Incorporating Functional Tasks into your Lesson Plan.

An Occupational Therapist’s perspective to therapeutic riding.
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Role at Happy Trails

- Occupational Therapist
- Riding Instructor
- Consult with other riding instructors
- Give individual EAT classes
- Give Group Classes focused on Life Skills.
Diagnosis we work with:

- **Primary Diagnosis**
  - Autism
  - Cerebral Palsy
  - Down’s Syndrome
  - Williams Syndrome
  - Angelman’s
  - Traumatic Brain Injuries
  - Chromosomal Abnormalities

- **Secondary Diagnosis**
  - Anxiety
  - ADHD
  - Sensory Processing Disorder
8 Senses
Proprioception

The Brain receives and interprets information from multiple inputs:

- **Eyes** send visual information.
- **Vestibular organs** in the inner ear send information about rotation, acceleration, and position.
- **Stretch receptors** in skin, muscles and joints send information about the position of body parts.
Proprioception

- Why is it important:
  - Tells us where we are in space
  - Grades are movement
  - Helps us maintain balance
Vestibular

The Vestibular System

"The Vestibule"

Ear

Semi-circular canals

Otoliths

5 TYPES OF Vestibular Input

ORBITAL

LINEAR

SIDE LYING

INVERSION

ROTARY

@theotbutterfly
Vestibular

- Why is it important
  - It keeps us balanced
  - Helps us sit upright and stand upright
  - Helps us walking
  - Changing positions challenges our vestibular system
What is Interoception?

Provides us with information about our body and emotional states

- Body States
  - Pain
  - Hunger
  - Thirst
  - Toileting Needs
  - Fatigue

- Emotion States
  - Anxiety
  - Anger
  - Sadness
  - Joy
  - Excitement
  - Irritability
  - Fear
1. Signals from the body are sent to the Thalamus

2. The Thalamus passes this information to the Insula

3. The Insula sends a message about your body sensations to you

- Ouch! A thorn! That really hurt!
- I'm really nervous about this speech...my heart is beating really fast!

Cell (detecting pain)
Cell (detecting heartbeat)
What is SPD?

1. External stimuli (visual/sight, auditory/sound, olfactory/smell, tactile/touch, and gustatory/taste) enter the body through sensory receptors.

2. Internal stimuli (proprioceptive/movement and position in space, vestibular/balance, interoceptive/awareness of internal organ needs) activate the peripheral nerves.

3. External and internal sensory input travels to the brain and is processed as either over-arousal, under-arousal, or neutral information.

4. Input that our brains process as over-arousal, register in our bodies as a hypersensitivity. Hypersensitivity can present as fear, avoidance, distraction, or poor balance.

5. Input that our brains process as under-arousal, register in our bodies as hyposensitivity. Hyposensitivity can present as overly touchy, close proximity to others, an inability to sit still, thrill-seeking, or clumsiness.

6. Input processed as neutral information do not present in our bodies as problematic behaviors. SPD arises when the hyper- or hypo- sensitivity to sensory input causes dysfunction in the person’s daily life. Every person with SPD can experience a different combination of sensory challenges.
Riding requires what skills?

- Balance
- Fine motor control
- Volume Control
- Endurance
- Timing
- Range of motion
- Body awareness
- Body Parts
- Eye hand coordination
- Tool use
- Strength
- Body Parts
- Know colors
- Reading emotions
- Knowing letters
- Knowing numbers
- Right and Left
Ground Activities
Emotions
Decorating/Dressing
Shapes
Numbers/Counting
Reaching tasks/Colors
Puzzles
Other functional Tasks

- Beads and String
- Scavenger Hunt
- Planting and Watering Plants
- First Aid
- Inside/Outside
- Right and Left
- Making Treats
- Read a book
Questions?
THANK YOU