit it using slides and climbers. However, children with visual, mobility, or balance challenges may not be able to use those components.

Any descending structure, like low-rise stairs and bumps with railings, potentially mixed with low-sloped sliding elements, would allow more children an alternate way to slowly descend and have a different, very satisfying experience. Children without special needs can climb up or enjoy a different sensory experience themselves.

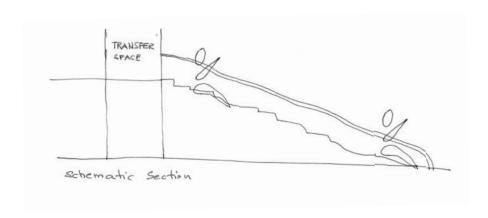
It is important to provide structures throughout the playground for all children to share and to give them more opportunities to connect and interact.

Visualization



VS.

Typical slide



Low-rise steps and low-sloped sliding elements with handrail allow for an alternate descending opportunity, including more children with different abilities.

		Minimum Requirement	
3b.	Alternate Slides	Not accessible to all children	Alternate safe way to descend

Slides are fun, but often scary for children with visual, mobility, or balance challenges. What makes them scary and dangerous to some is the height above ground and the bottom of the slide, which is above ground as well.

The example below shows a mount covered with artificial grass at the Santa Barbara Zoo in California. Children with special needs may slide independently, lying on large pieces of cardboard, or may be supported by a parent or a friend. The latter will have great social-emotional impact on both children. The child with special needs is not only integrated, but feels supported by his peer and has an opportunity to bond and connect. The same accounts for the child without special needs. She not only connects with her peer, but learns important social skills with a great impact on her future.

Visualization



,C



Pictures above: Santa Barbara Zoo







Typical slide

The Mount, with children sliding on the ground surface, allowing more children to experience sliding and having common ground with one another.

Children in need of support can slide with a caregiver or a friend.

		Existing or Min Requirement	The Way to Go
4a.	Play Components on Structures: Kaleidoscope - Color and Light	Tic tac toe, wheels	Alternate, more interactive and inclusive components

While children without special needs find many attractive climbing, descending, and ascending components on structures, play opportunities like tic tac toe and similar are less played with. However, those components are often considered part of the inclusive play components to meet the minimum numeric requirements.

The goal should be to place alternate elements on structures, attractive to all, so all children have a deeper reason to go up on the structure, interact, and learn through play--beyond just being on the highest point.

Visualization



VS.

Typical spy-glass. While a spy glass can be a lot of fun, an alteration could be to make it a kaleidoscope and surprise kids with its wonders when they look through.



Pictures above: Play with light at Roger Williams Park and Zoo

Kaleidoscope glasses or colored acrylic glass elements can be mounted into railings and walls for children to look through. Large colored glass elements could be spun by children where colors shine down on surfaces. Spinning wheels get a purpose, instead of just hanging on a side wall along the accessible route.

		Existing or Minimum Requirement	
4b.	Play Components on Structures: Storytelling	Tic tac toe, wheels	Alternate, more interactive and inclusive components

Another way to alter a play component is to consider using the basic tic tac toe board and replacing the icons with graphical symbols and their equivalent in braille to encourage story-telling.

Now children can engage in cooperative play by taking turns in spinning the story telling cylinders and using their creativity to come up with a story based on the symbol displayed: symbol by symbol, child after child, adding on to what the previous child has come up with.

It is additionally beneficial to integrate symbols that build up awareness for topics supporting social emotional growth.

Visualization



VS.



Typical tic tac toe spinning board

Altered storytelling spinning board, with symbols printed as pictograms and in braille

	Existing or Min Requirement	The Way to Go
5. Hanging Bridges	In most cases not considered to be inclusive	2nd way of travel

Hanging bridges are fun, but create an obstacle for many children. To allow all children to cross, an alternate way of travel is necessary. This can happen in form of an adjacent bridge, which can have a flat or a slightly wavy surface to allow all children a unique experience.

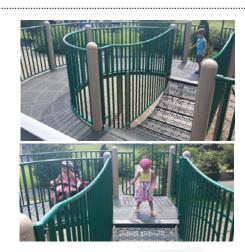
This way all children will be invited to cross, and to interact with, follow, or be followed by peers.

VS.

Visualization



Hanging bridge, in most cases a turning point for many children who cannot cross.





Bridge with alternate way of travel at Buttonwood Playground in New Bedford (top pics) Suggested wavy bridge as alternate way of travel (bottom sketch)

		Existing or Min Requirement	The Way to Go		
6.	Openings and Spaces Under Structures	Elevated equipment and components with openings to enter	Make openings large enough for all children to enter and exit		

Designated play spaces under elevated play equipment often have openings not large enough to provide access to all children. Many free-standing structures and components like small playhouses often face the same challenge of small openings.

Making the openings large enough will ensure access for all children and will promote their inclusion in the suggested play activity.

VS.

Visualization



This opening under a playstructure excludes children using equipment to from playing with peers.



Opening is large enough with a level surface for all children to enter, even with a friend in tow.

		Existing or Min Requirement	The Way to Go
7.	Landings, Steps, and Curbs	Steps to pavilions or onto ground level components	Avoid curbs and steps if possible

Often, pavilions on play or gathering spaces sit on a concrete pad. Other components often have a ground surface made out of wood chips or other materials that make it difficult for children using the equipment to access it.

Any kind of curbs or steps should be avoided. Same-level access or ramps need to connect for proper access. If ramps are installed, appropriate footings need to be provided so ramps do not sink into the ground with time, creating a boundary. Using wood chips to create a level surface in front of a concrete pad isn't sufficient, as wood chips will wash off or can be removed by individuals walking over it.

Visualization



VS.





A step at the end of the ramp creates an obstacle and makes it impossible for individuals in wheelchairs to enter the accessible element.



Top: Five-foot-wide (or wider) accessible ramp with smooth transition.

Bottom: A playhouse including all children to play by providing a ramp.

Wish list

Whether a pre-manufactured approach has been chosen or a natural one, making a list of desired items, components, and areas is crucial in the process of creating an inclusive instead space. One example of such a list is shown in the diagram below.

Often, budgets get in the way of ideas. The list helps clarify many aspects like costs, needs, benefits,

grade of inclusion etc.

The list can help to identify possible challenges, and to find solutions.

It can support the process of ensuring inclusion, by selecting suitable items which can be placed in a way that creates an interactive and diversity-embracing environment, instead of generating separate spaces for diverse abilities.

Item	Cost	Play Type Supported	Benefits	Drawbacks	Ability supported	Accessible	Inclusive	Need	Want	Comments
		Solitary, parallel,	I	I	1	I	I			
		associative, or								
		cooperative play								
Swing-set	\$XXX	Parallel play	Swinging has many		e.g. mobility	×	x	х		Ensure accessible
including	γλιλι	r drailer play	benefits. Use this column		impairments,	^	^	^		path to swings;
accessible			to list benefits an item may		sensory					putil to swilligs,
swing			have.		impairments, etc.					
					l	l	l			
	\$XXX	Solitary	If there is a benefit to	It may cause segregation, if		х		х		
Free standing			separating a swing (e.g. for	the swing is not integrated						
Accessible			sensory disorders), list it	into a set of swings						
swing			here.							
			I	I	1	I	ı			
Item 3										
Item 4										
			I	I	1	1				
Item										

Fundraising thoughts

A good way to start is to research completed playground projects and contact the responsible parties. It might help to look for playgrounds that were built in similar settings and were of similar size compared to the project in development. While larger towns and cities may have budgets to contribute to a project, smaller towns may not have these possibilities. Thus, researching what communities with similar preconditions did to fund a playground might be most helpful.

Make everybody fall in LOVE with the project! Before asking anybody for funds, a marketing plan should be in place. It will prove difficult to receive any financial support if donors will not get on board with a concept and get excited about the execution.

Here are some ideas on where to look for funds:

- Ask town or city if money is available
- Towns/cities may opt to make money available collected from accessible parking violations
- Crowdfunding
- Scratch cards
- Local and national businesses
- Local and national foundations
- Playground grants from large corporations
- Events

- Product sales
- Collection projects
- Runs
- Carnivals
- Silent auctions

There is a lot of information available online on how to start and execute fundraisers and what kind of fundraiser is best in certain cases.

Afterword

Not all of us, regardless of ability, will climb down the Grand Canyon, but we all surely enjoy the views.

All individuals have abilities and talents of their own. We all are different and shine in our own ways. We all need help in different areas and at different times in life.

Just because a person can walk and run doesn't mean she will climb mountains or win an Olympic medal. But everybody wants to be happy and enjoy life. And everybody should be able to do so.

Just because a person may not be able to perform a task in a certain way, it doesn't mean he cannot enjoy it in his own way. And it surely doesn't mean he does not deserve it or should not have access to it. This holds for every individual, regardless of ability.

For everybody to have access and feel welcomed and included, society needs to open its arms, minds, towns, and cities to create environments that do not leave anybody stranded, not able to pursue their right to happiness.

We all are responsible!

It could be ALL of us! It could be ALL of our children!

Yesterday, Today or Tomorrow.

People and children with disabilities ARE all our children,
our brothers and sisters,
our aunts and uncles,
our mothers and fathers,
our friends and neighbors!
We shall not TURN OUR BACK on them, on life!
We need to protect and support THEM... support US by supporting OUR systems and communities,
together, united as ONE NATION.

Yesterday, Today AND Tomorrow.

We ALL ARE responsible!

All means all.

"If we can change the beginning of the story, we can change the whole story." - Dimitri Christakis