

Tactile Experiences for All: Supporting Students with CVI





Learning Objectives



- ▶ Discuss early tactual development research and what we know now
- ▶ Recognize and describe Exploratory Procedures (EPs)
- ▶ Apply routine-based tactual strategies to use with families in home environments and in early childhood classrooms
- ▶ Explore tactile assessment options

Tactual Development

WHY IS THIS IMPORTANT?





Tactual Development Research

What Do We Know About Tactual Development?

- ▶ Tactile development is receptive, or passive, then active, or haptic

(Hatwell, 2003; McLinden & McCall, 2002)

- ▶ Sense of “Self” and “Others”

(Metzoff, Saby, & Marshall, 2018)



What do we know about Tactual development?

Most 5 or 6 year-olds have good haptic recognition

Intermodal transfer before age five is poor – or is it?

Why?

- ▶ Visual and Haptic representations that children form may be inherently different
- ▶ Young children have poor haptic perception
- ▶ Young children have poor manual exploratory abilities

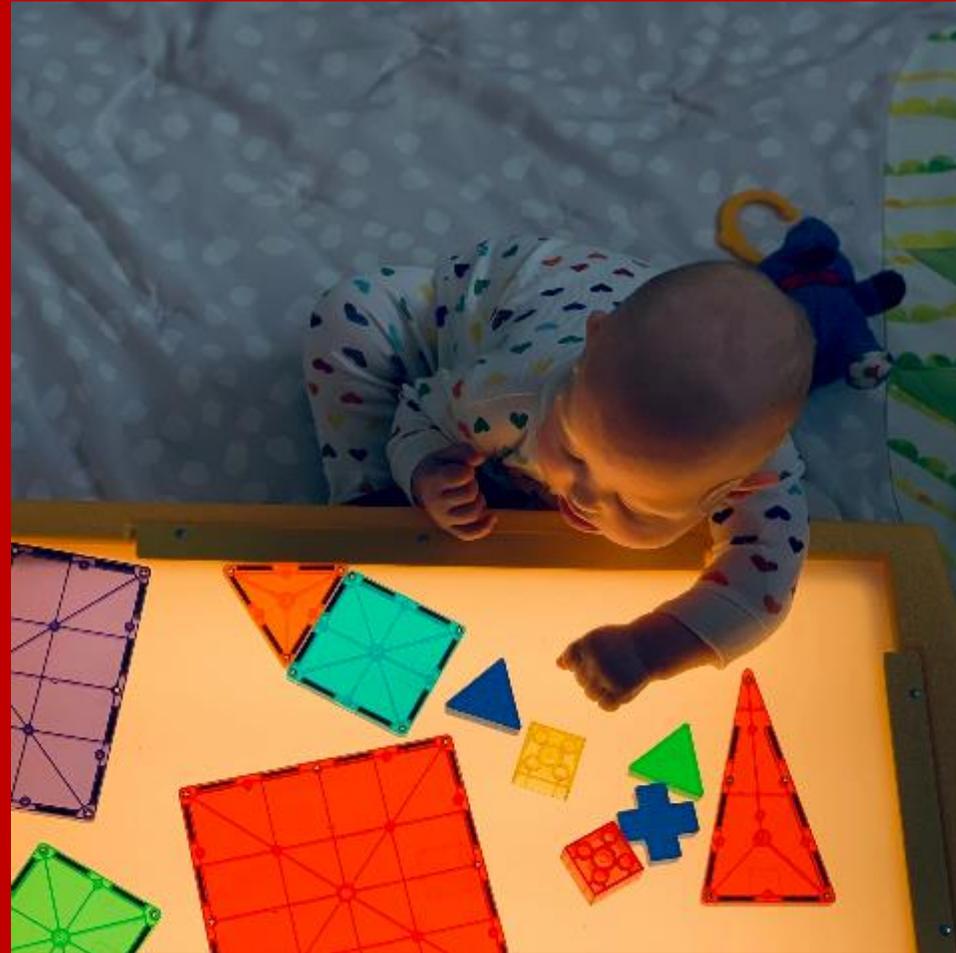
Students with CVI: Tactile Needs

Sensory Competence
expectations should be high

Experiences with "Known
Objects"

Students in Phase One may
need additional tactile support

All children need tactile
experiences to be competent in
their world. ALL.



What Do We Learn First?

Textures

Babies can discriminate

Texture before Shape

Prefer intense textures

Mouthing



Next: Shape

- ▶ Objects:
 - ▶ Familiar vs. Unfamiliar
- ▶ Presentations:
 - ▶ Simultaneous
 - ▶ In succession- delay
 - ▶ Miniatures

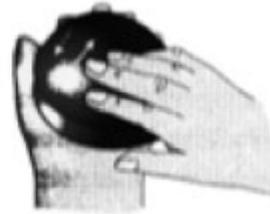
(Kalaghar & Jones, 2011; Lederman & Klatsky, 2009)



Exploratory Procedures

(McLinden, 2012,
McLinden & McCall, 2002)

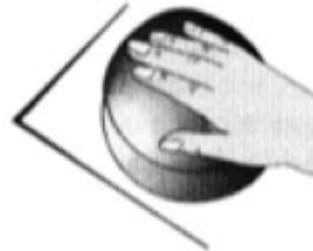
LATERAL MOTION /
TEXTURE



PRESSURE/
HARDNESS



STATIC CONTACT /
TEMPERATURE



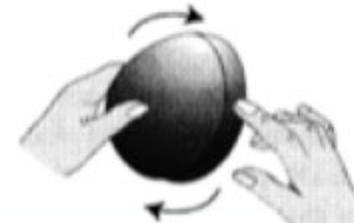
UNSUPPORTED
HOLDING/
WEIGHT



ENCLOSURE /
GLOBAL SHAPE,
VOLUME



CONTOUR FOLLOWING/
GLOBAL SHAPE,
EXACT SHAPE





Enclosure Video:





Object Permanence:

What Do We Know?

Bruce and Vargas, 2012;
Nelson et al., 2014



Why Is Messy Play Important ?

Builds Confidence and Curiosity

Avoids Tactile Sensitivity

Avoids Food Neophobia

Opportunities for fun

(Coulthard & Sohota, 2016)

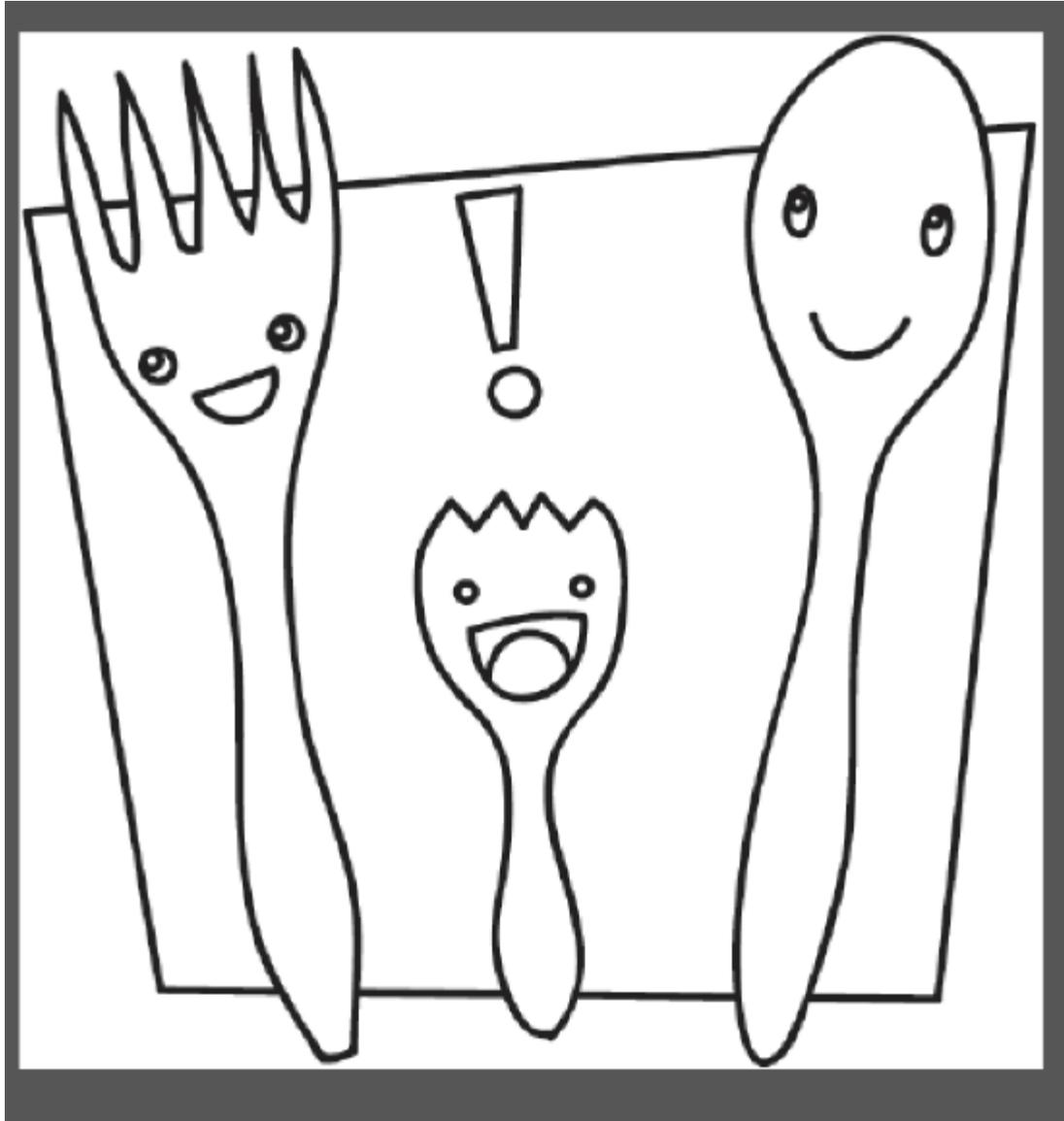


Strategies for Caregivers who can't be messy.....

- ▶ Dollar store shower curtains or ponchos
- ▶ Wear Gloves
- ▶ Play right before bath time
- ▶ Model for Caregivers that child likes it
- ▶ Take It Outside
- ▶ Sensory Bags

Using Tactile Strategies in the Classroom

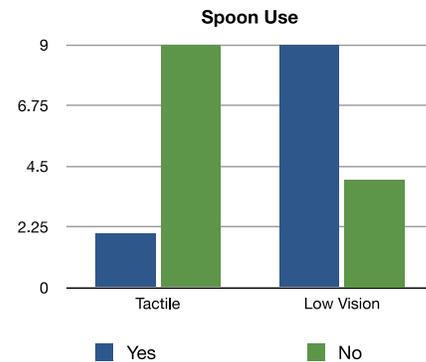
- ▶ <https://www.pathstoliteracy.org/resources/project-salute-successful-adaptations-learning-use-touch-effectively>
- ▶ Give children time
- ▶ Prior to age 8, neither visual or haptic development predominates
- ▶ Young children need to constantly change their understanding of size and orientation to objects
- ▶ Monitor texture acceptance and never force
- ▶ Students with CVI may change from primary tactile learners to primary visual learners as they move through the phases



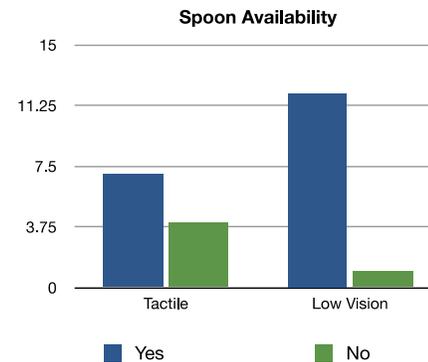
Utensil Use:
A Critical
Mealtime
skill

Gerber Study Spoon Use

	Tactile	Low Vision
Yes	2	9
No	9	4



	Tactile	Low Vision
Yes	7	12
No	4	1



Mealtime Routines Study Results

- ▶ What have we learned?
- ▶ Children need to spend time with utensils
- ▶ Intervention Group = More likely to use a spoon





Teagan

Self- Feeding

Exploratory Procedures

Cognitive Understanding

What's Next?



Assessment Options

- ▶ Erhardt Developmental Prehension Assessment
<http://www.erhardtproducts.com>
- ▶ Developmental Checklists
- ▶ Braille Readiness Grid
- ▶ Boehm-3 Preschool (Tactile Version)

Anchor Center
Tactile
Developmental
Rating Scale





What Should We Do?

- ▶ Encourage parents to touch their child with love and meaning
 - ▶ Encourage “Messy Play”
 - ▶ Lots of Experiences with toys and utensils
 - ▶ Watch for Exploratory Procedures and praise them
 - ▶ Work with Occupational Therapists
 - ▶ Assess tactual skills
 - ▶ **EVERYONE** needs Tactile Experiences!
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Questions?

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- ▶ 720-205-3147 or csmyth@anchorcenter.org

Thank You!

