

Physical Development & Movement Experiences Series  
Session IV

**MOVEMENT & CHILDREN WITH SPECIAL NEEDS**

### Today's Objectives

**UNDERSTAND**

Understand the benefits of including children with special needs in a physical activity.

**ENHANCE**

Enhance your early childhood program by adding strategies to include children with special needs in movement activities.

### Our presenters

**Toni Cacace-Beshears**  
SPL Treasurer and Board member,  
The Source for Learning  
Retired CIO, Children's Harbor  
Adjunct Professor Tidewater  
Community College

**Gauri Shirali-Deo**  
Senior Manager  
ECE Initiatives  
The Source for Learning

The Source for Learning - ECE Initiatives

### Why is it critical to include ALL children?

**Children with special needs are twice as likely as other children to be overweight**

### Benefits to Children

- Improved physical fitness
- Reduction of disease risk
- Skill development
- Socialization

### Benefits to Children

- Social-emotional well-being
- Greater confidence

- Decreased body fat
- Greater attention

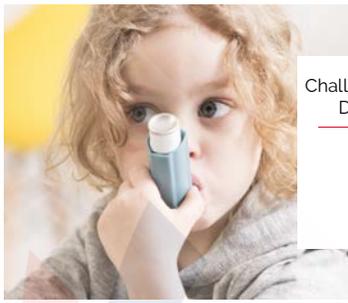
### Additional benefits to students with special needs

- Control progress of chronic disease
- Manage functional decline
- Mediate the psychological and social impact of disability
- Increase independence
- Facilitate life skill competencies
- Greater inclusion in family/community life
- Enhance socialization



### Challenges of Movement Activities Due to Medical Conditions:

- Asthma
- Diabetes
- Cancer
- Congenital heart disease
- Chronic illness



### Inclusion Tips for Children with Medical Conditions

Medical disabilities do not preclude doing most skills but may

- limit duration
- Decrease intensity
- Use low impact physical activity



### Learning About Medical Conditions

**Check with families about the children in your care:**

Identify the triggers and specific types of activities in which the child is permitted in or restricted from participating.

To get recommendations from physicians and therapists about the types of exercise recommended and any cautions.



## ADAPTATIONS For Medical Conditions

### ASTHMA

- Physical activity indoors
- Fewer environmental triggers
- Swimming
- Medical ID bracelet; inhaler and epi pen

### DIABETES

- Keep a blood sugar kit
- Physical activity
- Medical ID bracelet



## ADAPTATIONS For Medical Conditions

### CANCER

- Check with physician
- Fluids
- Sun protection
- Frequent breaks

### CONGENITAL HEART DISEASE

- Aerobic and moderate exercise
- Sun protection

### CHRONIC ILLNESS

- Targeted exercises



## Non Medical Conditions

- Communication Disorders/Hearing Impairment
- Blindness
- Sensory Processing Disorders
- Autism Spectrum Disorder (ASD)
- Attention Deficit Hyperactivity Disorder (ADHD)
- Intellectual Disability
- Cognitive Impairment: Traumatic Brain Injury (TBI)
- Social Emotional Disorders
- Orthopedic Impairments



## Communication Disorders

“

A **communication disorder** is an impairment in the ability to receive, send, process, and comprehend concepts or verbal, nonverbal and graphic symbol systems. A communication disorder may be evident in the processes of hearing, language, and/or speech. A communication disorder may range in severity from mild to profound. It may be developmental or acquired. Individuals may demonstrate one or any combination of communication disorders. A communication disorder may result in a primary disability or it may be secondary to other disabilities.

~ American Speech and Language Association

”

## Challenges of Movement Activities Due to Communication Disorders:

- Ability to follow specific directions
- Ability to ask questions, for help or clarifications



## Specific Adaptations for Children with Communication Disorders:

- Demonstration of activity in small steps
- Peer modeling
- Video modeling
- Cue cards
- Sign language
- Physical prompts
- Extra time



## Visual Impairments

“

...legal blindness (also called statutory blindness) as best corrected visual acuity of 20/200 or worse in the better eye; or a visual field limitation such that the widest diameter of the visual field, in the better eye, is 20 degrees or less.

~ The Social Security Administration

”

## Challenges of Movement Activities Due to Visual Impairments:

- Ability to see the actions
- Ability to move freely and safely in the environment



### Specific Adaptations for Children with Visual Impairments:

- Guided Activities
- Verbal Description
- Tactile Description
- Physical Prompts
- Environment
- Extra Time

### Sensory Processing Disorder

Sensory Processing Disorder AKA sensory integration dysfunction is a condition in which the brain has trouble receiving and responding to information that comes in through the senses.



### Challenges of Movement Activities Due to Sensory Processing Disorder:

- Coordination
- Ability to move freely and safely in the environment
- Spatial Awareness
- Motor planning
- Sensory stimulation
- Transitions



### Specific Adaptations for Children with Sensory Processing Disorder:

- Occupational Therapist (OT) guided activities
- Consider location, transitions and time
- Centering activities
- Visuals
- Options
- Modulators

### Autism Spectrum Disorder

Autism spectrum disorder (ASD) is the name for a group of developmental disorders. ASD includes a wide range, "a spectrum," of symptoms, skills, and levels of disability. People with ASD often have these characteristics:

- Ongoing social problems that include difficulty communicating and interacting with others
- Repetitive behaviors as well as limited interests or activities
- Symptoms that typically are recognized in the first two years of life

Symptoms that hurt the individual's ability to function socially, at school or work, or other areas of life.

~ National Institute of Mental Health



### Challenges of Movement Activities to ASD:

- Ability to follow directions
- Ability to provide feedback
- Sensory issues
- Anxiety, Obsessive Compulsive Disorder (OCD)
- Weak core



**Specific Adaptations for Children with ASD:**

- Build sensory stability, core and proprioception
- Visual directions
- Teach skill in smaller steps in separate location
- Reinforcement

### Attention Deficit & Hyperactivity Disorder

“ Attention-deficit/hyperactivity disorder (ADHD) is one of the most common mental disorders affecting children...Symptoms of ADHD include inattention (not being able to keep focus), hyperactivity (excess movement that is not fitting to the setting) and impulsivity (hasty acts that occur in the moment without thought). ”

~ American Pediatric Association



**Challenges of Movement Activities Due to ADHD:**

- Ability to stay on task
- Easily frustrated

### Specific Adaptations for Children with ADHD:

- Extra Space
- Visual Cues
- Check for Understanding of Directions
- Planned Reward System

### Intellectual Disability

“ Intellectual Disability refers to limitations in mental capability, reasoning, planning, problem solving, abstract thinking, comprehension of complex ideas, experiential learning, and speed of learning. ”

~ The Arc  
For people with intellectual and developmental disabilities

### Cognitive Impairment

“ Cognitive Impairments: Traumatic Brain Injury “...an acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a child’s educational performance...resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment; problem-solving; sensory, perceptual, and motor abilities; psychosocial behavior; physical functions; information processing; and speech. ”

~ IDEA

### Challenges of Movement Activities Due to Intellectual Disability and Cognitive Impairments:

- Ability to follow directions
- Ability to learn new steps and respond
- Ability to communicate questions or comments
- Some conditions are associated with low muscle tone
- Low expectations



- Specific step by step directions and demonstrations
- Limit decisions
- Opportunities for practice and extra time
- Peer helper



### Specific Adaptations for Children with Intellectual Disability and Cognitive Impairments:

### Social Emotional Disorders

“ **Emotional disturbance:** a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child’s educational performance:

- An inability to learn that cannot be explained by intellectual, sensory, or health factors.
- An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
- Inappropriate types of behavior or feelings under normal circumstances.
- A general pervasive mood of unhappiness or depression.
- A tendency to develop physical symptoms or fears associated with personal or school problems.

~ IDEA ”



### Challenges of Movement Activities Due to Social Emotional Disorders:

- Issues with interactions
- Fear & uncertainty
- Wariness
- Acting out

### Specific Adaptations for Children with Social Emotional Disorders

- One-on-one communication
- Pre-practice
- Large group support
- Identify areas of strength
- Possible leadership opportunities
- Peer-helpers



### Orthopedic Impairment

“ ...means a severe orthopedic impairment that adversely affects a child’s educational performance. The term includes impairments caused by a congenital anomaly, impairments caused by disease (e.g., poliomyelitis, bone tuberculosis), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns that cause contractures).

~ IDEA ”

### Challenges of Movement Activities Due to Orthopedic Impairment

- Coordination
- Balance
- Speed
- Mobility




### Specific Adaptations for Children with Orthopedic Impairments

- Share their ways of adapting
- Activities that can be done with all Participants seated
- Peer helper



### Make Your Playground/Large Motor Area Accessible

- Evaluate and assess
- Change routines
- Rearrange
- Consider child's needs

### Ideas to make areas accessible

- Wider spaces and room between equipment
- Gentle slopes
- Resting spaces
- Braille signs/Large print
- Contrasting colors
- Visual signs
- Calming places
- Opportunities for independence

### General Inclusion Ideas for All Students

- Information sharing
- Encourage inclusion
- Peer helpers
- Empathy activities




### General Inclusion Ideas for All Students

- Self-advocacy
- Peer education
- Respect and equity

### Ways to Adjust Physical Activities to Include Students with Special Needs

- Alter components
- Repetition
- Environment
- Equipment
- Peer or Adult helper
- Invent inclusive activities



### Physical Activity Ideas for Infants

- Tummy Time
- Play Time
- Sit up and Look Time



### Physical Activity Ideas for Toddlers

- Bubbles
- Sit and play ball
- Climbing
- Hand Control
- Peek a boo
- Tiger Tail
- Bunny Hop



### Promoting Physical Activity for Students with Special Needs – 5 Step Plan

- 1 Safety First
- 2 Integration of Wellness
- 3 Make the Connection
- 4 Increase Participation
- 5 Promote Healthy lifestyles

### NEXT webinar

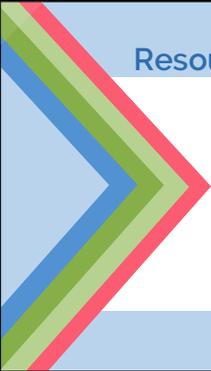
**Creating Engaging Play and Natural Environments for the Early Years - Birth through 5 -**

**Tuesday, May 22, 2018**  
**1:30-2:30 PM Eastern Time**



### Resources

- Lieberman, Lauren and Houston-Wilson, Cathy, (2009). *Strategies for Inclusion*, 2nd Ed. Champaign, IL: Human Kinetics.
- Orlick, Terry. *Cooperative Games and Sports*, Champaign, IL. Human Kinetics, 2006
- <http://www.actionforhealthykids.org/game-on>
- SentionCHEWS & KidCompanions Chewelry - Children with Special Needs: Benefits of Physical Activities and Adaptive Sports - <https://kidcompanions.com/>



### Resources

- Indiana Resource Center for Autism  
<https://www.iidc.indiana.edu/pages/The-Value-of-Movement-Activities-for-Young-Children>
- Physical Activity for Students with Special Needs by Jake Weiner - <https://prizmah.org/physical-activity-students-special-needs>
- Why Young Kids Learn Through Movement by Lara N. Dotson-Renta  
<https://www.theatlantic.com/education/archive/2016/05/why-young-kids-learn-through-movement/483408/>

### Resources

- Early Childhood Inclusion - [http://www.naeyc.org/files/naeyc/file/positions/DEC\\_NAEYC\\_EC\\_updatedKS.pdf](http://www.naeyc.org/files/naeyc/file/positions/DEC_NAEYC_EC_updatedKS.pdf)
- [https://www.caringforkids.cps.ca/handouts/physical\\_activity\\_with\\_a\\_chronic\\_illness](https://www.caringforkids.cps.ca/handouts/physical_activity_with_a_chronic_illness)
- <https://www.webmd.com/asthma/guide/exercising-asthma#1-2>
- <https://www.endocrineweb.com/guides/type-1-children/physical-activity-children-type-1-diabetes>

### Resources

- <https://www.cancer.org/treatment/survivorship-during-and-after-treatment/staying-active/physical-activity-and-the-cancer-patient.html> Congenital%20heart%20disease
- <http://www.aboutkidshealth.ca/En/ResourceCentres/CongenitalHeartConditions/AtHome/OngoingCare/Pages/Physical-Activity-for-Children-with-Congenital-Heart-Disease.aspx>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2690546/>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2866314/>

### Resources

- [http://www.heart.org/HEARTORG/Conditions/CongenitalHeartDefects/CareTreatmentforCongenitalHeartDefects/Congenital-Heart-Defects-and-PhysicalActivity\\_UCM\\_307738\\_Article.jsp#.WiBj0IWnHb0](http://www.heart.org/HEARTORG/Conditions/CongenitalHeartDefects/CareTreatmentforCongenitalHeartDefects/Congenital-Heart-Defects-and-PhysicalActivity_UCM_307738_Article.jsp#.WiBj0IWnHb0)
- <https://www.asha.org/policy/RP1993-00208/>
- <https://www.webmd.com/children/sensory-processing-disorder#1>
- <http://activeforlife.com/activities-for-babies-and-toddlers/>

### Resources

- <https://www.understood.org/en/school-learning/partnering-with-childs-school/instructional-strategies/at-a-glance-classroom-accommodations-for-adhd>
- <https://www.aaastateofplay.com/how-to-accommodate-special-needs-children-on-the-playground/>
- [https://kaboom.org/resources/build\\_playground\\_toolkit/accessibility/special\\_needs/mobility\\_impairments](https://kaboom.org/resources/build_playground_toolkit/accessibility/special_needs/mobility_impairments)

### Questions?

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