Assistive Technology Resources for Children and Adults with Disabilities

Closing The Gap

Solutions

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Back to the Future:
Returning FTF without Abandoning Virtual AAC Strategies

Summary:
The global COVID-19 pandemic has ignited many changes in the way we provide Augmentative and Alternative Communication (AAC) support. While many changes have created barriers, educators have worked together to innovate and inspire each other to support learners with complex needs. This article will explore how the foundations of AAC support and the new tools/strategies we have learned will improve our practices as we begin to return face-to-face.

The global COVID-19 pandemic has ignited many changes in the way we provide Augmentative and Alternative Communication (AAC) support. While many changes have created barriers, educators and clinicians have worked together to innovate and inspire each other to support learners with complex needs. Many therapists and teachers have reported increased participation in AAC involvement with family members as a result of virtual opportunities. As we have gained familiarity with digital meeting platforms and therapy activities, we have reflected on how this will improve AAC support in the future, both in-person and virtually.

As the saying goes "we don't want to throw the baby out with the bathwater," we find ourselves during this time of returning to in-person instruction and therapy, having learned new strategies during virtual sessions, having staff and family members involved in modeling and encouraging AAC, in many cases at a

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level higher than in the past. And yet, we miss Face-to-Face; we miss the immediacy and the ease of communicating in person in environments such as school and therapy. If virtual learning is the "bathwater," then engaging our students and families is the "baby." Not to say we weren't all spectacularly engaging prior to the pandemic, but to look back at what we needed to do keep students in front of the screen, for some of us for over a year, has been nothing short of a performance on "America's Got Talent"!

AAC FOUNDATIONS

In this article, we take a look at how therapists and educators are attempting to keep the tried and true foundations of AAC and at the same time intertwining virtual strategies from the past year as we return face-to-face. These foundations include (and are not limited to) planning implementation from the participation model, creating competent communicators, using aided language stimulation and non-demand modeling techniques, descriptive teaching, focusing on following the student's

Participation Plan in Classroom Settings Worksheet

Student:_____ **Date of Planning Meeting:**_____

Directions: complete the participation plan for each content/activity area throughout a student's schedule.
(1) list content area/activity;
(2) circle current level of participation in each of the 4 participation categories.
(3) discuss as a group the participation priorities for each content/activity; acknowledge that we all desire for all 4 participation areas to improve, however, finding a focus is important for student progress & planning for resources including people, peer buddies, modifications & technology;
(4) come to compromise on each item, putting a star next to the first priority; if needed, you can write a 2nd, 3rd and 4th next to the other areas in order of priority.

Participation Plan for _____ (content area/ activity)

- **Academic Participation**
  - Competitive
  - Active
  - Involved
  - None
- **Social Participation**
  - Influencial
  - Active
  - Involved
  - None
- **Regular Classroom (Inclusion) Participation**
  - Full
  - Selective
  - None
- **Independence**
  - Complete
  - With Setup
  - Fully Assisted

Planning for Technology

Directions: for the above content area/activity, make a list of the type of academic & social class activities that occur during that time. Content Area activities are things such as teacher lecture, completing a worksheet, writing a journal, topic discussion, etc. For each activity, list the instructional grouping since this may have an impact on the type of technology that can be utilized. Next, list the instructional or assistive tool(s), to be used.

Content Area Activity	Grouping (check one)				Technology Tool to Use
(examples: teacher lecture, worksheet, reading, writing, manipulatives, etc.)	Large Group	Small Group	Pair	One on One	(examples: word processor, text reader, calculator, page turner, electronic outliner, AAC, white board, visual schedule, switch, etc.)

form from www.kellyfonner.com - 2021 – participation plan adapted from Beukelman & Mirenda, descriptions from Musselwhite

Image 1: Participation Model Worksheet - Image of form that includes the 4 components of the Participation Model and planning grid.

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lead, and engaging/interactive activities that focus on discourse, not drill and practice.

One of the planning strategies that Kelly uses is adapted from the Participation Model of AAC Assessment. (Beukelman, D., & Mirenda, P. (2013). Augmentative and alternative communication: Supporting children & adults with complex communication needs (4th ed.). Paul H. Brookes Publishing Co.: Baltimore, MD.) She has been using this planning process to help determine the priorities in communication emphasis throughout the school day. For example, what times of the day are interventionists targeting their modeling and scaffolding their supports on linguistic competencies, operational competencies, social competence, and strategic competencies. Not that we don't keep an eye on these all the time, but through planning processes such as the participation model, staff and family find that there are natural parts of the day to focus their attention on specifics in these four areas. **See Image 1**

Some examples include supporting a student to increase their volume in louder school settings such as the lunchroom and recess; using certain forms of language in discussions ver-

The Participation Plan

Adapted by Caroline Musselwhite, 2000; from: Beukelman, D. & Mirenda, P. (2013). *Augmentative and Alternative Communication: Supporting Children & Adults with Complex Communication Needs, (4th ed.). Paul H. Brookes: Baltimore, MD, USA.*

Levels of Regular Classroom Participation

Full = Physically present in age-appropriate regular education settings for the entire school day. At times, activity patterns may differ from peers.

Selective = Physically present in age-appropriate regular education settings in some but not all of the school day. Educational services provided in separate classroom, resource room, community or other settings during the remainder of the school day.

None = Physically excluded from age-appropriate regular education settings all of the school day; may have access to hallways or other settings, but at times separate from regular peers.

Levels of Academic Participation

Competitive = Academic expectations same as for peers, though workload may be adjusted. Evaluations same as peers.

Active = Academic expectations less than peers, but similar content. Workload adjusted. Academic progress judged by individual standards.

Involved = Academic expectations minimal. Student included in class activities to the extent possible. Alternative activities used when needed. Evaluations by individualized standards.

None = No academic participation expectations. Student is passive during most learning activities in the regular class. No evaluation of academic progress.

Levels of Social Participation

Influencial = Chooses whether to be involved in social context w/typical peers. Actively participates in social interactions. Influences activities of the social group.

Active = Chooses whether to be involved in social contexts w/typical peers. Actively participates in social interactions. Usually does not directly influence the activities of the social group.

Involved = Chooses whether to be involved in social contexts w/typical peers. Participation may be passive. No direct influence on group activities.

None = Not involved in social interactions w/typical peers.

Levels of Independence

Complete = Able to participate in an activity without human assistance.

Independent with Set Up = Independent in an activity with human assistance to set up educational materials, AAC or other equipment, or to adjust physical position.

Assisted = Able to participate in an activity with physical or verbal assistance from a teacher, paraprofessional or student peer.

form from www.kellyfonner.com - 2021 – participation plan adapted from Beukelman & Mirenda, descriptions from Musselwhite

Image 1: Participation Model Worksheet (Continued)

sus when answering questions; directing personal need staff, not just being done to; and the power of social messaging. One student on Kelly's virtual caseload has been increasing her social participation through funny greetings and goodbyes (e.g., "give a hug, ladybug"), as well as increasing her self determination through the use of sassy comments and important messages (e.g., "I'm raising my hand, I want a turn"). This is an example of a practice that increased during virtual learning and is now becoming automatic during in-person and continued virtual interactions.

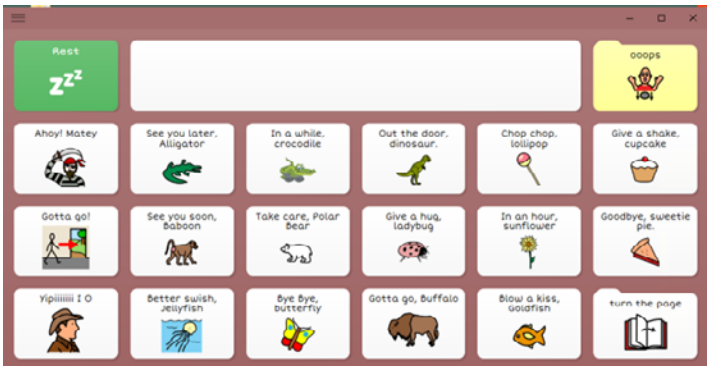

Image 2: Fun Goodbyes Screen Shot of page from AAC system that includes silly departure messages such as "Got to go Buffalo!"

HOW DID WE MAKE THE SUDDEN SHIFT TO VIRTUAL LEARNING?

The sudden shift to teletherapy and teleteaching was overwhelming to many clinicians and educators, despite their years of experience or comfort with technology. First and foremost we relied on the foundational principles of AAC support mentioned above, which would not change. However, many of us needed to innovate and reinvent what our support looked like. One resource that we turned to was social media. People with teletherapy experience began creating Facebook groups, making YouTube videos, answering pleas for help, and simply supporting one another. Tech-savvy practitioners began creating materials and finding tech hacks to share with their colleagues. And with the increased time online people from around the world began connecting with each other more frequently or in new ways. Teletherapy expanded the world of digital activities and resources, which was challenging at first but has many benefits for future use. Digital resources are easily customizable to student interests. For example, making a book in Google Slides with a student's favorite characters or adding AAC icons to a digital game. We can be immediately responsive when a student expresses a new interest, simply by conducting a Google Image Search. Now that we have developed familiarity and creative use of these digital tools, we can also use them to increase interest, engagement, and motivation when in person with students/clients. **See Image 3 Personalized Activity.**

We have been and continue to be supported by companies who have ready-to-go online therapy and literacy linked materials. We used premade materials from sources such as PRC/Satillo's AAC Language Lab https://aaclanguagelab.com/ which has materials in 3 different symbol sets ($19.95/year); Assistiveware's Core Word Classroom https://www.assistiveware.com/blog/assistiveware-core-word-classroom which has amazing follow-along videos from SLP, Amanda Hartmann (the beta version is free); Cough Drop's Communication Workshop https://www.coreworkshop.org/ which one of Kelly's parents swears by for getting books and activities for her emergent communicator son; Avaz's Blogs https://www.avazapp.com/blog/ with im-

Image 3 : Personalized Activity

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plementation strategies and activity ideas; Boardmaker's Community https://myboardmaker.com/Activities/Search filled with Free resources and the Instructional Solutions with thematic activities (full access is $99/year); and Pre-Made activities and customizable templates on LessonPix.com ($36/year); and of course, there's always more. Think of writing an article here for CTG to share your ideas!

We also took tips from each other, in addition to these company resources, practitioners and educators have shared materials and videos. We've used activity ideas from Facebook, YouTube and Pinterest sites such as https://www.facebook.com/AACVoices , https://www.facebook.com/theaaccoach, https://www.facebook.com/LaurenSEndersMaCccSlp/ , https://www.facebook.com/SENSEableliteracy , https://www.youtube.com/c/swingsetmamas/about and many more!

How much fun has it been to watch the progression of the children whose families are sharing their AAC journey? Some of those families include the FaceBook pages of AAC Family Fun, Hold My Words, Learning with Curren, KM Communication Wins, Mason's Milestones, Gateway to PODD, and We Speak PODD. Many families and AAC users themselves share their journeys or helpful tips on Instagram including @click.speak.connect, @hannah.r.foley, @nigh.functioning.autism, @journey2lomah, @fidgets.and.fries, @afriendforlillybug, @julietteandcaleb, @motherhoodphasing, @lildebbos. Do not limit yourself to viewing the sites of children, watch videos from young adults and working professionals who are our models, our leaders and our teachers in how they integrate their AAC throughout their day at home, in the community, in recreation and at work. If you haven't watched presentations by AAC users yet, take advantage of their recorded webinars on the company websites, on AAC in the Cloud, and during the Closing the Gap and other online conference events.

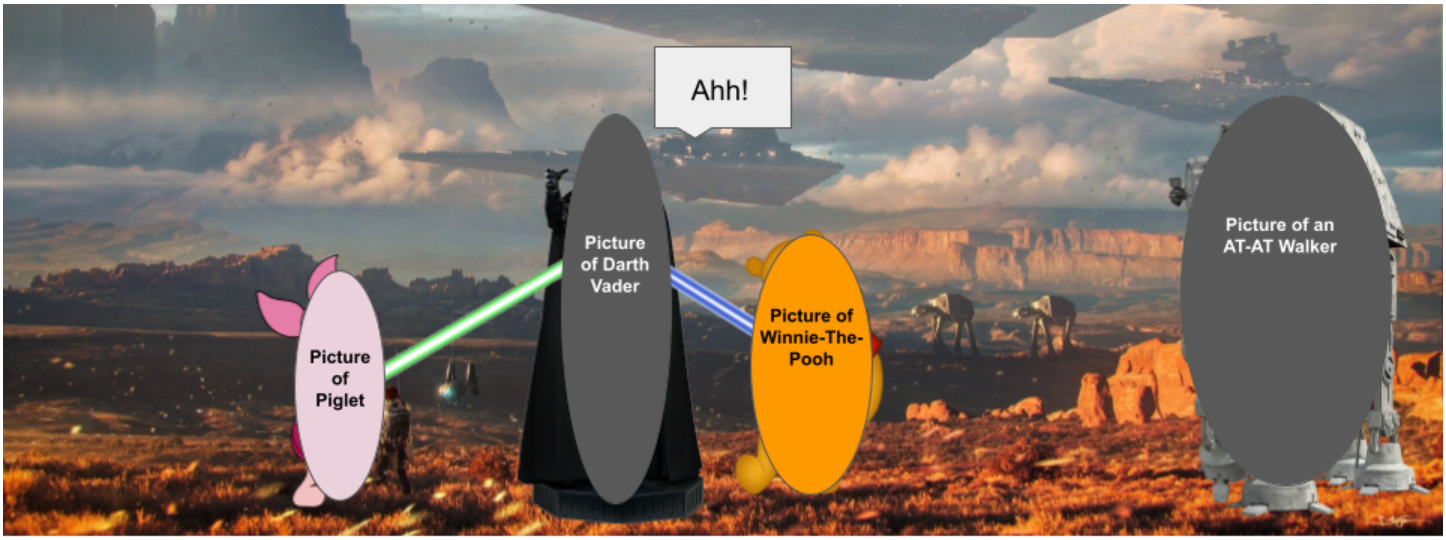
The great benefit of all of this sharing is idea generation; to get people to think outside their comfort zone in how they deliver AAC support to the students on their caseload and the children in their homes.

USING DIGITAL MATERIALS IN PERSON

When we return back to our schools and offices, should we clear out our hard drives and abandon our digital resources/streategies? No way! Digital materials are easy to adapt on the fly, which can be done both virtually and on a computer or tablet in person. For example, during a teletherapy session, one of Sarah's students shared that he liked John Cena and World Wrestling Entertainment (WWE). She did not have any games, books, or activities to respond to this interest and before virtual learning, she may simply have acknowledged the information and moved on. But on a computer, it took less than five minutes to create a language activity using pictures of his favorite wrestlers. The surprise, laughter, and joy expressed by the student were unparalleled. And in addition to the fun they had, he produced novel and spontaneous language using his AAC device.

The lesson learned after that session was to use digital tools to increase engagement through student interests. While we always strive to create activities that are personalized to an individual, we used to be limited in the number of physical toys, games, books, and activities we could buy and store. Now we can create or buy customizable digital activities and as a bonus, they take up no space in your office or classroom! Also, the creativity available with digital resources is sure to create something to communicate about, such as giving Piglet a lightsaber to save Winnie-The-Pooh from Darth Vader. **See Image 4: Star Wars.**

In addition to easily customizing language activities, there are many reasons that digital resources are here to stay in any setting. First, they are often cost-effective. There are many tools



They fight Darth Vader and Darth Vader is mad.

Image 4 : Star Wars

such as PowerPoint, Google Slides, Jamboard, and Canva that can be used to create pictures, books, writing activities, games and so much more. With time and creativity, the possibilities are endless in creating resources for people of all ages and ability levels. When using these activities in person they can be used dynamically on a digital device or printed out.

Additional free resources include YouTube which can be used in many ways, whether it is viewing a wordless short or listening to a read-aloud of a book that you do not have in your library. YouTube can be viewed on a smartboard, computer, tablet, or phone. Gifs are also a fun way to incorporate students' favorite characters or get them laughing. The extension GIPHY can be downloaded for free in the Chrome Webstore.

Another benefit of digital materials is that they are easily shared with other people in the communication circle of support. For example, after creating a book about a student's favorite characters it can be shared with caregivers, teachers, or friends so that the student/client can communicate about it with others. The consistency of materials across settings can help generalize skills that were targeted in therapy/the classroom to others settings. Many digital activities can also be printed out so that AAC users can take physical artifacts to share with other communication partners.

Curating digital resources during distance learning was certainly not time wasted. Digital activities are often easy to pull up on the fly, which helps us follow our learner's lead. All you need is a device and you have quick access to endless activities. One helpful tip is to keep resources well organized. This can be done using Google Drive, Google Keep, Wakelet, Padlet, or a Google Slide deck with hyperlinks.

NEW WAYS TO WORK WITH FAMILIES AND CAREGIVERS

During the past year, many presenters, practitioners, and educators have mentioned an increase in parent and caregiver participation since the beginning of the pandemic. We haven't seen hard data on this as yet, but there is an awful lot of discussion about this increase in the positive outcomes for children who use AAC. Whether that is due to the virtual setting alone, the increased engagement level in activities, children spending full-time at home, or virtual exposure to other AAC communicators. From an instructional setting that was forced upon us, virtual teaching environments may be found to be one of the big "game changers" in AAC intervention practices. Not that some practitioners weren't engaging their AAC using students prior to the pandemic, but oh, the increase in the number of those practitioners that HAD to "up their game"!

The sudden shift to a virtual world also forced practitioners and families to become more familiar and comfortable using digital tools and virtual meeting platforms. In some cases, it became easier to schedule meetings with teams when no one had to travel. Digital tools such as creating "how-to" videos, or informational videos were more widely used. This provided families and caregivers with access to AAC support, without having to come into school or attend a full-day workshop. This accessible support is certainly something to continue to offer even as we resume in-person meetings again in this "new normal."

On her caseload, Kelly has parents that have their children enrolled in the Ahern Academy Cooperative, an online forum for supporting the home education of students who use AAC https://www.aacvoices.org/ahern-academy.html (fee per class) . One of the benefits they report to these online classes of AAC communicators has been family members seeing the interaction and support strategies of other family and caregivers. Online students may get a chance to interact with other AAC communicators online that are not available for interactions locally.

BACK TO THE FUTURE… RETURNING FACE-TO-FACE

In conclusion, let us reflect on lessons we have learned during virtual learning and use them to provide more engaging and effective support for AAC use as we return to face-to-face instruction. In an effort not to "throw the baby out with the bathwater" we will maintain evidence-based foundations and continue to innovate and adapt even when we move away from virtual learning. As with any technology field, AAC support is ever-changing, and as Maya Angelou said, "do the best you can until you know better. Then when you know better, do better." ■

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Wordless Books:
A UDL Approach to Supporting Language and Literacy Development

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INTRODUCTION

It is critical for students to develop meaningful interactions around print across a variety of instructional approaches. The connection between literacy and communication is well established (Snow, et al., 1999). Research suggests that when students have complex communication needs, this may influence the way adults interact and respond to them around reading. Despite being in a literacy-rich environment at school or home, students with communication needs are less involved in literacy activities compared to their peers without disabilities. Adults may have more control of the conversation, tend to ask yes/no questions instead of open-ended questions, provide fewer opportunities for interaction, interrupt conversations when augmentative and alternative communication (AAC) is used, and concentrate on the technology more than the child (Erikson, 2017).

WHAT IS THE IMPORTANCE OF SHARED READING?

One component of comprehensive emergent literacy instruction is shared reading. A substantial body of research has demonstrated the widespread benefit of authentic, natural interaction that occurs between adults and children during shared reading (Clendon et al, 2014, Ezell & Justice, 2005). Supporting language and literacy skills such as oral language, phonological awareness, alphabet knowledge, and print awareness (Erikson, 2017; Browder et al, 2011), shared reading also aims to maximize interactions and opportunities to connect with text in a natural context. While researchers and practitioners have called for students with complex communication needs to have access to comprehensive literacy instruction in inclusive settings, a gap in applying this research to practice exists.

Shared reading is a powerful context for facilitating linguistic skill development in young children and a common practice for many families. Kaderavack and Justice (2004) found that speech-language pathologists (SLPs) favored shared reading because it was a contextually relevant and flexible approach to teaching language foundations. The dynamic context of shared reading can easily be adjusted to meet a particular child's language abilities and intervention goals.

From a service delivery perspective, shared reading has many benefits including meeting the needs of a wide range of learners including young students who are learning language foundations, students who are learning English, students with language disorders, and students with complex communication needs. Shared reading is a part of a robust approach to teaching early literacy skills regardless of the student's age.

WHAT IS UDL AND WHY SHOULD I USE A UDL APPROACH TO TEACHING LITERACY AND COMMUNICATION?

Universal Design for Learning, or UDL, is an approach to teaching and learning that gives all students equal opportunities to succeed by removing barriers to learning. Inherent in UDL is the flexibility to adjust the learning environment in order to meet all learners' unique strengths and needs. The UDL framework is based on 3 main principles: Engagement, Representation, and Action & Expression. (CAST, 2018)

Designing instruction and intervention with these principles in mind, proactively supports diverse groups of learners to access information and show what they know. Considering the why, what, and how of learning maximizes student opportunities to understand content and provides the best opportunity for them to demonstrate what they have learned (CAST, 2018). Applying the UDL principles to reading instruction using wordless books provides students with opportunities to (a) engage in reading experiences with high interest reading materials that support student interest and build autonomy (engagement/why), (b) attribute meaning and build vocabulary including use of their AAC system or core vocabulary board (representation/what), and (c) allows a variety of methods for both non-symbolic and symbolic responses (action & expression/how).

The primary aim of UDL is to empower learners to be purposeful, motivated, resourceful and knowledgeable, strategic, and goal-directed (Morin, 2021). With this powerful approach, lessons are created and planned with all learners in mind and the approach has the highest probability of success in reaching the greatest range of learners to access and engage in learning, not just certain students.

WHY SHOULD I USE WORDLESS BOOKS?

Wordless books are valuable tools for literacy and language development because they engage the reader, regardless of reading level, to interact with the text, make predictions, think critically, make inferences, and storytell. It is also a context for developing a more rubust vocabulary, understanding of story structure, and narrative language skills.

Narrative skills are the ability to use language to tell a story. As children develop narrative skills, they begin to follow simple rules of storytelling such as sequencing the events, how the characters interact and feel, and establishing a plot or story line. Narratives can be concrete, based on true events and personal experiences, or abstract created from their own imagination and ideas.

Story Grammar

A major aspect of narrative development is story grammar, which acts as a cognitive map to understand and generate narratives. The various elements of the story, such as plot, setting, characters, problem, solutions, feelings, theme, etc. are a predictable structure that supports student's reading comprehension, or the ability to process a story efficiently. School curriculum is based on reading and writing using this structure so it is essential for student success.

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Shared Context and Visual Supports

One component of narrative language is being able to develop a shared context. Wordless books provide visual support for a shared context when describing story settings and illustrate the sequence of events. This supports students to communicate about different aspects of the text, including characters, their perspective of story events, characters' motivations and thinking process (metacognition), what the reader knows versus what the character knows, make predictions and inferences, and more!

Vocabulary Development

Another component of narrative language is vocabulary development. Speech-language pathologists (SLPs) and teachers use several strategies to increase the length and complexity of a students' expressive vocabulary, including asking open-ended questions, modeling specific comments on each page, and providing wait time, in coordination with using AAC systems. Selecting books that are relevant and meaningful to the student support generalization of these skills across contexts. As narrative skills develop, instruction can include texts that are increasingly complex with more events and abstract ideas and thus more complex vocabulary.

Universally Accessible

Wordless books are accessible in all languages because there is no text to translate or read. The reader generates their own narrative about what they think is happening in the illustrations. Students who are multilingual can generate narratives paired with wordless books in their home language(s) as well as their language at school. With wordless books, all families can participate in shared reading activities regardless of language barriers or literacy skill level because they are universally accessible.

Strategic Skills for Communication

There is no "right" or "wrong" way to read a wordless book. Each student can create their own story from the same pictures teaching flexibility in language across the same context. By modeling that there are many ways to say the same thing or how different perspectives lead to different interpretations, teachers and SLPs support students to develop their authentic, unique voice.

Taking the Lead

Adults help students learn to take the lead during shared reading by providing long pauses, waiting for students to communicate, and responding to students by repeating what they communicated and adding more (Project Core, Tar Heel Shared Reader). Pausing for 5-10 seconds (or more!) gives students the time they need to initiate and generate their response. Encourage students to participate without physical support. Hand-over-hand assistance doesn't engage students cognitively or support independence (www.sharedreader.org). Students should be encouraged to participate without requiring it. Using these strategies, students have increased opportunities to lead the interaction about text as well as develop their own unique voice. Selecting high interest materials that are age respectful and engaging, invites participation and allows the student to share what they know, observe, and are curious about in a shared context.

Supporting Inclusion

Planning lessons with wordless books supports the participation of both emergent and conventional readers simultaneously using one text which can be accessed by all. To design a lesson with UDL principles in mind, means that teachers and therapists are anticipating, predicting and hypothesizing the variability of needs for their students from the start. The most inclusive environments provide multiple pathways for students to show what they know while addressing the content standards. In other words, teachers and therapists have "firm goals and flexible means (Novak, 2021)". Wordless books consider the language and literacy barriers to engaging in reading and offer flexibility and options that meet all students' needs, whether you are working with emergent or conventional readers.

WHAT ARE SOME IDEAS FOR IMPLEMENTATION?

The following specific shared reading strategies address one part of comprehensive literacy instruction.

Provide Texts that are Interesting as well as Age and Ability Respectful

Selecting high interest, age and ability respectful texts is key to inviting students to participate in shared reading activities. If it's not fun and interesting, then why do it? Don't forget to dig through print materials that are non-traditional "books" to hook your students' into reading. Try using the Lego(™) set building manual (that's a wordless book!), a catalog (for toys, clothes, seeds, furniture…whatever aligns with their interest), and/or a family photo album of a trip/event (have them write the captions/story). There is no rule that says you have to read a book

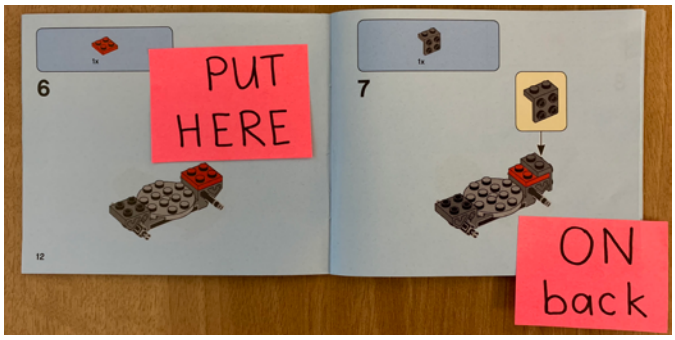

Image 2: A Lego (™) set building manual is an example of a wordless book that youth may already have at home and is highly motivating.

Image 3: Toy catalogs are another example of wordless books that children may have easy access to and readily available. They are free and filled with lots of interesting and new things to talk about.

cover-to-cover, word-for-word. You can make any book wordless by just covering up the text with a sticky note and rewriting the story at a level that's appropriate for your student.

Read with Enthusiasm and Expression

Read with an expression that matches the meaning of the text (Tar Heel Shared Reader). As you are reading, change your pitch, tone, volume, and speed to mark questions, important words, and text features. Give the characters a unique voice of their own that matches their character traits. For example, if you are reading Good Dog Carl by Alexandra Day, you may use a low pitched voice or woof for Carl the dog's voice and a high pitched voice for the baby.

Image 4: When narrating this page in Good Dog Carl by Alexandra Day, you could use a high pitched voice to act out the baby saying "Come get me" and a low pitched voice for Carl to say "Get on" when he comes over to the side of the crib.

Encourage and Support Communication and Interaction

Have your student's AAC system out and within arms reach during shared reading (Project Core). Attribute meaning to each of the student's efforts to communicate (Project Core). When the student communicates, repeat the things they say, point to the symbols they select, and describe their communication behaviors (Project Core). For example, if the student laughs when reading Goodnight Gorilla by Peggy Rathman when the gorilla lets the animals out of their cages, repeat this by laughing yourself, then point to "OPEN" on their AAC system, and say "you laughed because you think it's funny that the gorilla OPENed their cages." Hold your point on the word OPEN to model how to find this word in the student's AAC system. By doing this, you are modeling what the student might say and demonstrating how the student could use the symbols to communicate in a more clear, symbolic way.

Image 5: Using a low tech core vocabulary board, hold your point on the word you commented in order to model how your student could use the symbols in their AAC system to communicate about the story.

Make connections between the text and personal experiences

By making comments about the ways in which the text connects to things your students experiences, it brings literature to life. To support making text-to-self and other connections, ask your students open-ended questions such as "has something like this ever happened to you?" or "what does this remind you of in your life?" For example, in the wordless book Mirror by Jeannie Baker, encourage your students to make connections with how the two boys' lives are different, but also how many things connect them and how they are the same in their own family and life. (See images 6-8 on the next page)

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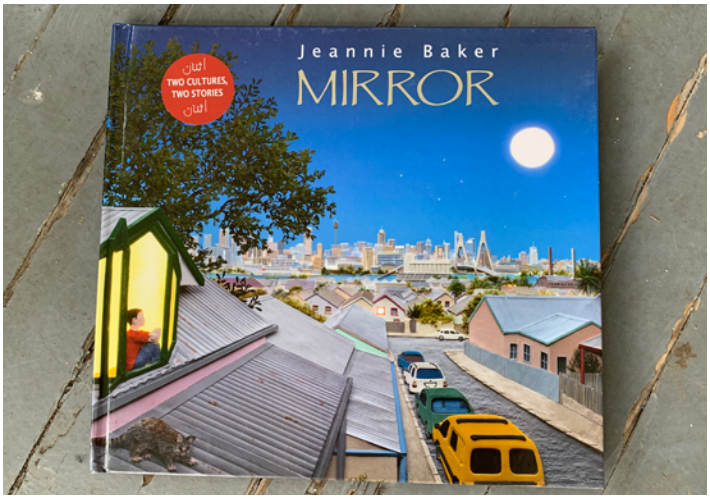

Image 6: Mirror by Jannie Baker is about two boys living in two different families in two different cultures. Their two stories share many similarities and differences illustrated throughout their various daily activities.

Image 7: This example in Mirror is meant to be read side-by-side inviting readers to compare and contrast the similarities and differences. The left side is the Western/Australian story and pages are presented left to right, how books are read in English. The right side is the Moroccan story and pages are presented right to left, how books are read in Arabic.

Core Vocabulary

Preplan comments for each page in the book you read to ensure that you are reaching your target (Project Core, Tar Heel Shared Reader). Use the Lesson Planning with Core Vocabulary to record your plan. Put a sticky note on each page with the brief comments including core vocabulary written on it of the words you plan to model. Have a low tech core board/poster or your student's AAC system in arms reach so you can model the core words as you say them. Remember to hold your point on the word so your student has time to see what you pointed to and how you found it within the AAC system. Invite and encourage your students to communicate in any way they can.

Examples of Lesson Planning with Core Vocabulary

Completed for: STUDENT

Grade:

Date Completed:

Team Members Completing this Plan:

Page in book/ Actiity	Language Function	What will you do and say to elicit this language?	1-2 core words	3-4 core words
Page #	Predicting	I Walk With Vanessa: Show the picture on page #__ of the girl staying up late/not falling asleep at night, point to her awake, pause, then comment using 1-2 or 3-4 core word phrases/sentences.	Now WHAT?	WHAT will SHE DO?
Title Page	Sharing information	Unspoken: Show the picture on the title page of the blanket over the fence, point to it, pause, then comment using 1-2 or 3-4 core word phrases/ sentences.	"It is ON the fence." "Safe to STOP HERE."	"STOP to EAT and DRINK." "WE CAN HELP YOU."

Developed by Lauren Kravetz Bonnet, PhD, CCC-SLP (June 2020)

Image 9: This is an example of Lesson Planning with Core Vocabulary specifically targeting various functions of language and explaining how you will model and elicit that language through preplanned comments.

Image 8: This sample page in Mirror illustrates the experiences and surroundings each boy and his family experiences when they go to buy things as part of their daily routine.

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Follow the CAR

To maximize interactions during shared reading, use the Follow the CAR strategy (Erickson, 2017, Clendon, et al. 2014, Tar Heel Shared Reader, Project Core www.sharedreader.org). CAR is an acronym that stands for Comment, Ask for participation, and Respond to all attempts. Start by turning to the first page in the book, read it, and wait 5 or more seconds to see if the student makes a COMMENT. If the student offers any book-related comments or communication RESPOND by repeating what they said and adding a little bit more. If they do not, ASK them to participate by saying "Tell me what you see" and then wait. More in depth information on using the CAR strategies can be found in the resources published by the University of North Carolina - Chapel Hill, Center for Literacy and Disabilities Studies - Shared Reader and Project Professional Development Modules. Erickson (2017) also discusses this in depth in her article Comprehensive Literacy Instruction, Interprofessional Collaborative Practice, and Students With Severe Disabilities. Using the Tar Heel Shared Reader site (https://shared.tarheelreader.org/), you can search for books and electronically write your pre-planned comments on each page and save them.

Image 10: In I Walk with Vanessa by Kerascoët, you could pre-plan the comment "now WHAT?" to demonstrate how to ask questions, make predictions, talk about metacognition and problem solving, as you simultaneously model core vocabulary of what the student might say using their AAC system.

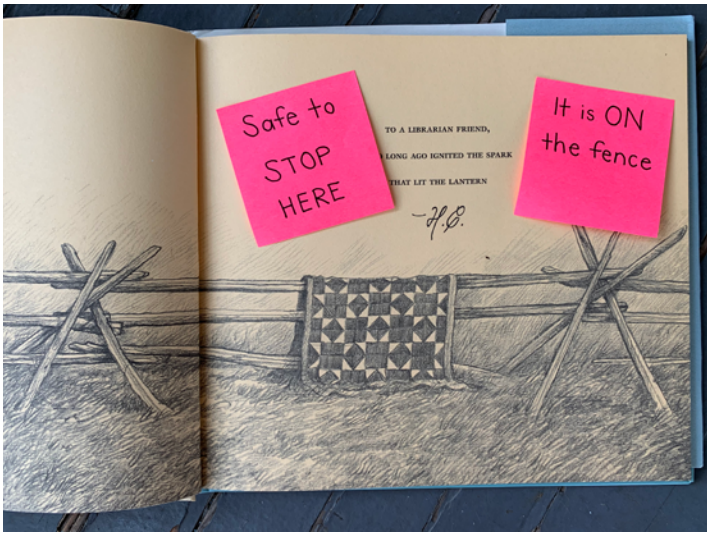

Image 11: In Unspoken by Henry Cole, you could discuss what the blanket draped over the fence meant to freedom seekers by modeling what a student could say using 1 or 2 core words, such as "ON" and/or "STOP HERE." Use a sticky note with your pre-planned comments on each page to be sure you address your intended targets.

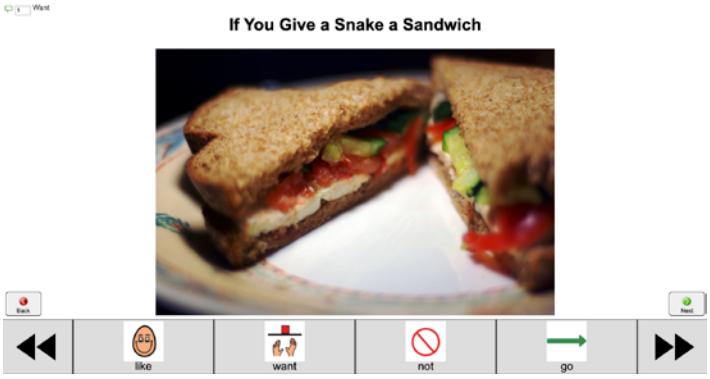

Image 12: Tar Heel Shared Reader allows you to type in your pre-planned comments on each page, save them, and also present the universal core words on screen as you are reading for easy and quick access.

CROWD IN THE CAR

Building on increased student engagement and comprehension, one strategy you can use is putting the CROWD in the CAR (Erickson, 2017, Clendon, et al., 2014, www.sharedreader.org). CROWD is an acronym that presents 5 different ways that ASKS students to participate while using the CAR strategies (Erickson, 2017; www.sharedreader.org). They are:

1. Completion - utilizes a fill in the blank technique, easiest to do using a repeating line book where the student can anticipate the next familiar line of the book. For example, using Pancakes for Breakfast by Tomie dePaola you can establish a repeating pattern with the text you narrate such as "no milk, go get some more" "no eggs, go get

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some more" "no flour, go get some more" "no butter…"

2. Recall - adult asks a question about what has already happened in the book without asking a question. For example, in I Walk With Vanessa by Kerascoët you could say "tell me about the bully."
3. Open Ended - ask an open ended question to encourage students to draw upon their background knowledge, there is not a single correct answer. For example, in Where's Walrus and Penguin by Steven Savage, you could say "tell me, what do you think about Walrus and Penguin's adventures together?"
4. Wh questions - adults are used to asking these types of questions during shared reading, these questions start with who, what, when, where, how, and why. For example in Tuesday by David Wiesner you could say, "how did the frog go from place to place?"
5. Distancing - relating the book to the student's life. For example, when reading Unspoken by Henry Cole, you could say "the girl helped the freedom seeker. Tell me about how you help others."

The CROWD strategy is used during the "A" or ASK phase of the CAR strategy. These methods can increase student engagement and build language skills through a variety of different ways to communicate about the text.

Bloom's Taxonomy

Using the Revised Bloom's Taxonomy (Anderson, et al., 2001) a revision of the original Bloom's Taxonomy (Bloom and Krathwohl, 1956), plan a lesson that differentiates instruction and/or intervention based on individual student needs. The Cognitive Process Dimension (Anderson, et. al) represents a continuum of increasing cognitive complexity, from foundational skills (e.g., naming/labeling, matching, restating, giving an example) to higher order thinking skills (e.g., testing, judging/debating, hypothesizing, (re)constructing, and inventing). Apply this framework to using wordless books during shared reading might look like this:

1. Remembering - naming setting, listing characters, recalling basic information
2. Understanding - retelling the story using picture supports, sequencing 3-4 picture cards from the story, discussing characters' feelings, summarizing the main idea
3. Applying - using knowledge acquired from this book and applying it to other situations, constructing new

Image 13: This image from of Iowa State's Revised Bloom's Taxonomy demonstrates how the cognitive process and knowledge dimensions interact with one another. This is a powerful tool when planning learning objectives using a UDL framework and applying it to shared reading activities using wordless books.

idea - what else could the character have done to get the same outcome, drawing a conclusion

4. Analyzing - compare and contrast different characters/settings, categorizing different parts of the story (e.g., problem, solutions), examine different pieces of evidence from the story to conclude an idea/theme, distinguishing between fact and opinion
5. Evaluating - justifying or defending their opinion based on evidence from the story, prioritizing possible solutions to a problem presented in the story, reflecting on the solutions and judging their effectiveness
6. Creating - developing an alternative ending to the story, designing a new episode/scenario, hypothesizing what might happen in the future to these characters in other settings/places/times

For more information about the Cognitive Process and Knowledge Dimensions, go to Iowa State University's Center for Excellence in Teaching and Learning, teaching with effective educational practices, Revised Bloom's Taxonomy.

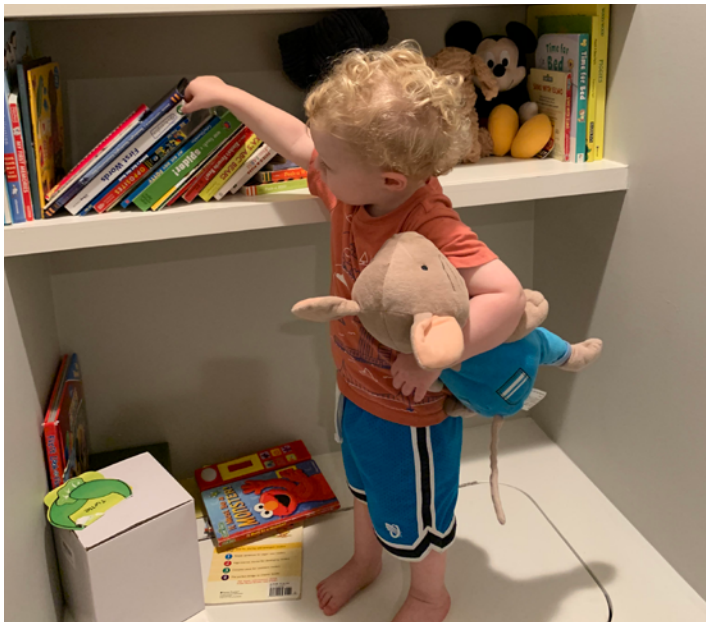

Image 14: There are so many titles to choose from when selecting a wordless book. Follow your students' lead and let them pick what interests them to get started.

HOW DO I FIND WORDLESS BOOKS? (MAKE INTO A CHART)

Examples of Wordless Book Titles

1. Reading Rockets - https://www.readingrockets.org/booklists/our-favorite-wordless-picture-books
2. Good Reads https://www.goodreads.com/list/show/26375.Best_Wordless_Picture_Books

Free, Open Source Materials

1. Tar Heel Reader
2. Shared Tar Heel Reader
3. Epic! Books
4. Your school library
5. Your public library
6. Free Little Libraries in your community

Paid Educational Resources

1. Reading A-Z has a component in it that you can turn any book into a wordless book
2. Used books or library book sales
3. Book stores/retailers

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Accessible Lessons – From Designing to Creation to Instruction – Making it All Work – Part 2

By Cassie Frost
Thursday, October 28, 2021
3:30 pm – 5:00 pm (Central Daylight Time)

Come on a journey from designing, to creation, to instruction. Review the design process and learn how to create accessible content and lessons from the beginning. During this session, you will have the opportunity to get hands-on in the process of creating accessible lessons and classroom content. At each step, examples, discussions, and new tools will be shared.

Participants will have the opportunity to explore new creation tools and evaluate the ease of use and barriers to accessibility for each. Reflect on common instructional methods and how those can support or increase barriers to accessible lessons. Explore what it means for content to be accessible and learn how to create materials that are accessible on their own or work fluidly with assistive technology tools.

All Learn: Curriculum-based High-Leverage Supports, Strategies, & Tools – Part 1

By Kelly Fonner and DonnaMcNear
Tuesday, November 2, 2021
3:30 pm – 5:00 pm (Central Daylight Time))

Do you have a child or student(s) who require significant supports, intensive instruction, modified materials and curriculum, delivered through accessible and engaged participation with technology, tools, and of course, inclusive practices? For students with high needs who have visual, physical, social, intellectual and/ or Complex Communication Needs(CCN), the classroom setting has had a multitude of barriers from learning.

During this 3 part webinar, we will share strategies and planning for specially designed instruction through the use of accessible educational materials, assistive techn ology, and modified curriculum. Examples of tools and strategies will be delivered through video and print case studies. Mere participation is not enough for students with high needs; engaged, excited and scaffolded learning experience daily is a must.

During this 1st webinar, Donna and Kelly will discuss Science of Brain Development and opportunities provided by switching up terminology used around students with high needs. They will describe specially designed planning processes that position barriers as opportunities to learning, integration and increased participation. Participants will have the option to complete one of these planning processes to receive feedback from the presenters.

All Learn: Curriculum-based High-Leverage Supports, Strategies, & Tools – Part 2

By Kelly Fonner and DonnaMcNear
Thursday, December 9, 2021
3:30 pm – 5:00 pm (Central Standard Time)

During this 3 part webinar, we will share strategies and planning for specially designed instruction through the use of accessible educational materials, assistive technology, and modified curriculum. Examples of tools and strategies will be delivered through video and print case studies. Mere participation is not enough for students with high needs; engaged, excited and scaffolded learning experience daily is a must.

During this 2nd webinar, Donna and Kelly will take a closer look at specially designed curriculum, With AEM, AAC and other Assistive Technologies available, educators have often hodge-podged together opportunities for "participation". In recent years, publishers and manufacturers have been creating universally designed curriculum and time will be spent reviewing several of those options. We will also discuss data collection planning and have the option to receive feedback from the presenters.

All Learn: Curriculum-based High-Leverage Supports, Strategies, & Tools – Part 3

By Cassie Frost
Tuesday, December 15, 2020
3:30 pm – 5:00 pm (Central Standard Time)

During this 3 part webinar, we will share strategies and planning for specially designed instruction through the use of accessible educational materials, assistive technology, and modified curriculum. Examples of tools and strategies will be delivered through video and print case studies. Mere participation is not enough for students with high needs; engaged, excited and scaffolded learning experience daily is a must.

During this 3rd webinar, Donna and Kelly will assist you to pull together your current strategies and tools through introducing an organized, strategic plan for implementation. This 7-part accommodation framework for integrating accessible instructional materials and tools will be demonstrated through example students from their consultation caseloads. They will also share with you how to design a short-term plan for getting off to a great start!

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How ReadSpeaker's Text-to-Speech Software Enables Accessibility for ALL Learners

When most people think about "accessibility" in education, they tend to imagine services specifically designed to support students with disabilities. However, accessibility is much more than that. It's about providing access to learning tools that benefit all students, regardless of their abilities. The text-to-speech (TTS) solution provider ReadSpeaker is one of these remote learning tools that countless K-12 and higher education students have come to trust to deliver that universal access. ReadSpeaker is the only TTS product that provides true accessibility for all students and integrates with today's leading learning management systems (LMSs).

ReadSpeaker is an advocate of Universal Design for Learning (UDL) and comes with the tools needed to ensure good instructional design. The platform removes barriers to learning and gives students flexibility over how they receive information, demonstrate their knowledge and skill, and engage with materials. ReadSpeaker's ability to fulfill UDLs guiding principles stems from its long history in facilitating accessibility in education.

ReadSpeaker
pioneering voice technology

ReadSpeaker was founded in 1999 by Fredrik Larsson and Niclas Bergström. Both had different reasons for wanting to explore TTS solutions. Larsson, who is blind, wanted to help others who have the same condition access the internet, and Bergström became interested when a family member's ability to read started declining. Together, Larsson and Bergström built ReadSpeaker into what it is today.

More than 20 years later, 1,500+ institutions and 10,000+ customers across the globe use ReadSpeaker to enhance learning experiences for all learners. Since its founding, ReadSpeaker has expanded beyond TTS and now offers a broad suite of accessibility tools and resources, many of which were also invaluable during the COVID-19 pandemic and will continue to be going

KATHY WOOD, Education Partner Manager. Kathy works to nurture and broaden relationships with our educational software partners. She brings with her over 20 years of experience in education software and LMS technology. She is an avid runner, connoisseur of books, and a mom to two teenage boys and several rescue animals.

GINGER DEWEY, Educational Development Manager. Ginger works to help clients get the most use out of the ReadSpeaker Suite of Learning Tools. With over 35 years as an educator in both K-12 and higher education, Ginger is an advocate for accessibility and the Universal Design for Learning (UDL). She is a proud mom of a Civil Engineer and a Sargent in the Marine Corps and enjoys crafting and reading.

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forward.

What separates ReadSpeaker from other TTS products and accessibility tools is its comprehensive scope and usability. Nowhere else can you find a plug-and-play solution that works seamlessly with existing education technology and meets the unique needs of individual learners, including those attending learning institutions at a distance.

ACCESSIBILITY IS GOOD DESIGN

Accessibility in education is no longer meant solely for a subset of students. It's something that institutions now have to consider for every single learner, especially when teaching remotely. Administrators learned this valuable lesson over the last 18 months as they watched students of all ability levels adapt to distance learning, and institutions democratized their LMSs in hopes of increasing accessibility across the board.

Along the way, administrators began learning what worked and what didn't under remote and hybrid learning models. One key discovery was that LMSs needed to expand to not only offer accessibility tools, but to help students engage. In other words, accessibility evolved into an essential consideration in platform design.

ReadSpeaker has operated with this understanding for decades, which is why the platform proved so successful during the pandemic. ReadSpeaker is compelling, customizable and easy to use, making it a powerful resource for meeting students where they are and allowing them to embrace learning in their methodology.

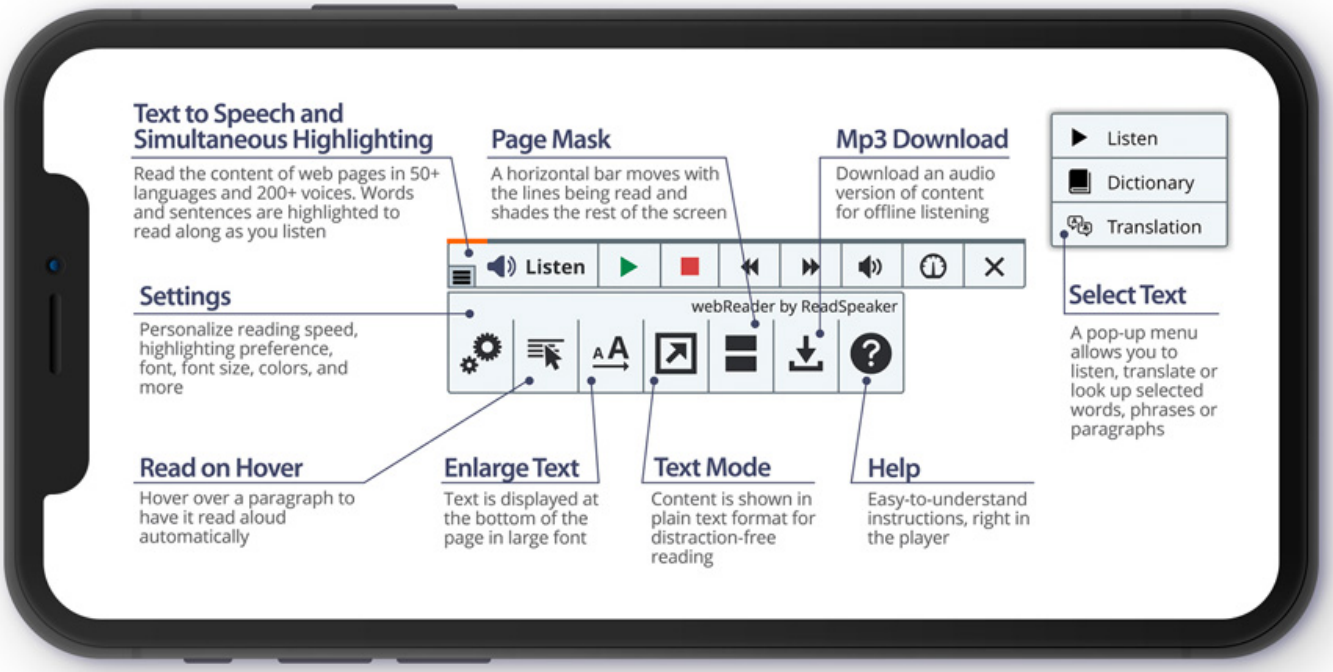
For example, on the TTS side, ReadSpeaker allows users to choose from 200+ male and female voices in 50+ languages. Learners can speed up or slow down their reading as needed to align their visual and auditory processing. All ReadSpeaker voices are humanlike and relatable, a reflection of the company's commitment to working with talented voice professionals worldwide.

Moreover, the company is continuously improving enunciations by including discipline-specific terms. Institutions can also request customizations to the ReadSpeaker dictionary to read acronyms, pronounce names, and speak words correctly for their specific locales.

On the design front, ReadSpeaker gives total control to students over how the platform displays content. Learners can adjust fonts, font sizes, font colors and filters, as well as change how the platform highlights text that is actively being read. These options and more create a dynamic bimodal learning experience that doesn't exist in the typical classroom.

In addition, ReadSpeaker comes with proof-listening and dictation capabilities, giving students more ways to check their work. Its capabilities include reading typed text aloud, pausing naturally for punctuation and drawing attention to clumsy sentences, missing words, or unintentional words that are easy to miss when proofreading. All of this functionality is packaged into easy-to-use tools. ReadSpeaker embodies good design and is directly in line with the UDL principle of providing flexible learning opportunities that accommodate learning differences between individual students.

Gold Lawson-Cohen, who is a doctoral learner at Grand Canyon University, affirms that ReadSpeaker is crucial for her as a higher education student. "Having someone read back to me my



work is imperative for me to make sure that I wrote it properly," says Lawson-Cohen. "It helps me with a lot of my editing process...especially for longer articles. Being able to change reading speed and having the ability to upload documents to ReadSpeaker's library is very helpful...ReadSpeaker's text-to-speech software has been a godsend."

Dr. Trish Trifilo with Wayland Baptist University explains why ReadSpeaker is such a unique offering in the marketplace. "You can't just assess individual tools," says Dr. Trifilo. "You have to evaluate the accessory tools that help a variety of learners." She adds, "Can you change the pace of the read? Can you slow down speech? Speed up speech? Can you match it with highlighting? Can you change the color of the highlighting? ReadSpeaker combines all of these different options, creating a more enriching overall learning experience."

Without ReadSpeaker, institutions have to stitch multiple tools together to give learners the customizations they want, which involves students needing to learn multiple platforms. ReadSpeaker delivers this functionality in one place for learners of all abilities to leverage.

ReadSpeaker also takes some of the burden off parents, many of whom are still unsure of how to cultivate positive learning environments for their children at home. JoAnne Glenn, Principal of the Pasco eSchool, acknowledged this reality and approached her remote learning strategy accordingly.

"We recognized that we were going to encounter parents who weren't used to supporting online learning, working from home, or supporting multiple students at home," says Glenn. "The ability to empower young learners with ReadSpeaker so that they could engage in instruction helped us feel better about the plan we were developing in that period."

Rather than have parents provide engagement for students learning new material, ReadSpeaker fulfills this need, going above and beyond what other virtual TTS platforms can offer. In higher education, ReadSpeaker also plays a crucial role in meeting accommodations or preferences that don't get disclosed early on, as will be discussed in more detail in the next section.

PLUGGING EQUITY GAPS

Equity in education is vital for all learners today. The reason is that many students prefer or need to learn in ways that differ from how they are taught in live, in-person settings. These students are frequently underserved unless they attend institutions that prioritize accessibility. And equity issues persist when educational institutions don't address accessibility problems or don't have the resources to do so effectively.

Adding complexity to this issue is that it's common for students who could benefit from accessibility tools to forego them willingly. Some are hesitant to pay out of pocket, while others are worried about the perception associated with using such accommodations. Additionally, students who proceed from K-12 might not have the funds for testing to document accommodations. Therefore, they don't receive what they need up through the college level.

For all these reasons, it can be difficult to address equity gaps, even when administrators know they exist. Twenty-six percent of adults in the U.S. have some sort of disability. In higher education, 60-80% of students do not disclose their disability to their university. While accessibility laws have been in place since 1972, it wasn't until the last 5-10 years when Office of Civil Rights (OCR) began working more closely with institutions to audit online courses, websites and more to bring them up to current standards. If an institution does not make needed accessibility changes, the OCR will prosecute the institution.

In many ways, the COVID-19 pandemic was a forcing mechanism that revealed how important accessibility tools are in addressing inequities in education. In the sprint to launch virtual learning, administrators had to think creatively about how to reach all students at all levels. Institutions were able to re-create some of the elements of a traditional classroom experience, but were not able to re-create all of them. Thus, faculty were tasked with finding new ways to engage learners. Many of these new tools that aided in leveling the playing field for students also helped institutions embrace a UDL approach.

Administrators today must factor UDL principles into course design and ensure they account for remote/distance learning always. Doing so allows students to consume information in whatever form they need to be successful.

Accessibility tools give learners more options for exploring new content and internalizing materials. Students who would otherwise fall behind in the classroom, like those who speak English as a second language (ESL), have more opportunities to learn at their own pace with modern accessibility tools. And learners who would usually feel self-conscious about using accessibility tools have more opportunities than ever to test them freely.

ReadSpeaker is instrumental in addressing equity gaps for institutions at scale. "We had to bring on almost 40,000 elementary students," recalls JoAnne Glenn with Pasco eSchool about the early days of the pandemic. "Many of [our students] are devel-

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oping readers who are straddling the line between learning to read and reading to learn. So, knowing that we could use [ReadSpeaker] to read text aloud to students, we knew it would be an important piece of what we could offer our families."

Glenn also noticed how ReadSpeaker supported students who typically didn't get specialized attention in institutions. "We found along the way that students who were struggling readers who weren't identified for specific support appreciated the opportunity to have text read to them to make sure they were comprehending all the material," says Glenn.

ReadSpeaker users don't have to navigate away from the platform to clarify what they are reading or hearing. They have what they need at their fingertips. For instance, Wiktionary and Google Translate are integrated with ReadSpeaker. Both tools make it easy for ESL learners to understand unfamiliar terms and convert confusing phrases into their native languages.

ReadSpeaker plugs new and old gaps in education that are only becoming more pronounced as a result of the industry-wide shift to remote learning. The platform allows students to discover how they learn best and optimize their learning outside the bounds of the traditional classroom experience.

ACOMMODATIONS AND ASSESSMENTS

When in classrooms, students with learning disabilities can take advantage of certain accommodations and tools during assessments. For instance, those with IEPs, 504 plans, or higher education accommodations are able to have tests read to them or get more time to complete assignments. However, human readers tend to give off unintentional signals, such as facial expressions or voice inflections, which can give learners receiving accommodations an unfair advantage over their peers who don't receive oral accommodations. Using ReadSpeaker removes those unintentional signals and provides an equal experience for all learners.

ReadSpeaker Text to Speech for Learning
YouTube: Video Link

On top of offering TTS functionality and various accessibility tools, ReadSpeaker has built-in features to maximize student success on any type of assignment. For instance, ReadSpeaker comes with a Reading Ruler tool that students can use to block content outside of their primary focus area. The ruler acts like a paper note card that students use when reading physical textbooks to stay on the line they are reading.

Similarly, ReadSpeaker has a Page Mask tool that shields text above and below a specific range of content that students want to focus on. Learners can make the mask bigger or smaller depending on their preference and unique needs and increases focus on the material being read and allows the learner to pick up on the nuances in the text. Mentioned earlier, color filters are also available to give students several choices for finding font and background color combinations that are conducive to their reading preference

ReadSpeaker can also handle math and STEM content, setting it apart from many accessibility platforms. "In our department, we believe in teaching people to fish," says Alice Wershing from Pellissippi State Technical Community College. "We want sighted students to be able to read all their materials. Up until we added ReadSpeaker to our LMS, our sighted students had to learn to use another piece of software, NonVisual Desktop Assistant, to hover over math content. [ReadSpeaker] gives them the opportunity to control how they consume their materials and use materials in a way that works for them."

"It's critical for a TTS solution to be able to read STEM content," adds Lamar Younginer, Director of Educational Technology at Florence-Darlington Technical College and CEO and Co-founder of Virtical Education. "STEM is becoming more and more prevalent in our society, our economy, and in our schools. The fact that Readspeaker works as well as it does is huge."

Educators also have access to proctoring solutions that make it easier to ensure academic integrity. Institutions using proctoring software do not have to make other arrangements because ReadSpeaker works with both the proctoring software and the LMS, allowing learners to continue to use the same tools while being proctored aids in reducing learner stress.

Kevan Watkins, former Director of Accessibility Services at Georgia Northwestern Technical College, has found ReadSpeaker to be particularly helpful in situations in which students taking online or hybrid courses need access to tests deployed in

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the Blackboard LMS. "If a student with academic adjustments is taking a hybrid or remote learning course, their tests are completely accessible in Blackboard now," says Watkins. "There's no need for an additional reader."

So, not only does ReadSpeaker empower students with the tools they need to focus, it also creates additional capacity for educators and administrators.

EASE OF IMPLEMENTATION

Ease of implementation is crucial when evaluating potential accessibility solutions. Administrators, educators, students, and parents are still operating under stressful conditions, even as institutions reopen their doors for the 2021-2022 academic year. Given this backdrop, it's unreasonable for many institutions to implement complex applications that require significant training and IT development.

When accessibility tools and TTS platforms are frustrating to use and hard to implement, students don't adopt them. Consequently, institutions miss out on important opportunities to engage remote learners, reduce inequities, and deliver positive educational experiences.

ReadSpeaker, again, differentiates itself here in multiple ways. The platform integrates with today's leading LMSs, saving institutions from having to transition to new solutions or tap IT for development support. ReadSpeaker doesn't require users to download any software and is compatible with today's most widely used devices, browsers and operating systems.

Additionally, ReadSpeaker works with nearly any type of coursework or content. Outside of traditional learning materials, the platform can add speech capabilities to online documents, websites, applications and online forms. Instructional videos are available on-demand for those who need help with specific features or use cases, and the organization is constantly providing professional development for its user base.

Dr. Trish Trifilo of Wayland Baptist University has noticed students using ReadSpeaker in surprising ways since implementing the platform. "Lots of students use ReadSpeaker when they are traveling or commuting to listen to certain documents," she says. "Many students also use [the platform] at home in situations where they don't want to distract others, like when they are reading a document in a darkened room."

ReadSpeaker is also lauded by those who implement and manage the platform from a technical standpoint. "[ReadSpeaker] just works with both our website and our Canvas installation," says Eric Turner, Assistant Director of Web and Portal Services at Mt. San Antonio College. "We didn't have to do anything extra to make it work post-pandemic. It was a quick setup, so it was something we didn't have to worry about."

While ReadSpeaker offers free technical support for the entire life of a license, many users find they don't use those channels. "The person responsible for managing ReadSpeaker here doesn't actually know the company's tech support number or even how to get help and that's a good thing in his book because he hasn't had to look that up very often, which is great," says JoAnne Glenn of Pasco eSchool. "He was able to set the platform up and forget about it."

In a world in which institutions continue to offer some form of hybrid or remote education, having a reliable platform like ReadSpeaker that all stakeholders appreciate will only grow more important.

CLOSING EDUCATION GAPS WITH READSPEAKER

As educational institutions look to the future, administrators must consider ways to improve accessibility for all students, especially in a world with remote learning. While accessibility is essential for students with learning disabilities, the right tools and platforms can enhance outcomes across the entire learning ability spectrum.

Fortunately, ReadSpeaker is designed for the modern education landscape, and its advantages over other offerings are clear. ReadSpeaker aids in improving learning outcomes and literacy rates. This, in turn, leads to more students completing their courses and achieving their goals with greater success.

At a higher level, ReadSpeaker enables institutions to attract and retain diverse student populations that would otherwise have to seek out alternative solutions. The platform is one of the most comprehensive, cost-effective tools available, making it the best choice for supporting education in every form across the globe for years to come.

As you can see, ReadSpeaker is for ALL students. For more information, visit our website www.readspeaker.com/education or email us at education@readspeaker.com. ■

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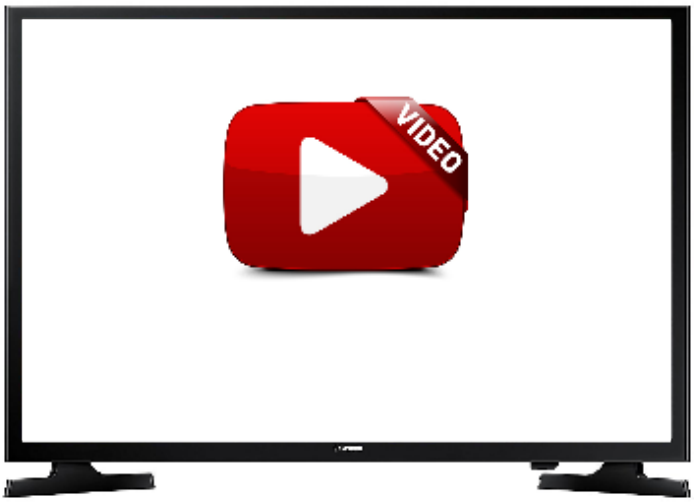
product spotlight

MOVIA Robotics – Introducing HomePal!

MOVIA Robotics helps children with Autism and other special needs unlock their potential through their unique robotic assistive technology. MOVIA's Robot-Assisted Instruction (RAI) systems help children with Autism and other special needs remove barriers to learning, socializing, and adapting… both in school and at home.

HomePal is an Educational Robot that integrates artificial intelligence, software, and hardware technology to provide a variety of facial expressions, body movements, and communicative interactions. MOVIA's HomePal provides a unique set of interactive capabilities that work wonderfully in the home or school environment, providing users with a heartwarming and educational experience.



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Scanmarker Air Pen Scanner – Assistive Technology Tool

Scanmarker Pen and Air is an invaluable tool for those with dyslexia and other learning disabilities. The integrated text to speech function in the Mac, Windows, iOS and Android software allows the user to hear the text being read back to them in real-time whilst it is being scanned.

The Scanmarker Air pen is a wireless, OCR scanning pen. With scanning lines of print, the pen completes optical character recognition and transfers it to another source. The Scanmarker Air is a text scanning tool available in a wireless and wired version offering copying text from a hard copy source to digital format for note taking, reading aloud, or translation. Easy to set up and use, the Scanmarker Air is a tool for students or individuals taking notes, reading and saving information in a digital format.

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BJLive! – Resetea

Resetea – A programmable & visual tool to manage time For many people, like those with ASD, time is an abstract concept and can be difficult to assimilate. Resetea allows the users to experience time in a visual and linear way, which makes it not only more comprehensible but it also helps to organize tasks more efficiently. Also, by understanding what happens next, anxiety is diminished and users have a feeling of calm and safety which is very important for their well-being.

Resetea has been designed by Andrés Collazos, a special education teacher, keeping in mind people with ASD (Autism Spectrum Disorder), cognitive or learning disabilities, dementia, and early childhood education. This device is the perfect ally when it comes to organizing a sequence of tasks or activities, since it allows you to see how much time is left for finishing each activity.

LEARN MORE

EazyHold Universal Cuff: Adaptable, Hygienic, and Oh So Comfortable!

Their patented EazyHold design gives children and adults the ability to hold onto tons of items with ease. EazyHold straps are made of soft, flexible food-grade silicone, hypoallergenic and latex free. Wash in the dishwasher or clean with disinfectant wipes. These silicone cuffs can be sanitized at temperatures up to 500 degrees and won't degrade!

With EazyHold you can easily accomplish all your daily living activities with independence despite physical conditions or disabilities that might be impacting your grip strength.

Their grip assist comes in multiple sizes, for infants to seniors, to help get a better grip on small to large objects. These flexible universal cuffs attach securely to enable a comfortable grip on eating utensils, writing implements, sippy cups, gait trainers, toys and more!

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EyeOn: The Next Generation Of Eye Tracking Has Arrived

Meet EyeOn, the world's slimmest, lightest-weight, fastest, and most accurate tablet with a fully integrated eye tracker. This Augmentative and Alternative Communication (AAC) device combines the portability of a tablet with the predictive power of eye-tracking technology for all-in-one, hands-free accessibility.

Designed to strike the perfect balance between form and function, the FDA-registered EyeOn stands out from the competition by delivering unprecedented accuracy and reliability, amplified sound, up to 10 hours of battery life, and high-resolution imaging day or night. Plus, its slim form is housed in a protective casing for unmatched durability

Say what you want, when you want — with the help of EyeOn. There's no heavy headset. No difficult calibration. No burdensome set-up procedure. It's just a powerful, portable, convenient and rugged tablet reinvented around your needs.

LEARN MORE

Google Chrome can now caption audio and video

Google recently added Live Captions to the desktop version of Chrome. With Live Captions enabled, Chrome auto-transcribes any audio playing in the browser, even if the sound is muted.

Captions make online content more accessible. If you're in a noisy environment, trying to keep the volume down, or are part of the 466 million people in the world who are deaf or hard of hearing, having captions lets you follow along to whatever content you are watching — whether it's viral feta pasta videos, breaking news or a scientist discussing their latest research.

Unfortunately, captions aren't always available for every piece of content. Now with Live Caption on Chrome, you can automatically generate real-time captions for media with audio on your browser. It works across social and video sites, podcasts and radio content, personal video libraries (such as Google Photos), embedded video players, and most web-based video or audio chat services.

These captions in Chrome are created on-device, which allows the captions to appear as the content plays without ever having to leave your computer. Live Caption also works offline, so you can even caption audio and video files saved on your hard drive when you play them in Chrome.

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Smartbox – Introducing Lumin-i – the first eye tracker for AAC with Smart Eye Technology

Lumin-i is a powerful and precise eye tracker created by Smartbox. Lumin-i is the first eye tracker for AAC developed with Smart Eye technology.

Key features include incredibly responsive performance and a large track box that tolerates a wide range of head movements and positions.

Lumin-i also offers a unique anti-reflection mode to help users who wear corrective glasses with coatings or filters.

A bespoke built-in camera unit has been created for Lumin-i, turning Grid Pad 12 and Grid Pad 15 communication aids into robust and dedicated eye gaze devices.

They developed Lumin-i in collaboration with Smart Eye – the global leader of AI-based eye tracking solutions for the automotive, aerospace and research sectors. Their trackers are used around the world by organisations including NASA, Airbus, Audi, Harvard University and Georgia Tech.

LEARN MORE

SignAll uses leading-edge AI technology to teach ASL

SignAll's technology uses computer vision and AI to make learning ASL more intuitive and personalized. Students can receive live feedback on their signing.

Using advanced natural language processing and machine translation methodologies, visual input is converted into meaningful data for effective sign language recognition.

SignAll Lab - Leading-edge technology for learning sign language. A compact modern workstation and ASL app for computers with advanced AI-driven tools for classrooms and businesses..

SignAll Online- Access hundreds of ASL videos on any device

Use SignAll Online, an ASL app for web, for complete flexibility to practice sign language on your phone, tablet, or computer.

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