



Assistive Technology Solutions for Communication



Heather Blalock, MA., CCC-SLP
MNPS - Assistive Technology Team



what's

**Assistive
Technology?**

- **IDEA states that assistive technology is “any item, piece of equipment or product system, whether acquired commercially off the shelf, modified or customized, that is used to increase, maintain or improve functional capabilities of a child with a disability.”**



Areas of AT



- * Seating and Positioning
- * Communication
- * Computer Access
- * Motor Aspects of Writing
- * Written Composition

* Reading

* Math

* Organization

* Recreation/Leisure

* Activities of Daily Living

What is functional communication?

- * Functional communication is using preferred methods to express wants and needs, social interactions, and exchanging information.

We Focus on
Functional
Communication.



AT Solutions for Communication

Low Tech

- * Picture symbols (Choice boards, communication books; picture exchange; topic boards)
- * Photographs
- * Objects





Examples of communication books

"PECS was developed in 1985 as a unique augmentative/alternative communication intervention package for individuals with autism spectrum disorder and related developmental disabilities. First used at the Delaware Autistic Program, PECS has received worldwide recognition for focusing on the initiation component of communication."
(Bondy & Frost)

The PODD communication system is taught through a focus on natural language stimulation, where visual language is modelled alongside verbal. The adult language partner points to the symbols representing the key words of her sentence while speaking. (Gayle Porter)



Voice Output Communication Devices



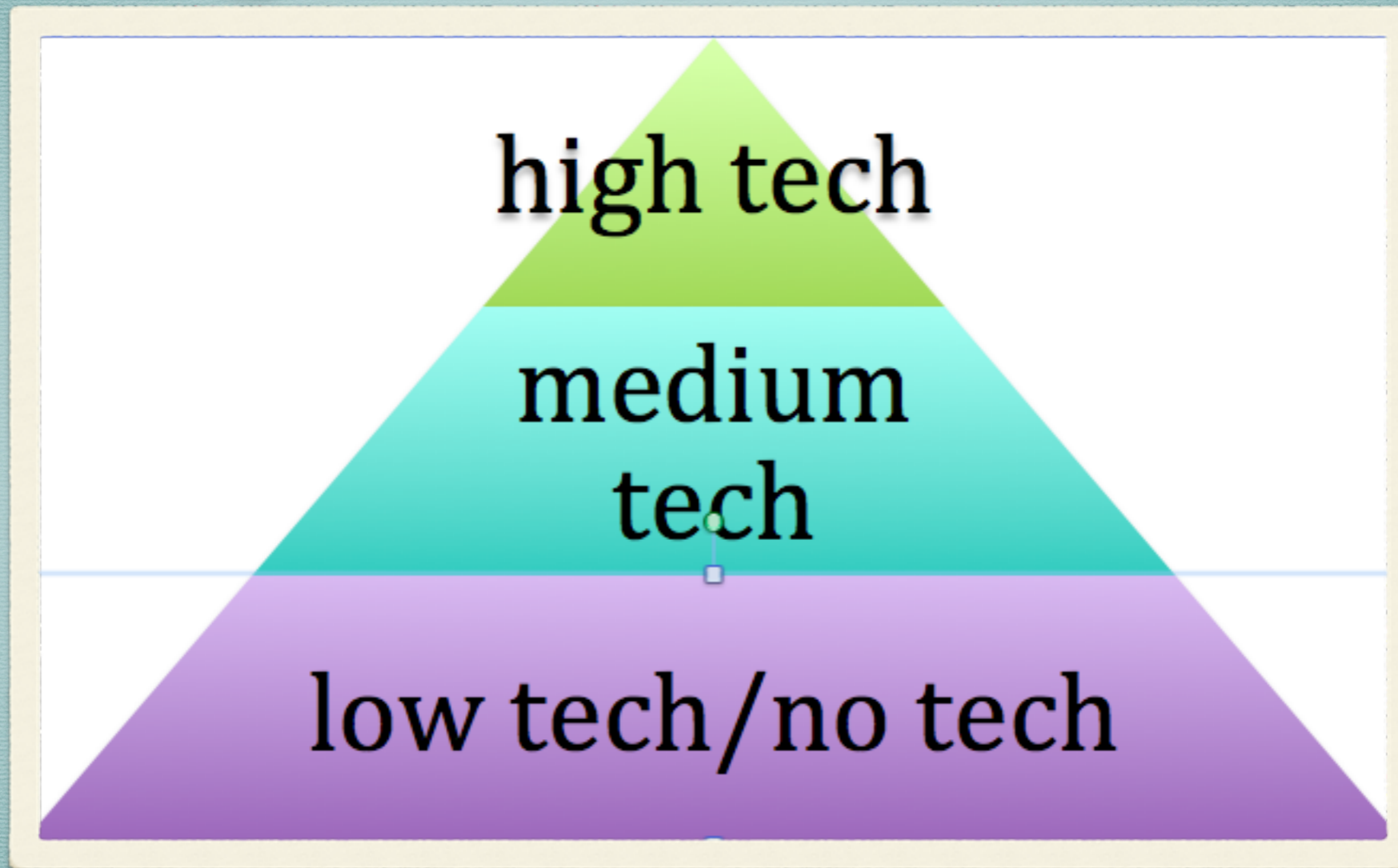
* one button (Big Mac, Big Talk)

* 3-4 button (Talkables)

* 1-23- location /multiple overlay



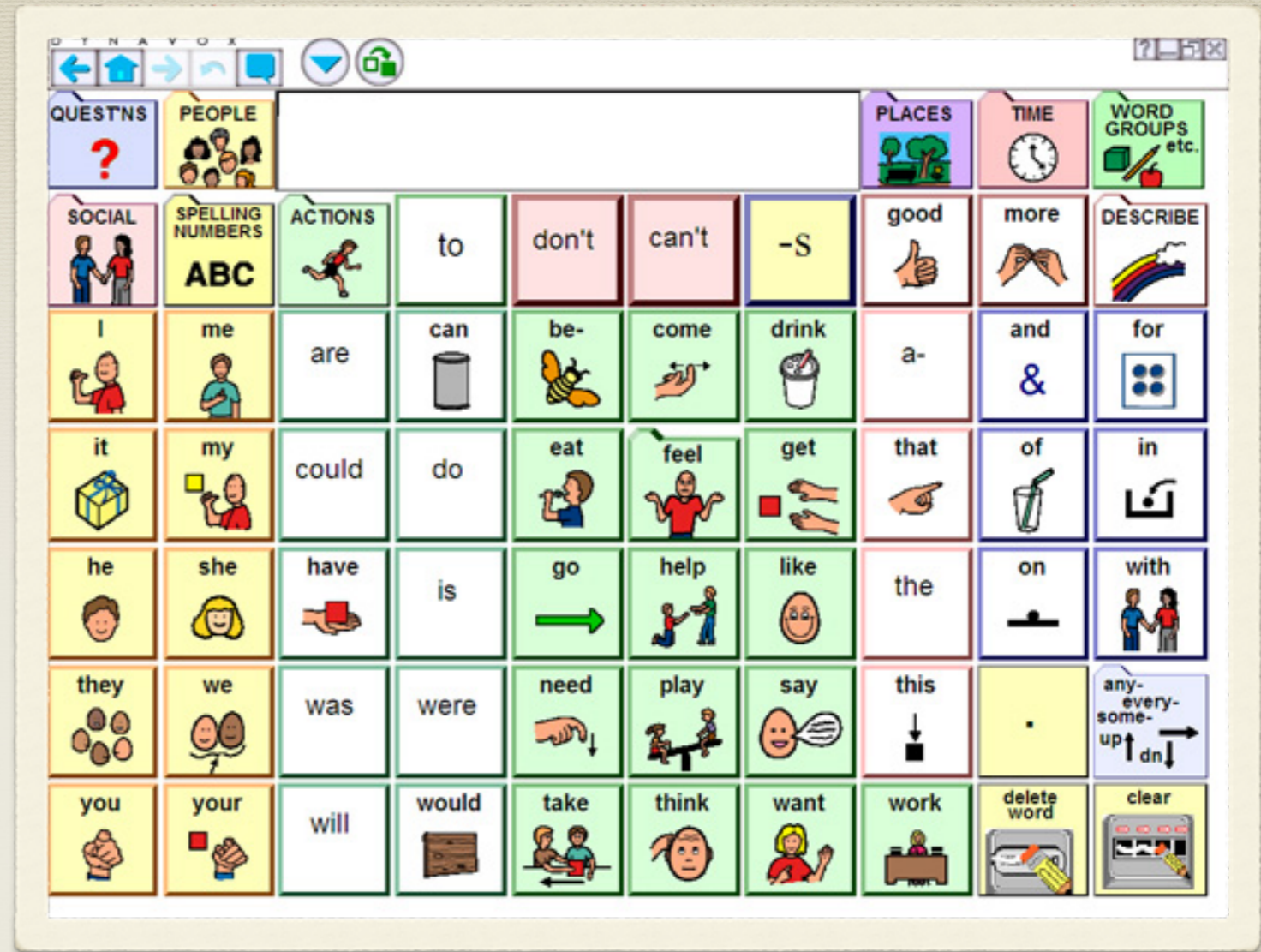
High tech solutions



Voice Output Communication Devices

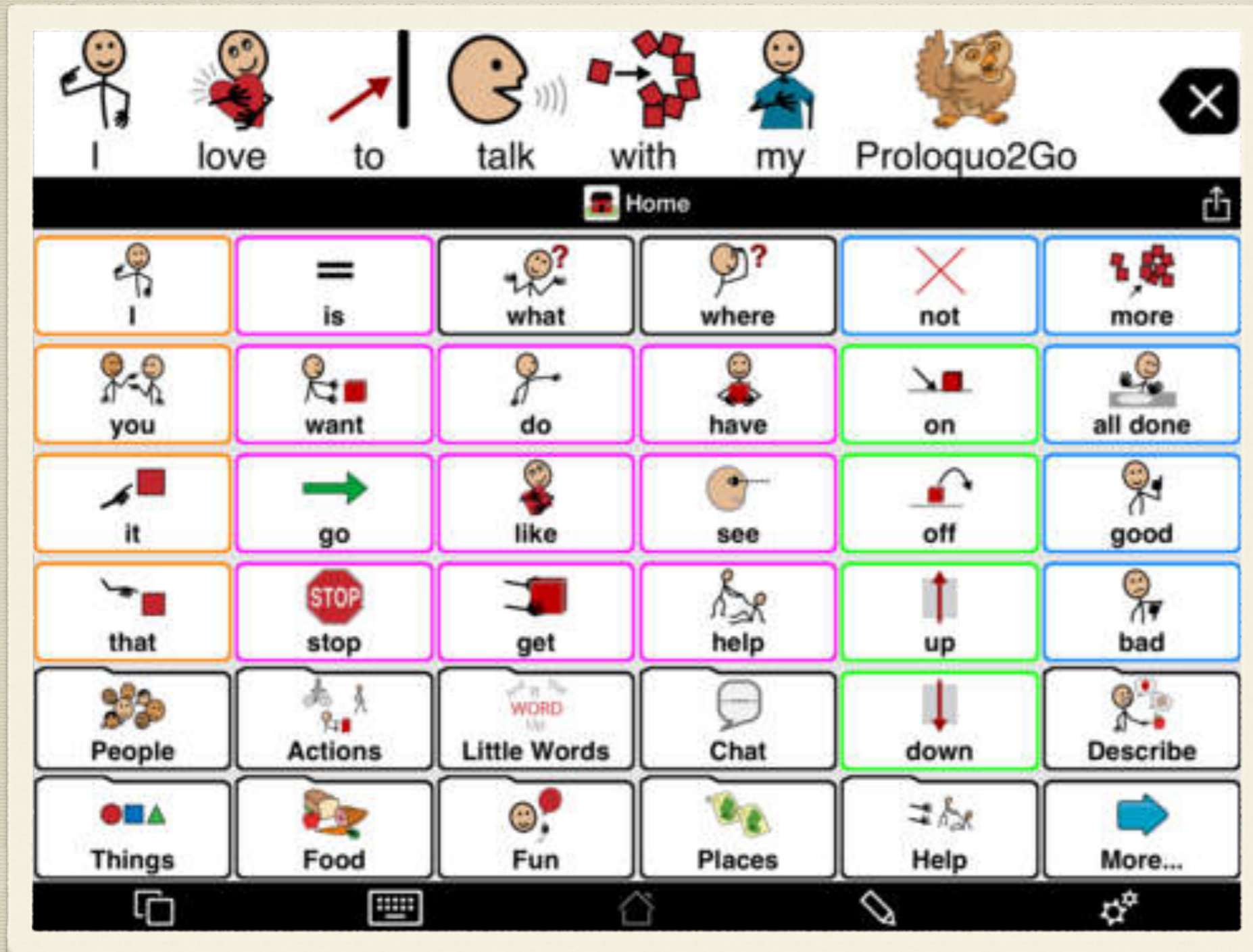
- * **Tobii- Dynavox**
- * **Prentke Romich Company**
- * **iPad/ iPod AAC applications**





"DynaVox Compass software is an innovative, flexible, and research-based communication solution for individuals who cannot use their natural voice to participate more fully in their everyday lives."

"Symbol-supported communication app to promote language development and grow communication skills, from beginning to advanced communicators"





"Language Acquisition through Motor Planning (LAMP) is a therapeutic approach based on neurological and motor learning principles."



"Verbally is an amazing, comprehensive assisted speech solution for the iPad."

Practical solutions for supporting communication at home



- * **Choice boards: begin with snack, toys/activities**
- * **Don't let them access desired items without communicative attempt.**
- * **Free smart phone apps for pictures/simple voice output.**

Snack Choice Board

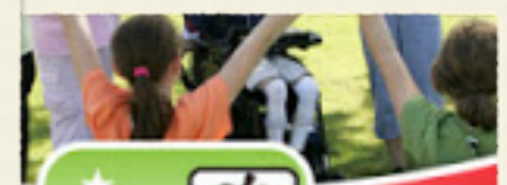


fruit snacks 	pretzel 	cookie 	pop tart 	popcorn 
cookie 	gummy 	tortilla chips 	cheetos 	crackers 
goldfish 	crackers 	applesauce 	raisins 	yogurt 
rice krispies 	apple 	banana 	grapes 	carrot 
orange 	strawberry 	pb & j 	cupcake 	cheese 

What is your favorite restaurant?



Oh Yes! IT'S FREE



SoundingBoard™
v3.0

Conceive. Create. Communicate.



Hot chocolate



Tea



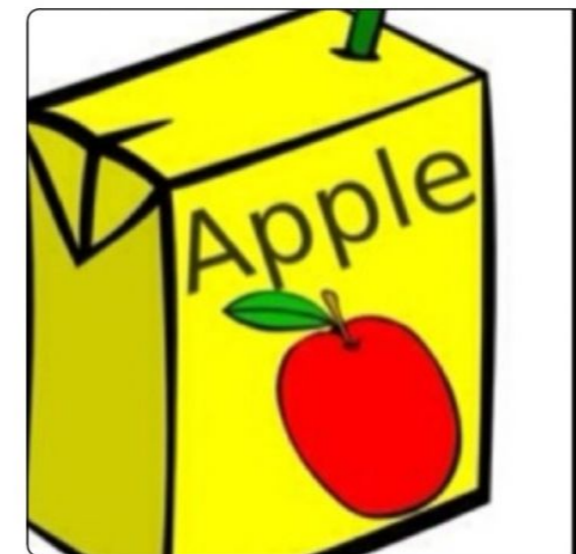
Orange



Coke



Soup



Apple Juice

FREE

Story Kit



International
Children's Digital Library

www.childrenslibrary.org

AT&T 3G 11:08 AM 81%

Bookshelf

Details

My book >

Josh >

Notes (tap to edit) >

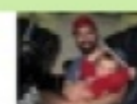


Bob has a nose.

Read

Edit

Share





Pic Collage



Picture Card Maker

AAC Use Home Plan

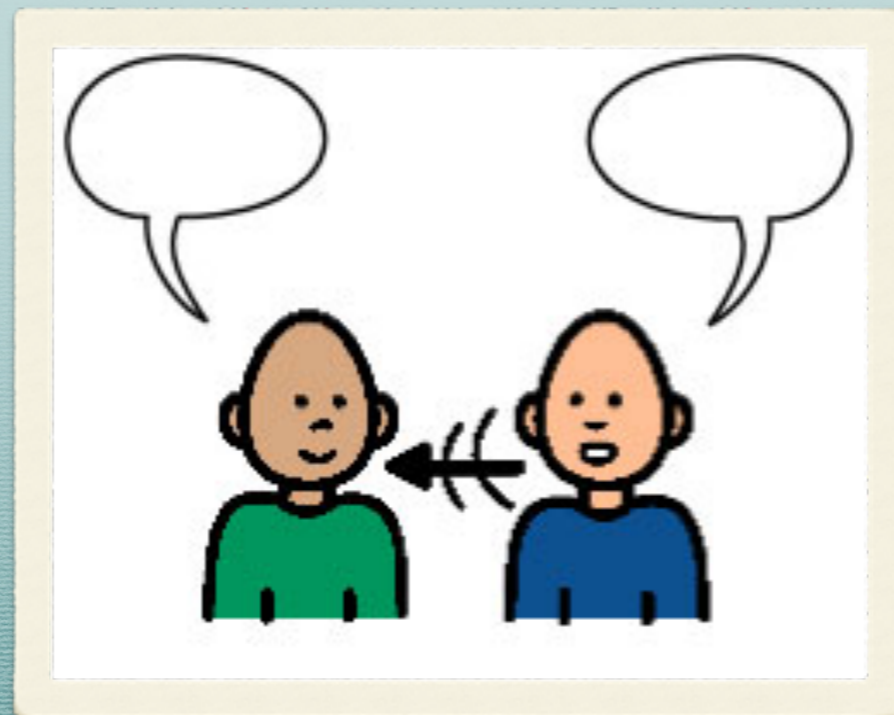
Activity/Topic	Skill	Vocabulary	Navigations	Misc.
Discussing School Day	Sharing Information Commenting	Feelings, classes, It was a good day. I went on a field trip. I had art. I had a bad day. I learned about the planets. (need access to school page)	Navigations will be specific to each device	
Meal Time	Make Requests Make Choices Comments Social Etiquette	Food choices, utensils, setting the table, what are we having to eat? It's too hot. I don't want that. Thank you. Please. Drinks. Can I be excused?		
Shopping	Making Choices Asking Questions Comments Social Etiquette	Category items to choose what your shopping for. Colors What is the price? I want to buy that? How much? It fits. It's too big. I don't like that. Thank you, please. money		
Sporting events	Sharing information Comments Answer questions	I had a great game? What was the score? Did you see me kick the ball? I love soccer. I don't like soccer. I had fun with my friends. Sport choices. Can I go to the concession stand? Food choices		
Doctor Visits	Sharing information Greetings Questions Feelings	Feelings, my body parts, hello, good bye, see you next time, I feel nervous, will this hurt, how long will this take		
Cooking	Questions Comments Choices Requests	Can I help cook, what should we cook, Can we make cookies, need a pan, need a measuring cup, this smells good, I don't like that, that tasted great, Can I try it? Food items, utensil items,		
Book, Magazine	Answer questions <ul style="list-style-type: none"> • What are they doing • What color is the? • What happened? 	I like it/don't like it Descriptions (colors, feelings, locations, events) Good, I don't know, alright		

AT referral process for MNPS



Communication- related
referrals begin w/ your
school's assigned SLP.

**All MNPS- SLPs incorporate and explore
low- to-high tech options during therapy**



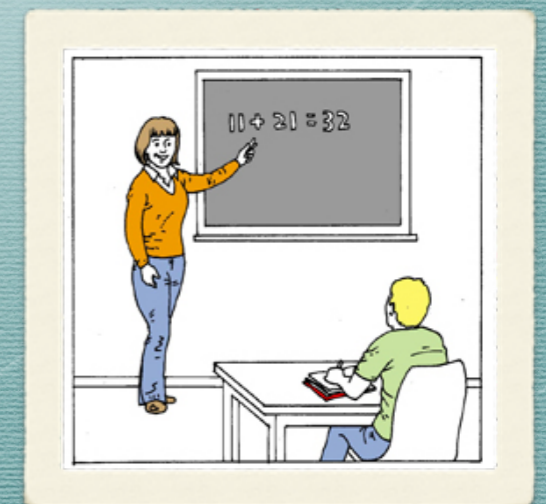
Referrals related to handwriting, keyboarding, and computer access begin with your school's assigned OT.



All MNPS- OTs incorporate and explore low- to-high tech options during therapy

Academic-related referrals
begin with the classroom
teacher and/or special ed coach

**All MNPS teachers have a variety of
technology within their school building**



MNPS AT Team

- * **Complete consultations and assessments.**
- * **AT referrals are addressed collaboratively with SLPs, OTs, teachers, staff and parents.**
- * **Provide ongoing training and support.**

Assessment Procedures

Functional Communication Checklist

Assessing Student's Needs for Assistive Technology (WATI)

DeCoste Writing Protocol

Protocol for Accommodations in Reading (PAR)

Observation of therapy/classroom

Consult team members

IEP/ Data review

Direct /collaborative assessment

Equipment trials

Important things to consider when evaluating for an AAC device

- * **Visual scanning**
- * **Visual discrimination**
- * **Vocabulary knowledge**
- * **Orthographic continuum**
- * **Physical access**
- * **Current communication modalities/functions**
- * **Previous AT implemented.**

MNPS- AT Training

- * **Initial training is provided when equipment is issued.**
- * **Professional Development: SLPs and OTs participate in ongoing PD opportunities, therefore building capacity in our district to better support students and teams.**
- * **AT Contact Person- Each SLP and OT is assigned an AT team member to contact as needed for additional support.**
- * **Ongoing training for all team members: 1/2 day AAC work sessions are offered each grading period**
- * **SLP/OT Therapy: teaching the student to use device and model use for staff.**
- * **SLP/OT consult- ongoing training and device support for team.**
- * **Other available resources for teams: video tutorials, training modules; cheat sheets; in-app support**

Additional support for AT devices:



AAC Use Plan

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00	Arrival/Morning Meeting: Calendar(Days of the week, Months, weather, seasons, days in school), Requests (I want a break, head squeeze, etc.),	Arrival/Morning Meeting: Calendar(Days of the week, Months, weather, seasons, days in school), Requests (I want a break, head squeeze, etc.),	Arrival/Morning Meeting: Calendar(Days of the week, Months, weather, seasons, days in school), Requests (I want a break, head squeeze, etc.),	Arrival/Morning Meeting: Calendar(Days of the week, Months, weather, seasons, days in school), Requests (I want a break, head squeeze, etc.),	Arrival/Morning Meeting: Calendar(Days of the week, Months, weather, seasons, days in school), Requests (I want a break, head squeeze, etc.),
9:00	<u>Language Arts and Reading</u> : Request needed items for work completion (glue, scissors, etc.)	<u>Language Arts and Reading</u> : Request needed items for work completion (glue, scissors, etc.)	<u>Language Arts and Reading</u> : Request needed items for work completion (glue, scissors, etc.)	<u>Language Arts and Reading</u> : Request needed items for work completion (glue, scissors, etc.)	<u>Language Arts and Reading</u> : Request needed items for work completion (glue, scissors, etc.)
10:25	<u>Math</u> Commenting, requesting needed items for activity	<u>Math</u> Commenting, requesting needed items for activity	<u>Math</u> Commenting, requesting needed items for activity	<u>Math</u> Commenting, requesting needed items for activity	<u>Math</u> Commenting, requesting needed items for activity
11:45	<u>Lunch</u> : Comments, requesting food or desired sensory break	<u>Lunch</u> : Comments, requesting food or desired sensory break	<u>Lunch</u> : Comments, requesting food or desired sensory break	<u>Lunch</u> : Comments, requesting food or desired sensory break	<u>Lunch</u> : Comments, requesting food or desired sensory break
12:30	<u>Intervention/Eden</u> Answering social questions when needed, requesting break, desired break	<u>Intervention/Eden</u> Answering social questions when needed, requesting break, desired break	<u>Intervention/Eden</u> Answering social questions when needed, requesting break, desired break	<u>Intervention/Eden</u> Answering social questions when needed, requesting break, desired break	<u>Intervention/Eden</u> Answering social questions when needed, requesting break, desired break



AAC Plans

Implementation Plans

- * Clearly define roles and responsibilities regarding AT device (programming, ensuring consistent access, charging, equipment restrictions, and security)



References

- * ASNAT- Wisconsin Assistive Technology Initiative
- * Functional Communication Checklist- TN State Department of Education
- * Tobii- Dynavox - dynavoxtech.com
- * PRC- prentrom.com
- * assistiveware.org
- * verballyapp.com
- * Rethinkautism.com
- * Picture Exchange Communication System (Bondy & Frost) pecsusa.com
- * PODD-(Porter) Practicalaac.org

MNPS AT Team

- * Heather Blalock, MA.; CCC-SLP
- * Danielle Campbell, MS.; CCC-SLP
- * Janelle Heathman, OTR/L
- * Marilyn Reaves, OTR/L
- * Krista Bolen, M. Ed.; Special Education Coach



obrigado

Dank U

Merci

mahalo

Köszí

спасибо

Grazie

Thank
you

muruuru

Takk

Gracias

Dziękuję

Děkuju

danke

Kiitos