

CULTIVATING INCLUSIVE PLAY

Creating playground environments that provide enhanced accessibility for all



AIA Learning Unit

- Understand the various ground covering options for playground structures.
- Identify the available inclusive playground equipment elements and how to incorporate these elements into new and existing playground structures.
- Learn how to create playground environments that promote inclusive play.
- Understand the different types of play that can occur on inclusive playgrounds and the health benefits they provide to kids.
- Identify different types of project delivery methods and approaches for implementation and procurement.

Introductions



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Director of Planning and Construction
Management, Lewisville ISD



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Principal, Huckabee

Lewisville ISD - Facilities



LISD Profile

More than 48,000 Students

127 square miles - one of the largest footprints in DFW

Top 20 largest district in the state, Top 100 in the nation

79 sites containing approx. 10 million sq. ft.

- 39 Elementary Schools
- 15 Middle Schools
- 10 High School level campuses
- 2 Career Centers
- 1 Learning Center
- 1 Early Childhood Campus
- 2 Aquatic Centers
- 5 Stadiums, multiple athletic, and support buildings

The Importance of Play



Traditional Playground

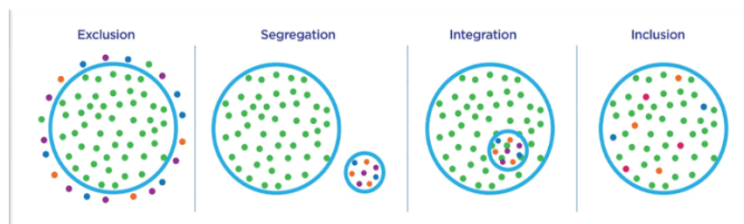


Americans with Disabilities Act of 1990



Universal Design

- Access for all, regardless of abilities
- Account for the diverse perspectives and backgrounds of users. Include users from different ethnicities, genders, and/or with cultural differences, varying language abilities and preferences, and more.



7 Principles of Universal Playground Design

1

Equitable
Use

2

Flexibility
in Use

3

Simple &
Intuitive Use

4

Perceptible
Information

5

Tolerance
of Error

6

Dignity &
Self Esteem

7

Stress
Management

7 Principles of **Inclusive** Playground Design

1

Be Fair

2

Be Included

3

Be Smart

4

Be Independent

5

Be Safe

6

Be Active

7

Be Comfortable

7 Principles of Universal Playground Design

Tailoring the Principles Uniquely Aligned for Outdoor Play and Recreation Environments	
Principles of Universal Design Center for Universal Design NC State University	7 Principles of Inclusive Playground Design Institute for Disability Research, Policy & Practice Utah State University
Equitable Use	Be Fair
Flexibility in Use	Be Included
Simple & Intuitive Use	Be Smart
Perceptible Information	Be Independent
Tolerance for Error	Be Safe
Low Physical Effort	Be Active
Size & Space for Approach & Use	Be Comfortable
<small>The Center for Universal Design (1997). The Principles of Universal Design, Version 2.0. Accessed September 22, 2016 from https://www.ncsu.edu/design/cud/about_ud/udprinciplestext.html</small>	<small>PlayCore & Utah State University (2010). 7 Principles of Inclusive Playground Design, Chattanooga, TN.</small>



Morgan's Wonderland



“

“If we’re being child-centered
and engaging kids, then it should
look like play”

Laura Park Figueroa

”



Neurodivergence

- Encourage play-based approaches that support social participation, develop relationships, and cultivate motor skills
- When a narrow skill set is expected or required by the built environment or program to participate, it often creates physical, psychological, and/or social barriers.
- Include a multigenerational approach

6 Principles of Trauma Informed Design

1

Empowerment &
Personal Care

2

Security, Privacy,
& Personal Space

3

Sense of
Community

4

Beauty & Meaning

5

Dignity & Self
Esteem

6

Stress
Management



“Universal design is an approach for designers to make products and services **accessible and usable** for the **largest possible audience** without the need for adaptation or specialized design.”

Interaction Design Foundation

Design Considerations

A young boy in a blue polo shirt is looking up at a colorful play structure. The structure is composed of large, rounded, interconnected sections in shades of blue, green, and red. Several circular openings are visible, some of which show other children playing. One opening at the top shows a child's legs and arms. Another opening shows a child's hands. A third opening shows a child's feet in pink shoes. The background is a bright, overcast sky.



Accessible Routes

ca0

- Access is provided, but not universal. Goal should be access for all at all entry points.
- Consider ease of moving beyond a single piece of equipment
- Loose material requires maintenance to remain accessible



Slide 20

ca0

similar entry to a stage, everyone can get an award at the same access point...

caudillt@lisd.net, 2024-09-24T20:37:32.941

ca0 0

ADA swings and belt swings are allowed in same space.

caudillt@lisd.net, 2024-09-26T20:48:23.820



Multiple
walkways and
points of access.



Surfacing



Turf texture is more like grass without the risk of mud.
More navigable for legs and wheels.
Turf ground covering has greater stability.

Consider thickness and padding at throughout if possible, and at a minimum in the following:
high traffic and impact zones, in addition to fall attenuation.



Equipment



ca0



Consider:

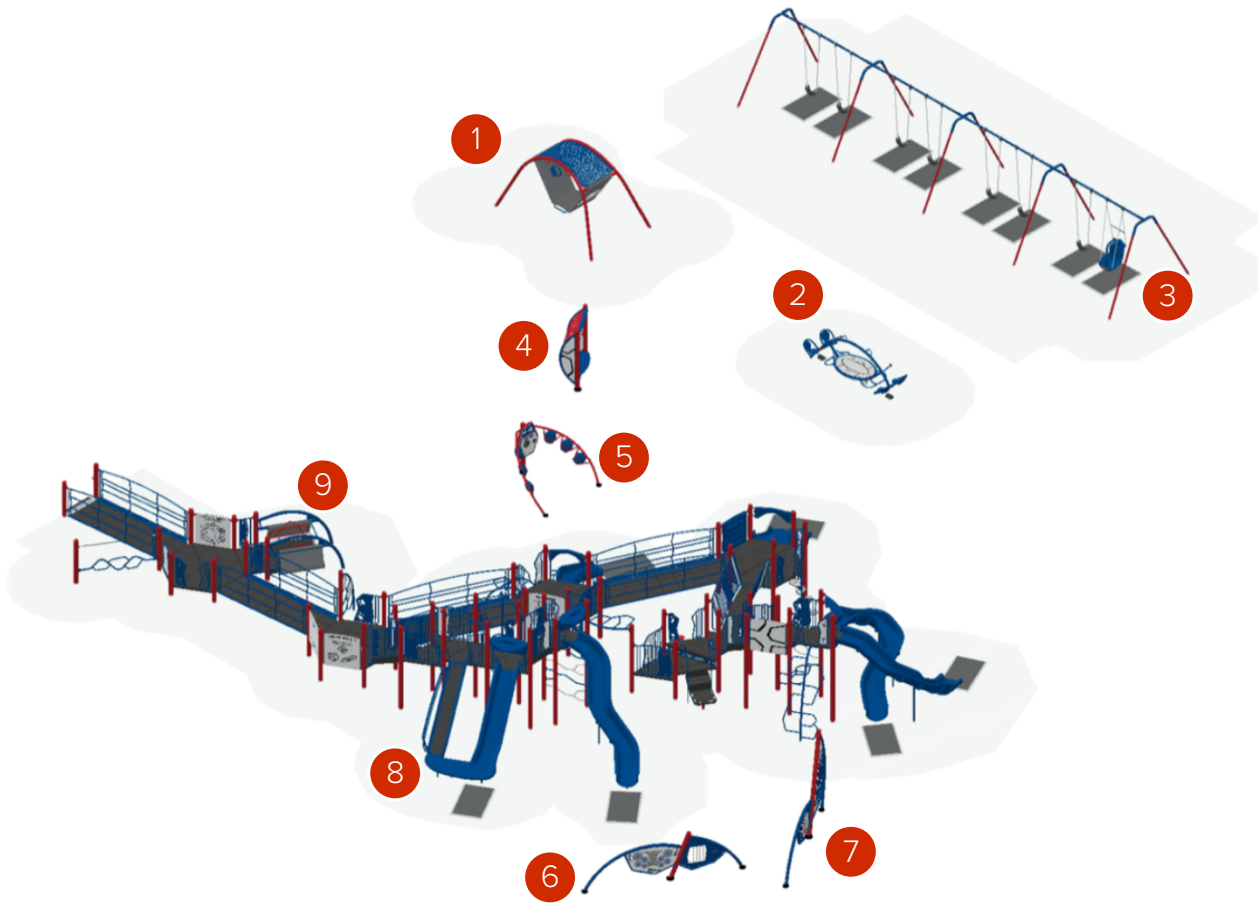
- Size
- Inclusive Play
 - Material
 - Safety
- Accessible Bridges
 - Variety
 - Flexibility
 - Location

Slide 26

ca0 LISD used a 16'-0" eave height to avoid vandalism.
caudillt@lisd.net, 2024-09-24T20:52:56.948

CH0 0 eaves on shades?
Corrie Hood, 2024-09-24T21:35:41.922

ca0 1 yes!
caudillt@lisd.net, 2024-09-26T20:03:57.587



- 1 Brava Universal Swing
- 2 Orb Rocker
- 3 Freedom Swing
- 4 Serenity Spot
- 5 Movement Inclusive
- 6 Stem Play Panels
- 7 Stem Play Panels
- 8 360 Loop
- 9 Innova Bridge & Rocker

McAuliffe Elementary School – Lewisville ISD

CHO



Slide 28

CH0

@caudillt@lisd.net Love this!

Corrie Hood, 2024-09-24T21:36:35.969

ca0 0

Thank you! :)

caudillt@lisd.net, 2024-09-26T20:03:27.149



Brava Swing Set

- Allows for independent transfer.
- Tool for children on the Autism spectrum to freely express stimming behaviors such as rocking while participating in the natural movement of the swing.
- Creates an equitable and accessible environment for all children to be part of the action with their peers, family members and caregivers.



Orb Rocker

- Provides place for hands and feet and a side entrance that allows all users to enter and ride comfortably.
- Helps children develop socially, emotionally physically and cognitively all while having fun and getting exercise.



Freedom Swing

- Ergonomically designed seat provides greater stability, security and comfort for kids with limited core and upper-body strength.
- Safety harness is easy to lift and secure with a latch mechanism.

Serenity Spot

- A fort-like environment that offers special features such as a kick flap, objects to manipulate and a mirror to help see and express emotion.
- Allows children to express themselves freely and provide an outlet for stimming behaviors of children on the ASD spectrum.
- Enhances and encourages intergenerational play with spaces for children and caregivers to sit and interact.





MOVMT Inclusive

- Offers the opportunity for socialization and cooperation within a child-directed setting.
- People-powered.
- Fosters intergenerational engagement when children and adults play together and helps kids get more time at the playground when parents or caregivers participate in play.

StemPlay

- Children learn best through play.
- Science & Engineering outdoors.
- Parallel Play.





360 Loop

- This transfer, climber, slide combination allows for children of all abilities to have control over their play experience and be able to play and move independently.
- Transferring onto the climber, kids can climb however they are comfortable using their upper bodies or legs to work their way to the top before they come down the slide.



Innova Bridge & Rocker

- Provides rocking and socialization options for children of all abilities and doesn't require a transfer from a mobility device.
- Brings equity to the playspace and promotes inclusivity by providing options for children of all abilities to have the same experience on the playground.



INNOVA™ BRIDGE

Burke

Shading





Consider:

- Size
- Transparency
- Material
- Structure
- Angles
- Sun Path
- Height

Modifications to Existing Playgrounds

- Ensure fall zones are accounted, including non-competing fall zones.
- Select play structures that can share fall zones or have zero fall zones like the Movmnt.
- Consider playground flow and run zones.
- Parallel entry points.

Delivery Methods

- Construction Manager at Risk (C@MR)
- Competitive Sealed Proposal (CSP)
- Job Order Contract (JOC)

Slide 41

CH0

[@Emily Cozort] Do we have symbols for these delivery types? Maybe a quick intro slide from a bond presentation?

Corrie Hood, 2024-09-25T14:40:40.180

Construction Coordination

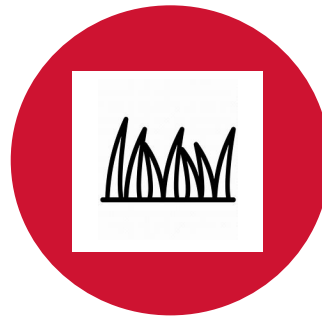
- Surrounding Sod Extents
- Adjacent Irrigation
- Fencing Extents
- Staging Area
- Identify Utility locations
- Lead Times



Budget



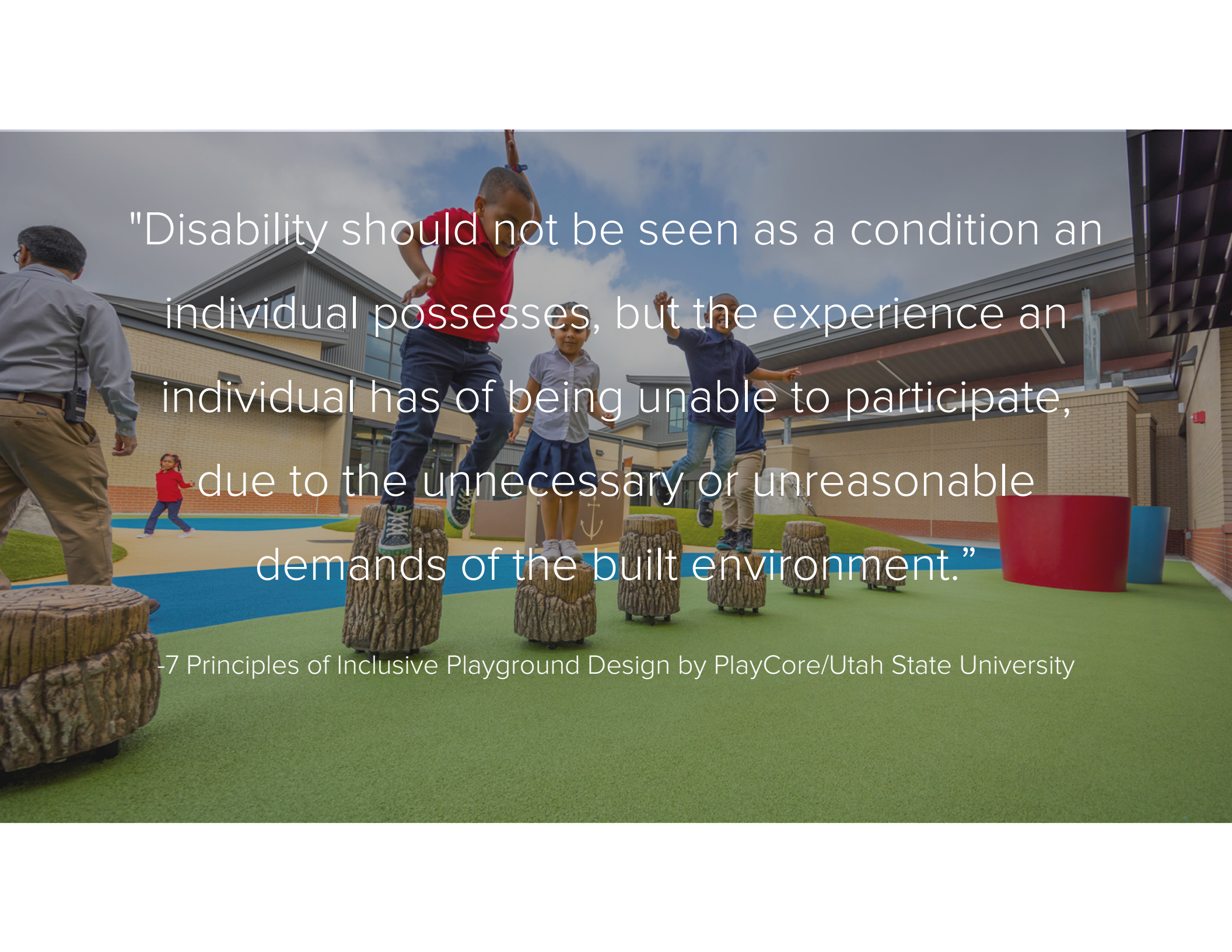
PLAYGROUND



TURF



SHADE

A photograph of a modern playground with green artificial turf and blue safety surfacing. Several children are playing on a series of log stumps of varying heights. One child in a red shirt is jumping over a stump, while others are standing on or climbing them. An adult male in a grey shirt and khaki pants is supervising from the left. In the background, there is a brick building with large windows and a red and blue cylindrical structure.

"Disability should not be seen as a condition an individual possesses, but the experience an individual has of being unable to participate, due to the unnecessary or unreasonable demands of the built environment."

-7 Principles of Inclusive Playground Design by PlayCore/Utah State University



Thank you!