Assistive Technology Resources for Children and Adults with Disabilities

Closing The Gap

Solutions

June / July, 2020
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Adapted Play in Early Childhood

Children learn through play. Young children with special needs may have difficulty participating in play activities. Parents and providers can use a variety of modifications and adaptations to help a child take part in and learn from play. Children with motor, visual, hearing, cognitive, emotional social or communicative disabilities may need support or specific interventions to facilitate their play.

An intervention is a specific program or set of steps to help a child improve in a specific area of their developmental discrepancy. Each child is unique and will need individualized intervention based on their needs. An intervention is specific and formalized; it lasts weeks or months and is reviewed during specific intervals. Many school districts use the Response to Intervention System (RTI) or Multi-tiered System of Supports (MTSS) to help struggling students.

WHAT IS ADAPTED PLAY?

Often children with disabilities do not know or understand how to play. Adapted play is modifying and adapting games, activities and toys based on an individual child's interests and needs. This includes imaginative play. Accessing toys can be an obstacle for some children due to their disability. A child in a wheelchair may not be provided the same amount of tummy or floor time as a typically-developing child. The lack of exposure to toys and movement may impact their access and experiences with play. A young child with a visual impairment will not have the same experiences as their typical peers. Young children with disabilities require access to toys and assistance in learning how to play.

Often Individualized Education Plans (IEPs) or Individualized Family Service Plans (IFSPs) are based on goal-focused instruction. If a child is delayed in the area of physical development, they may have a goal for physical therapy that is focused on walking. If a child is delayed in the area of communication their IEP or IFSP goal may focus on talking. When we have children who are medically fragile we focus on their health needs. Young children with disabilities need to have their goal focused instruction centered around play.

Young children need to have access to play and our children with disabilities will need for their play to be adapted and accessible. For children in the birth to age three category, we do have some focus on play within the home visit settings. Often, preschool students have pressure to perform and work toward state common core standards. Teachers, parents and providers may focus on other areas when play should be the focus of their young child's goals. Play provides children with their first oppor-

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tunities for communication and, as participation increases, it automatically improves the quality and quantity of opportunities (Beukelman; Mirenda, 2005).

Developmental Doman	Example Play Activity
Adaptive Behavior	Ask for help social story in the dramatic play center
Communication	Turn-taking games with family or peers
Fine motor	Draw with peers at the Art center
Gross Motor	Join peers, touch toys, access a switch toy, and take turns with peers
Social-Emotional	Use a feeling card during play to express feelings

Play is crucial for child development. Games give children pleasure and encourage them to go further, repeat, try and learn from their experiences (Ferland, 2006). Unfortunately, in the hustle and bustle of working toward core standards gameplay can be minimal or nonexistent.

Peer-mediated Intervention is an evidence-based strategy for young children with disabilities that can be implemented to support play. Typically developing peers are selected and taught to recognize and appreciate differences. The peers are taught the target behavior that will be used to facilitate the intervention. The adult leading the intervention plan should first model the use of a strategy. After the adult has modeled the intervention plan the peers can role play with one another to practice the skill or strategy. It is recommended that the assigned peer interacts with the child with a disability for 15 minutes daily.

Imaginative play is essential for child development. Our current reality of regular screen time can limit opportunities for imaginative play. Children who have access to regular screen time may imitate the play or scenarios they have viewed on the screen instead of creating their own imaginative play scenario. Developmental psychologist Thalia Goldstein, Ph.D., studied 97 five-year-olds enrolled in Head Start programs. The kids were split into three activity groups. One group pretended to be animals or other people; one group was read to, and a third group built with blocks. What was discovered was that the children who were in the dramatic pretend-play group increased their emotional control over the course of eight weeks during the study. Kids are learning what their emotions feel like in their bodies, what their emotions feel like in themselves and how they can begin to modulate and control those emotions.

My challenge to providers, therapists and parents is to provide access to play instead of pulling children out of play. IEP and IFSP goals should focus on play for all children under the age of six. The foundation of learning for children in the early childhood years is play. Our children with disabilities need to have play incorporated into their specially designed instruction.

The children's book I'm a Frog by Mo Willems can be used to support imaginative play for children with disabilities. The main characters are Elephant and Piggie. In the book, Piggie says he is a frog. Elephant becomes worried about Piggie acting like a frog. Piggie is in fact a pig. Piggie explains that he is "pretending." Piggie goes on to describe that pretending is acting like something you are not. Piggie asks Elephant to pretend to be a frog. Elephant decides to pretend to be a cow. The book I'm a Frog by Mo Willems can be used to introduce the concept of imaginative play and to support imaginative play in the classroom and at home for young children with disabilities.

Children with disabilities need to have access to toys. Toys will need to be adapted to meet the needs of the individual child with a disability. The child's interests and preferences will need to be considered. Toys can be extended or built up for a child to have a better grip on the item. Toys may need to be stabilized in one area. The area may be a table, tray, highchair, or the floor. Toys and games may need to be simplified for children with disabilities to access. Toys or other play objects will need to be kept in close range to the child to facilitate play. Areas on the toy, game, or object may need to be highlighted for the child. If the child has a color preference the color can be used to highlight the object. Toys and games need to be kept within the child's field of vision. Parents should bring toy access considerations to the IEP or IFSP team meeting for problem-solving and goal setting specific to the child's individual needs.

There are six stages of play

- Unoccupied Play (birth-three months)
- Solitary Play (birth-2 years)
- Spectator/onlooker behavior (2 years)
- Parallel Play (2+ years)
- Associate Play (3-4 years)
- Cooperative play (4+years)

Often children with disabilities can get stuck in one stage of play. If providers focus on teaching a child how to build a tower and never move on to how to create a shared structure the child may become stuck in one stage of play. If a child has had limited access to play, they may be in an early stage of play and need intervention to move toward a more developmentally appropriate stage of play. As a child has access to experiences they will move through the stages of play. Children who are medically-fragile may have very limited exposure to play which impacts their overall development and stage of play.

DIY (do it yourself) or Upcycling (whatever you want to call it) is one way to incorporate play for young children with disabilities. Providers that enter the home for children with IFSPs or those who are at home due to the child being medically fragile can bring in a simple empty paper towel or tin foil roll and ask the families to save them instead of throwing them out. Playing with a paper towel roll can be associated with fine motor standards for gripping, picking up, and hitting the objects to-

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gether. Using the paper towel roll to whisper words to each other is linked to communication listening and speaking common core standards. Having a child experiment with different sizes of towel rolls and place them inside of each other aligns with math common core standards for sizes and quantities. Providers can use upcycled items and create play experience aligned with the child's goals.

Screen media is often provided to children in place of meaningful play. Children with disabilities will require technology to communicate and access toys and games during play. The American Academy of Pediatrics (AAP) discourages all screen media for children less than eighteen months of age, except video chatting with the assistance of a caring adult. For children ages eighteen to twenty-four months, it is recommended that caregivers use high quality, educational media and use that technology to interact with the child. Further, children two to five years of age should be limited to one hour per day of high-quality screen time, alongside a caring adult who can help them understand what they view and how to apply it to the world around them (AAP,2016). For children who need to access screens, Mount N Mover by Blue Sky Designs can be used to create an accessible environment for children in multiple settings including a hospital or home care setting.

Adapted play includes songs and fingerplays. It is very common for children to passively view videos that include "educational" content and songs. For children to learn and create concepts and connections they need to be actively engaged. Youtube has a place in education and can be very engaging for learners. Songs and fingerplays with actions and imaginative play with music encourage developmentally appropriate play and can be adapted for all learners. Five little pumpkins sitting on a gate is much more interactive with laminated numbers and pumpkins. The child can watch the teacher model the adapted finger play, participate as a group, and retell the finger play independently after multiple exposures. A child can match the numbers or objects instead of retelling if that is the stage they are in. The song Looking For Dracula teaches the concepts over, under, around and more. Raffi's song Apples and Bananas can be paired with pictures or real items to teach vocabulary. The song Going on a Bear Hunt can be used to teach imaginative actions and for students to have access to a peer model's imaginative ideas and thinking in a group setting.

The Core Word Classroom by Assisiveware has free templates and examples for how to incorporate Core Words into play. Core words are the 50 to 500 words that make up most of what we say in typical conversation and writing. The Core Word Modeling Guide provided by Assistiveware includes one-page guides to support the team to model core words to match the language levels of Augmentative and Alternative Communication (AAC) learners. The Core Word Five Minute Fillers are one-page quick reference sheets to help you make the most of every opportunity and model core words on the fly. The Mr. Potato Head Five Minute Filler document includes core words and examples of how to use the words for needs and wants, getting and giving information, and social interaction. The Mr. Potato Head Five Minute Filler document could easily be sent home for a student to practice using their core words in an adapted play setting. The family and providers would have access to the same document and could highlight words that are used for quick and efficient data collection.

Dr. Lilli Nelson's Theory of active learning states that active learning is based on the belief that ALL children can learn. Children need environments created that encourage active exploration. Parents and caregivers should not interfere with play, meaning we are not guiding the child's hands or telling the child what they should do. Dr. Lilli Nelson recommends encouraging the child to be an active participant in their own learning by creating spaces and presenting materials that are interesting and safe to explore. The play environment should be responsive, something should happen when a child moves or hits something. The Activity Gym by Enabling Devices incorporates lights and sounds. Providers can change the toys and placement of items. DIY water or sensory walls can be created with household items to encourage active learning exploration.

Water Walls
DIY Toddler and Baby Sensory Walls

TIPS AND CONSIDERATIONS FOR SUPPORTING PLAY

To support boundaries for a child with special needs colored tape can be used to create play boundaries or define the rules of a game. A child's preferences or restricted interests can be used to expand their play. For a child who likes dinosaurs and is tactilely defensive, have the child hold the dinosaurs and make dinosaur prints instead of touching the play-doh. This can be replicated with shaving cream, water and sand using the child's preferred toy. The child can have a similar experience to their peers that is adapted for them based on their interests and

needs. One child may be practicing pointing their finger and not yet ready to hold a writing utensil. A child who may not yet be ready to hold a pencil or crayon can write or draw using shaving cream or sand on a cookie sheet using their finger. A stylus can be used or pencil if the child does not want to touch the shaving cream or sand.

Communication Placemats

Often fluorescent lighting can be distracting and for some children painful. Play areas can be dimly lit or fluorescent light fixtures can be covered with blue coverings to dim the light. A child may need tinted glasses or a hat to dim the lighting in some areas of the school or center. For a child that is transitioning from the home setting to a school or daycare setting and is sensitive to loud sounds, you can record the sounds of a busy classroom and introduce the child to them at home. As the child is introduced to the sounds noise-cancelling headphones can be offered to support lessening the loud sound experience. The lunchroom and playtime (or center time) are often very noisy times of the day in early childhood settings. For a child to be successful during playtime they will need to be prepared for loud noises. A child who is not able to adjust to the loud sounds may need headphones for certain loud play activities such as blocks.

Children with special needs may have difficulty entering a playgroup. Some children may need something to keep their hands busy as they navigate entering a playgroup. Spiral hair ties, spiral key rings, and spinner toys all work well. They are small and can be placed in a pocket or placed on yarn for a necklace to be easily accessible when needed. Young children who have a tendency to hit their peers during classroom transitions may also benefit from holding a soft spiral hair tie or key ring to keep their hands occupied. A social narrative should be used as an intervention to support a child to enter a play area calmly and successfully navigate play transitions.

A child who has restricted interests or preferences can be introduced to new concepts using communication placemats. If the child likes one zoo animal you can create communication placemats with the preferred animal and other animals. Peers can join the table with the placemats and toys. The provider can model and introduce new animals and ways to imaginatively play. The placemats can also include other prompts, sign language cues or visuals specific to the child's needs during play.

The 5 point feeling scale created by Kari Dunn-Buron can be used to assist with transitions during play. Young children have strong feelings and often need assistance identifying their feelings and expressing them especially when the child has communication or other delays. The five point feeling scale can be laminated and placed on yarn to create a necklace. When the child is upset the teacher or a peer can point to the feeling scale and talk through the problem. It can be posted around the classroom to support all children. The Second Step Curriculum is a tool that can be used to support young children with disabilities to navigate strong feelings. The curriculum includes visuals and posters that describe feelings. The curriculum teaches children strategies for calming down and solving problems during play.

A child that is in a wheelchair will need their play space to be created. First, the classroom will need to have enough room for the child to navigate their chair to each play area. One option to create a play space on the chair would be on a tray for a stander or wheelchair. A two-inch suction cup dent puller can be used to create a boundary when a child is rolling toys on their tray. A pool noodle can also be cut in half and taped or velcroed to create a play space boundary. While it is important for children to learn that items can be dropped, it is essential that they have access to their toys. The placement of the toys and the boundaries are

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Gesture	What it means	What you should do
Waves hands back and forth near chest	I'm done! Or I need a break	Model you are done playing! Allow request if possible

Example Gesture Dictionary

important for the child to experience the toy and manipulate it.

For a young child that is not yet communicating verbally a communication gesture dictionary should be created and shared between home and school. The gesture dictionary should be continually updated as the child gains more gestures. The communication gesture dictionary includes a gesture the child makes, what it means and what you should do. This information should be shared between the family and all providers. Peers should be taught what to do as well so they can communicate in a play setting. The intervention Stay, Play,Talk is a peer-mediated intervention used to increase the social interactions of preschool children. Typical peers are taught three skills: stay near their partner, engage with their partner and talk with their partner by commenting on play activities and responding to their partner's communicative efforts. The sessions take place during daily activities that involve play. Stay, Play, Talk has been found to produce lasting improvements in children's social interactions.

Video Example Imaginative Play with the Doctor's Kit
https://www.youtube.com/watch?time_continue=3&v=Kip5KMDfQNA

Video modeling can be used to teach children how to play with toys, join playgroups and other important play skills. Video modeling is an intervention that uses technology to provide visual modeling of a targeted behavior or skill. Video modeling can be utilized with the whole group of children or as an individualized intervention. All children can benefit from seeing what to do in the block center using video modeling. An entire group of children may watch the video once. A child with Autism Spectrum Disorder may watch the video a second time before joining peers in play at the block center. The Clips App can be used to create short modeling videos on an Apple device. Book Creator can be used to create books with video links for video modeling.

Power Cards and Social Narratives can be used to support children with special needs during play. Both interventions describe social situations for learners by providing relevant cues,

explanation of specific feelings and thoughts of others in a social situation and descriptions of

appropriate behavior expectations. Social narratives and Power Cards are individualized based upon the needs of the learner, short and written from the perspective of the learner. The Power Card strategy consists of a brief scenario and a visual cue. Social Narratives have a more detailed story format.

Image credit Resource Galllery of Interventions Ocali.org

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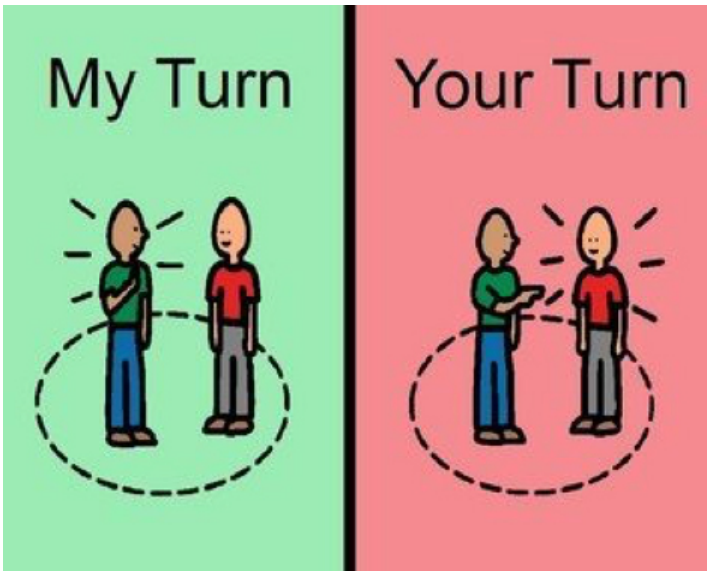

Mayer Johnson Boardmaker symbols
https://goboardmaker.com/

Young children often need support and practice when taking turns. A taking turns necklace can be created with yarn and Mayer Johnson Symbols from Boardmaker online. The symbols "my turn" and "your turn" can be color-coded green for "my turn" and red for "your turn." If the child has an understanding that green means go and red means stop the color coding can support the visual necklace. If the child does not yet have an understanding of red means stop and green means go, the providers can teach the skill with games and visual supports. Visuals can be created to support the intervention theme of red meaning stop and green meaning go. The children can exchange the necklaces when the favorite toy or game is exchanged. The children will need adult support and as the children begin to understand the turn taking necklace then peer models can begin to assist the child with special needs instead of the adults. Providers need to share ideas and stay up-to-date on current Early Childhood Assistive Technology. The Early Childhood Special Ed and AT Blog includes app reviews, switch ideas, specific disability information and more. Subscribe to get updated information sent directly to you.

A holding box for preferred toys can be used to support play for children who have a difficult time separating from a special toy or object. The box can be as simple as a shoebox or a plastic crate. The holding box will need to be individualized for the student's needs. A plastic crate will work well for a child who is attached to an object like a blanket and needs to be able to see that it is safe. Some children have difficulty separating from a small toy or figurine and just need to place it somewhere before they can begin to play with other toys. The idea is that the toy or object is safe and the child will get it back. The holding box is not used to take away toys for punishment. The holding box can be used by any child in the class. A typically-developing peer may need to model how to use the holding box for a child with a disability. The typically-developing peer can place an object in the box to demonstrate for the child with a disability. Social narratives or real photos can also be used to support how to use the holding box. A timer can be used for a child to practice using the holding box. The child can place their special toy in the box and when the timer goes off, they can go back and get their special toy. The goal is over time the child will be comfortable to separate from their toy and join peers in play.

For a provider who is doing home visits for a child with special needs, the provider will be focusing on the child's individualized goals. I would challenge providers to ensure they are including play in all aspects of their data collection. As an example, a child's goal may be for the child to stack blocks and focus on a task by following directions. Providers can consider the stages of block play and encourage the child to expand their block play as well as direction following within a play setting. The fine motor goal of stacking blocks can be accomplished simply by modeling and stacking blocks or the provider can consider the stages of block play and work toward a higher level of play. For a child who has difficulty with change, providers can make small changes and support the child through the problem-solving process. Adaptive textured blocks can be added with soft or wooden blocks. The child may refuse to use the new blocks or could have a meltdown. The provider can model how to use the different types of blocks and assist the child in using calming strategies. Young children can get "stuck" in a stage of block play and will need direct modeling and support to move on to the next stage. **What stage is your child in?**

Stages of Block Play

Stage 1 (2-3 Years) Non-Construction
- Carrying and Dumping Blocks
- Learning about block properties
- Developing muscle tone and coordination
- Children explore the properties of blocks by moving, touching, holding and feeling as opposed to building.

Stage 2 (age 3) Repetitive
- First structures appear
- Puts blocks side by side
- Experimentation and problem-solving
- Encourages cooperative play
- Stacking blocks vertically in repetitive patterns

Stage 3 (age 3-4) Bridging
- Creating bridges

Stage 4 (age 4) Enclosures
- Create a space and enclose an object or area
- First with blocks lying flat, then vertical enclosures

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Stage 5 (ages 5-6) Structural
- Creating structures

Young children need to play in order to learn and reach their goals! Providers need to think beyond switch toys. If we focus simply on switch toys, they will miss out on other play opportunities throughout the day. Adding a laundry basket in a wagon to the outdoor play area with accessible toys for a child to access allows the child to play with peers in the least restrictive environment. Parents and providers must consider what typical peers are using during play and how the TEAM can make it accessible for our young children with disabilities. Twelve categories are listed below with assistive technology items and resources to support play for children with disabilities in early childhood settings.

RECOMMENDED ADAPTED PLAY PRODUCTS

ART AND FINE MOTOR

Zot Artz Adaptive Art Tools For Children with Disablities
Raised Line Coloring Book
Raised Line Coloring Book
Raised Line Braille Color and Paint
Loop Scissors
Melissa and Doug Water Wow
Melissa and Doug Zip Button Bear
Desktop Slant Board
Industrial Strength Twist Ties

COMMUNICATION

The Core Word Classroom Assistiveware
Matt & Molly Kits
Blue Bee Pals
Wristband Board
Stay Play and Talk
Tobii Dynavox Facebook Share Snap Plus Core App (picture below)

Accessible Playground

DO IT YOURSELF-- DIY

Use an empty veggie tray to adapt games

Quiet Spray Visual Support

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- Use pillows to prop up a student to be positioned to draw on a cardboard box.
- Tape paper under the table and have students cross the midline to draw under the table.
- Freeze small figurines in an ice tray and use them to support and encourage play.
- DIY Music Kit Includes one regular guitar and one switch adapted as well as Music Kit
- DIY Assistive Technology Devices to Make @ home
- Pool noodles can be used to create play and safety boundaries. Preferred colors can be used to motivate the child.
- A laundry basket can be used to position a young child for play indoors or in a wagon for joining peers outdoors.
- Create a water wall for children to access water play.
- Sensory walls and boards.

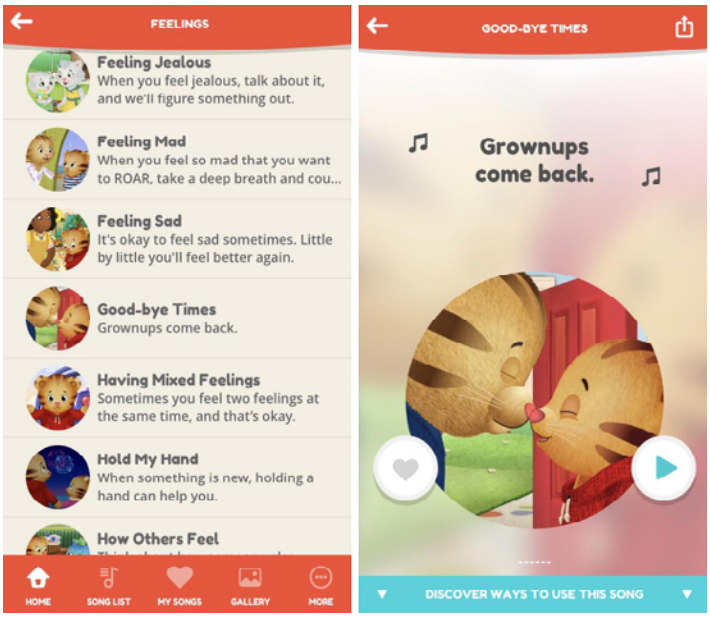
Visual Support for an outdoor scavenger hunt

BOOKLETS & RESOURCE GUIDES

- PACER Center's EZ AT Booklet
- EZ AT Activities for Children Ages 3-8 with Disabilities
- Toys: Universal Tools for Learning, Communication and Inclusion for Children with Disabilities
- Able Play Toy Guide by Lekotek
- Easter Seals Resources for Play
- Toys and Play for Children with Disabilities Resource List
- Tactile Books Pathways to Literacy

APPS

- PBS Kids
- Social Story Creator & Library
- First Then Schedule
- First Then Schedule HD
- Visual Schedule Planner
- Choice Works
- Scene Peak
- Daniel Tiger for Parents IOS App (images right top side)



Daniel Tiger for Parents IOS App

SEATING AND POSITIONING

- Bilibo Seat
- Bumbo Seat
- Scoot 4-in-1 Mobility Rider

Zip Zach Youtube - https://www.youtube.com/watch?time_continue=1&v=n-nlok-OziY

- Cube Chair
- Cube Chair Desk
- Wedge
- Adapted Trike
- A laundry basket can be used to position a young child for play indoors or in a wagon for joining peers outdoors. Rolled up towels can be used to improve positioning.

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TOYS & GAMES

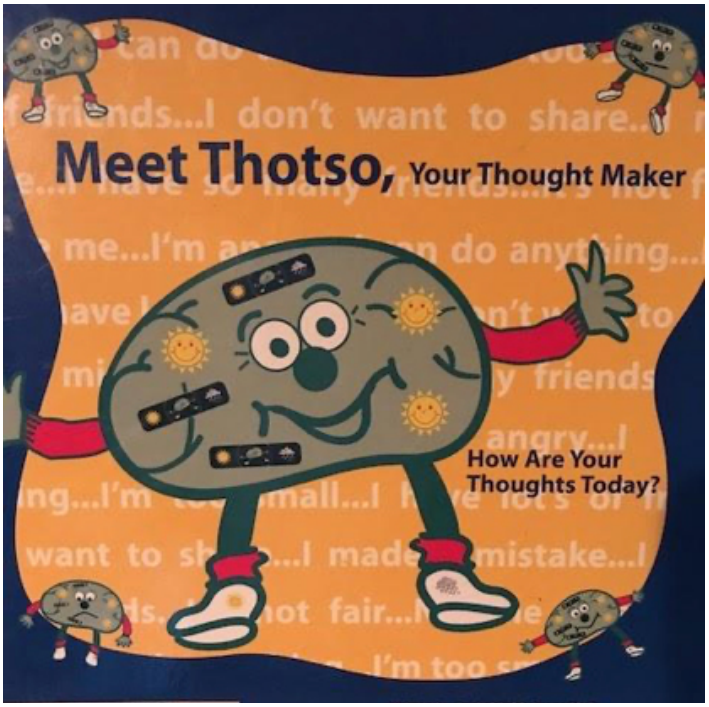
- Frankie the Bubble Fish
- Little Tikes Shopping Cart (add weights to improve stability)
- Tactile Step N Stones
- Skoog Music
- 25 Braille Toys for Kids who are Blind
- Hi Ho Cherry Oh
- Activity Gym
- LED Color Changing Balls
- Big Water Toy by Enabling Devices
- Starfall
- ABCYA
- Tarheel Reader
- Help Kidz Learn Switch Games
- Tar Heel Gameplay

ACCESS

- Mount N Mover by Blue Sky Designs
- Elevated Sand Table
- Pinterest Link
- Hitch Switch Interface
- Switch Accessible Apps
- Melody Bells
- Glenda's AT Info and More's Switch Activities
- Dent Puller (create play boundaries)
- Ablenet PowerLink
- All-turn-it Spinner
- Big Red Switch
- Letsparticipate.org
- Industrial Strength Twist Ties
- Pouring Cup

CHALLENGING BEHAVIOR SUPPORT

Sunshine glasses (from Meet Thotso) worn by Carter Hamilton



Meet Thotso Book by Rachel Robb Avery, Phd

- Center on the Social and Emotional Foundations for Early Learning (CSEFEL)
- 5 point feeling scale
- Carol Gray Sample Social Stories
- Book Creator One
- Power Cards
- Colored Tape (to create visual boundaries)
- Headphones

TIMER OPTIONS TO SUPPORT PLAY

- Children's Countdown Timer
- Free online timer
- One Click Timer (only on Chrome Browser)
- Time timer IOS App
- Time Timer Visual Timer
- Clock App on Ipad & Iphone -Stop playing feature

BOOKS & KITS

- I'm a Frog by Mo Willems (children's book)
- Loose Parts Inspiring Play in Young Children
- Assistive Technology Solutions in Minutes
- Early Childhood Special Ed and AT Blog
- PEAT's Suite
- Cara's Kit Preschool
- Cara's Kit Toddler
- Do Watch Listen Say

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PLAY RESOURCES

Becoming Young Thinkers
Developmentally Appropriate Pratice in Early Childhood Programs
From Play to Practice
Lisa Murphy on Being Child Centered
Play the Foundation for Children's Learning
Saving Play
The Project Apprach for ALL Learners
The Project Approach

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Advance in the field of Assistive Technology with one of our fully online master's degrees:

M.S. in Assistive Technology Studies and Human Services
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Closing The Gap 2020 VIRTUAL CONFERENCE

OCTOBER 28 - NOVEMBER 11, 2020

Assistive Technology in Special Education, Rehabilitation and Everyday Living

CALL FOR PROPOSALS

SUBMISSION DEADLINE
TUESDAY, JUNE 30, 2020

SHARE YOUR EXPERTISE

Groups or individuals who wish to participate in Closing The Gap's 2020 Conference should submit their proposals for one-hour and multiple-hour presentations as soon as possible. Poster sessions will also be considered. The deadline to submit is Tuesday, June 30, 2020. Directions and information are found within. Please fill out the online proposal form completely; incomplete proposals will not be considered. Online submission is available at:

https://www.closingthegap.com/call-for-proposals/

PROPOSALS

Closing The Gap will consider proposals for one-hour or multiple-hour sessions that describe and/or demonstrate successful applications of assistive technology for persons with disabilities.

Proposals are invited that report results of current applications; research; development of hardware, software or adaptive devices; model programs or procedures used by and for persons with disabilities.

Proposals for sessions that demonstrate the use of software programs, mobile apps, adaptive devices or the innovative use of assistive technology are highly encouraged – especially specific how-tos, tips and tricks and product comparisons.

Proposals should focus on practical applications, implementation strategies and best practices, rather than theoretical discourse.

Proposal content should be supported by evidence and should include quantitative performance data.

Proposals for open forums in which participants discuss, comment openly and share ideas and opinions relevant to a primary subject or focus are also encouraged.

Because the median assistive technology sophistication level of Closing The Gap Conference participants advances each year, Closing The Gap encourages proposals for sessions directed at persons who are actively using assistive technology in education, rehabilitation, vocation or independent living – typically intermediate to advanced level users.

Closing The Gap recognizes the continued need for introductory activities as well, and will select a range of proposals that meets needs across the assistive technology experience continuum and facilitates a balanced interchange between special educators and rehabilitation professionals.

SESSION RECORDINGS AND LIVE Q&A

In offering to present a paper, it is expressly understood that if accepted:

- Presenters are required to provide a pre-recorded session to Closing The Gap conference organizers by September 1, 2020. View recording guidelines.
- A PDF handout and short quiz (multiple choice and/or true or false format) is also required. Complete details provided upon acceptance.
- A corresponding, Live Q&A (based on your presentation) hosted by Closing The Gap and moderated by presenter will be scheduled between November 9-11, 2020 at the discretion of conference organizers.

NOTIFICATIONS

Confirmation of presentation proposal acceptance/declination and corresponding live Q&A will be sent by August 15, 2020.

PUBLICATION

Selected manuscripts submitted by conference presenters will be published in Closing The Gap Solutions. Guidelines for submitting materials for these proceedings will be sent upon confirmation of session acceptance.

BEFORE YOU BEGIN

We recommend emptying your cache and restarting your browser prior to submitting. If necessary a PDF proposal may be emailed directly.

VIRTUAL CONFERENCE REGISTRATION OPTIONS

Virtual Conference - October 28 - November 11, 2020			
Registration Received	**On or before July, 31**	**August 1 - October 16**	**October 16 - Nov. 11**
Standard Rate	$425	$499	$525
Solutions Member Rate	$325	$399	$425
Group Discount - 5 or more Group Discount - 8 or more Group Discount - 20 or more		Deduct $30 Deduct $50 Deduct $70	
Parent / Individuals with Disabilities *(A letter describing your child's disability must accompany registration.)*	$295		
Full-time Student Rate *(Proof of full-time student status must accompany registration.)*	$295		
Presenter / Exhibitor Rate Rate	$350		$450
Exhibit Hall Only Registration - FREE			

Preconference Workshops	Price
Monday, October 26 and Tuesday, October 27	$295 per day
BUNDLED PRICING! Monday and Tuesday Bundle ($80 savings)	$510

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A limited number of scholarships are available for persons with disabilities or parents/guardians of children with disabilities. Scholarships are awarded on a first come, first served basis and one time only per person.

DISCOUNTS

Complete details available online at www.closingthegap.com/conference

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UPCOMING LIVE WEBINARS

PROFFESIONAL DEVELOPMENT

CEUs are provided by the AAC Institute and are available for live webinars at no additional fee (does not include sponsored webinars unless noted). A 60-minute webinar = 0.1 CEUs. A 90-minute webinar = 0.2 CEUs

The Ten T's of Teaching AAC: Practical Strategies for the AAC Team

By Pati King-DeBaun
Thursday, June 4, 2020
11:00 am – 12:30 pm (Central Daylight Time)

Behind every AAC student is a team of professionals, support staff, and family. It is vital that all team members are on the same page. These straightforward and practical strategies will help both parents, teachers, and therapists understand the importance of the underlying strategies for teaching students who use AAC systems.

If you are practitioners, these approaches can be used to train other professionals within the student's environment including regular education teachers and support staff. Supported tools will be suggested to make sure that all team members are on the same page!

Learning Outcomes:

1. Participants will be able to describe at least three adaptive strategies for maximizing overall AAC use within classrooms
2. Participants will be able to describe at least three examples of adaptations to support core word instruction within activities or lessons
3. Participants will be able to describe at least three examples of adaptations to support and social engagement and participation within in the classroom

Making Language Visible for Infant, Toddler and PreSchool Students

By Pati King-DeBaun
Thursday, June 25, 2020
11:00 am – 12:30 pm (Central Daylight Time)

Making Language Visible is a strategy used to help parents and teachers make language or communication visible for the child or student with significant language impairments. Infusing these strategies into routine activities and breaking down the strategies based on the facilitator's comfort zone can foster greater overall success.

This session will demonstrate how the levels of Making Language Visible can be used by the facilitator of young toddlers and beginning communicators at home, in preschool, and early childhood programs. This session will address a broad range of students, and how to layer communication and literacy supports into everyday activities at home and at school

Learning Outcomes:

1. Iarticipants will be able to create at least three new approaches to support a broad range of child/student language ability levels
2. Participants will have at least three implementation ideas for layering AAC in the classrooms
3. Participants will be able to create at least three implementation ideas in the home with toddlers

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Partner Skills Tips and Strategies for Supporting your Students that Use Core Boards and Devices

BY KELLY KEY

Recorded: May 7, 2018

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CapAACity Building Is Where It's AT!

Summary - *If you have been to a conference, read a research article, or looked at a blog post recently, you know about the benefits of capacity building for augmentative and alternative communication (AAC). CapAACity building is where it's AT, right!? But, when attempting to implement a sustainable capacity building model, there may first be barriers to address. In this article, we will share how we are implementing capacity building approaches with families, school teams, and administration.*

If you have been to a conference, read a research article or looked at a blog post recently, you know about the benefits of capacity building for augmentative and alternative communication (AAC). CapAACity building is where it's AT, right? But when attempting to implement a sustainable capacity building model, there may be barriers to address first. There's a good chance we have all experienced the struggles that come with attempting to figure out how to best promote AAC use with school teams and families, while also navigating how to provide support to administration effectively.

According to McNaughton, D. et al. (2019), "Effective communication is based both on the capacity of the person with complex communication needs, and of other key stakeholders including communication and education professionals, family members… to ensure that appropriate AAC supports are provided." As AAC facilitators for a special education cooperative, we provide consultations, evaluations and direct therapy for students with complex communication needs who may benefit from AAC supports. But in reviewing our capacity-building strategies with self-evaluations matrices, by staff needs assessments and through observations and conversations, we found that our

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MAGGIE JUDSON, M.S. CCC-SLP, ATP is a Speech-Language Pathologist and Assistive Technology Professional working for the Belleville Area Special Services Cooperative in southern Illinois. She specializes in Augmentative and Alternative Communication in a public school setting, providing consultations, evaluations, and direct therapy to students ages 3-21, as well as implementing professional development activities. She received a bachelor's and master's degree from Southern Illinois University Edwardsville and an Assistive Technology Specialist certificate from The University of California at Dominguez Hills. A frequent contributor to the Praactical AAC blog, Maggie has presented on AAC at the regional, state, and national level. You can reach her at maggie.judson@bassc-sped.org or on Instagram at @basscAAC and @the.bookish.slp.

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attempts to support the AAC knowledge, skills, and attitudes of our key stakeholders was in need of improvements. In response to this information, we organized an approach to enhance the participation of our AAC teams by adding to and refining our current methods to capacity building.

CAPACITY BUILDING MODEL

First, what is a capacity-building model? According to Bowser & Reed (2018), capacity building is "where the members of the AT team spend their time training and supporting members of the Individual Education Plan (IEP) teams and student services teams so that they can effectively perform those tasks as effectively as possible." A capacity-building model supports members of the student's team to be able to make decisions to fully integrate AAC equipment and strategies throughout the student's day. Furthermore, it can help prevent AAC from only being used by one person or in only one setting. Gayl Bowser & Penny R. Reed (2018) said it best with, "AT used only in isolation is ineffective. Real use in meaningful activities is the only way that AT can increase or improve a child's function."

As we looked at how best to shift towards the role of capacity builder, we:

1. **Started with self-reflection/evaluation -** To know where you want to go, you need to spend time analyzing where you currently are! We completed self-reflection forms available on the Quality Indicators of Assistive Technology website (qiat.org). These reflections helped us gain a sense of what we needed to focus on to improve our services.
2. **Went to the experts! -** Spending time on the National Assistive Technology in Education Network (NATE Network) website and doing a review of relevant literature are great ways to see what is considered evidence-based practice around the topics of capacity building and implementing a capacity-building model.
3. **Thought through how to work smarter, not harder -** When thinking about adding to and changing parts of our service delivery model, we wanted to put our efforts into areas that were going to have the most significant impact and payoff. We spent time thinking about what would be most productive in terms of building capacity in our setting and made those the priority.
4. **Came up with a plan! -** There are a variety of capacity-building strategies that can be implemented, so we spent time making a plan. We thought about changes we could do now, next year and in the long term. By looking at our roles as the AT leaders for our cooperative, and at our current efforts around capacity building, we could see where we wanted to improve and grow. Spending time in the planning stage helped us look towards how we could better support our families, our educational personnel and our administration.

FAMILY

When we completed self-reflection around the support we were providing to our family members, we could easily see that some of the things we were doing were working. Providing AAC carry-over practice, individual AAC training, phone calls, emails, notes home and data logging visuals were always rated as helpful by our families. However, we could also see that there were areas that we could improve to better support the capacity of our families in terms of their understanding, comfort level and use of AAC at home and in the community. According to Johnson et al. (2006), "Family members… need knowledge not only in the operation and upkeep of the components of the AAC system but also in techniques to develop the functional use of the AAC system over time", so that is where we wanted to increase our support!

AAC FAMILY SUPPORT NETWORK

Providing support to families can be implemented in a variety of ways, and one way to help is AAC families connect with other AAC families. As professionals, we can share ideas and make suggestions, but we are not able to share from a lived perspective, so it is our responsibility to help our families have access to this type of support. According to McNaughton, D. et al., (2019), "It's your job (as professionals)... to help these families connect with other AAC families (online or in-person), (Nieder, 2017)". To this end, we have established a family support network. With this, we asked families of children who use AAC to be on a contact list that we can share with other families. Specifically, we have found this to be useful for families that are new to AAC or express they are struggling to incorporate and support AAC at home or in the community. Families that have offered to be on this list have given permission by signing a consent form. We also reach out to let them know if and when we share their information with another family.

FAMILY AACTIVITY NIGHT MAKE-AND-TAKE (FAN-MAT) TRAINING

Another capacity building strategy we implement with families is a series of Family Nights. These trainings incorporate education with hands-on material making to provide resources families can practice skills with and then take home to use with their child. The idea behind including a make-and-take component came from Gail Van Tatenhove (2017) - "If you are asking parents to do specific tasks, make sure they have easy access to the materials needed to do the task at home."

After spending time reviewing core/fringe terminology, demonstrating a variety of communication functions, practicing aided language input and watching videos of families using AAC in the home, we jump into the make-and-take activity! (See image 1) We structure each training around a specific topic, such as reading or game night, which helps us focus on working with parents to embed AAC systems into activities they are already doing at home. We have found that focusing on how we can fill

Image 1 - Example of materials parents make during the training

a need the family already has, not just giving them something "more" to do, helps parents feel supported to jump in to try out new skills.

Our FAN-MAT trainings are held two times a year, in the evening, for one hour. Students and siblings often come with their caregivers, which allows for hands-on time to practice and to explore the AAC system. This provides for real-time, in-the-moment capacity building for each family in attendance!

We also share information on social media support, such as family blogs or blogs written by AAC users, and groups on Facebook or Instagram. These online supports make it easy for parents to check out information and connect on their own time in a way that works for them.

SCHOOL TEAMS

Having all members of a school team feel knowledgeable, invested and involved in the AAC needs of their students is what capacity building is all about! This is one of the best ways to create sustainable AT services and to help to ensure that AAC is being incorporated and used throughout the student's day.

Unfortunately, however, not all IEP members may have the knowledge needed to feel comfortable around AAC. According to Bowser & Reed (2018), "there is a need for professional development about AT. Studies repeatedly show that both special education and general education teachers receive very little training about AT in their teacher preparation programs." As the AT leaders for our cooperative, this quote stuck out to us. It helped us to see that we needed to increase our professional development opportunities to reach all members of the school team effectively. Additionally, the NATE Network includes the following points in its definition of capacity building:

- ➜ Providing multiple types of professional development
- ➜ Building on-demand resources

Through our self-reflection, we saw that these two components needed to be more fully addressed in our PD offerings. While we were providing some trainings and offering support in other ways, we felt we were not doing enough! We could see we were not offering enough ongoing professional development nor enough coaching support. We also felt there were ways we could more effectively reach our teams besides the traditional sit-down training. From that, we developed and implemented the following.

MAKE-AND-TAKE (MATerial) TRAININGS

As AAC facilitators for a special education cooperative, one of our primary job responsibilities is ensuring teams who work with students with complex communication needs have access to relevant professional development opportunities. We have employed multiple formats when it comes to providing facilitated learning opportunities for our teams. We have offered the typical training in which participants sit and listen to a lecture, we have supplied materials with a brief, in-the-moment training, and we have provided staff with resources for learning at their own pace. However, we found that our teams struggled to put into practice intervention strategies discussed during these types of trainings and demonstrated little change in practice and development of skills. We could see the learning opportunities offered were not providing the level of support needed to affect change in practice, so we went back to the drawing board. When we were looking to develop more effective professional development activities, we did what any speech-language pathologist would do - we went to the research!

Through our research, we found that critical features of evidence-based professional development include explicit explanation and illustration of the content, knowledge and practices to be acquired. Furthermore, according to Dunst (2015), participants should have "opportunities to be actively involved in as many of the in-service training activities as possible as opposed to passively sitting through lectures in workshops" (p. 213). This explained why many of the traditional style trainings provided were not having the impact we were hoping for; there was not enough opportunity to be actively involved, and there was way too much passive sitting! Furthermore, looking at adult learning theory principles, we see that adults learn best when they can immediately use the content taught and prefer learning that is problem-centered rather than just content-centered (Carlson McCall, Padron, & Andrews, 2018). We assumed providing materials to staff for use in the classroom would be an effective approach. Still, without the intensive training piece on how to implement the materials, it was not a problem-centered approach to learning. It lacked that connection of how the materials could immediately be put to use to support students. This explained why just giving materials, without a complete explanation and demonstration, was missing the mark for effective professional development.

We paired this information with our observations and feedback gathered through a needs assessment to determine what

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components and supports staff was hoping to see included in a professional development offering. One of the main points we kept hearing throughout this process was professionals expressing how frustrated they were with attending workshops and getting excellent information, but then coming back to work and not having the time or resources to implement what they learned.

Taking this information and keeping in mind what the literature tells us about adult learners, we developed a professional development initiative to tackle these barriers by combining learning with resource development. We wanted professionals to leave our trainings with ready-to-implement materials to create conditions in their day-to-day practice that promotes the use of evidence-based interventions, bypassing barriers and obstacles. This is in line with recommendations stated in The Assistive Technology Trainer's Handbook. According to Reed, Kaplan, and Bowser (2009), "to increase the likelihood that your participants will implement what you trained them to do … provide the tools they need to implement back in their own setting" (p. 92). Our solution was a make-and-take training series that combines clear explanation, illustration and active learning with hands-on material making to encourage increased AAC strategy, visual support, literacy and assistive technology use in the classroom. This MATerial (make and take) training initiative was designed to provide evidence-based strategies for teachers and related service personnel to increase student learning in the school setting by giving hands-on time for making materials that relate to the information provided during the training. (IMAGE 2)

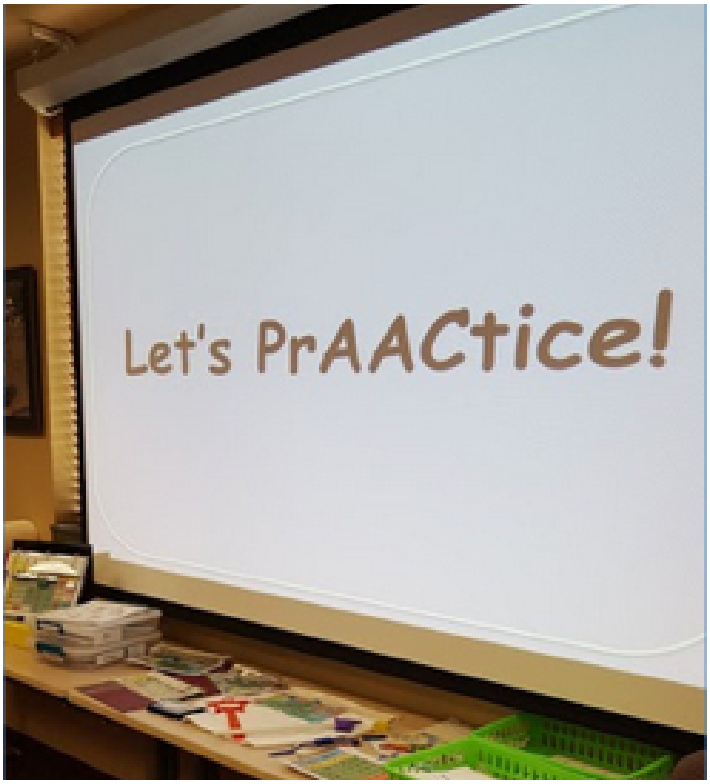

Image 2 - Hands-on practice during trainings

We structured this training program as a four-part series spread out over a school year. According to Darling-Hammond, Hyler, and Gardner (2018), professional development that is spread out over time, as opposed to a one-time training, is more effective at creating change in practice. While participants can pick and choose which topics to attend, we present the training as a series and share the benefits of attending over time. The items we selected to address were based on needs assessments and through informal discussion and observation with staff. From this, we identified the topics of visual supports, communication development, and emergent literacy as our top areas of need. These topics are very much interrelated and feed into one another in terms of supporting students with complex communication needs. Viewing the MATerials as a training program, as opposed to stand-alone sessions, provides participants with a complete understanding of best practices and with more materials to implement communication and literacy instruction in their classrooms and therapy rooms.

POWER AAC COHORT

At the 2018 ATiA Conference, we attended the session, "AAC Training for School-Based Teams Using POWER: AAC Online Modules," presented by Pennsylvania Training and Technical Assistance Network (PaTTAN) and Gail Van Tatenhove CCC-SLP.

Action Planning Worksheet
POWER AAC Cohort

Module(s):
Idea/Concept:
Intended Implementation:
What I will need:
Follow-Up: What I did, when I did it and how it worked:

Adapted from *The Assistive Technology Trainer's Handbook*

Image 3 - Self-reflection form used during cohort

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After reviewing the POWER AAC project, we felt it could be a beneficial training initiative to increase AAC knowledge within our cooperative. We provide it as a POWER Hour cohort offered once a month throughout the school year. (See image 3) This ongoing training allows for multiple contacts over time to practice, implement and reflect upon new practices and for participants to form a professional learning community (PLC). According to Zimmerman (2006), "Creating a professional learning community is one strategy to help teachers work together to manage their learning and plan constructive change."

Additionally, we present the training in a flipped style classroom format, in which participants review the modules independently before the cohort. Studying the information before we meet allows time during the cohort to explore the content and supplemental materials more in-depth through reflective conversation. Participants report that this time to participate in practice reflection and group discussion is one of the most valuable takeaways from the sessions.

Furthermore, these modules are available online, making it a very accessible resource to structure for remote learning. During this time of social distancing and sheltering-in-place, we can continue our cohort of learning through the use of online platforms.

CLASSROOM IN AACTION

A new offering we began this year is a coaching program for preschool and early childhood classrooms to help embed AAC supports throughout the day as a type of universal environmental support. We have structured this around the TELL ME PROGRAM - AAC IN THE PRESCHOOL CLASSROOM by Dr. Carole Zangari and Lori Wise. TELL ME is a perfect fit for this program because our focus is on helping the preschool classrooms embed AAC supports and core word learning throughout the school day, while also addressing the emergent literacy needs of their students.

Our goal is to make sure AAC supports are available to our youngest students as soon as they enter the classroom, as well as build the capacity of these school teams so they can effectively support the AAC needs of their students. We focus on providing the classroom team with ongoing support and coaching specific to their individual students and individual needs. We meet in their classroom once a month for a semester. While this type of assistance may be hard to "scale-up" to reach more teams on a grander scale, we are finding coaching to be very beneficial in this one-on-one type approach. According to Joyce & Showers (2002), "coaching is the primary support strategy that increases the trainee's ability to retain and apply new information to almost 90% of the content provided." From our experience, coaching provided within this job-embedded context helps teams show growth and independence in implementing AAC, thus increasing their ownership in supporting students with complex communication needs.

SOCIAL MEDIA PRESENCE

According to Gail Bowser, "one sure way to build capacity is by building access to a variety of online resources. This provides on-demand support for school staff just when it is needed. Quick guides, short explanatory videos, recorded webinars, frequently asked questions, and newsletters available online are a few of the ways to build just-in-time access to resources (NATE Network, 2019)."

Learning on-demand and on-the-go are becoming the norm, so we want to support our teams where they are showing up! We have started a YouTube channel in which we share tech tip videos of equipment available in our Lending Library with ideas on how to use the material in the classroom, as well as videos of us providing aided language input on AAC systems. We can share these videos with our staff and, just as importantly, with our families! We have also created an Instagram account, which allows us to share therapy ideas, resources and a variety of other AAC related material in real-time. Even during this time of distance learning, having a social media presence enables us to continue to easily connect with and provide support to our school teams and families, while maintaining our goal of increasing the capacity of all our stakeholders. (See image 4)

ADMINISTRATION

As said by Ash & Persall (2007), "as a leader of leaders, the administrator has a powerful effect on the performance of the staff." So, if you are not addressing administrative involvement in your capacity-building efforts, you are missing a huge opportunity to have a significant top-down effect on the way AT is viewed and valued within your school setting. Administration can set the example for how AT is valued and can significantly impact the culture of AT participation in your school. Furthermore, this aspect of capacity building fits well into the idea of working smarter, not harder! By putting efforts into this area, we knew the positive outcomes would trickle down and continue to grow, because "whether or not they are aware of it, administrators set the tone for how AT is valued by staff (Bowser & Reed, 2018)."

Through our self-reflection, we realized a couple of things when it came to how we were addressing our administration's AAC capacity. One, we were not really doing anything at all! Sure, we would provide updates on what AT/AAC trainings were being offered and would engage in the occasional discussions around AAC for specific students. But still, there was no real capacity building happening. And two, this meant we could significantly improve our efforts in this area, thus having a considerable impact on our overall AAC capacity-building efforts, which was very exciting!

INCREASING ADMINISTRATION AT KNOWLEDGE

As AT leaders for our organization, it is our responsibility to support the administration in developing their AT vision. If they

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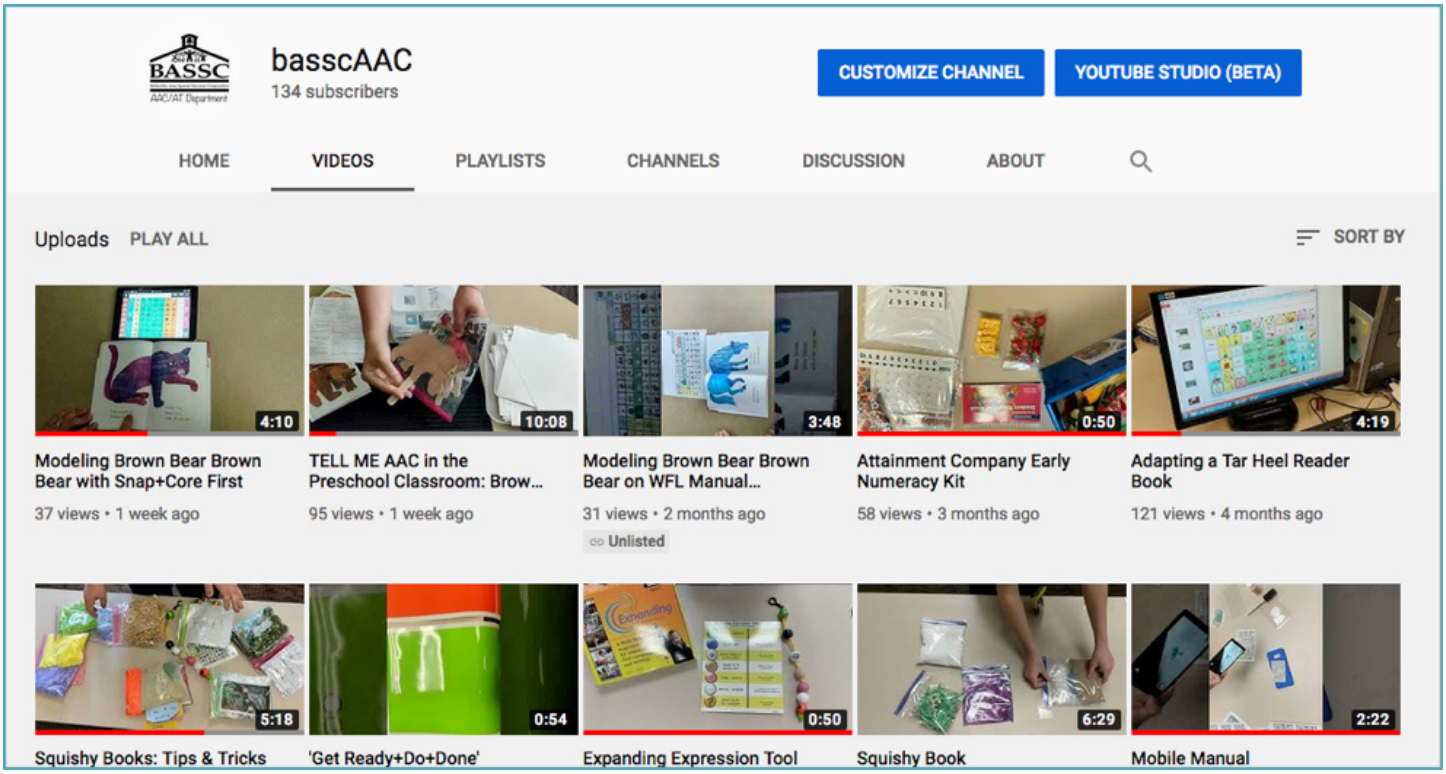

Image 4 - Social media presence for staff, parents, and other key stakeholders

do not know what they don't know, they won't know, right? To address this area, we are now personally inviting administrators to professional development opportunities that we conduct or host. We do it in person, when possible, to add that element of social pressure - it is much harder to tell someone no to their face than it is through an email!

We have also started scheduling and holding monthly AT Department meetings. This is such a simple way to ensure that we have a platform to bring up AAC routinely and to share things we are doing, projects we are excited about, as well as any concerns and needs we may have.

AT FOCUS IN INTERVIEWS

This past school year, we started discussions with the administration regarding incorporating specific AAC questions in interviews. We spent time reviewing hiring practices to determine where AAC could fit into job announcements, job descriptions and interview questions. This is an essential aspect of creating that top-down culture of participation, as typically, "only administrators have the assigned responsibility to recruit staff members who are qualified to provide AT services (Bowser & Reed, 2018)." We simply bring this up every month at our AT meeting to keep it on the radar.

AT QUESTIONS IN STAFF EVALUATIONS

Discussing with administration the idea of including an AT focus during staff evaluations is another way to address creating that culture of participation, helping staff to see that AT is valued and essential. "When administrators include AT in their staff evaluation, educators see it as important (Bowser & Reed, 2018)", which can have a considerable impact on your capacity-building efforts. We spent time reviewing the forms used during staff evaluations to see where AT might fit in. And, you guessed it, we keep bringing it up at our monthly meetings!

WHERE TO START

When it comes to capacity building, remember that "increasing skill levels of educators, and developing their view of the value of AT, requires training, practice, and coaching, as well as time to mature (Ashton, Lee, & Vega, 2005)." The critical piece is to get started and keep at it! But where to start? Here are some of the things we kept in mind to get the capacity building ball rolling:

➜ QIAT Self-Evaluation Matrices - Again, spending time evaluating your current practices is a great place to start to see what is working and what needs improvement. The QIAT matrices are very helpful, as they "can be used to plan for changes that lead to improvement throughout the organization in manageable and attainable steps. When completed by an individual or team, the results of the self-assessment can be used to measure areas of strength and plan for needed professional development, training, or support for the individual or team (Bowser & Reed, 2018)."

➜ NATE Network - Every time we get on natenetwork.org we find a new, excellent resource! It is a great place to go to start gathering information and ideas.

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➜ Think long-term, i.e., a 1-, 2-, or 3- year plan - We are all so busy, it can feel overwhelming to think about adding more to our plate, but by breaking things down into manageable steps spread out over time, it makes it much more doable.

➜ Content from AAC Users and Families - Trying to figure out how better to support your families in terms of AAC? Check out content and materials from AAC families and users. There are great blogs, social media accounts, research articles and conference presentations that can provide so much insight.

➜ Staff Needs Assessment - Looking to see how best to build capacity with staff? Start with a needs assessment to see what the real concerns and needs are. If you can help to solve an actual problem that your team is facing, it can help to get them on-board.

➜ "Leading the Way to Excellence in AT Services" - This book has had an enormous impact on how we view our role as capacity builders and AT leaders for our organization. We have it highlighted, dog eared and marked up on every page! It is a great resource, and we highly recommend it.

➜ 'Assistive Technology Teams: Many Ways to Do it Well' by DeCoste, Reed & Kaplan, and 'The Assistive Technology Trainers' Handbook' by Reed, Kaplan & Bowser - These resources are must-haves if you are thinking through new ways to build the AAC capacity for your organization. If you are a member of the NATE Network, you already have these gems! If not, you can download a PDF copy for free from the National Assistive Technology in Education website (natenetwork.org)!

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PRODUCT INFORMATION:

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Strategies for Building Language with AAC Through Game Play

INTRODUCTION

People need joy in their lives. Learning filled with joy increases productivity, social-emotional health and promotes a sense of well-being. One way to spread joy while learning is by playing games. Games provide an opportunity for families and friends to participate in a structured social activity that strengthens bonds of togetherness. Games and game play go across cultures and generations. Playing games offer opportunities for exposure to rich language concepts to help learners expand their vocabularies. Most importantly, games are fun!

While games operate with rules, within those boundaries they provide interactivity and choice. Meaningful choice produces a sense of control increasing the likelihood of an individual becoming invested in an experience.

We hope that by the time you are reading this article life that has been impacted by COVID-19 around the world will be at least somewhat more back to normal. However, what we the authors have discovered personally during this time of self-quarantine and changes to our school, work and social routines is that game time with our families in our homes and with friends through

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virtual platforms has been a way to connect with each other, maintain relationships and even take a break from technology. A March 21, 2020, New Yorker magazine article discussed how playing games provides those practicing social isolation "a place that can relieve them of anxiety and stress." Speech Language Pathologist, Tara Roehl finds traditional board games adapted for online play via web meeting applications, such as Zoom, are an effective means of delivering speech and language teletherapy. Regardless of your reason for game play, whether as a family bonding experience or to address specific language goals, games are a more than just a way to pass the time.

USING GAMES IN THERAPEUTIC OR EDUCATIONAL SETTINGS

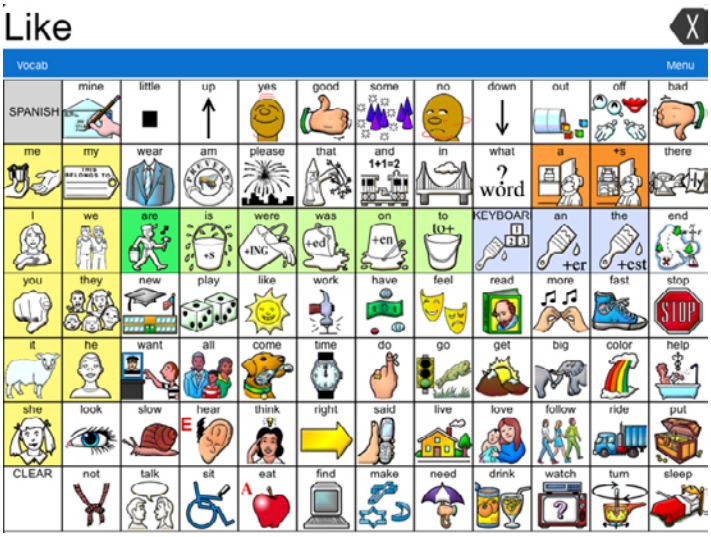
PROMOTING LANGUAGE

Most games follow rules, usually require turn-taking and typically have predictable outcomes (someone wins, someone loses, or a task, quest or journey is completed) all of which means that the language needed to play almost any game is predictable and can be structured to provide numerous opportunities for repetition of language targets for players using AAC. Single words or short phrases including *my turn, your turn, go, wait, get, put it, take, there, here, same, different, no, don't* and *can't* are just some of the core words that can be targeted in virtually any game. Longer phrases including *I have it, do you want, give it to me, I have same, I have different, put it down, take that, I know it, do you have it, I need more, I like this* and *what do you have*, can be repeatedly modeled and used by communication partners and individuals using AAC in the context of a game.

Depending on the game, fringe words can easily be incorporated, either specific to the theme of the game or to gaming itself, including *win/won, lose, cheat,* number words, etc. It's important to note that while fringe vocabulary may be targeted in game play, it is not advised that a specific board or page set be created for general game play. Use the games as an opportunity to become proficient at using the vocabulary on pages as they are already organized in a user's AAC system. For example, if a fantasy game involves the vocabulary *princess*, *troll* and *knight*, the adult player should model and support the users of AAC in finding these words as they may already exist on a people page or on a storytelling page. Alternatively, increase the user of AAC's strategic competence with other vocabulary by helping them find ways to describe a low incidence word--*ugly, short monster* for troll or *man on horse* for knight. If a word that was previously low incidence becomes a high use word due to frequent game play or increased interest in a subject, then add it to a logical location within the users system, where they can access it for a variety of purposes. Furthermore, fringe vocabulary during game play might be an additional opportunity to practice spelling and literacy skills by modeling on a keyboard.

MODELING AAC USE DURING GAME PLAY

When playing a game with someone who is learning language with augmentative/alternative communication (AAC) it is important that other players model language using the AAC as well. Options for communication partners to model can be on the user's device or on a second device. If the user of AAC is learning to use a high-tech device, not every player may have access to the same high-tech device. In these instances, the other players might have a low-tech board that mimics the home screen of the high-tech device. The other players then point to words as they say them aloud. At first, the language learner might not even be expected to use the AAC. The other players should engage with the AAC demonstrating certain words, such as, *like, your turn, play, you go, fun, I like it*, or any words that might come up during the play. Not every word spoken needs to be modeled on the AAC system. Players could attempt to target one word per turn or round, based on the skills and vocabulary being targeted.



PRC's LAMP Words for Life 84 Location Language System.

GAMES OVERVIEW

TYPES OF GAMES

Games can be placed into two major categories of video games and tabletop games. Subcategories exist for each. Video games can be played on consoles, desktop/laptop computers, or mobile devices. Tabletop games include board games, card games, role playing games or any other type of game with physical elements shared in the same space. Games can either be competitive or collaborative. Competitive games invite the different players, either individually or on teams, to face off against one another usually resulting in one player or group of players ultimately winning the game. Collaborative games have the players working together to progress through a story, solve a mystery, or otherwise work together to overcome some obsta-

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cle put forth by the objective of the game. Finally, some video games are neither competitive nor collaborative but, instead, create a shared environment in which people can build, construct or otherwise create. These are known as sandbox games and although people can and do collaborate in these games, it is not a requirement to play as there is not necessarily an objective to win. Any of these types of games can be used to foster and support the learning of language using AAC.

CHOOSING THE RIGHT GAME

The game selection process mirrors the process for considering technology to meet educational goals. When searching for a game to play, one considers the interests and abilities of the potential players before selecting. A person who likes superheroes or fantasy worlds, might like games with those elements baked into the design. If maps and mysteries are more your thing, then a different set of games might be appealing. Knowing what interests the people with whom you hope to play can help you select the right with the most appeal. Another strategy for selecting the right game would be to read or listen to reviews of games. There are several board game review podcasts available, such as the All The Bits podcast hosted by instructional designer, Michelle Compton and Speech Language Pathologist, Shaun Pearson, which provide detailed explanations of games along with their own insights as to who might find the games fun to play. Any game can be used to promote language. Working to select games interesting to the player(s) will help maintain attention while working on language targets.

LEARNING THE RULES

Although most games still come with a written set of rules, a different modality to learn how to play a game can be to watch a video of someone explaining the rules. YouTube channels such as Watch It Played provide brief tutorials for how to play just about any game you can find or think of. The videos can be paused, rewound or watched repeatedly to help with comprehension. Video tutorials also allow for a quick way to refresh one's memory on how to play a game that hasn't been played in a while. Videos can be watched at increased speeds to experience the content in half the time. Another way to learn how to play a game is to watch others play it. Wil Wheaton's Tabletop is a YouTube channel dedicated to watching different celebrities playing board games together. Twitch.TV provides people with a way to watch others playing all types of games in real time or through recorded video. Of course, as with any content read or viewed online, viewer discretion is advised.

BOARD GAMES

When one hears the word "game" an image that might be conjured could be that of a classic board game such as Checkers, Chess, Scrabble, Life, Sorry!, Monopoly, Candyland, Chutes and Ladders or Clue. These games have withstood the test of

time and might be commonly found in classrooms and homes around the world. There are several newer board games that provide an opportunity to connect while learning something new. Some contemporary popular games include Settlers of Catan, Ticket to Ride, Munchkin and Splendor. Most board games also have a junior version available so the entire family can enjoy the game play. There are some board games that include different sensory experiences as well. For instance, Shadows in the Forest is a game meant to be played in the dark. Players move a lantern around a three-dimensional game board attempting to find cute creatures hiding behind trees. No matter the type of board game selected, the family and friends are sure to have a fun time.

CARD GAMES

Go Fish, Old Maid, Gin Rummy and Spit are family favorites with multiple variations and are easy to play with nothing more than a deck of playing cards. Uno, while made with a specific deck based on colors, can be played with suits of 2 regular card decks. Newer card games include Sleeping Queens, Moose on the Loose, Loot and Dragonwood, which has both cards and dice. These games have engaging artwork and easy to learn rules both of which can be used to entice players while reducing the barrier to entry.

ROLE PLAYING GAMES

You're walking through the woods when suddenly you hear a child scream. You turn toward the sound and see a girl, maybe 5 or 6 years old, sprinting toward you. Behind her, and gaining, is the strangest creature you've ever seen. It's the size of a bear but with feathers. Its head isn't that of a bear at all. Does it have a head of an owl? The child and the creature are both barreling toward you and will be on you in mere moments. What do you do? What do you do? You are now immersed in a role-playing game, with a problem to solve!

Role playing games, like Dungeons & Dragons, invite players to pretend to be a character with varying traits, abilities and personalities. The character then progresses through a series

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of scenarios that make up a cohesive story. Role playing games typically have one person, known as the Game Master (GM), who manages the story. Dice are often used to determine outcomes of actions selected by the player. High rolls usually mean something favorable happens. Lower rolls might mean something less desirable occurs.

The characters of role-playing games are usually heroic in nature who go on quests, solve problems or otherwise interact in a fictional world. Characters, each managed by a different player, might work together as a team, known as a party. Parties with shared objectives promote collaboration, creativity, critical thinking and communication. Role playing games allow players to create a shared storytelling experience with open-ended possibilities. The openness of the game provides an opportunity to say whatever you want to say whenever you want to say it however you want to say it which promotes language use.

Listen to Shaun Pearson describe how he ran a role playing game session over the summer at a camp for users of AAC by going to https://bit.ly/smalltalks3 and check out this article from the International Society for Technology in Education on using role playing games to engage all students by going to https://bit.ly/isterpgs

SANDBOX GAMES

Certain games have no objective to win. Instead, they are just meant to be a space where players can gather to create together. Like children playing with sand on the beach (or a sandbox) players construct structures that can be works of art, virtual environments, buildings or anything the players can imagine! Minecraft might be the most popular and well-known sandbox game which allows players to design and create in a virtual space making it ripe with opportunities to use and practice language concepts and usage. Although any part of speech can be practiced in a sandbox game, they are particularly useful for practicing spatial prepositions such as over, under, on, in and beside.

ADAPTING GAMES TO MEET A PLAYER'S NEEDS

Favorite tabletop games can be adapted to target specific vocabulary or learning targets. The games **Guess Who** and **Hedbanz** provide an opportunity to incorporate question words, *who* and *what*. **Zingo**, which is an early childhood-oriented BINGO game with a few different versions. All these commercially available games can be played as is straight out of the box or can be adapted with targeted vocabulary by overlaying custom images on the game boards. Physical adaptations allow individuals with motor needs to participate and play independently. Placing dice in a clear plastic food container can provide students an alternative way to roll dice which uses larger gross motor movements to roll. Writing numbers on big cardboard boxes is another way to produce an adapted die. Virtual dice apps and websites are available including https://www.online-stopwatch.com/chance-games/roll-a-dice/full-screen/. If at home and if a voice activated assistant is nearby, people can verbally or with AAC say, "Roll a d6" to roll a virtual die and listen to the results. If playing a card game, some people might enjoy using a card holder of some sort. This could simply be two pieces of wood rubber banded together to form a slit in between their two longer edges or it could be a commercially available card holder.

Sites like http://Tarheelgameplay.org provide a large array of games that are switch accessible. The adapted XBox controller allows people an opportunity to interact in games on the Xbox with switches. Switches can be inserted into the ports which can be configured to operate different controller commands. Organizations like AT Makers and AbleGamers help connect individuals with disabilities to fellow gamers who can help make customized adaptations to meet the unique needs of every individual person.

Listen to Bill Binko, creator of AT Makers, discuss the Maker Movement by going to https://bit.ly/twtatmakers and Mark Barlet, co-creator of Ablegamers, discuss accessible gaming by going to https://bit.ly/ablegamerstwt.

CREATING CUSTOM GAMES

One activity that can be particularly fun for children is to create their own games. These games could then be shared and played with friends or family. A simple activity could be to create a game board using a file folder. Students could use a Bingo dabber, stamps, stickers or trace circles around a coin to make spots on the game board. A printout of symbols of target words, could be placed intermittently throughout the board. When playing the game, the student could roll the dice or spin a spinner to move their marker throughout the board. When they get to a symbol of a word, they could be asked to use it in a sentence using AAC.

Software for creating custom clipart based game resources, such as LessonPix, provides a variety of templates for playing cards, dominos, BINGO and traditional board games that allow

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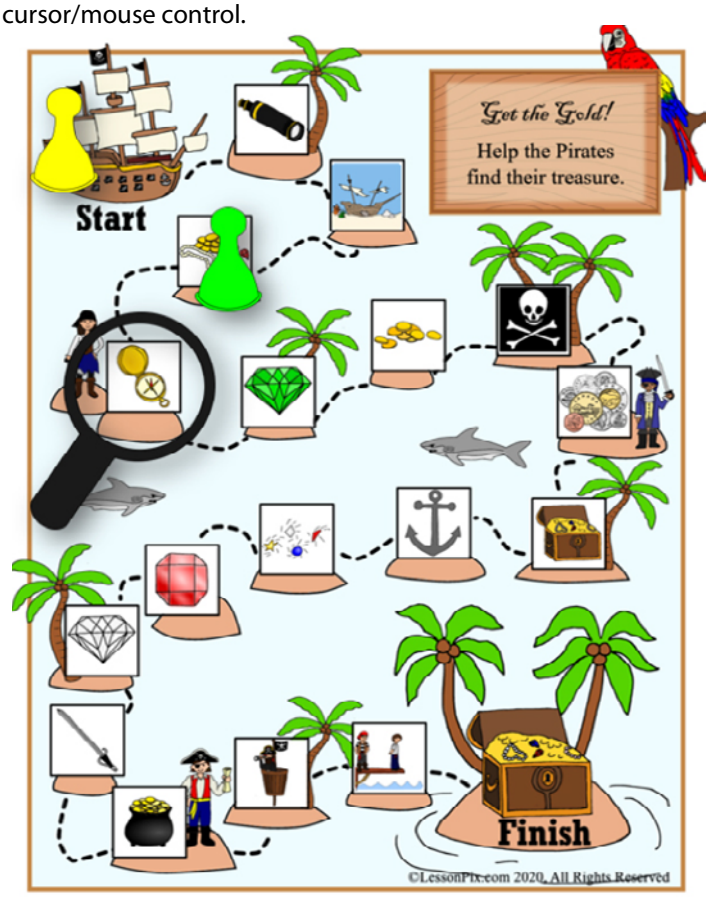
therapists, educators and families to tailor these games to meet a specific goal or to engage a player with highly motivating themes. Creating custom game boards allows a therapist, educator or family member to simplify the game as needed, make it relevant to the individual needs of a student, or zone in on target vocabulary or curricular concepts. By adjusting the number of squares needed for a BINGO style game, students with a shorter attention span, low tolerance for frustration or who are just learning the rules of the game can have quick success, ultimately building up to the traditional 5x5 game board. Custom game boards can be used in school or therapy and provided to families for follow up without additional expense. When custom game boards are created in or downloaded as PowerPoint or Google Slides, they can easily be adapted for use during teletherapy over a web conferencing platform that allows shared cursor/mouse control.



Customized Treasure Map gameboard used with permission from LessonPix.com.

CONCLUSION

Games have been around for centuries and are a part of every culture in the world. Game play brings families and friends together, especially in challenging times. Games provide a distraction or a means to bond with others. Games by their nature are typically interactive and provide opportunities for choice and autonomy. Game play is a fun and engaging way to address the language targets for individuals learning how to use an AAC system. The language used in games is consistent and can be used across many contexts, and as a result can lead to language competency for individuals who are motivated to be successful communicators during play. Games played in person or virtually decrease barriers for individuals with disabilities and provide needed opportunities for social interactions, competition and collaboration. With a large variety of game options, from tabletop to video and off the shelf to adapted there is the perfect game out there for everyone!

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Emergent Math Concepts and Accessible Activities

Do you struggle with what mathematical concepts you should start teaching first to emergent math learners? Do you wonder how to make some materials or tools accessible? With math, we know that mathematical concepts build on each other, so it is essential that we know what the foundational topics and concepts are and how to make them accessible for all learners. When we are designing math for our learners, we need to design with all the learner's needs in mind. We will be discussing the nine mathematical topic areas and different ways to accommodate different learner needs in each area. These accommodation lists are not extensive, but are here to provide ideas of different ways to accommodate different learners needs.

There are nine mathematical topics which highlight key mathematical concepts that are the foundational skills needed to ensure a lifelong mathematical understanding. The nine mathematical topics are sets and attributes, number sense, counting, composing and comparing numbers, patterns, measurement, data analysis, spatial relationships and shapes. Also this article will explain the topic area, and the math concepts, and provide ideas for making the activities accessible for the different types of learners. While designing for math instruction we want to design learning activities that get mathematics into the learners eyes, ears, hands and feet. Learners who are nonverbal will need to have their math vocabulary available within his/her communication system. For our learners who are blind, it is essential to have hands on materials that are different enough tactilely that the learner can determine the difference. For example, all hard plastic objects that have a smooth texture or pieces of material that have similar texture.

Sets and Attributes are the first topic area. This topic area is very important for emergent learners to understand sets and attributes as they learn to categorize or sort items. Categorization or sorting is a skill that is also used in literacy from sorting capital letters from small letters, vowels and consonants, etc. It is systematic. It is ordering. It is comparing and contrasting. It is also the very most basic form of algebra. Attributes are the characteristics of an object. The attributes of an object can be used to sort collections into sets. It is important that as teachers we instruct the attributes of objects. For example, if we are asking a student to sort silverware, we need to talk about the different attributes of each piece. We need to teach that it can be sorted as silverware or that the same collection can be sorted into different ways. This concept is also important for our learners who may be learning to use a category based communication system. If the learner does not understand sorting or categorizing, he/she will not understand why certain items belong in certain folders. Modeling this concept is important in mathematics and communication. Here are some activities or tools to try: A sound, ear, activity for sorting could be different sizes of bells. Each size makes a different sound. If you have a learner with a hearing loss, the learner could sort by size.

Different sizes of bells.

If you are looking for an iOS app for sorting, try Drawing Pad. You can split the screen up into however many categories you

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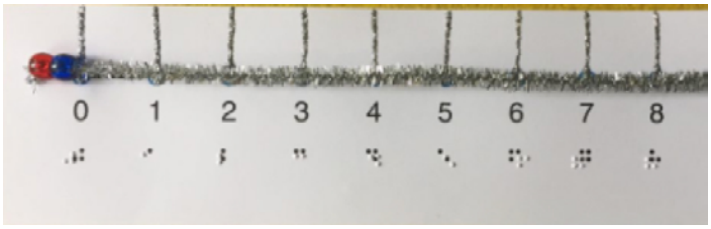
are sorting and then use the stamps for the sorts. Learners could choose which stamp collection they would like to sort. This app also has the capabilities of changing the background color to black which may be beneficial for learners with a visual disability.

The second topic area is **Number Sense**, which is a key building block of learning arithmetic. Number sense connects counting to quantities, solidifies the concepts of more and less, and helps learners estimate quantities and measurements. The first math concept within number sense is numbers are used in many ways. Numbers may be categorical or nominal, referential, cardinal or ordinal. The second concept is quantity is an attribute of a set of objects, and we use numbers to name specific quantities. The last concept is quantity of a small collection can be perceived without counting. This concept is also known as subitizing. As a learner I can look at a group of items and know "how many" without counting the items. Providing opportunities, to observe and manipulate quantities and change in quantities builds on the learners natural sensitivities and interest. Providing language enhances these experiences. Here are some activities or tools to try: Life-size activity, feet, would be to take painters tape and make five frames or ten frames on the floor. Have the students be the manipulatives within the frames; make sure the frame sizes are large enough if you have a wheelchair user in your classroom. You can modify this to make a frame on a table and use paper plates to be the manipulatives.

Frame on a table and paper plates.

The National Council of Teachers of Mathematics has an Illuminations website where the learner can do online interactive Ten Frames. Interactive Ten Frame

The third topic is **Counting**. Even before they can count, children learn that number, or counting words are special. Experience hearing others count, or name quantities provides foundational experiences with number words and the idea that they refer to quantities and can be ordered. The math concepts within counting are: counting can be used to find out "how many" in a collection and counting has rules that apply to any collection. Counting is very complex as it includes rote counting and rational counting. Rote counting is reciting the numbers from memory correctly. Rational counting is matching each number name to an item in a group. In order for rational counting to take place the learner must master one-to-one correspondence, stable order, cardinality and order irrelevance. While some people may feel that one-to-one correspondence is easy, it actually takes a while for learners to grasp it. Learners need to coordinate words to physical movement and the eye along a line of items, matching one number word to one item until all the items are used up. Here are some activities or tools to try: The use of number lines to teach stable order, board games where you count spaces going down a path to teach one-to-one correspondence, putting items in different groupings to teach order irrelevance, and lastly labeling a group after counting them to teach cardinality. The math learning center has a virtual number line that you can adjust the spacing, the number sets, and many other various tools. If you have students with visual concerns, you can create tactile number lines. To get your learners up and moving, create a number line on the floor for the learners to walk on. Another great resource for online manipulatives would be: National Library of Virtual Manipulatives



A number line on the floor for the learners to walk on.

The fourth topic is **Comparing and Composing Numbers** this topic may also be considered Number Operations. The math concepts within this topic area are: sets can be changed by joining items or by separating items, sets can be compared using the attribute of numerosity and ordered by more than, less than, and equal to, and a whole can be decomposed into equal or unequal parts: the parts can be composed to form the whole. Number operations are the tools that we use to find the answers to the questions like: "How many fewer?", "How many more?", "How many now?", etc. When we are first teaching math, there is no need to focus on the math symbols or arithmetic. The learners need many opportunities to think through the relationships between how quantities work in their everyday life before they can think of using addition or subtraction. When we hurry our learners through memorization of rote facts, we lose the time the learner has to understand why the fact is true. We need to provide time for the learners to problem solve and multiple opportunities to make sense of the problem. Allow the learners to draw, use manipulatives, or act out the problem. Experiences encourage explorations and appropriate talk of parts and whole in many contexts. Manipulating and grouping all kinds of objects builds foundations for parts and wholes from which all

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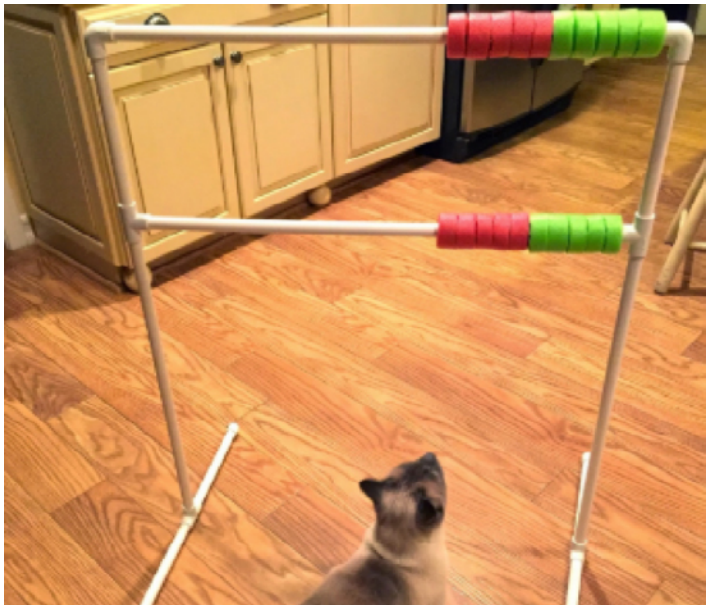
subsequent learning develops. Here are some activities or tools to try: The Rekenreck is a great tool to use for composing and decomposing sets. There are various ways to create a Rekenreck or purchase one. This one can be made and used right at a learner's desk.

Can be used right at a learner's desk.

If you have a learner who is a wheelchair user, you could create this one.



Make one of these for a life size rekenreck or accessible for a learner who uses a wheelchair.

There is also Number Rack iOS app, web or Chrome that works for students who have fine motor concerns. The Cranmer Abacus was especially adapted for individuals who are blind to complete math operations.

The fifth topic is **Patterning**. Patterns are any predictable sequence and come in many different forms. It could be visual patterns, auditory patterns, movement patterns, temporal patterns or numerical patterns. Learners will learn to find and use mathematical regularities and structures. They will learn to identify, duplicate and extend sequential patterns such as ABCABCABC, but also to find regularities and structures in number and geometry. Repeating patterning skills predicts later math knowledge. Patterning is a critical math skill. The math concepts within patterning are: patterns are sequences governed by a rule; they exist in the world around us and in mathematics. Identifying the rule of a pattern brings predictability and allows us to make generalizations and the same pattern can be found in many different forms. Here are some tools to try: If you are looking for an online manipulative and pattern options for students, Glencoe virtual manipulatives. Remember if you are using physical objects to teach patterning and you have a student with a visual impairment, you should use objects that have great diversity.

The sixth topic area is **measurement**. Measurement encompasses a lot of different learning trajectories. Measurement can encompass length, area, volume, angles and turns, but the beginning concepts that we will be discussing are that many different attributes can be measured, all measurement involves a "fair" comparison, and quantifying a measurement helps us describe and compare more precisely. As you see, it is important that the learner already knows about attributes prior to learning about measurement. The central challenge in helping emergent learners understand measurement concepts is to slow down our expectations for the learning process. It is important to know that the more authentic the measurement problem-solving situation is, the more deeply the learners are to be engaged. Here are some activities or tools to try: There are various ways that you can adapt rulers to make them accessible. You can purchase rulers that have handles built on top for learners with fine motor concerns. For learners with vision concerns, you can glue bump dots or other objects on top of the ruler for each inch. Talking tape measures are also an option for our learners. The Tape Measure app for iOS and Ruler App for Android are apps that you use augmented reality to measure the distance from one point to another point.

The seventh topic area is **data analysis**. The purpose of collecting data is to answer questions that are not obvious. Collecting the data needs to be done for authentic problem solving. Data must be represented in order to be interpreted, and how data is gathered and organized is dependent on the question to be answered. Next, it is useful to compare parts of the data and draw conclusions about the data as a whole. As the learner is creating representations using objects, pictures, or graphs, the learner needs to know how to label and describe parts of their data displays. One is able to scaffold a learners charts by the use of different types of graphs. Some learners may need to start with using an object graph, while others may be able to use a pictograph, and others a bar graph or tally chart. Data analysis for emergent math learners is about quantifying information in order to answer a question. That requires children to organize data in some visible way so that comparisons and generaliza-

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tions are possible. Here are a few good books with good questions to spark simple graph explorations with children: *Which Would You Rather Be?* by William Steig, *Whose Shoes?* by Stephen R. Swinburne, and *Anno's Flea Market* by Mitsumasa Anno.

The eighth topic area is **spatial relationships**. Learners develop the processes of generating, maintaining and manipulating mental images of two- and three-dimensional objects, including moving, matching and combining them. It is a critical math topic. Spatial Relationships begin at birth. Most learners start to learn by reaching for and grasping objects that are dangled in front of them. Next, the learners are cruising around to negotiate a path through a room. Lastly, the learner can locate items or decide how best to get from here to there, which have begun to represent space. Learners will learn the relationships between different positions in space (includes maps and coordinates). The key concepts embedded in these activities that make them mathematical are their relational nature. Here are some activities or tools to try: Do games like Simon Says and allow learners take turns as the leader to give directions. Puzzles involve spatial sense. Have multi-piece puzzles, pattern blocks, and tanagrams should be available with different levels of support and age appropriateness.

The last topic is **shapes**, everything in the material world has a shape. Learners need to go beyond the use of superficial shape labels to recognizing and specifying the defining attributes of shapes. As learners sort shapes with others, they become aware of rules about shapes. Learners will also discover, while exploring three-dimensional solids, that the faces of solids look like circles, rectangles, triangles and other common two-dimensional shapes. When learners are given the chance to combine, rotate and compare shapes this will help learners develop understanding of part/whole relationships within and among shapes. Learners can learn to identify structures within embedded figures (finding "hidden shapes" within more complex diagrams). Here are some activities or tools to try: Using the website Illuminations website allows students to manipulate shapes. If a student struggles with fine motor skills, this site allows the use of a snap together tool. This tool snap shapes together once they are close. Educators can also purchase wooden shapes that have velcro on them, which allows the learners to connect real wooden shapes together. Busy Shapes app for iOS and Android has 150 incremental levels.

In conclusion, it is vital for us to make sure that our learners have the foundational skills in mathematics before we move onto more complex concepts. Math concepts are around us in every aspect of our lives and filter into other content areas. The number sense, counting, comparing and composing numbers, sets and attributes, and patterns are the foundational building blocks to the other three topic areas which are measurement, shapes and data analysis. When we are designing our lessons we need to make sure that we are designing for all of our learners' needs. ■

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product spotlight

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THE NEW I-SERIES

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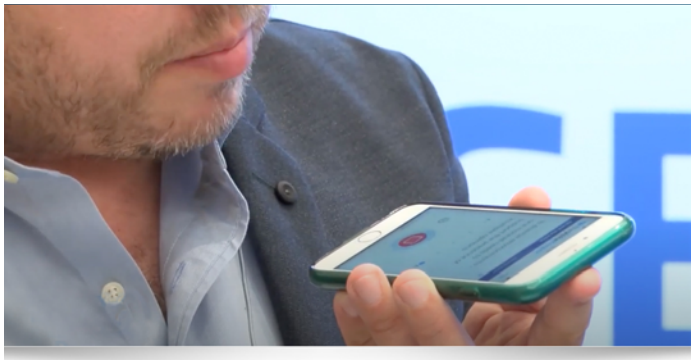

THE VOICE KEEPER

The Voice Keeper is the only voice banking technology that allows people to create and preserve an authentic version of their voice from an app as well as from a computer within minutes. While traditionally voice banking software requires anything from 350 to 1600 sentences in order to create a digital voice, The Voice Keeper has developed cutting-edge milestone-based technology which allows users to record as much or as little material as they want. This means that users can start creating a new voice with as little as 30-100 sentences. However, the more material they record, the better the technology will become in capturing their personal tone, accent and the way they speak.

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The Voice Keeper app is very simple and easy to use and does not require screening sentences, additional software programmes or an external microphone. Individuals can just register within seconds, hit record and start reading sentences in order to create a digital version of their voice. The AI-based algorithm creates the first version of their voice with just 3 minutes of recording material. For this process to be completed on a personal computer, it is recommended to use a USB headset microphone.

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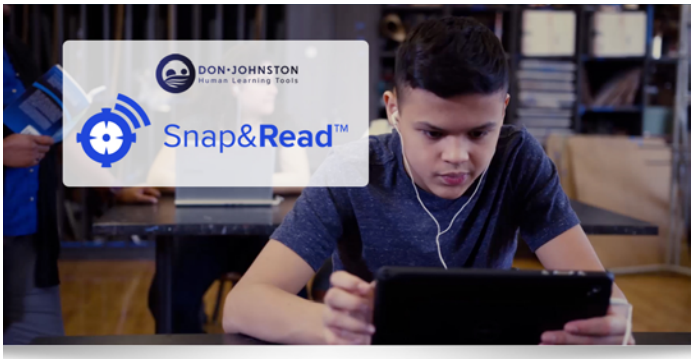

Snap&Read is the Next-Generation reading tool for Google Chrome, iPad and more, that can cover the most diverse reading needs. It reads both accessible and inaccessible text aloud, it levels vocabulary, and it translates, delivering usage data to teachers who then can more easily assess students' reading needs individually.

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QuickTalker Freestyle by Ablenet

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SUCCCESS FUNDING QUICKTALKER FREESTYLE

Linda is a speech therapist in a school district in Philadelphia, PA. In the past year, Linda and AbleNet have requested and received funding for several QuickTalker Freestyle communication devices for her students. Watch this short video to learn more about her experience.

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Harkla – Weighted Compression Vest

Are you looking for a tool to help your child feel secure, calm, and focused? Harkla's weighted compression vest for kids with sensory issues, autism, and ADHD combines the sensory input tool with a wearable by applying pressure to sensitive areas of the body. Simply place the vest over your child's clothing, and watch your little one return to feeling grounded and in control.

A perfect addition to the classroom, pack the weighted compression vest with your child's school supplies for on-the-go sensory integration therapy. It works well on travel, too! Improve both their and your car rides with a vest providing deep pressure sensory input.

The weighted compression vest for kids is made out of soft neoprene and is built to last. Unlike other brands, Harkla has built-in ventilation using mesh to make sure your child stays cool while receiving the sensory integration therapy benefits.

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ClearMask – See the person, not the mask.

The ClearMask's patent-pending, full-face transparent face mask makes healthcare more human by improving visual communication for more compassionate, inclusive connections.

Amagine what you might be missing.

55% of communication is visual. Standard surgical masks block faces and prevent the ability to see facial expressions, read lips, and establish rapport.

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It is quiet, durable, and weighs less than a bottle of water. The large power button is easy to find and operate. The finger rest allows those with vision or dexterity challenges to easily find and use the nail slot.

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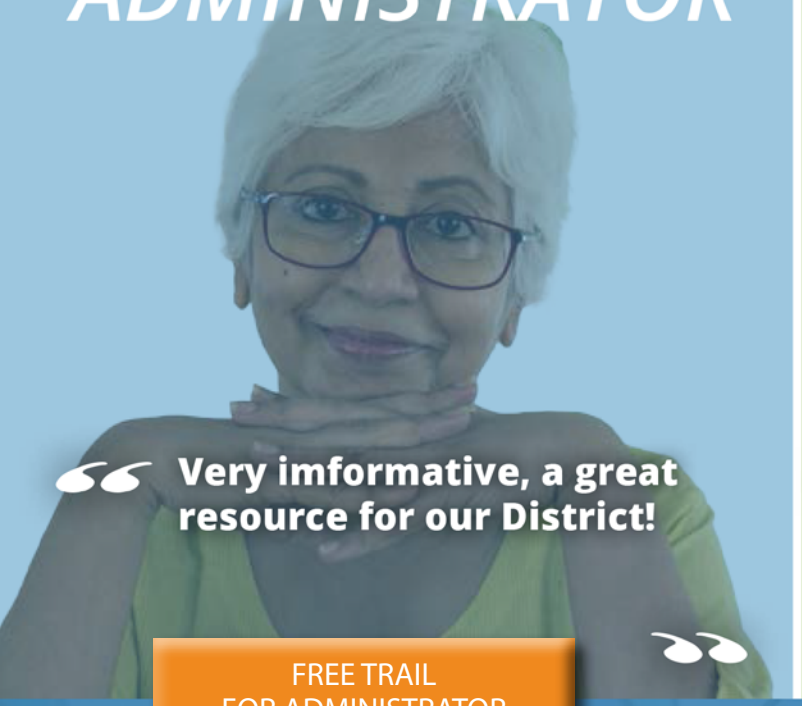

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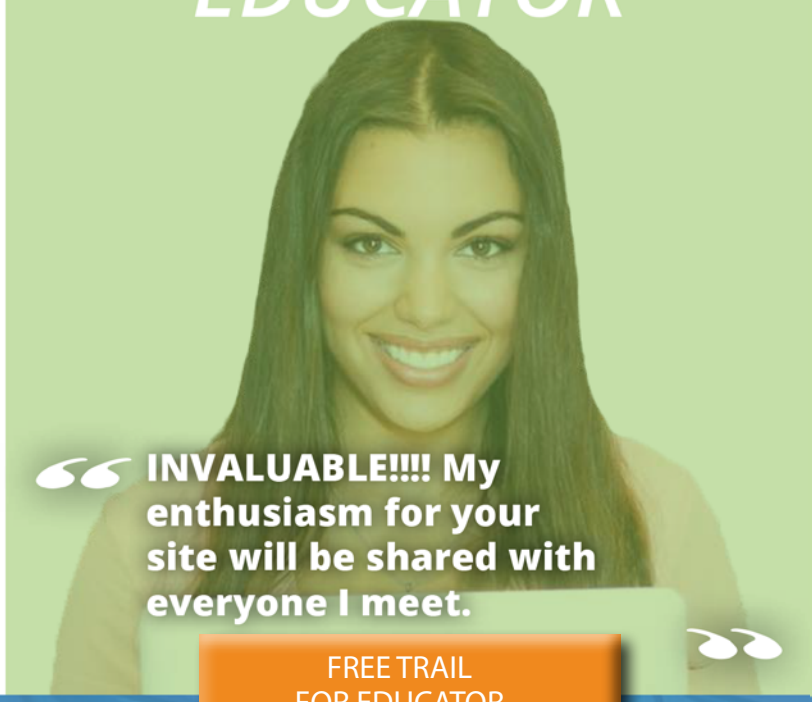

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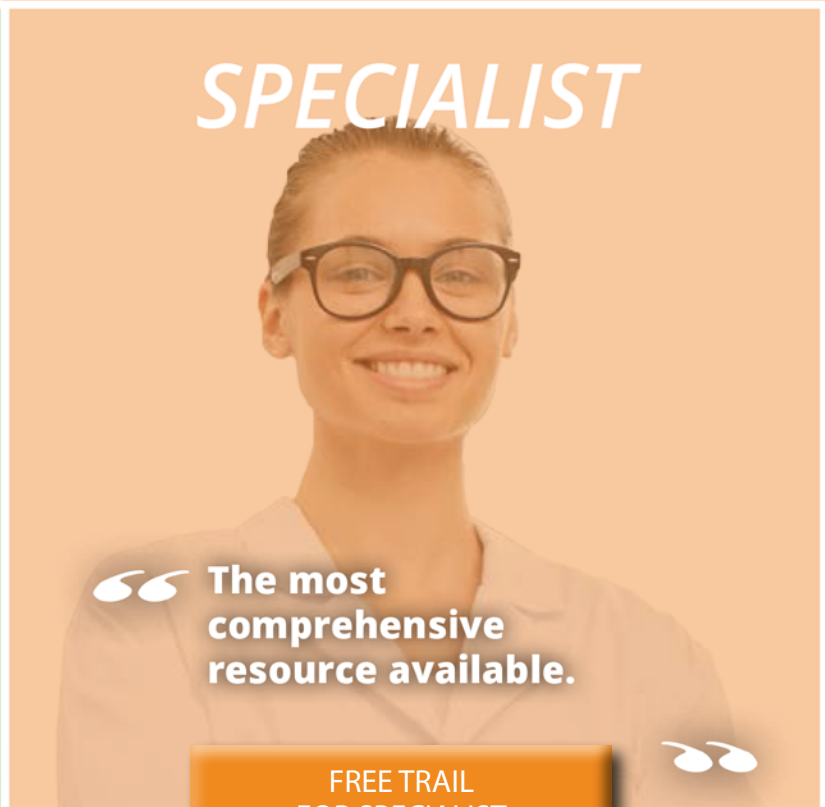

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