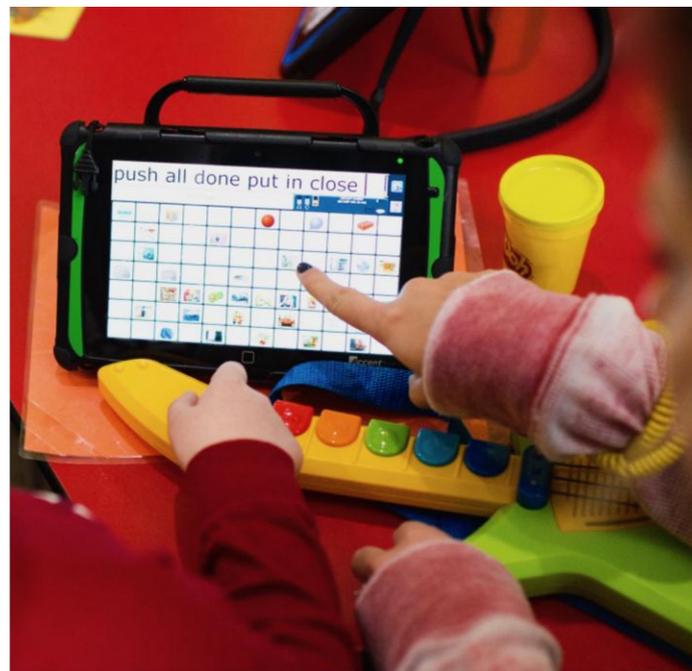


Bridge to Spoken Language





Lindsay Knez, MA, CCC-SLP, BCBA

- My start in the field.
- Speech language pathologist (SLP) since 2007.
 - Worked in early intervention, private practice, and in residential and charter schools for children with autism.
- Board certified behavior analyst (BCBA) since 2012.
 - Worked in clinic, home, and school settings.
- Certified LAMP professional.
- Co-owner and operator of K1ds Count, LLC .

Overview of K1ds Count



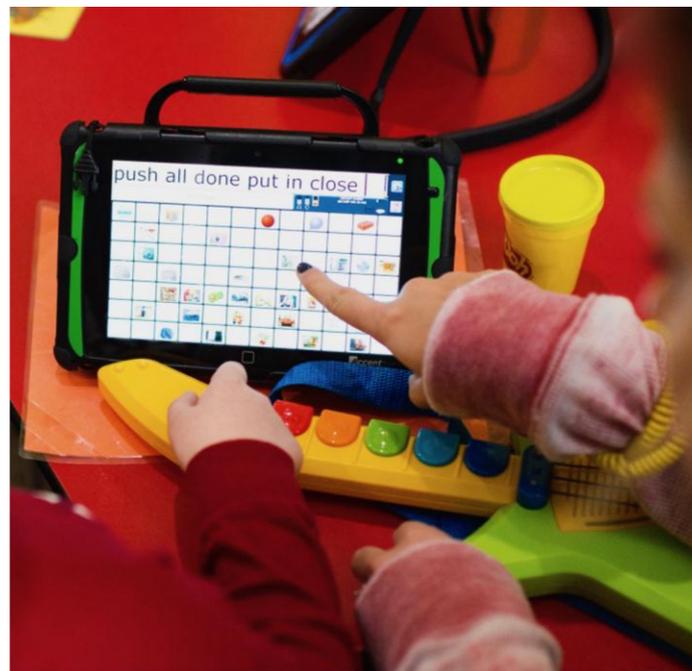
- K1ds Count LLC.
- Brownsburg, Indiana. Crawfordsville, Indiana.
- Speech, occupational, and physical therapies as well as school psychology.
- Comprehensive school services.
- Outpatient services.
- ABA and autism program.
- LAMP Center of Excellence.

Disclosure

Lindsay Knez

- Co-owner K1ds Count, LLC
- Receives no compensation today for presenting.
- Not a LAMP trainer.
- Not an employee of The Center of AAC and Autism.
- Certified LAMP Professional through The Center of AAC and Autism.
- K1ds Count is a LAMP Center of Excellence.
- Receives no compensation for being a Certified LAMP Professional or for K1ds Count being a LAMP Center of Excellence.

Bridge to Spoken Language



Every child is unique

- Every child is unique, including children diagnosed with autism spectrum disorder (ASD).
- Each child has unique personalities, interests, abilities, and challenges.
- Children with ASD also have very different ways to communicate their wants and needs.

Variability in Speech, Language, and Related Skills

- Difficulties in speech and language development within population of children with ASD.
 - Joint attention: Showing interest in others through eye gaze, pointing, and shared attention.
 - Social Skills: Initiating interaction and responding to the interaction of others.
 - Emotions: Difficulty understanding the emotions of themselves and others and communicating feelings to others.
 - Non-verbal communication difficulties, including understanding and using eye contact, gestures, body language, etc.
 - Vocal development deficits: Differences in vocal development. Many children may not use speech to communicate especially in early years.
 - Receptive language: Difficulty turning to their name. Difficulty following instructions. Safety concerns.
 - Presence of echolalia in some children.
 - Play skills: Difficulty in functional and pretend play. Repetitive play.
 - Conversation skills: Shared vs individual interests, conversational rules, figurative language.

Behavior and Communication

- Difficulties with communication often lead to problem behaviors.
- Children may engage in problem behaviors rather than appropriate communication to:
 - Gain access to preferred food, toys, or activities.
 - Get the attention of an adult or peer.
 - Escape a direction, task, or environment.
 - Access certain sensory input.

Childhood Apraxia of Speech (CAS)

- A motor speech disorder that makes it hard for a child to develop speech. It is important to know that the muscles are not weak, but rather there is a communication problem between the brain and the muscles and articulators used for speech.
- In order to speak, messages that tell the muscles in the mouth how to form sounds and words. The message must go from the brain to the mouth.
- There is a disruption in these messages for a child with apraxia.

Signs and Symptoms

- Does not coo or babble as an infant.
- Limited sounds or words.
- Understands much more than he/she can say.
- Doesn't always say a word the same way or says a word only once.
- Trouble saying longer words or putting words together.
- Older kids may show “groping” behaviors.
- This is not a complete list of signs, symptoms, and risk factors.

How does this relate?

- Why are we discussing CAS in our presentation today?
 - A three-year study showed that nearly two thirds of children initially diagnosed with autism also had CAS.
 - We need to consider CAS as a possibility in treatment when working with children with autism.

Tierney, C., Mayes, S., Lohs S., Black, A., Gisin, E., Veglia, M. (2015). How Valid Is the Checklist for Autism Spectrum Disorder When a

Child Has Apraxia of Speech?. *Journal of Developmental Behavioral Pediatrics*. 36(8), 569-574.

Treatment

- Treatment clinical considerations when targeting speech:
 - Feedback is an important part of motor learning.
 - At K1ds Count we use a multi-sensory approach.
 - Incorporate hand cues to visually show the shape, placement, or movement of our articulators.
 - Use of tactile cues to show the differences between sounds.
 - Importance of auditory feedback through modeling.
 - Importance of repetition.
 - Use of shaping.
 - Uh—>Buh—>Buh o—>Bub o—>Buh bo—>Bubble

Treatment

- Other considerations when targeting speech:
 - The motivation must match the challenge of speech.
 - Use of fun and creative activities.
 - Get active.
 - Examples: bouncing on the ball, swinging, etc.
 - Frequent praise and reinforcement.

Treatment

- Treatment Intensity
 - Motor learning requires repetition for learning.
 - Research shows best treatment outcomes include 3-5 sessions per week.
 - Other options outside of working with the SLP.
 - Our speech treatment intensity at K1ds Count for kids who show signs and symptoms of CAS.

Treatment

- Speech and ABA therapies collaborate.
- The BCBA is trained to assess motivation and use teaching strategies, such as shaping, chaining, prompt fading, among many others.
- ABA is the gold standard for autism treatment, especially when combined with other treatments such as speech and occupational therapies. It decreases behavioral problems and barriers to learning by systematically applying behavioral principles. ABA also teaches new skills, such as speech, language, increased attention and sitting behavior, self-help skills, social skills, and play skills.
- Application of ABA is too broad to cover in today's presentation.

Treatment

- Response to treatment
 - Every child responds differently.
 - SLPs may choose to supplement with another way to communicate while also working on speech.
 - AAC stands for augmentative and alternative communication.
 - AAC is any mode of communication outside of speech.
 - These modalities may include sign language, PECS, or use of speech generating devices.

Bridge to Spoken Language

- At K1ds Count, it is important that we help our children express their wants, needs, thoughts and feelings while learning how to talk.
- Over 50 children at K1ds Count use speech generating devices (SGD) to communicate.
- Most devices that we use incorporate the principles of LAMP.

What is LAMP?



- It stands for Language Acquisition through Motor Planning.
- LAMP uses unique and consistent motor plans paired with an auditory signal and natural consequence.
- It was created to specifically assist non-verbal children diagnosed with autism.

More on LAMP

- It is designed to limit the response effort needed to form a message so that the child can focus on the social interaction.
- Example: typing on a computer keyboard.
- A child can begin to use the LAMP approach at a very basic level, such as learning cause and effect. The child can advance with LAMP until he or she is using complex language.
- Hide and show function, keyguards.

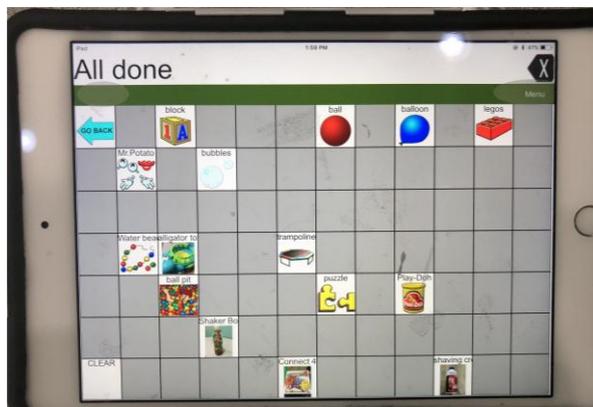


Core Vocabulary

- LAMP focuses on teaching core vocabulary words. These are words that can apply to all environments and activities.
- Examples include go, eat, play, fast, on, off, etc.



- Spoken language is made up of mostly core words.
- LAMP also recognizes the importance of teaching nouns as well.
- Teaching nouns allows the child to make more specific requests that match his or her motivation (e.g. play vs play blocks).



More on LAMP

- Many children using LAMP begin to communicate their wants, needs, thoughts, and feelings on their device.
- You may see increased social engagement and a decrease in problem behaviors.
- Some demonstrate increased speech.
- Each child has a unique path to progress.

Accessing a SGD

- If you think your child would benefit from a SGD to aid his or her speech and communication, consult with a speech pathologist.
- The speech pathologist completes an AAC evaluation. The speech pathologist then completes a report and recommends a device if needed. She will then work with the company that makes the device and the child's doctor to submit a request for funding to your insurance company.
- Devices that use LAMP.
- Words for Life app.

Summary

- Every child is unique.
- Children diagnosed with autism differ in their communication abilities and challenges.
- It is important to consider the possibility of CAS and motor planning challenges in treatment.
- Every child progresses differently.
- For children with limited vocal language, a SGD may serve as a bridge to helping the child to communicate until he or she develops speech.

Resources

- Helpful websites...
 - <https://www.asha.org/>
 - <https://www.aacandautism.com>
 - <https://aacapps.com/>
 - <http://www.kidspeech.com/>
 - <https://www.prentrom.com/>

Selected References

Wetherby, A.M. (2000), *Autism Spectrum Disorders*. York, PA: The Maple Press Co.

Tierney, C., Mayes, S., Lohs S., Black, A., Gisin, E., Veglia, M. (2015). How Valid Is the Checklist for Autism Spectrum Disorder When a Child Has Apraxia of Speech?. *Journal of Developmental Behavioral Pediatrics*. 36(8), 569-574.