The goal of the Design Guide is to offer inspiration and resources to decision makers which will increase the chances of creating an inclusive, universally designed outdoor playground.

Play Richness is a key factor when creating inclusion. That means providing a rich, inclusive play space where children of all abilities can grow and learn through physical, emotional, sensory, and social experiences.

The Play Richness section of the Design Guide is divided into three main parts: Physical, Sensory and Social and those parts divided into activities such as Spinning, Tactile, Cooperative Play. Each of those activities has a card in this deck. One side lists the reasons that make this activity important to child development, the other lists the Playworld products that support this activity.

The Inclusive Play Design Guide includes many concepts that help create a more inclusive playground. Co-located & Contiguous is one of those ideas.

Co-located & Contiguous
- To allow a child to get into a space is to give them access. To give them engagement with other children is to create inclusion.
- If possible and appropriate, equipment with different levels of challenge should be connected to create a single larger contiguous event.
- If connection to one another is not appropriate or possible, then the activities should be co-located (as close to one another as possible) within the same pod, zone or room within the playground.

Use this and other concepts in the Design Guide to help lay out the activities on the reverse of these cards.
Spinning

Why is this activity important in child development for all children?

• When children spin, multiple parts of the brain are stimulated simultaneously.
• This builds new and more developed pathways throughout the brain.
• These pathways improve learning potential, spatial awareness and rhythm.
• Spinning activities may develop pre-reading skills and concepts.
• Helps with improving balance, muscle control and gross motor skills.

Which Playworld Systems products support this activity?

• Bing Boing
• Crazy Tea Cup
• Loopy Whoop
• Overdrive
• Spin Cup
• Spinami
• Spintastic
• Tire Swing
• Twister
• Vortex
• Whirligig

Sliding

Why is this activity important in child development for all children?

• Stimulates a child’s vestibular and visual sensory systems.
• Allows a child to work on balance.
• The sensory input helps develop a child’s ability to motor plan.
• This is the ability for a child to think through unfamiliar movements of their body.
• Offers the experience of a modified fall through space and the thrill of perceived risk.

Which Playworld Systems products support this activity?

• Origins Hill Slide (Make accessible without ramp)
• Rumble Seat Slide
• Slither Slides (All versions)
• Spiral Slide
• Stainless Steel Lightning Slides (Cochlear implants)
• Aluminum Slides (Cochlear implants)
• Tube Slide
• Wide Glide Slide (Parent could hold a child easily)
-rocking

**Why is this activity important in child development for all children?**
- Stimulates the vestibular system.
- Helps regulate anxiety.
- Develops muscle tone.
- Establishes a sense of timing during movement.

**Which Playworld Systems products support this activity?**
- Adventure Series Tight Rope
- AeroGlider
- Bing Boing
- Duo Seesaws
- Flip Flop
- Funky Animals (with & without sound)
- Nucleo
- Quattro Seesaws
- Rope Bridge
- Spring Riders (All)
- U-Bounce
- Vaquero
- Wave Rider Seesaw

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-swinging

**Why is this activity important in child development for all children?**
- Provides each child’s nervous system with a wealth of visual, vestibular and proprioceptive information. Since their position changes constantly, their brains register continual updates from their sensory systems.
- As they swing, children gain an understanding of how their body moves through space and the speed of movements they are comfortable with.
- Swinging works on motor planning skills necessary to resist or increase active movement.
- Laying on a swing puts pressure on the muscles and joints, thus calming the nervous system.
- Provides calming movement.
- Helps develop postural stability.

**Which Playworld Systems products support this activity?**
- Accessible Swing Seats
- Swings with a belt seat (i.e. Arch Swings)
- Early Childhood T-Swing
- Monorail
- Sky Surfer
- Tire Swing
**PHYSICAL**

Climbing, Crawling & Strengthening: **Upper Body**

**Why is this activity important in child development for all children??**

- Strength training is important for everyone, including children with motor control challenges such as cerebral palsy.
- Increases muscle strength and endurance, helps protect muscles and joints from injury, strengthens bones, helps promote healthy blood pressure and cholesterol levels, and boosts metabolism.
- The activity of swinging from one arm to another on overhead equipment is called brachiation. The benefits of brachiation include developing skills such as endurance, strength, flexibility, general coordination, hand-eye coordination, visual perception of distance, balanced locomotor patterns, and confidence.
- Perceptual-motor skills such as spatial, directional and body awareness are sharpened through climbing.
- Motor fitness skills such as agility, speed, power, balance, and coordination are also developed by climbing.

**Which Playworld Systems products support this activity?**

- 270° Horizontal Loop Ladder
- Chinning/Turning Bar
- Crazy Bones Bridge
- EZ Digger (Standard & Accessible)
- Horizontal Spiral Ladder
- Monorail
- Overhead Climber Under Catwalk
- Overhead Spiral Ladder

**Climbing, Crawling & Strengthening: **Climbing**

**Why is this activity important in child development for all children??**

- Strength training is important for everyone, including children with motor control challenges such as cerebral palsy.
- Increases muscle strength and endurance, helps protect muscles and joints from injury, strengthens bones, helps promote healthy blood pressure and cholesterol levels, and boosts metabolism.
- Climbing helps create “sensory-motor intelligence” and “visual spatial perception,” allowing kids to effectively relate to objects and navigate in the world.
- Some of the requirements for climbing contribute to children’s cognitive development – memory, problem solving, and imagery/visualization.
- Perceptual-motor skills such as spatial, directional and body awareness are sharpened through climbing.
- Motor fitness skills such as agility, speed, power, balance, and coordination are also developed by climbing.
- Crawling is a type of simple climbing using similar skills.

**Which Playworld Systems products support this activity?**

- Adventure Tubes
- Accessible Climber
- Beanstalk Climber
- Castle Wall Climber
- Cliff Hanger
- Cloud Walk Climber
- Cosmic Warp
- GEO Climb (All)
- Geodome Climber
- Inclined Cliff Hanger
- Jumble Gyms (Both)
- Origins™ T-Rex & Eggs
- PentaWeb Climbers
- Pikes Peak
- Plateau Climber
- PlayWeb™ Climbers
- Pup Tent
- Ribbon Climber
- Rock Climber
- RockBlocks® (All)
- Rope Climber
- Rope Net Climber
- Silo Climber
- Solar Climber
- Spider Web Climber
- Spine Climber
- Stairs & Ladders
- Super Dome
- Super Satellite
- The Matrix
- Tree Climber
- Tree House Climber
- Triple Twist Climber
- Twisted Steel Climber
- Upper Silo Climber
- Whirlwind Climbers
- Wildwood Climber
PHYSICAL

Balancing

Why is this activity important in child development for all children??

• Our “sense” of balance is actually based on the proper functioning of the vestibular system in close conjunction with our visual, motor skills and proprioceptive systems.

• Balance is considered to fall into the same category as flexibility, core strength, and mobility as an essential ambulatory skill.

Which Playworld Systems products support this activity?

• Balance Beam
• Challenge Walk
• Critter Crossing
• Funky Animals (with & without sound)
• Lily Pods
• Nucleo
• Origins™ Rock Log
• Parallel Bars
• Sidewalk
• Spintastic
• Spring Mates®
• Stationary & Bounce Buttons
• U-Bounce

PHYSICAL

Jumping & Bouncing

Why is this activity important in child development for all children??

• For children unable to register where their body is in space, jumping provides a sensory jolt to the joints which then send information to the brain helping them identify where or how their body is positioned.

• A child with Sensory Processing Disorder (SPD) may need a stronger signal, and need to jump higher or harder movement to create that.

• Provides convincing contact that enables the child to know where their body stops and the ground starts.

Which Playworld Systems products support this activity?

• Blast Off
• Bounce Button
• Bouncing Drawbridge
• Flip Flop
• Gyro Bounce
• Nucleo
• See Saw
• U-Bounce
• Walk the Plank
All of the benefits of motion should not be restricted to typically-developing families. Those include:

- Stimulates the vestibular system.
- Helps regulate anxiety.
- Develops muscle tone.
- Provides each child’s nervous system with a wealth of visual, vestibular and proprioceptive information. Since their position changes constantly continual updates are required from their sensory systems.
- Opportunities for children of all abilities to play together.

**Why is this activity important in child development for all children??**

**Which Playworld Systems products support this activity?**

- AeroGlider
**SENSORY**

### Tactile

*Why is this activity important in child development for all children??*
- "Tactile" refers to the sense of touch.
- Skin is the tactile system’s sensory receptor.
- The tactile system enables us to identify where we have been touched.
- Tactile discrimination tells whether objects are cold, wet, sharp, or scratchy.
- The tactile system is the largest sensory system in the body and plays a vital role in human behavior and physical movement.
- Touch sensations flow throughout the entire nervous system and influence every neural process to some extent.
- Tactile input helps the brain organize information for developing visual and auditory systems.

*Which Playworld Systems products support this activity?*
- Accessible Climber
- Any rock climber with hand holds (i.e. RockBlocks®)
- Play events using rope (i.e. Adventure Series)
- Bell Panel
- Drum Panel
- KPE: Kid Powered Energy Family
- Origins™ Boulder Creek (Water Play)
- Origins™ Boulders (All)
- Origins™ Diggables (All)

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### Auditory

*Why is this activity important in child development for all children??*
- All children enjoy music and other noises at some level.
- They especially enjoy sounds that they control.
- Children with sensory processing disorder often like deep tones, rather than high tones.
- The appropriate noise level for one child might be very different for another child.

*Which Playworld Systems products support this activity?*
- Babble On
- Ball Maze Panel
- Bell Panel
- Chimes Panel
- Construction Panel
- Drum Cannon Panel
- Drum Set
- Funky Animals with Sound
- Gears Panel
- Horn Panel
- KPE: Kid Powered Energy Family
- Mechanical Panel
- NEOS® Family
- Pachinko Panel
- Post Mount Bells
- Rocker Panel
- Shifting Sands Panel
- Spring Riders with Sound
- Talking Bob
- Treasure Tumble Panel
**Visual Perception**

**Why is this activity important in child development for all children??**
- Visual processing refers to a group of skills used for interpreting and understanding visual information.
- The brain-eye connection is an integral component of the visual system, since the image that the retina (back of the eye) receives needs processing before it can be used. For example: the image is upside down on the retina.
- Visual processing helps you move your eyes in a specific direction with or without distraction, allowing motion tracking.
- Use of the visual sensory system strengthens the eye muscles, the ability to focus on something, and the ability to see differences between objects that are similar.

**Which Playworld Systems products support this activity?**
- Any of the “Hunt” Panels (i.e. Nature Hunt Panel)
- Find the Way Home Panel
- Magnifying Panel
- NEOS® (all versions)
- Magnifying Panel
- Shape/Color Sequencing Panel
- Treasure Tumble Panel

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**Nature Features**

**Why is this activity important in child development for all children??**
- In a study of 96 children diagnosed with attention-deficit hyperactivity disorder, the greener the play area, the better the concentration and mental functioning.
- Green environments reduce stress, depression and anxiety. A 2005 study in Sweden found that the more often one visits green areas, the less often one reports stress-related sickness.
- Green environments improve the functioning of the body’s immune system.

**Which Playworld Systems products support this activity?**
- Garden House
- Garden Arches
- Garden Beds
- Garden Gates
Cozy Places

Why is this activity important in child development for all children?

• A quiet place offers a child a place to escape the stimulation of a busy playground and take time by themselves.

• Cozy places provide space for children who may be on the Autism Spectrum to regulate their sensory systems after a time of high sensory input.

Which Playworld Systems products support this activity?

• Origins™ Garden Gates (All)
• Origins™ T-Rex Hatched Egg
• Play Seat
• Pup Tent Climber
• RockBlocks® Climbing Tunnel
• Single Post Seat
• Adventure Tubes (All)
**SOCIAL**

### Cooperative Play

**Why is this activity important in child development for all children??**
- In cooperative play, children share a common activity and work toward a goal together.
- While a basketball net may promote inclusion, it doesn’t necessarily promote cooperative play. On the other hand, a see-saw requires cooperation. It takes at least 2 people to make it move.
- Children with autism, sensory processing disorders, as well as other intellectual or neurological disabilities need a lot of practice in order to be able to accomplish cooperative play.

**Which Playworld Systems products support this activity?**
- Bing Boing
- Blast Off
- Flip Flop®
- NEOS® (all versions)
- Overdrive
- Revo
- Seesaws (including Quattro)
- Spinami
- Tetherball
- Whirligig

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### Social Interaction

**Why is this activity important in child development for all children??**
Social skills are the foundation for getting along with others. Think of social interaction as having three basic elements:

1. **Social intake** - noticing and understanding other people’s speech, vocal inflection, body language, eye contact, and even cultural behaviors.
2. **Internal process** - interpreting what others communicate to you as well as recognizing and managing your own emotions and reactions.
3. **Social output** - how a person communicates with and reacts to others, through speech, gestures, and body language.

- A lack of social skills can lead to behavioral difficulties in school, delinquency, inattentiveness, peer rejection, emotional difficulties, bullying, difficulty in making friends, aggressiveness, problems in interpersonal relationships, poor self-concept, academic failures, concentration difficulties, isolation from peers, and depression.
- Children with learning disabilities, sensory integration difficulties, Asperger’s Disorder, Autism Spectrum Disorder, neurological disorders, and emotional disabilities often need additional practice to learn social skills. A playground is a perfect place to practice what they are learning in social skills training.

**Which Playworld Systems products support this activity?**
- Basketball Hoop System
- NEOS® (all versions)
- Tetherball
- Toss Up
- Triple Shoot-Out
**Dramatic & Imaginative Play**

*Why is this activity important in child development for all children?*

- Dramatic and imaginative play is extremely important for child development. Children who are given a variety of opportunities to develop their creativity and imagination are learning to express their individuality in interests, abilities and knowledge. In these interactions they also learn to appreciate and respect differences in cultures and viewpoints.

- Dramatic play assists children in expanding their awareness of self in relation to others and their social environment, learn language, cognitive, and social skills.

- Some children with disabilities have more difficulty than others with pretend play, which is why they need to be offered many different opportunities.

*Which Playworld Systems products support this activity?*

- Themed products (Castle, Nautical, Nature)
- Bernie Bus
- Driver Half Panel
- Freddy Firetruck
- Funky Animals (With & without sound)
- Origins™ Boulders (All)
- Origins™ Diggables (All)
- Origins™ Garden Arches
- Origins™ Garden House
- Origins™ T-Rex (Head, Tail & Ribs)
- Origins™ T-Rex Eggs (Hatching & Hatched)
- Playdozer
- PlayExpress®
- Spring Mates®
- Storefront panel
- Trike Path (Drive-Thru, Playhouse, Gas Station & Signs)