



TEMPE INCLUSIVE PLAYGROUND GUIDE



2019



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Commitment to our parks

The City of Tempe is committed to expanding the accessibility and inclusiveness of parks and playgrounds for children with all-abilities. This is in alignment with two City Council priorities:



#3 – Enhancing the quality of life for all Tempe residents and workers through investment in neighborhoods, parks, the arts, human services, and city amenities, with an emphasis on equity and diversity.



#4 – Implementing sustainable growth and development strategies, including improving Tempe’s public transit system to meet future needs, by actively seeking innovative technologies and leading the way in creating a more sustainable community.

We would like to thank all of those from the field of child development, disability advocacy and traditional mobility access who have been instrumental in paving the way for inclusive playgrounds. Your dedication and commitment to creating spaces for all-abilities is truly inspiring and served as a catalyst for the development of The Tempe Inclusive Playground Guide.



INTRODUCTION

Welcome to the Tempe Inclusive Playground Guide

According to the United States Census, approximately 56.7 million people have a disability in the United States. This means 19% of the United States population or nearly 1 in 5 people experience some level of limitation. These challenges affect how individuals and their families, friends and caretakers spend their day at school, at work and even at the park.

The Inclusive Playground Guide was developed to help create spaces that afford children with and without disabilities, the opportunities for more inclusive fun and safe playing experiences. A truly inclusive playground is designed to meet everyone's skill level and provides challenges for each and every child coming to play. Creating inclusive, thoughtfully constructed play spaces facilitates children of different abilities to engage with one another, have fun and do what kids love to do: play.

“We believe playgrounds are places where having fun should have no bounds.”

- Tempe Staff



PURPOSE

How we created the Inclusive Playground Guide

Do you remember those carefree days as a child, playing on the neighborhood playground equipment at the local park? It was on the playground where many of us first met lifelong friends racing down slides and swinging high as kites together. An inclusive playground has the ability to engage our imagination and encourage us to succeed beyond all perceived limitations, by creating optimal play value for every age and ability-level. This is the driving force behind the design of Tempe’s Inclusive Playground Guide.

The Inclusive Playground Guide was developed by adapting the PLAYWORLD SYSTEMS® Inclusive Play Design Guide® (2013)* to meet the City of Tempe’s playground needs. PLAYWORLD SYSTEMS® identifies three areas of play: sensory, physical and social as well as challenge levels associated with each play activity. It was through these areas of play and challenge levels that the Inclusivity Index was created by the City of Tempe.



At the end of this guide, is an example of the Inclusivity Index (Appendix B) which is a tool to assist staff in identifying playgrounds in need of all-ability equipment and score community and neighborhood parks on all-ability equipment installed as well as their challenge levels. The proposed standards for inclusivity factor in: individual playground size, seven play categories and three challenge levels defined by ability level. This tool will be used by the city when renovating parks as well as community neighborhoods when they are selecting playground equipment to ensure inclusivity goals are reached.

Proposed standards to meet "inclusivity index" goals:

Playground Area Sq Ft	Play Categories	Challenge Levels
1000 – 2499	2	1,2,3
2500 – 4999	3	1,2,3
5000 – 7499	4	1,2,3
7500 – 9999	5-6	1,2,3
10000+	7	1,2,3

*A Playworld Systems®, Inc. (2013) Inclusive Play Design Guide. Retrieved from <http://www.playworldsystems.com/inclusive>.

DEFINITIONS

Playground differences

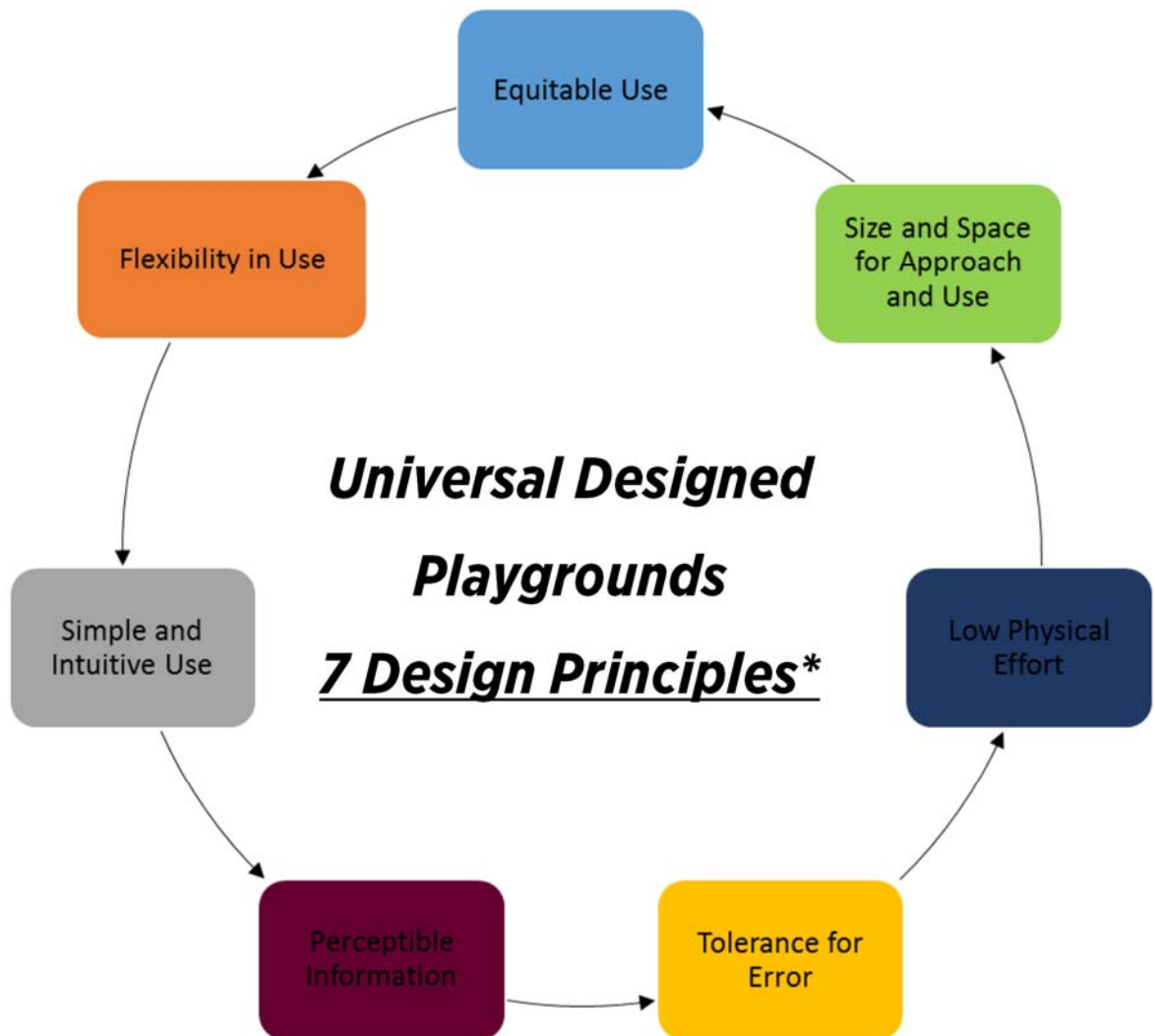
There are a variety of different terms used to describe a playground where children of all-abilities can play. It's important to know the differences since they are often used interchangeably but mean different things.

- **ADA compliant playground**- A playground that meets all ADA guidelines for playgrounds. Although these structures meet ADA guidelines it does not mean that children with multiple abilities will be able to play on the playground since some barriers may exist.
- **Accessible playground**- A playground designed to give accessibility to as many people as possible. Typically, it is used to focus on the “ability to access” such as a structure for people with disabilities including ramps and ground level activities.
- **Inclusive playground**- A playground designed to ensure that children of multiple abilities can play together, not just alongside each other. It goes beyond minimum accessibility; truly inclusive playground design creates play opportunities for children of all-abilities promoting healthy physical activity, exploration and learning, ensuring no one is left out.



DEFINITIONS

- **Universal designed playground**- A playground designed where the environment, products and structures are usable and effective for everyone, not just people with disabilities. A Universal designed playground is not created for those with disabilities but one that takes a human-centered approach where all the equipment works for the widest spectrum of users, to the greatest extent, without the need for adaptation. Typically, these playgrounds are designed using 7 principles.



*The Center for Universal Design (1997). The Principles of Universal Design, Version 2.0 Raleigh, NC: North Carolina State University

PLAY VALUE

Play experiences

It is a common belief among many child developmental experts that playgrounds are among the most important environments for children outside the home. Participating in free, spontaneous play—the kind that occurs on playgrounds—is considered the most beneficial type of play. According to PLAYWORLD SYSTEMS®, the goal of the playground developer is to create a rich play space, integrating a variety of play opportunities where children of all-abilities can explore, grow and learn through sensory, physical and social experiences. These three components attribute to high levels of play richness which is what each playground is designed to bring to the community. To give you a better picture of each component we have broken them down into their own individual categories: *sensory, physical and social play*.



PLAY VALUE

The Tempe Inclusive Playground Guide incorporates all four types of sensory play as identified by PLAYWORLD SYSTEMS® when scoring our playgrounds. These four include: tactile, auditory, visual and quiet/cozy place.

Play Activities	Tactile; Touch	Auditory; Hearing	Visual Processing; Sight	Quiet Experience; Cozy
Play Value	Touch activates the entire nervous system and plays a crucial role in human behavior and physical movement.	Auditory exposures ignite multiple responses from the brain facilitating the understanding of sounds and words.	Visual sensory activities strengthen brain-eye connection and interpretation of visual information.	Quiet places afford children a place to escape stimulation and help regulate their sensory systems from high sensory input.
Play Equipment Design Examples	>RocksBlocks >Stalagmite Climber >Aeroglider >Cozy Cocoon >Garden Panel	>Gears Panel >Drums >Bells	>Scavenger Hunt Panel >Maze Panel	>Cozy Cocoon >Cave Boulder

Cozy Cocoon

The cozy cocoon provides a space for children with and without autism to escape when overstimulated.



PLAY VALUE

2. Physical Play

Physical play engages children in activities and movements that not only enhance the physical well-being of the child but also provides an outlet for their boundless energy. It provides children with the opportunity to expand and develop their gross motor skills, learn new things and socialize. Physical play promotes early brain development and helps decrease developing health conditions such as obesity, high blood pressure, diabetes and many other chronic health conditions facing our children today.

The Tempe Inclusive Playground Guide incorporates six out of the eleven types of play identified by PLAYWORLD SYSTEMS® when scoring our playgrounds. These six include spinning, swinging, climbing, crawling, upper body and balancing.

Play Activities	<u>Spinning</u>	<u>Swinging</u>	<u>Climbing</u>	<u>Crawling</u>	<u>Upper Body</u>	<u>Balancing</u>
Play Value	Stimulation from spin helps build and develop new pathways throughout the brain.	Swinging provides stimulation to the nervous system, benefits and works on motor planning skills.	Climbing increases muscle strength and endurance. It helps protect muscles and joints injury.	Crawling helps develop muscle balance by engaging nearly all the muscles of the body from head to toe.	Arm strengthening increases muscle strength and endurance which helps protect muscle and joints from injury.	Balancing incorporates many of our sensory systems including visual and vestibular systems. It increases core strength and mobility.
Play Equipment Design Examples	<ul style="list-style-type: none"> >Twister >Spin Cup >Cozy Cocoon 	<ul style="list-style-type: none"> >Unity Hoop-la Swing 	<ul style="list-style-type: none"> >Accessible Stepped Platform >Tree Climber >Unity Stepped Platform >Canyon Crossing > Twist Climber 	<ul style="list-style-type: none"> >Canyon crossing 	<ul style="list-style-type: none"> >Horizontal >Spiral >Ladder >Twister >Chinning and Turning Bar 	<ul style="list-style-type: none"> >Unity Stepper >Balance Trax Boomerand >Stationary Button >Canyon Crossing

PLAY VALUE

Sway Fun Glider

The wheelchair accessible glider provides vestibular input for all ages and levels of mobility.



Diggers

This type of play equipment promotes the development of gross motor skills.



PLAY VALUE

3. Social Play

Playgrounds naturally provide children opportunities to engage in social and pretend play which can influence their social development and social interactions. During play children progress through social stages and learn social rules such as give and take, reciprocity, cooperation and sharing. Social play also promotes physical activity and moral reasoning. Children learn vital social skills while playing which helps prepare them to function effectively in the adult world. The three types of play in this category include social, cooperative and imaginative as identified by PLAYWORLD SYSTEMS.®

Play Activities	Social Play	Cooperative Play	Imaginative Play
Play Value	Social interactions facilitate building friendships, increasing self-esteem and problem solving skills.	Children working together strengthens listening, negotiating and sharing skills.	Children who experience creative/dramatic play learn to convey their individuality in abilities, interest and knowledge.
Play Equipment Design Examples	<ul style="list-style-type: none"> >Ramped Structure >Store Front Panel >Playhouse 	<ul style="list-style-type: none"> >Aeroglider >Unity Spin >Unity Hoopla Swing 	<ul style="list-style-type: none"> >Unity Stepper Large >Climber >Drive Away >Store Front Panel >Playhouse

Playhouse

This structure fosters a child's imagination and includes musical instruments and panels for sensory and cognitive development.

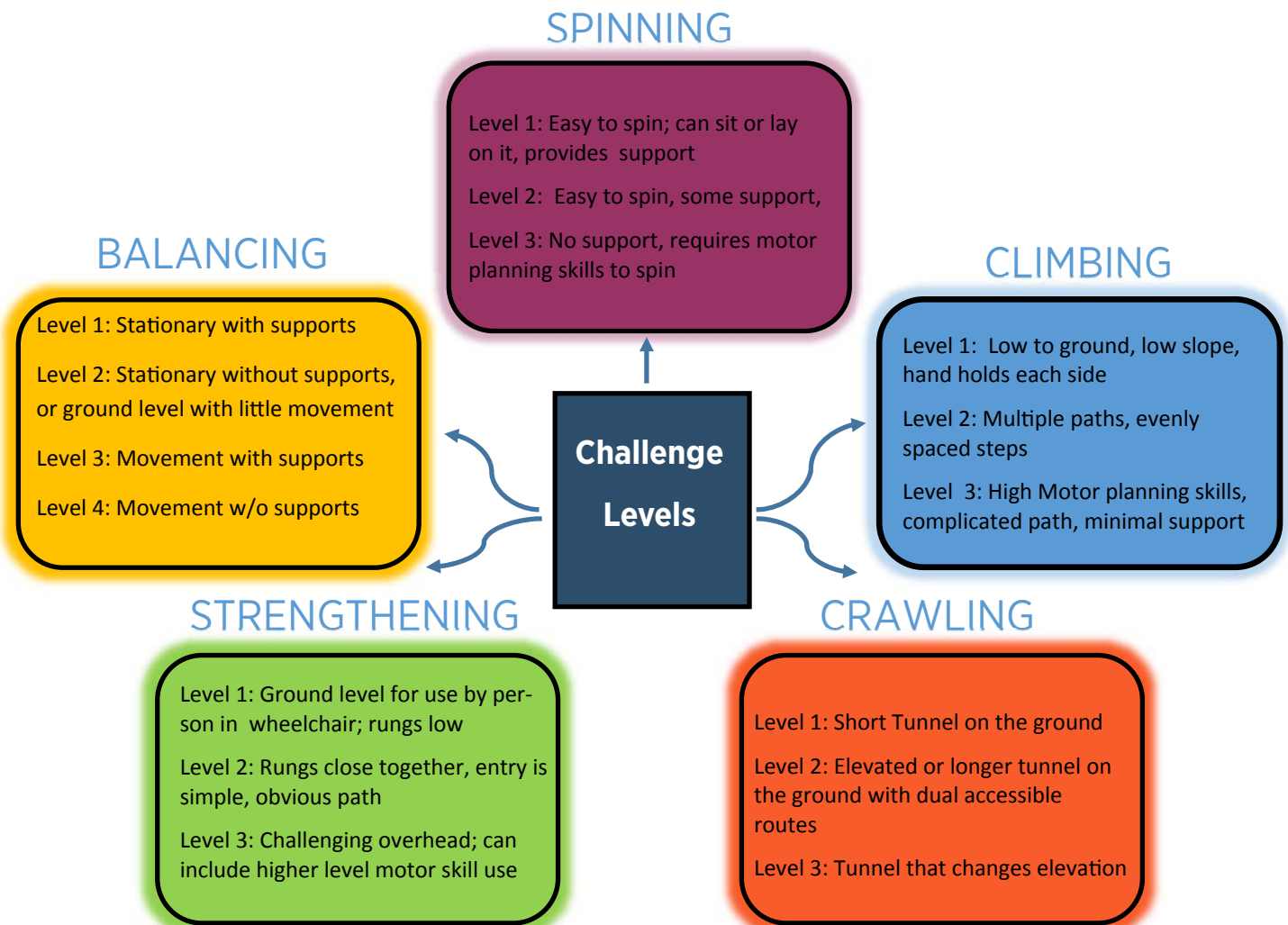


Challenge Levels

Challenge Levels

Offering a variety of multiple challenge levels ensures there are varying activities for all children to participate in regardless of age and ability. It has been a common industry practice to either design a playground too simply or design too advanced for only those with elevated motor skills. As mentioned at the beginning, a truly inclusive playground is designed to meet everyone's skill level.

PLAYWORLD SYSTEMS® has identified challenge levels for each type of play activity. We have adopted these challenge levels and applied them to our Inclusivity Index when scoring our playgrounds. This will ensure that our city playgrounds are inclusive for children with all-abilities by providing challenges for each and every child coming to play.



SUMMARY

What does all this mean?

Simply put: **Playgrounds are places that should be designed to speak to everyone regardless of abilities.** The City of Tempe is committed to making this happen by creating playgrounds with optimal play value for children with all-abilities. By implementing the proposed guide and Inclusivity Index when developing and renovating city playgrounds, we are ensuring our inclusivity goals are met. A key component to the Inclusivity Index is the playground size directly correlates with the inclusive equipment design. In other words, the greater the size of the playground, requires more funding needed to elevate the design to meet our standards.

We know that every age and ability benefits from outdoor play. We also know that outdoor play frees children to follow their impulses, fosters greater physical health and allows them to learn from and interact with nature which all aide in developmental growth. But it is the equipment and design of an inclusive playground that encourages healthy participation and social interaction from all-abilities which in turn aides in the creation of cohesive societies.


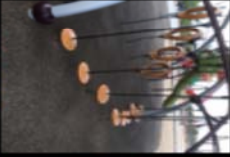











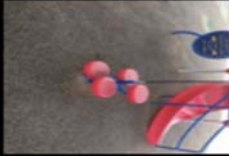






Tempe is looking forward to establishing new inclusive standards in our playgrounds and creating a footprint for others to follow.

Thank you.

“ Play is the highest expression of human development in childhood, for it alone is the free expression for what is in a child’s soul.”

*- Friedrich Froebel
(Father of Kindergarten)*

APPENDIX A CHALLENGE LEVELS

CHALLENGE LEVEL	SENSORY									
	SPINNING	CLIMBING	SWINGING	BALANCING	STRENGTH	CRAWLING	TACTILE	AUDITORY	VISUAL	QUIET
1										
2										
3	