

Tales of a Tactile Learner

- 2017 Cooper transfers to preschool in Bismarck
- Brandi meets Cooper...Cooper meets Brandi.
- Cooper age 5.
- Brandi age (just kidding).

TO KNOW COOPER IS TO LOVE COOPER!

My Inspiration...

A screenshot of Aiden's Story: An Alternate Path to Braille and Literacy with picture of fingers reading symbols.

About Me & Disclaimers

- I work for Bismarck Public Schools in ND. I am the sole TVI/COMS. This is my 26th year.
- Bismarck is the largest school district in North Dakota with 18 grade schools, 3 middle schools, 3 high schools, an alternative high school, a Career Academy and Technical Center, and an early childhood education program (BECEP).
- Yes, I am fortunate to have an aide for 3-4 hours each day to help me with materials. No, I do not feel like this is enough.
- I have not given up on braille with Cooper. It continues to be part of his programming.
- I MAY own stock in black corrugated plastic.
- I always buy low profile Velcro because it lays flatter.
- I hoard plastic take home containers for sorting activities.
- I may order the APH black bifold boards by the dozen.
- Most everything I share today will work with your braille

readers as well!

Background on Mr. Cooper

- Cooper has Neurofibromatosis Type 1. He also has Optic Gliomas that are spread throughout both optic chiasmata causing complete loss of vision in both of his eyes. The neurofibromatosis and optic gliomas were discovered when he was 11 months old.
- He has multiple brain tumors, 3 shunts and ventricle tubes.
TBI
- Other affects: decreased stamina, mobility/balance, speech, shakiness.
- Lesions and small tumors on his spine. He has been on & off (mostly on) one form of chemotherapy or another for the last seven years, which also contributes to his challenges.
- Early onset of puberty and scoliosis which is creating havoc with mobility.
- Cooper needs 1-2 naps each day just to make it to 1:30pm when his school day ends.
- No oral foods, only protein drinks by sippy cup.
- Frequent absences due to illness, medical appointments hospitalizations.

Video of “Beginning of the day Cooper”

Starting our day with the pledge

Pre-Braille and Pre-literacy

- Preschool experiences: shaving cream, yoga, sensory!
- Understanding same and different

- Refining same and different
- Braille Literacy - tracking
- Incorporating tactile literacy for colors, daily schedule, calendar concepts, and family.

Video: Cooper's Mobility

Where we started...tactile defensiveness

- Cooper on Halloween dressed like a doctor. In front of him is a box of white beans with black spiders throughout. His hands are up and airborne.

Same or Different.

Matching 3-D objects.

Working up to field of 4

Exposure to all kinds of textures.

Sorting trays from APH kit (SAM Kit)

Matching Symbols using a muffin tin (referring to braille dot positions)

- A 6-cup muffin tin with textures adhered to bottom.
- Another set of the same textures are set beside it for matching.

Video of Cooper matching and sorting by shape and by texture. Circles, squares, and triangles (from APH)

Refining matching / same and different

- Still 3-D but items are adhered to cards.
- Several Pairs of square laminated cards with textures hot glued to them. 2 cards with bows. 2 cards with 3 pom poms. 2 cards with 4 buttons. 2 cards with bottle caps. 2 cards with wooden rings.

Refining Matching Continued

Cards with 3-4 tactile objects adhered. One is different.

Working on tracking left to right and refining discrimination.

Adding in Symbols with Meaning

Tactile Symbols: Schedule

- Snack – clear rubber dots with bump on top
- Circle Time – round circle felt material.
- Outside – rough texture
- Therapy – nonstick mat materials
- Math – 5 small blocks
- Calendar – soft side of Velcro
- Bathroom – elastic piece from pull-up

Tactile Symbols: Family

- Cooper – small wooden dolly that is shaped like a cane
- Dad – glasses
- Owen - stuffed animal
- Mom – a shirt with buttons because Cooper always tells her to do the laundry.
- Grandma – fake curly hair

Tactile Symbols: Days of the Week. Catchy symbol phrases were key to start!

- Magnetic Monday (magnet)
- Tickle Tuesday (feather)
- Wooly Wednesday (wool fabric)
- Thirsty Thursday (piece of straw)
- Foamy Friday (packing foam)
- Stretchy Saturday (stretchy bracelet)
- Lord's Day Sunday – (wood pieces to make a cross)

Tactile Symbols: Seasons of the Year

- Fall – two wooden sticks
- Summer – small seashell with sandpaper on the bottom
- Winter - zipper
- Spring – plastic rainboot

Tactile Symbols: Weather

Windy – bent twig with leaf below

Sunny – Round shaped sun with triangular rays (corrugated yellow paper from APH)

Cloudy- fuzzy shaped white cloud

Rain – hot glue shaped rain drops.

Snow – foam shaped snowflakes

Tactile Symbols: Seasons of the Year

- Rectangular garden kneeling pad lined with soft Velcro.
- Symbol for today (from TSBVI?)
- Always put everything in the same spot

Tactile Symbols: Colors

Use of triangular crayons – don't roll and easy to mount textures on them.

- Red hearts - APH plastic red bumpy paper
- Blue bubbles - 3 clear dots
- Green grass – fake grass
- Yellow banana – yellow foam in shape of banana
- Orange slices – two orange squares using corrugated paper.
- Brown bear – felt brown paper.
- Black holes – black foam with three holes punched out.

- Pink pretties – pink jewel with flat back
- Purple pom poms – small purple pom pom

Always make 2 of each tactile symbol for matching
 Matching games provide fun practice! Attach to APH Tactile
 Connections cards or my smaller go-to is corrugated plastic.

Video: Modifying books to meet student vocabulary.

AND THEN THERE WAS COVID.....

- All tactile materials went home.
- Videos of how to instruct.
- Phone calls with mom and Cooper to converse.
- Google drive set up for parents with preschool lesson plans and videos, etc.

Finding the right books to connect with what has been taught.

Photo of book "Little Quack Loves Colors" along with color symbols and sight words "like," and small rubber duck.

Video I made during COVID modeling to the parents how to present the book Cooper.

Tactile Symbols with Concept Books incorporating familiar vocabulary.

- Book titled "What's the Weather?"
- Cooper could pick from a choice of 2-3 tactile symbols.
- Clothes you Wear for Different Seasons (snow boots vs. rain boots, heavy coat vs light coat, etc.)
- Weather for Different Seasons (rainy, snowy, etc.)
- Environmental Changes with Each Season (flowers blooming, leaves falling, trees getting new leaves, geese flying south...)

- Seasons associated with Holidays/Celebrations (Pumpkins, Christmas, Fourth of July, etc.)
- Colors – Colors of Leaves, Colors of Pumpkins, Color of snow, color people say the sun is, Color of new green grass, etc.

Repetitive Children’s “That’s Not My” Books

- That’s not my monster,
- That’s not my dog.
- That’s not my duck.

Pictured is the book “That’s Not My Monster.” with tactile symbols for that, not, my and monster.

- Pen Friend. Round, magnetic Pen Friend tags velcroid to each page for Cooper to read independently.

That’s Not My Duck with Symbols

Picture of Book “That's Not My Duck" with tactile symbols cards. Symbol cards for that, not, my and duck.

Tactile Symbols and sight words

Book titled “Too Many Leaves.”

- Focus on colors.
- Sight Words: big, little(small), I
- Focus on family members including self.

Video of me modeling how to present the book titled “Too Many Leaves.”

Continuation with prebraille...Tracking and Refining Tracking

Middle of the day Cooper. Calling 911, the Fire Dept. or Donald Trump on staff

Shared Goals and Cotreating Services

- Collaboration with ALL team members! (PT, OT, SLP, and Primary Case Manager)
- While PT worked on balance, he read sight words to her for distraction.
- SLP co-treated 1-2 sessions per week to work on her articulation goal.
- OT incorporated fine motor activities that included literacy.

Example of Collaboration

- SLP joined reading sessions with specialists to model ways to support Cooper using verbal and tactile cues for sound production.
- Picture of marker board on the right with reminders of how to cue Cooper such as
 - L – Jaw up – tell him to close his mouth
 - TH-tongue out/voice on (the, that)
 - M, L, P –lip popper

Words, words so many words. Where did I begin?

- Built on Cooper's existing library of tactile symbols.
- Started with sight words from the Edmark Reading Program
- Along with braille alphabetic word signs like can, do, like, go, etc.

Photo of Sight Words Binder. Sight words are mounted on corrugated plastic.

Practicing with audio options such as the pen friend and Go Talk One (attainment company)

Practicing with audio options such as the pen friend and Go Talk One (attainment company)

Photo of sliding jig. Corrugated plastic with moveable bead below words.

Video of Cooper using his corrugated plastic sliding jig

Matching Jig Example. Corrugated plastic with 3 choices.
Move the word I say to the top.

Corrugated jig matching activity. Read me the sight word at the top. Move the one that matches it to the top.

Video: Cooper reading a sight word sentence.

“Cooper will go and see the horse.”

Video of Cooper Reading one of his Sight Word Books

Sharing Experiences. Peer Relations

Cooper reading his board.

“I will go on an airplane Thursday. I will go with Mom, Dad and Owen (brother).”

Video: Cooper sharing his upcoming trip with peers.

Next Up. Introduction of Tactile Letters

- Chose textures that were readily available.
- Mounted vowel textures on circles and consonant textures on square manipulatives from the APH Hundreds Board
- Storing extras so that they are always available on the fly

Curriculum to Guide Instruction

- Extensive training in LETRS
- Incorporating Cooper’s existing library of sight words
- General education standards and benchmarks
- UFLI Scope and Sequence. District implementation starting next year.

Storage of Letter Symbols. Binders and APH storage panels

Photo of Cooper matching letters using the 6- place muffin tin.
Video of Cooper practicing beginning sounds

Photo of matching jig.

Letter “c” at the top. Cooper has to choose which sight word starts with the letter “c” Sight words are car, boy and horse.

Photo of matching jig

The sight word so is at the top. Cooper has to find the first sound he hears in the word so and move it to the top.

Sliding Jig with letters s, t and c

- Cooper has to slide the bead under the letter that makes the sound “t”
- Cooper has to slide the bead under the beginning sound he hears in the word “camp.”
- Cooper has to slide the bead under ending sound he hears in the word “toss.”

Segmenting sounds in the word “bat” using the sliding jig.

Read the word at the top.

The word is bat.

Slide the bead to the first sound you hear in bat.

Slide the bead to the second sound.

Slide the bead to the ending sound.

Next UP CVC/CCVC/CVCC Words.

Video: Cooper reading the word “sat”

Video: Cooper reading “I like to nap”

Blending CCVC and Sight Words into sentences. Photo of Cooper reading, “I do not like the clam”

Opportunities to discuss new vocabulary concepts.

Cooper is sorting words by word family using the APH Divider trays and take-home trays from Texas Roadhouse 😊

Photo of Cooper using the APH Tray with dividers to segment and blend CVC words. Repetition is KEY!

- Cooper is blending the CVC word “pat.”
- First, he taps it out on his cymbal
- Then he moves each letter one by one from the lip of the tray to the Velcro and then again from the Velcro to the bowl

Video of Cooper tapping out the sounds in the word “slap” with his cymbal and mallet

Increasing Literacy and Peer Opportunities. Photos of adapted APH “The Caterpillar” book. Each page recorded with pen friend tag and 1-2 words for Cooper to read.

Video: Cooper using his pen friend to interact with an APH “Bear Hunt” book

Video of Cooper sharing his book with his peers.

Assistive Technology

Choose It Maker (HelpKidzLearn)

- On the iPad using self-made overlays out of corrugated plastic
- Working with High School students on making 3D overlays
- Auditory scanning on the computer using two switches and a switch interface. One switch “moves it” and the other switch “gets it” (keyboard actions of tab and enter)

<https://www.helpkidzlearn.com/>

Photos of iPad overlays I’ve made from corrugated plastic

- The Choose It maker app prompts Cooper to find the word “horse”.
- Cooper finds the word horse and taps the open area right below the word.

- A reward sound is then played.

Photo of my Choose it Maker Template. Prompt is “Find the Word your teacher tells you”. I put the word I want him to find on the green side.

Video of Cooper practicing reading his sight words using an iPad, the choose it maker app and a homemade corrugated overlay.

Video of Cooper using two switches and a switch interface with help kids learn using auditory scanning. Switch one moves it. Switch two gets it.

MATH

Photo of Cooper with APH bifold board, APH electronic dice, adapted number sticks and an abacus.

Cooper rolls the dice once for tens, twice for ones then he reads the number, and last, he sets the same number on his abacus.

Photos of two types of adapted abacus. Where we started with corrugated plastic, moveable beads, and pipe cleaner.

Photo of Numicons used for number identification.

<https://www.amazon.com/Numicon-Box-Shapes-1-10/dp/0198487312>

Photo of the math sentence $1+2 =$ and an abacus to solve it.

Photo of self-made number sticks 0-10. Corrugated plastic with adhesive dots. The five is marked with tape.

Impulsive digits hack 😊

- Photo of an abacus with rubber cord lock beads.
- Set a number, place a rubber stopper below the beads.
- Students can still manipulate but cannot change the number

by bumping it.

Tactile Numbers. Added this year.

Photo of tactile numbers 0-9.

Photo of tens and one place holders using letters T and O

Peer Relations

Photos of peer art to Cooper. Students poked pencils into their art so Cooper could feel their pictures.

Peers made Cooper tactile cards and recorded personal messages on each with using the pen friend.

Cooper shares with his peers his upcoming plans. “I will go in an airplane Thursday. I will go with mom, dad, and Owen.”

And sharing May the 4th be with you.

Photos of efficiency and storage. Rolling cart with Cooper’s materials follow him all day.

Video of Cooper singing Halleluia at the end of his day. Some days, we are singing Halleluia 😊

Thank you for attending my session!

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