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Voiceitt's Journey to make speech truly accessible to all

WHY VOICEITT'S MISSION IS MAKE SPEECH ACCESSIBLE TO ALL:

For at least 1.5% of the world's population, over 120 million people, communicating verbally is not an option as a result of medical conditions. These conditions, collectively called dysarthria, result in speech that is very difficult to understand.

Nearly 20% of all individuals will have suffered a cerebrovascular stroke by the time they reach 75, resulting in slurred speech for half of that group. Other causes of dysarthria and impaired speech include amyotrophic lateral sclerosis (ALS), Parkinson's disease (PD), brain cancer, and traumatic brain injury (TBI). Due to lack of neurological and motor control (often accompanied by other physical limitations), their speech impairments make it difficult for them to complete simple tasks like ordering a coffee, saying hello to a friend, and using a smart home device to control their home environment.

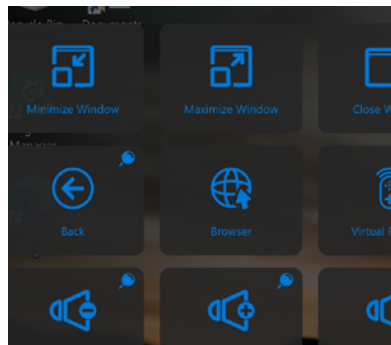Voice-driven technologies are increasingly mainstream. If the skyrocketing sales of voice activated devices worldwide are any indicator, it is likely that voice will soon become a primary means by which we interact with the world around us. For most of us, voice-activation can be convenient and fun. But for people with motor control challenges and speech disabilities, the ability to navigate the environment and control devices by voice can be life changing. However, many of the people who can potentially benefit from a so-called "voice first" world cannot access these technologies because along with motor control challenges, they do not have standard speech patterns.
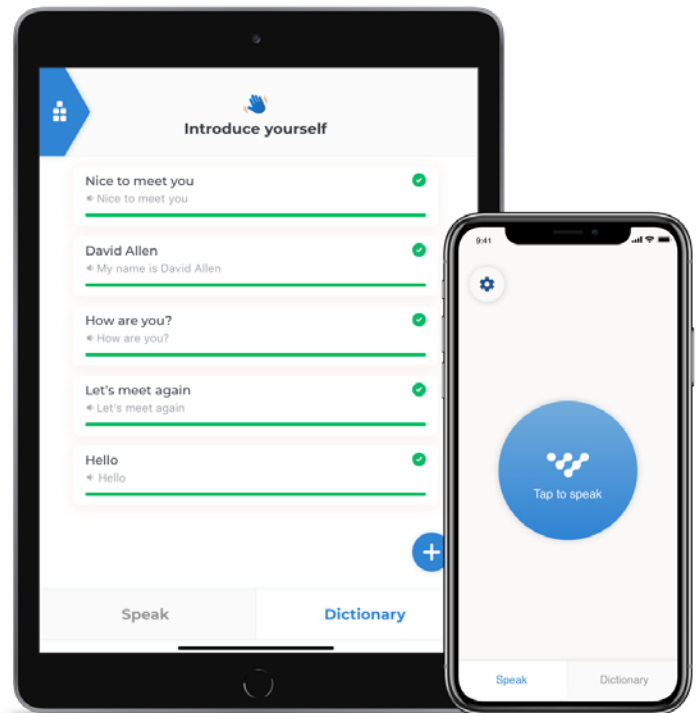
Voiceitt App

When designing an automatic speech recognition (ASR) technology for dysarthric speech, one needs to consider that pronunciation 'distortion' cannot always be described as simple sound substitutions or deletions. Motor impediments in speech organs

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DANNY WEISSBERG Co-Founder & CEO of Voiceitt is an engineer-turned-serial entrepreneur with 15 years of experience in entrepreneurship, business development, management, innovation, research and development in cutting edge technologies of complex software solutions. Danny also has specific distinction in R&D, having excelled through various points of his career at leading Israeli software firms CheckPoint, HP, and Radvision (now Cisco). Danny graduated with a B.Sc. with Honors in from the Technion – Israel Institute of Technology, a B.A. in Computer Science with Honors from the Open University of Israel. The idea for Voiceitt was born when Danny Weissberg's grandmother had a severe stroke. Very suddenly she lost her ability to speak clearly and be understood by the people around her, including her close family. This immediately Danny, who had been unusually close with her since he was a toddler, felt her pain and frustration as she struggled to communicate basic human needs.

lead to both (involuntary) asynchrony between articulatory gestures and (voluntary) alternative articulatory strategies, which in turn yield insertion of sounds not found in the target words, splits of target sounds (one to many), repetitions of target sounds, substitutions of entire sound sequences (many to many) and insertions of pauses inside words. For example, too early opening of the nasal passage to airflow, which reduces air pressure above the vocal folds and facilitates their vibration, often results in the presence of an unexpected nasal consonant (like n or m) before another consonant, or of nasal coloring of an entire syllable.

Recognizing the complexity and the unique needs and characteristics of the users it serves, the core technology that forms Voiceitt's multi-layered solution is built upon two main ASR architectures adapting state-of-the-art ASR techniques to recognize dysarthric speech.

Voiceitt's is an accessible app, designed to serve individuals with dysarthria caused by medical conditions, such as Cerebral Palsy, Stroke, ALS, Parkinson's disease, Down's syndrome, Traumatic Brain Injury and any other type of non-standard speech to communicate and control smart assistants with their OWN VOICE for the first time. Voiceitt's app identifies and adapts to the individual's unique impaired speech patterns like breathing pauses and

non-verbal sounds so that individuals with severe speech impairment can use it to communicate. Voiceitt does not need an Internet connectivity for usage and can be used everywhere.

Technologically, Voiceitt lives in a world where all state-of-the-art ASR (Automatic Speech Recognition) systems are designed to recognize standard speech in a variety of native languages from around the world. Being a speech recognition technology that aims to serve millions of individuals around the world with impaired speech, Voiceitt cannot use existing ASR systems as they were initially designed - we innovatively combine systems, tools, methodologies, sometimes even pure theoretical research in the field of speech recognition, and apply everything in an app that intelligently recognizes the user's unique speech patterns and translates his speech into standard pronunciation which other people (and smart assistants) can understand.

Voiceitt builds a custom ASR speech model, to each user, using machine learning, utilizing deep neural networks, we extract unique speech features used to train our system with the individual's speech. Once ready, the personal custom ASR model is loaded into the app where it is used to identify the user's speech and translate it.

It is very unique in a sense that it naturally uses speech/voice

Voiceitt Communication - https://www.youtube.com/watch?v=WRZmoZOtvc0

recognition for communication instead of the traditional use of communication boards that require tapping, and picking through hundreds to thousand words and expressions in their dictionary.

No other technology currently allows individuals with mild-severe speech impairment, including non-verbal sounds to communicated and express their needs naturally and freely with their own voice while supporting large spectrum of speech impairments. Current Assistive technology solutions DO NOT support speech as a communication option (only text).

At the moment, individuals with speech impairment cannot use any type of smart assistant device because those assistants cannot understand non-standard speech. Voiceitt allows for the first time for individuals with speech impairments to use a voice activated technology that is already mainstream and include population with speech impairments in this technology. This assist them to be more independent, do tasks on their own without depending on external help.

Voiceitt can be used in every language, in every country- the app is language independent therefore no matter which language you speak - Voiceitt will translate the non-standard speech to standard speech.

SO HOW DID WE BUILT VOICEITT?

Through our journey, we had the honor to meet our future customers and to dive into their sometimes complexed reality of their day to day and communication obstacles in specific. We had the rare opportunity that not every company has, to build our app together with the people that are going to use it. We have received the most genuine feedback along with their own unique story and experience.

Being an app that is supposed to serve individuals with not only speech, but also motor disabilities, the app was designed with high degree of usability in mind. The app's design promotes user independence and social participation throughout its user workflows, applying simple to use interactions, accessible screen components' design (large components, high contrast colors, and audible aids. It also supports full interaction with accessibility switches - all of this to allow the user with an app they feel comfortable with, that is easy for them to use, and that gives them a sense of independence.

The app was also designed to offer the user quick wins and celebrating them with encouraging animations - i.e. showing the users that the app recognizes them for the very first time. This is

extremely important and all our users come to use the app because their speech is unintelligible to most unfamiliar listeners.

Voiceitt has been tested and used by hundreds of users who provided profound usage feedback allowing us to create a truly accessible communication solution customized to our users' unique speech and usage characteristics

Recently we have started a community release program that allows users to experience the app and communicate with the help of it. We found out an interesting fact – the type of usage is unique to every user: some of them rely on Voiceitt to be their voice: this is actually the only way for them to connect with their own voices and express their needs. Others use Voiceitt as a 'helper' to cope with words that they find difficult to pronounce or for explaining.

Our journey did not finished yet. Our mission is to continue and help people with non-standard speech express themselves and achieve independence using their own voices. The voice technology revolution is leaving people out. We promote inclusion of individuals with speech impairments in our society by giving them their own voice back and the ability to use it on their day to day. We strive to enlarge their possibilities to communicate with others and control their own environment to gain independence.

Visit Voiceitt website: www.voiceitt.com ∎

iTeach Eye Gaze

A NEW BEGINNING

An assistive technology evaluation was just completed and it is determined that eye gaze is the best access method for your student to access a computer. The next step is implementation! This can feel so exciting, yet daunting because now that the access method is determined, the sky's the limit to the student's potential. It is important to note that if the evaluator and the implementer for the eye gaze system are not the same, then the implementer must take the time to develop a rapport with the student and get to know their interests. The implementer needs to understand what the student's vision is for their future (both short-term and long-term) and whether they are intrinsically or extrinsically motivated to use eye gaze. Depending on the age of the eye gaze user, they may not understand everything they can do by using their eyes to access a computer/tablet.

Teaching eye gaze is a team effort. Make sure to include as many members from the student's education team as possible, including the eye gaze user's family. The goal is to build capacity amongst the team because the more adults on the team that are invested, the more likely the eye gaze user will build his/her intrinsic motivation and confidence. When building the foundation of the team, ensure that it is built upon strong communicative ties. Students with complex bodies fluctuate day-to-day, hour-by-hour or moment-by-moment on how they are feeling, which can impact the use of eye gaze.

DEFEYENITIONS

When working with the student's team, it is important that they are clear with technical terms that are associated with eye gaze. The first term is Surface Pro, which is a Windows operated

Image 1: Microsoft Windows Surface Pro

tablet. See Image 1, a picture of a Microsoft Windows Surface Pro. It **MUST** have Windows 10 software to operate with an eye tracker and eye gaze software. The second term is Communicator 5 by Tobii Dynavox. Communicator 5 is a text-based communication software, but offers eye gaze users to have access to the following: Windows software, customizable keyboards that have predictive text, environmental controls and social media. Windows Control by Tobii Dynavox enables computer access for eye gaze users on Windows PC's or Surface Pros. Dwelling is

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ERIN ROSS, Erin is an Assistive Technology Facilitator with experience working in public schools. She graduated from the University of Illinois at Chicago' Assistive Technology Certificate Program and received her ATP from RESNA. Prior to her position as an Assistive Technology Facilitator, she was a special education teacher for students with severe autism. Erin's passion for helping people with disabilities sparked when she was in kindergarten and met her best friend Justin. Erin helped Justin communicate on his low to high tech devices as they grew up together. Justin not only inspired her to help others communicate but as Justin reached adulthood, she realized the need to help adults with disabilities. Erin founded Home Sweet Home Foundation, a nonprofit that transforms supportive housing for adults with I/DD into safe, happy, and nurturing homes-empowering them to live with the confidence and dignity they deserve.

Image 2: Tobii Dynavox's latest eye tracker, known as the PCeye, that is compatible outdoors.

when the eye gaze user's mouse cursor needs to hover over the intended selection before they can right or left click. Tracking refers to when the eye gaze user's eyes can follow a moving object in any direction across the whole screen. The eye tracker, also known as the PCEye, is the hardware that is able to read an eye gaze user's eyes. See Image 2, a picture of Tobii Dynavox's latest eye tracker, known as the PCeye, that is compatible outdoors.

Think of teaching eye gaze as breaking everything down into a task analysis. Task analyses can be taught by applying chaining strategies. Chaining strategies are used to teach students multistep skills. Once the skill is broken down, one can teach the student the skill in one of two ways: Forward chaining or backwards chaining.

Forward chaining is when a skill is broken down into multiple steps. The teacher instructs the student the first step until it is mastered and then subsequently provides prompting until the student completes the skill. Once the first step is mastered, then the teacher instructs the second step to mastery, then provides the student prompting until the student completes each step of the skill. The skill is taught in a "forward" progression.

Backwards chaining is when a skill is broken down into multiple steps, the teacher provides prompting until the very last step and teaches the last step until mastery. Once the last step is mastered, the teacher provides prompting to the student until the second to last step, etc. The skill is taught in a "backwards" progression.

As previously mentioned, Windows Control and Communicator 5 softwares by Tobii Dynavox are two different eye gaze softwares and each have distinct features. In order to determine which software will be the best fit for your eye gaze user, you will need to do a feature matching approach.

WINDOWS CONTROL

The task bar contains all of the mouse emulation functions for the eye gaze user to execute the tasks that he/she needs to accomplish. See Image 3 a picture of the Windows Control Taskbar. Refer to Image 4, the chart is titled, "The Meaning of All of the Tasks in the Windows Control Taskbar." The chart lists the images of each task on the taskbar and lists the action that each task is associated with. When the eye gaze user holds their gaze at the left click icon, he/she can activate a Secondary Click. The user will know that left click, also known as Primary Click, changed because the color will change from a faded color to white. The Tobii Dynavox Support and Training define Secondary Click as,
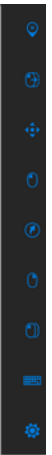
Image 3: Windows Control Taskbar

The Meaning of All of The Tasks in The Windows Control Taskbar

Task	Action
	Place Cursor
	Drag & Drop
	Scroll
	Left Click
	Shortcuts
	Right Click
	Double Click
	Keyboard
	Setting

Image 4: The chart lists the images of each task on the taskbar on the left and lists the action that each task is associated with on the right.

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Image 5: A pop-up of the 21 different Windows Control shortcuts that appears on the left side of the screen.

"Same as Primary Selection [Left Click] but with a higher precision. Secondary Selection means that the zoom will progress deeper before the final execution of the Task, making the desired portion of the screen bigger and easier to select within." Tertiary Click is another task that is not visible on the taskbar. The eye gaze user must dwell on the "Left Click" a little bit longer than when trying to activate "Secondary Click." Ultimately, the tertiary click activates "Sticky Left Click." Imagine you are holding down the Left Click on your mouse or trackpad. It is the same emulation using eye gaze. It is less work for the eye gaze user to activate "Sticky Left Click" than to activate "Left Click" to perform the action, then activate "Left Click."

The shortcut task opens up a pop-up on the left side of the eye gaze user's PC or Surface Pro. See Image 5 for a picture of the pop-up that appears on the left side of the screen. This allows the eye gaze user to execute certain tasks more quickly without having to do more work on their eyes.

If you begin to teach an eye gaze user with Windows Control first, I suggest going into "Settings" and limiting the number of tasks on the taskbar to "Left Click" only and "Settings" because it isolates the targets for them. The reason for starting with "Left Click" is because it is the most commonly used mouse emula-

tion for accessing games or fun activities. For a beginning eye gaze user, holding a gaze at a small target can be very difficult and fatiguing. By limiting the number of tasks on the taskbar, it limits the eye gaze user from making so many errors. As the implementer, you want your eye gaze user to experience that immediate gratification of success, especially if you are trying to build their intrinsic motivation. In order for the eye gaze user to experience imminent success, use a backwards chaining approach. At first it might be very difficult for the eye gaze user to select the "Left Click" from the taskbar, then shift their gaze to the desired target. As the implementer, I may activate "Left Click" with my finger for the eye gaze user, let the eye gaze user track and then dwell to activate the target.

It is important to remember that the tasks on Windows Control are very small icons. In order to activate the secondary and tertiary clicks, it takes a great deal of practice to hold a gaze and dwell over a small target as a beginning eye gaze user. When the shortcut window opens, it requires tracking to the pop-up window and dwelling on a target. When the targets are very close together, this can increase the probability of error.

COMMUNICATOR 5

The taskbar of the Communicator 5 software has three "pages." View Image 6 to see "Page 1 of the Communicator 5 Taskbar." Refer to Image 7 of "Page 2 of the Communicator 5 Taskbar." See Image 8 for "Page 3 of the Communicator 5 Taskbar." The tasks on the taskbar are larger target sizes. There are also words or phrases beneath the icons. It requires navigation to get to all of the tasks on the taskbar. Sticky left is its own task on the taskbar, meaning it is not an embedded click on the taskbar like Windows Control. Sticky Left is the most frequently used mouse emulation feature for a beginning eye gaze user, as it is needed to play games. Remember, on Windows Control, the eye gaze user has to maintain their gaze to activate the Sticky Left Click. On the third page of the taskbar is "Programs." Programs can be customized to be a shortcut to any software on the eye gaze user's PC or Surface Pro. Unlike Windows Control, the "Programs" cannot be customized into the same actions under "Shortcuts" like, "Minimize Window," "Maximize Window," etc. Some other considerations are that Communicator 5 does not have "Drag & Drop." Additionally, the scrolling up and down tasks require more eye movement than Windows Control.

When determining which software is the better fit, it is critical to take into account the following characteristics and traits of the student: personality, self-confidence and self-esteem. It is also very important to ask yourself these questions: How persistent is the student? How often is he or she willing to try again without getting defeated? What is the school team's buy-in? What is the family's buy-in, training and availability to help the student at home? How much time is being allocated in and out of school for the student to practice? Just because the student may start out learning eye gaze with one software doesn't mean they cannot change softwares down the line. Again, it is all about which software they start feeling immediate success with. If the student sets any short-term or long-term goals for themselves when learning eye gaze, take into account their preference of which software they think will help them achieve those short-term and long-term goals.

HEYERARCHY

The suggested order of mouse emulation functions to teach your eye gaze user is as follows: Sticky Left (if using Communicator 5 Software), Left Click, Double Click, Right Click, Scroll, Drag and Drop. It is important to note that the order may differ based on what your eye gaze user's interests are. "Shortcuts" and "Program" shortcuts can be taught after the student can do Sticky Left and Left Clicks.

When learning a difficult skill, it is always best to work on the skill when doing something fun and engaging. Playing games is the first step to learning eye gaze. As the implementer, you would use a backwards chaining approach when teaching your student to play games. As the implementer, you should first activate "Sticky Left," so the eye gaze user can focus on playing the
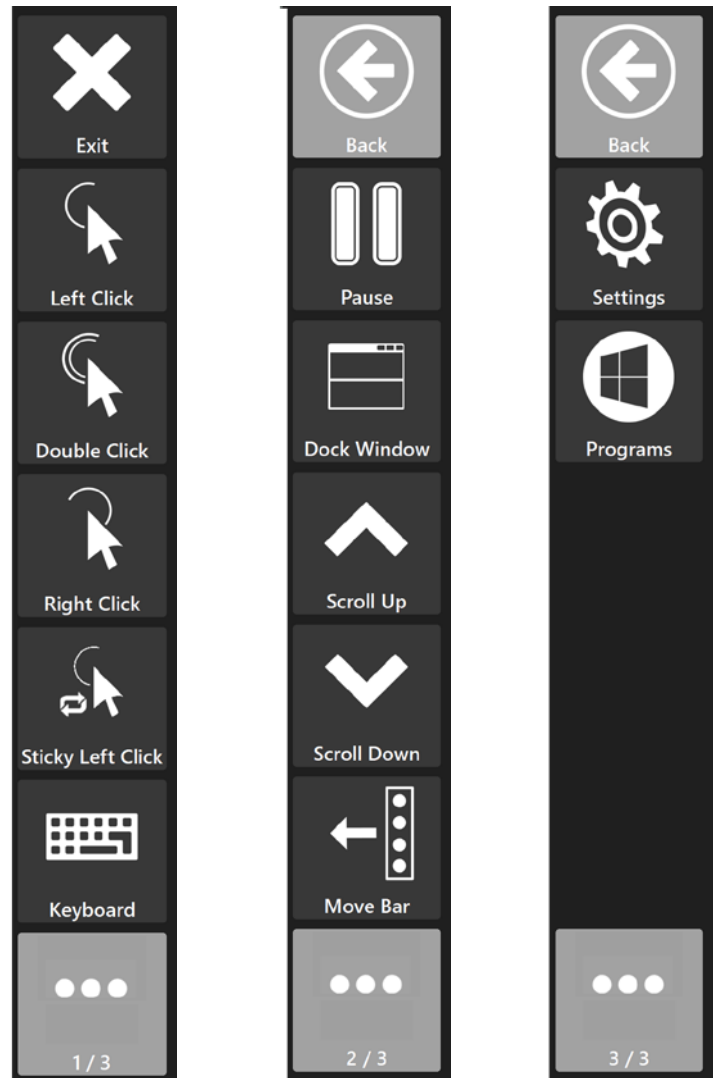
Image 6   Image 7   Image 8

Communicator 5 Taskbar.

game. The next step would be activating "Sticky Left" and letting the student dwell and click "Play." After that, give the eye gazer user three opportunities to activate "Sticky Left" before selecting that for them. If they don't activate "Sticky Left" in those three opportunities, then you will activate Sticky Left. Over time, you'll repeat the previous step and give them 5 opportunities to activate "Sticky Left." "I cannot tell you how much time it will take to progress to each step in your individualized task analysis, or even progressing from three to five tries to activate "Sticky Left" is appropriate for your student because every student is different. This is where you are going to have to gauge the whole student in this process, especially their tolerance level and persistence because you do not want the student to hit their maximum frustrational level and give-up or shut down.

GAMES AND MORE GAMES!

HelpKidzLearn, Inclusive Eye Gaze Learning Curve Games, Look to Learn and Look to Read are the games that I use when teaching eye gaze to my students. As the implementer, I like to introduce students to age appropriate games. However, I do take into consideration that this might be the first time ever that an eye gaze user is able to play games independently. The students might not care that the games they are playing are not necessarily age appropriate. I also understand that kids have different interests at all different age levels.

HelpKidzLearn is an accessible website for kids that use different access methods (e.g. touch, eye gaze, switches, etc.) and was created by Inclusive Technology Ltd. They are currently offering a 14-day free trial. HelpKidzLearn has different monthly and yearly licensing options on their website: helpkidzlearn.com They do a nice job of separating games for kids in Pre-K through about 1st grade under "Early Years." Under "Games" they have games that vary by age appropriateness, from about kindergarten-fifth/sixth grades. "Stories" has a lot of stories and songs that target counting from 1 to 5. "Creative" has activities that would gauge the interest of kids of all ages. There are different activities that allow kids to create their own masterpieces (e.g. paint, holiday cards, sandcastle, etc.). HelpKidzLearn releases holiday themed games seasonally!

The Inclusive Eye Gaze Learning Curve games are organized by targeted skills necessary for using eye gaze. They also do a nice job of breaking down the skill of eye gaze into a task analysis. If you play the games in this progression (it goes from easy to hard) and if you master the skills in progression, then you should be able to do the higher level skills: Tracking, Fixating, Locating, Take Turns, Explore, Choose Anything, Preferred Choices, Linear Choices and Multiple Choices. These games also take data while the user is playing the games. The cost for the Learning Curve game varies by how many licenses you want to purchase. For a single user, the cost is $799.

Look to Learn sequences their games in a task analysis similar to the Inclusive Eye Gaze Learning Curve games. The categories of games progress from "Sensory," "Explore," "Target," "Choose," to "Control." Look to Learn has an assessment tool called heat map. The heat map shows the progression of where the eye gaze user looked on the screen. This can be a tool to measure progress. Look to Learn costs $570 or $684 with tax.

Look to Read is for beginning readers to learn how to recognize sounds and letters, as well as track words on a page. This may be the first time that the eye gaze user is able to interact and access a book or literary material independently. The cost of Look to Read is $285.

BEYOND GAMES

You are probably wondering, "How do I know when my student is ready to move on from only playing games?" This can occur when your student is making one to zero mistakes, is accessing targets all over the screen while playing games, and wants to continue playing games. Additionally, you may also notice an increase in the eye gaze user's intrinsic motivation. You may be using the built-in assessment features in the games to measure your student's progress.

When you are ready to make the shift from using eye gaze to play games to applying eye gaze to natural opportunities, find out what the student's interests are, or talk to same aged peers and find out what applications or websites they are interested in. It is also beneficial to reach out to the eye gaze user's family and get their input! Some ideas are: YouTube Kids, logging on and watching Netflix and listening to music or podcasts on Pandora, Spotify, or any other streaming platform. Make sure to use a forward chaining approach when teaching eye gaze users to apply skills learned from playing games to the natural opportunities.

CONCLUDING THOUGHTS

Take the features described in this presentation and match them to your student(s)! There is no right or wrong direction, you may try one software and realize it is not the right fit and go with another. You may go with one and realize as they become more proficient, the other option has features for the skills they need to access at that point in time. Consider the whole child in this process! Most importantly, celebrate every success!

REFERENCE

What are sticky tasks? Tobii Dynavox. (2020). Retrieved from https://www.tobiidynavox.com/support-training/faq-from-salesforce/what-are-sticky-tasks/ ■

BOOK CREATOR

The World is My Audience

Like every good story, mine has a start. It starts at an inner city school in Canton, Ohio, where I was the teacher to a class of special education students.

If you looked at a picture of them, you'd think they were happy children. You'd be wrong. They were 5th graders and they had big problems. They didn't care about me. They didn't care about their friends. They didn't care about school. But the one thing that really surprised me was their hatred for writing. They really hated writing.

At first this hatred confused me, until I came to a realization myself. I realized that I hated writing too! Even as an adult, I didn't like to write. So I figured, if I could help myself—perhaps I could help them too.

Over the next few weeks I tried a myriad of different writing prompts to encourage them. Guess what? None of them worked!

Instead of the traditional writing prompts, I tried to think outside the box. I unleashed a writing prompt about the day in the life of a dog. If normal wouldn't work, maybe gross would?

"Hey kids. Today we are going to write about the day in the life of a dog."

The kids weren't impressed.

"It's going to be fun. You know what dogs do. Pretend to be them. You wake up. You lick your butt. What happens next?"

You could hear the kids snickering in the background. This wasn't working either. I needed something different.

The next day I went to my students with another prompt, this time, about pizza. I figured if they wouldn't be swayed by gross things, maybe I could convince them to write about food.

Who doesn't like food? I tried to get the students to write about pizza since it was National Pizza Day. I asked them to tell me about their favorite pizza, favorite kinds, favorite crusts, favorite toppings, favorite brands and more. And… nothing. Still no response.

At this point, I was about done. I felt like a boxer who had been punched in the face for 12 rounds. I felt defeated. I realized teaching might not be for me and I began plotting my exit from education. As I was thinking about writing my resignation letter, something happened. I remembered what all good teachers remember. I remembered the teacher store in town.

I hopped in my car and drove as fast as the speed limit would allow. I arrived at the store, and there it was in the back left corner, ironically, next to the headache medicine. It was the holy grail of writing. This book had 730 journal prompts in it. That was two for every day of the year! I was so excited that I ran to school the next morning with the journal book in hand. I shared the prompts with my students and guess what? They hated all of them. THEY HATED ALL OF THEM!

After trying every single writing prompt in the book, I finally realized I was looking at things wrong. It wasn't about the prompt, it was about the execution. Many months of thinking helped me come to three conclusions as to why kids hate writing… or school, for that matter.

1. AUDIENCE OF ONE

For the most part, students do work and when they are done, they turn it into you, the teacher—the audience of one. Some-

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times they will take the work home and put it on the refrigerator and they have an audience of three or four but that's it.

But think about it - many of the students we work with these days have a global following from an early age, online, through social media. So an audience of one is not OK with them, because they have grown up in a world of sharing, commenting and global relationships.

2. COLLABORATION

I also realized that students seldom collaborate with each other in school. It's the year 2020 and we are still telling students to work independently, to not talk, to not share and to keep their eyes on their own papers. They hate this. If you don't believe me look at the number of videos on YouTube. Kids work together all the time.

3. LEGACY

I also realized that my students weren't contributing to the benefit of anyone else. All of their work was being thrown in a trash can. Nobody was seeing it. Nobody cared. Where was the work that would be left behind to benefit others? Other than the gum under the desk, nothing was being left behind for others.

It was a big revelation to me to view the problem through these new lenses. The only problem was, I still didn't really have a solution. I was looking for a tool that could help me wrap all of this up (a big ask, I know). Luckily for me technology in education has come on in leaps and bounds in the past decade or so, and I came across an app I hadn't used before - Book Creator.

Book Creator was launched on iPads in 2011, ostensibly not as an educational app but as a tool for self-publishing authors (although the UK-based developers soon realised they had an education app when teachers started using it from day one of launch).

I remember searching the Apple App Store for "writing tools" and coming across Book Creator. I bought the full version with my own money for $3.99 (as my school wouldn't buy it for me). I fell in love with the app instantly - I found it incredibly so easy to use, and it opened my eyes to the idea that anyone could be an author.

So I was full of enthusiasm as I went back to my class with my new idea. And… I was greeted with the same moans and groans as usual.

"You want us to do what? Doesn't that involve writing? No way."

I looked at my students and told them, "Today is going to be different. Yes, it's going to be different because we are going to write and publish a book."

The kids looked at me with confusion in their eyes. "Why would we want to write a book and publish it?", they wondered.

"I don't want to read your writing anymore", I said. "Your writing is terrible!"

(Gasps)

"I want everyone in the world to see how bad your writing is!"

You could say my students were a little shocked. But then, a strange and magical thing happened. One student piped up:

"But if we're going to publish a book for the world to read, shouldn't we make it good?"

More ideas and questions followed, and the excitement in the room was palpable.

I explained that they were going to write a book for a global audience and that people would leave feedback and comments and that people would love it.

"What are we going to write about?"

I didn't care. I just wanted them to write.

"How long will this take?"

I didn't care. I just wanted them to write.

"How much money are we going to make."

None. The entire book would be given away for free. It's not about the money. It's about the legacy. It's about the students writing and contributing to someone other than themselves.

We began the writing process like any other assignment. We discussed character, setting, plot and more. We developed an idea for the story. We talked about adding audio, video, photos, text and more to our story. Engagement increased. Time on task increased and the energy in the classroom changed to something you can normally only dream of.

After about two weeks my students had a story. We published it and waited for the downloads to happen. After the first day, we had 16 downloads of our book. 16! That was amazing and the students were thrilled. Each day we added more and more downloads. The kids desperately wanted to write more books.

Within three months we had written and published three ebooks on Apple's Books store. We were graphing the downloads in the hall on chart paper, estimating how many downloads we would have by the end of the year and planning our next books. Comments from all over the globe came pouring in and it meant a great deal to the students. For the first time in their lives, they had a real, authentic audience for their work rather than a teacher who was paid to give feedback.

By the time I left that role, my class (and some other classes I had introduced the concept to) had published 160 books, which have been downloaded more than 60,000 times! My students were published authors, for sure.

A NEW CHAPTER

In 2018, I was approached by Book Creator to join their team as the Teacher Success Manager. I now get to teach others about Book Creator all day long, which I love! From that perspective, let me tell you about how effective Book Creator can be as an assistive learning tool.

You'll no doubt know already about Universal Design for Learning. As educators, we understand that students enter our classrooms each day with a wide range of skills, interests, needs and learning styles. For me, it's about removing barriers and dif-
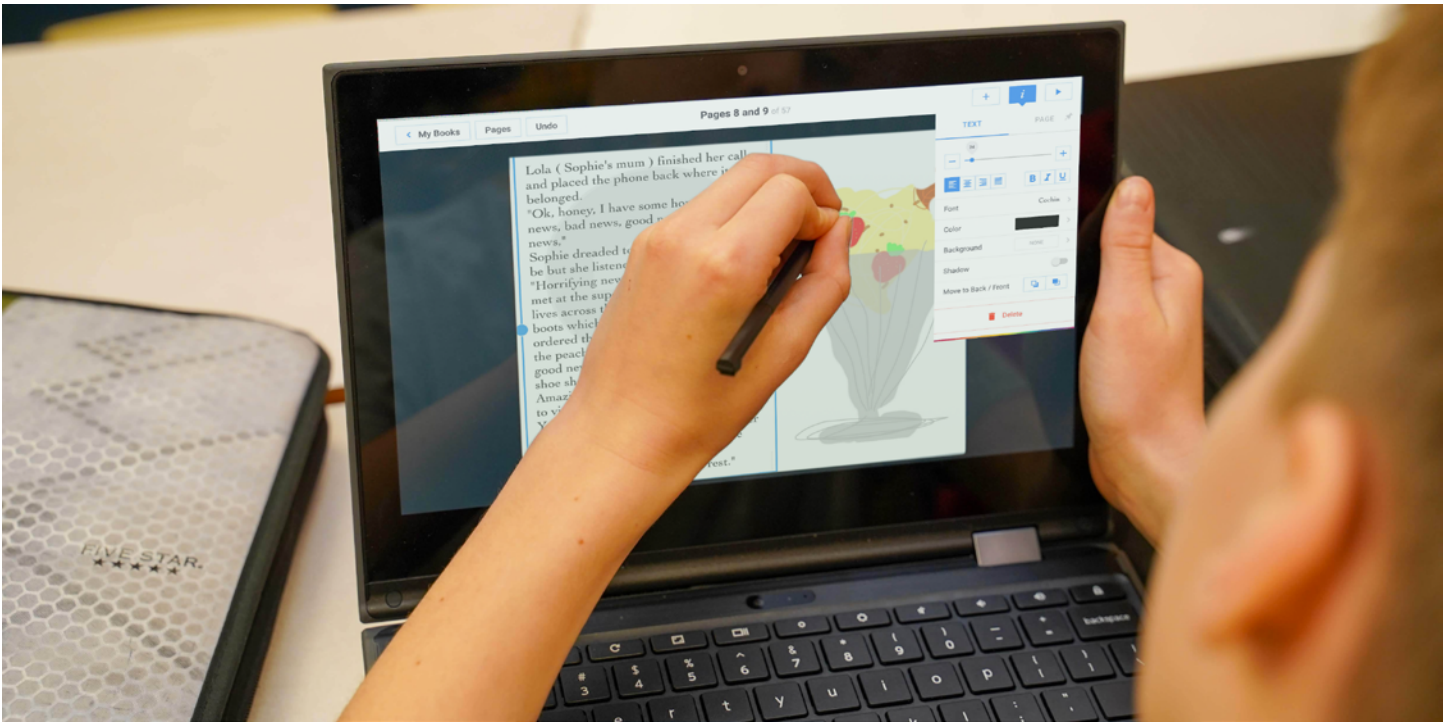
A student uses a stylus to draw in their book in Book Creator.

ferentiating the learning experience to suit the child.

Book Creator is open-ended and beautifully simple to use, so we can provide learners with relevant content, customized to them and with various supporting options to make that content accessible. What's more, the multimodal tools (text, images, audio, video, shapes, drawing etc.) and supports available within the app make lessons accessible while building in student voice and choice. Kids can create no matter what their learning style is.

Here are just some of the hundreds of accessibility options within Book Creator:

- Speech to text
- Text to speech
- Closed captioning (for audio and video)
- Keyboard navigation
- Open Dyslexic font
- Alt text support for images
- Multiple language support
- Spell check and predictive text
- Switch access support (for applicable devices, such as an iPad)

The team at Book Creator is dedicated to making accessibility a core design feature. Even this year they added 230+ accessibility improvements. I love that.

Now, let me tell you the story of when I switched jobs and joined Alliance City Schools, as their Technology Integration Specialist. Things were going smoothly until one day when I met Pam, a speech and language pathologist for one of the elementary schools in Alliance.

Pam explained to me that she had a group of 4th grade autistic boys that needed some serious motivating and help. They weren't interested in doing any kind of work at all and she thought making videos would help. I asked her what they were struggling with and she mentioned social skills in particular. Fresh from my experience in Canton, I was looking for another group of guinea pigs and this was the perfect opportunity for me to try Book Creator out with a group of students that weren't my own.

Pam explained to me this was a tough group of kids. She gave me a look of consternation when I explained that rather than making movies, we were going to write books.

When I told her that not only were we going to write a book but that we were also going to publish this book for the entire world to download, she looked at me like I was on drugs!

I began meeting with her and her students once a week. I explained to the students that they would soon be globally published authors, and you know what? They were so excited about this, it was contagious.

We began using the Book Creator app to make videos of inappropriate social skills interactions (this wasn't difficult because this is what they did on a daily basis). Countered to that, we also made videos of the correct interactions, which was a great learning opportunity for the kids.

We added their stories, information and author biographies. The students also realized they could record their voices using the app and they had great fun doing this, particularly for those kids who were normally reticent to speak in front of others. This was a safe space to express their voice. Then, being able to add

Real-time collaboration -
https://player.vimeo.com/video/272330586?autoplay=1

photos of themselves was the icing on the cake!

After a month of work, the book was ready and we published it on the Apple Books store. The downloads started flying in and this is where the real transformation occurred. The students were so excited about the downloads. They put a map in the hall and began to chart which countries had downloaded their book. This seems like such a small thing but to these students it was the world (and from the teacher's perspective— how about that, not only were they improving their literacy but now they were focusing on math too!).

These students who were afraid of talking to others, had few friends and were thought of as outcasts soon became the stars of the school.

The students were talking to kids in the hall explaining why there was a red pin in Japan and Norway and Canada. One student's parent, who never came to any IEP meetings, showed up for the first time. She was so excited to see what her son had done that she came to her first meeting at the school in four years.

The students couldn't stop writing and wanted to make more and more books. They had so much fun and learned so much while using this app that they wanted to write a whole series of books. In the end, they wrote and published three books in the social skills series.

After experiencing the excitement and engagement that has happened over the last 8 years of making books with students, I've realized a few things.

Students need to be making things. They need to create their learning. They can't just sit back and let "education" happen to them. They need to be active participants who create wonderful things. Do you agree?

Students need to collaborate with each other. They like it. They need it. They crave it. We need to provide students with the opportunities to work together in and out of the classroom.

Perhaps even more so now that many schools are facing remote learning environments.

Students need to share. If they can't share then you should share for them. We all have a story to tell and getting that story out to others is powerful, and incredibly motivating for students.

I want to end this article with a favorite quote of mine from the educator, Rushton Hurley.

"When children create for the world, they make it good. When children only create for their teachers, they make it good enough."

Well, guess what? Good enough ain't good enough anymore. Let's get that work off of the refrigerator at home and get it onto everyone's refrigerator!

Happy book making.

PRODUCT INFORMATION

Book Creator is an easy-to-use tool for making multimedia digital books in any subject area, from primary upwards.

Create: combine text, audio, video, drawings, photos and appsmash other content!

Read: have your book read to you in multiple languages, with word highlighting and page turning.

Publish: share your book online, download as an ePub file or print it as a PDF.

With over 2 million books made every month by teachers and students across the world, Book Creator can bring creativity to your classroom, help engage reluctant writers, and allow students to demonstrate their understanding.

Teachers can get started for free by creating an account at app.bookcreator.com, which will give them 1 library and 40 books at no cost. Additional books, libraries and other features can be purchased with a monthly or annual subscription (starting at $10 per month).

Book Creator online works on Chromebooks, laptops, PCs and most tablets. There is also a standalone iPad app available for $2.99 .

Find out more at bookcreator.com. ∎

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

Complying with Required Student Accommodations During Remote and Hybrid Learning

By Jessica Kellem and Yevgen Borodin
Thursday, December 10, 2020
4:00 pm – 5:00 pm (Central Standard Time)

EIn this Webinar, we will present Capti – an all-in-one assistive technology platform that helps teachers to Assess, Accommodate, and Advance reading in person or remotely. Distinguished by EdTech Digest's 2020 " Assistive Technology" and "Literacy/Reading" awards, Capti has become the essential solution for accommodating students with dyslexia, ADHD, vision loss, quadriplegia, autism, etc.

 Capti helps districts maintain compliance and levels the playing field for students who cannot access content independently and. Capti helps make ANY text accessible, turn it into an audiobook, and seamlessly deliver it to students. Capti offers state-of-the-art visual modifications, high-quality text-to-speech, OCR, dictionary, writing tools, reading assessment, secure browser, etc.

### Executive Functioning in the Classroom

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

Executive Functioning consists of important skills in the areas of memory, organization, and attention. Come learn tips, tricks, and tools to help all learners be successful in your classroom. This session will review executive functioning and then take a look inside of a classroom to find areas that students may struggle and give concrete examples of techniques and strategies for supporting students.

Supports will be discussed for the classroom environment, teacher supports, and for students that all work together to help students who may be struggling with executive functioning in your classroom.
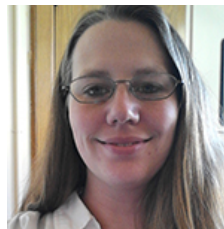
### Executive Functioning – Gone Digital

By Cassie Frost
Tuesday, January 12, 2020
3:30 pm – 5:00 pm (Central Standard Time)

Executive Functioning becomes more important than ever as students work in an increasingly digital environment. File naming, managing web content and email, cleaning out folders, and staying on task are just a few of the executive functioning tasks that students may struggle with

due to executive functioning deficits.

This webinar will focus on digital tools that help students stay better organized and engaged in learning. Participants will leave with tools that they can use in their instruction and in their digital environments to help support all students with executive functioning skills.
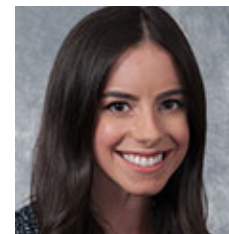
Bridging the Gap Before the SGD Arrvies

By Eliza Smith
Tuesday, January 19, 2021
3:30 pm – 4:30 pm (Central Standard Time)

The time from the original evaluation to the time the client has their own device may span several months. There can be a lot of waiting in the process, but this can be productive time to work with the child's team to lay crucial groundwork for supporting their communication and language now and in the future!

This technical session will highlight how to use device emulation software and low-tech communication supports to facilitate team buy-in and understanding of the AAC system. The session will provide examples of how to utilize emulation software to support communication partners in 1) learning the device vocabulary file 2) creating visual supports, and 3) interacting with the vocabulary in the child's environments.
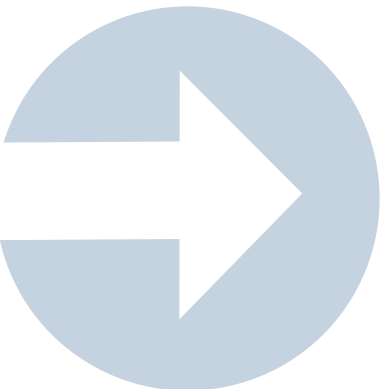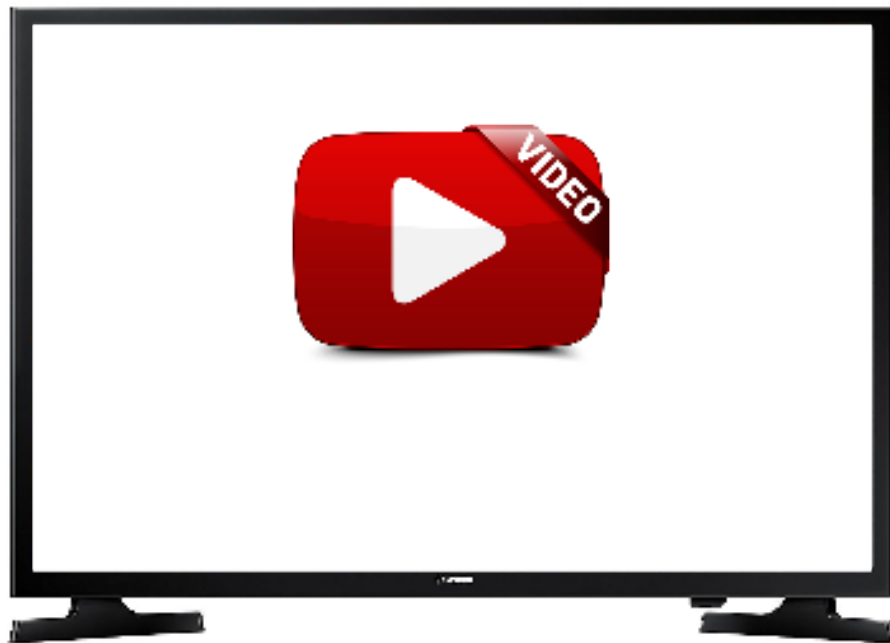
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Partner Skills Tips and Strategies for Supporting your Students that Use Core Boards and Devices
BY KELLY KEY

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15 Ways to Use Google Slides from the Classroom to the Living Room and Beyond!

SUMMARY:

Google Slides is regularly utilized in classrooms and available to all students. However, how to apply the features of Googles Slides to create powerful accessible learning materials is not often taught to teachers or other professionals in the learning community. In this article, we will outline some of the creative uses that Google Slides has to offer. We will explore activities for self-directed learning, life skills, visual supports, AAC, and emergent literacy. Come take a look!

JENNIFER STYLIANOS, OTR/L, ATP. Jennifer is a licensed Occupational Therapist and Adjunct Faculty at the University of New Hampshire. She obtained her B.S. with a double major and honors in Psychology and Health Sciences from Stephens College in Columbia, MO. Ms. Stylianos completed graduate school at Tufts University in Medford, MA where she obtained her Master's degree in Occupational Therapy.

Ms. Stylianos has been working exclusively in the field of assistive technology for almost a decade. Her passion is blending technology with real tasks to create solutions that work now and help to build the student's lagging skills. She has presented locally and nationally on a variety of subjects including emergent writing, executive functioning supports, and switch access.

LINDSAY MARCOUX, CCC-SLP, ATP. Lindsay is a licensed speech-language pathologist who has worked in the field of Augmentative and Alternative Communication (AAC) as a consultant since 2010. Ms. Marcoux graduated from the University of New Hampshire in 2007 with a Bachelor's degree in Communication Sciences and Disorders. She received her Master's degree in Communication Sciences and Disorders from the University of New Ham pshire in 2009. During that time, she also earned a Graduate Certificate in assistive technology.

Ms. Marcoux specializes in working with students with complex communication needs that use alternative access methods. Lindsay holds the Certificate of Clinical Competence in speech-language pathology from the American Speech-Language and Hearing Association (ASHA) and is a member of ASHA's Special Interest Division 12 (AAC Division).

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In the ever-shifting educational landscape of remote, in-person, and hybrid learning, it is important to be able to provide learning opportunities in new and creative ways. The additional demands of teaching in a pandemic have left time and resources stretched beyond the already constricted limits. With the dizzying array of products that have been advertised, it is overwhelming to find just the right tool that can meet a variety of educational needs. Google Slides is regularly utilized in classrooms and available to all students. However, how to apply the features of Google Slides to create powerful accessible learning materials is not often taught to teachers or other professionals in the learning community. It can be used digitally, in-person or remotely, individually or collaboratively. In this article, we will outline some of the creative uses that Google Slides has to offer. We hope that after reading this article, you can start using Google Slides to create accessible homework assignments, student portfolios, and encourage self-guided learning.

SELF DIRECTED LEARNING

1. Adapted Books: Google Slides offer an array of features that allow teachers to create adapted books which can be advanced with the press of a spacebar. For students who struggle to access the space bar, there are many ways to move through the slideshow. This includes tapping the touchscreen in preview mode, creating a cardboard cut out for the spacebar, or a low-tech button pusher (See Image 1), or a USB switch interface (See Image 2).

Max is a student with a complex physical, visual, and cognitive profile. In the immediacy of becoming remote, his switch interface was left at school. He was able to continue to access adapted books created by his paraprofessional with his favorite songs and images. Mom was able to set him up with his Chromebook and the low-tech button pusher. This was the only activity during remote learning that he was able to engage in that did not require adult support.

Image 2: Hitch 2 is a USB switch interface available by Ablenet, Inc.

Image 3: Copy and paste the Google Slides shareable link and change /edit to /preview..\
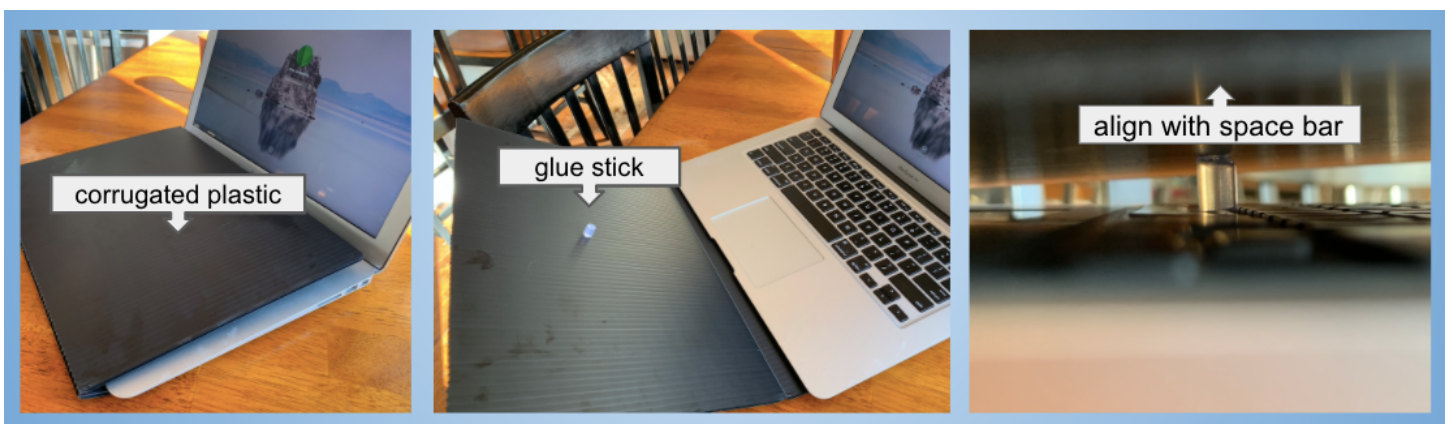

Image 1: Create your own low-tech button pusher using corrugated cardboard or a 3 ring binder. Add a glue stick to where the cardboard will make contact with the space bar and glue a piece of glue stick to that spot.
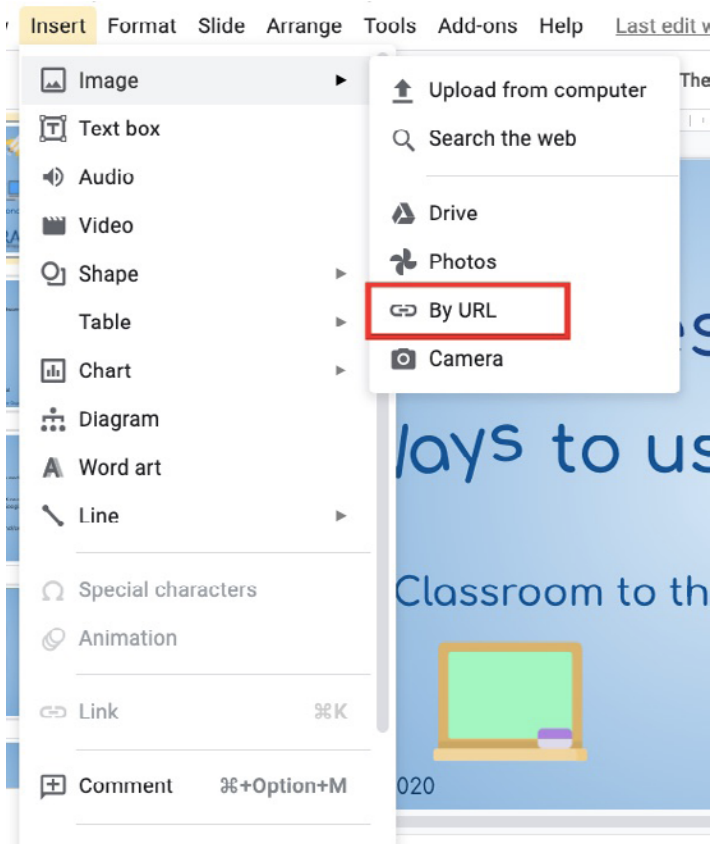
Image 4: How to Insert an Image by URL

Image 5: How to Make a Shape Transparent

How Share Slides in Preview Mode:

Sharing your adapted book in preview mode prevents changes to the book and eliminates the need to log-in (when the share settings are set to anyone with a link). To do this, you simply change the text after the forward-slash at the end of the sharing link to **preview** (See Image 3). *This link can then be saved as a QR code, shared via email or text message to allow families easy access when remote. Imagine a wall of QR codes linking to adapted books on your classroom wall when students return!*

2. Flashcards: Flashcard decks can be created in Google Slides and assigned to students within Google Classroom. The flashcards could include text, images, moving images (GIFs), or videos to offer multisensory learning. The font, images, and colors are easily manipulated to allow for optimal visual access.

How to Insert an Image By URL:

Websites like GIPHY.com offer a wide array of eye-catching moving images, known as GIFs. To add a GIF to your slides, click on the web link icon to copy the URL to your clipboard. You can then add the moving image to Google Slides by going to *Insert -> Image -> By URL* (See Image 4) and paste the copied web link. The use of moving images in your slides can offer additional contextual information, help sustain attention, and can be used to engage and motivate students.
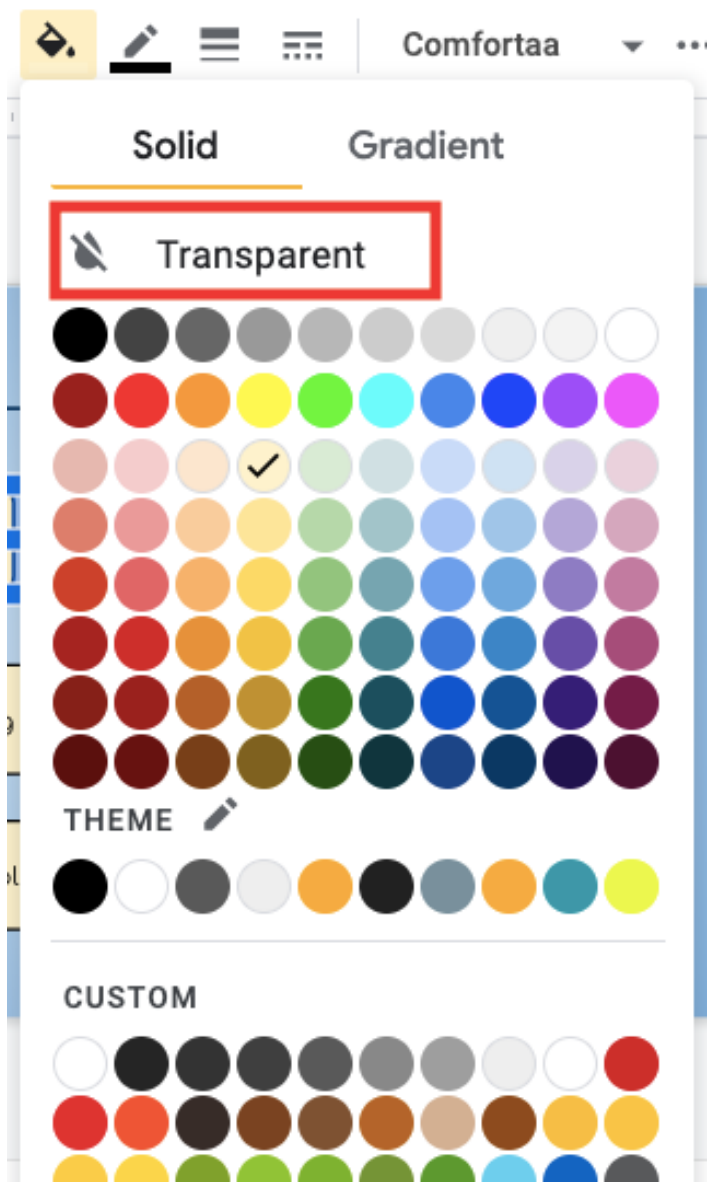
3. Interactive Diagrams: The creation of interactive diagrams within Google Slides allows students to independently explore multimedia content in a structured and visual format. By inserting transparent objects on top of your diagram, you can create hotspots that can link to videos, music, text, and more! *Think about all of the existing diagrams that you use in your class that can now become an interactive classroom activity using Google Slides!*

How to Insert a Transparent Object:

Create a transparent object over your diagram by going to *Insert -> Shape* or click on the Shape icon on your toolbar. Once you've added your shape over the selected area of your diagram, you can make that shape transparent by going to the Fill Color

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icon on your toolbar (See Image 5) and select *Transparent*. This will eliminate the default color of the shape so that the image on your diagram remains visible.

4. Choice Boards: Choice Boards allow students to guide their learning by selecting which activity they are going to do. In Google Slides, you can link an object on your slide to take your student to a specific website or link to another slide in your slide-show. The skill of linking is also a great way to organize materials so students can access their assignments all in one place. *There are many existing organizational templates available through websites like Teachers Pay Teachers and blogs like Hello Teacher Lady.*

How to Link an Object:
Objects that you can link include shapes, text boxes, icons, or images. Any item that is selectable in your slide can be linked. You can add a link to an object in Slides by going to *Insert -> Link* or selecting the *Link icon* on your toolbar (See Image 6). Then paste the web link or search that you want to direct your student to and click *Apply*. Links in your slide can be accessed in both edit and preview modes.

5. Drag & Drop Activities: Drag and drop activities are a great way to take your manipulatives virtual. You can insert images for counting, sorting, and matching activities. In edit mode, your students can then move the images around the Google Slides to show their work. *Slidesmania.com has a large collection of educational Google Slides templates including an entire section of FREE Google Slide templates specifically for drag and drop activities using manipulatives.*

LIFE SKILLS
6. Task Sequences: Using video and or photos is a great way to support student memory, organization, and understanding when completing tasks. Within Google Slides it is so easy to insert a video from YouTube.com, by pasting the URL from your favorite website, or your Google Drive. Task sequences can be used to support novel vocational tasks, activities of daily living, social scripts and so much more!

How to Add Video:
Videos can be added to slides by going to *Insert -> Video* (See Image 7). Once your video is selected, it will appear in your slideshow. You can also manipulate and resize your video on your slide. One of the best parts of adding YouTube videos to your slides is that you no longer have to wait for the ads to finish to view your video.
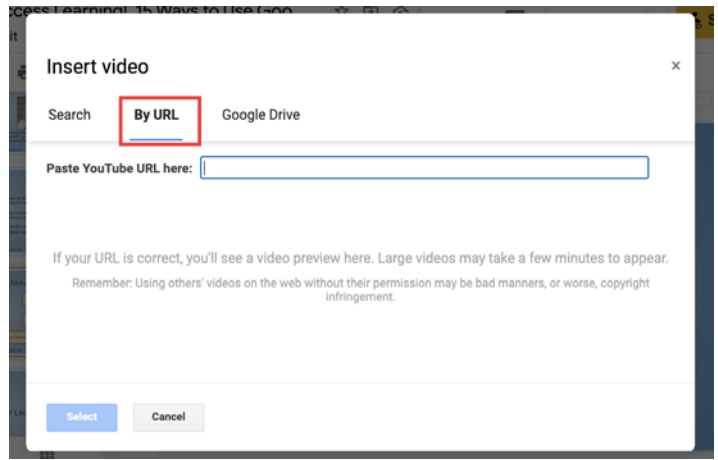

Image 7: Insert YouTube videos by copying and pasting the URL

Image 8: A transparent shape was added over the package directions and linked to the trimmed YouTube video

7. Chunked Video Directions: The skill of trimming videos in your slides is so quick and easy it makes Googles Slides the ideal platform for video modeling tasks. Video modeling is an effective tool and there is evidence to support video modeling for teaching a targeted behavior or skill. By chunking the video onto multiple slides, you can break down the task into smaller, more manageable steps.

Ava is a student who was learning how to safely use the microwave as one of her learning objectives during remote extended year services. A Google Slideshow was created by duplicating one slide with a YouTube video of how to make Kraft Easy Mac (See Image 8), then trimming each video into the corresponding steps listed on the packaging. When Ava returned to school in the fall, she was able to access the slideshow on her cell phone to access the video directions.
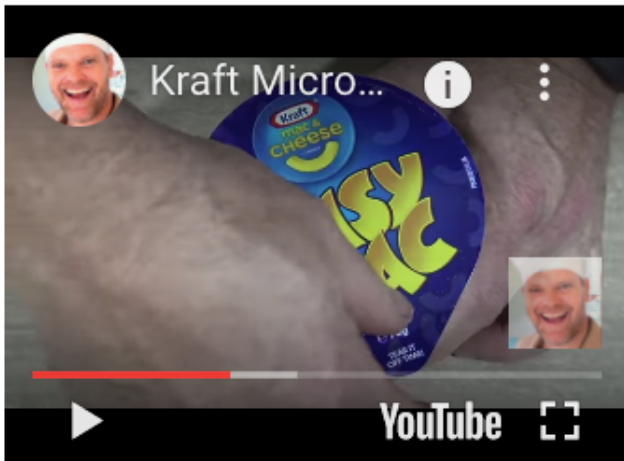
How to Trim a Video in Slides:
Trim your video by first selecting the video you added to your slide and clicking on the *Format Options* in the toolbar. A sidebar menu will appear to give you some playback options for your video. In the sidebar menu, you can preview the video and use the

Image 9: Use the Video Playback option to trim your video to only show what you want your students to see.

Start at and *End at* (See Image 9) button to trim your video to the section you want to play on the Slide. You also have the option of selecting *Autoplay when presenting* under *Video Playback* to have the video play automatically when in the present mode.

VISUAL SUPPORTS

8. Class Expectations: Saving an image as a background prevents items from being moved or reformatted on the slide. The use of visual supports is an effective method of establishing classroom norms and setting the tone for the class. Students who struggle with working memory deficits, auditory processing challenges, and/or attentional challenges often find visual supports more effective than auditory directions. *Also, this is a great way to create graphic organizers and overlay text boxes or shapes for the student to annotate on the slide!*

9. Contingency Boards: Contingency boards offer cognitive-behavioral support for understanding sequences where there are multiple potential outcomes. By creating a contingency board in Google Slides, you can link the different slides with-
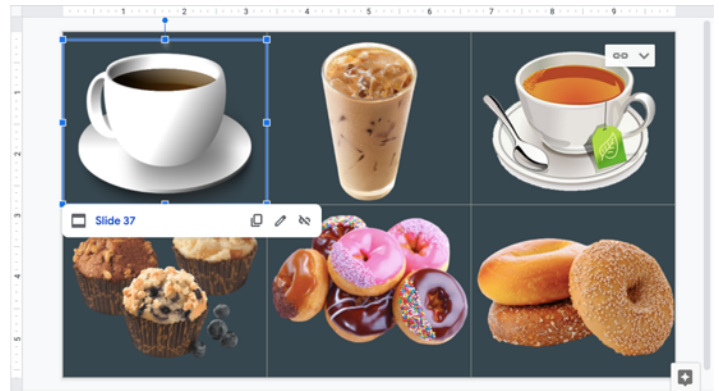

Image 10: Menu item images link to the corresponding contingency board.
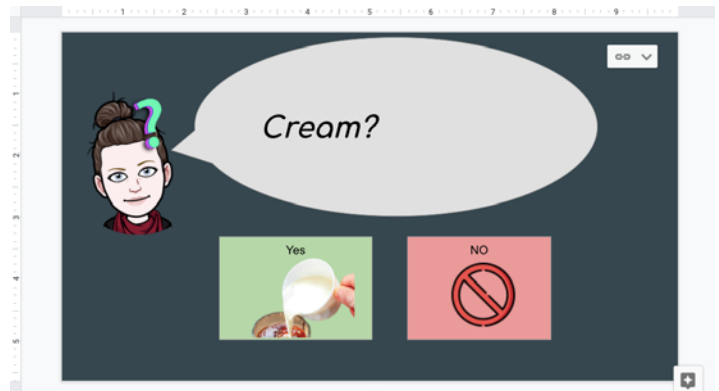
Image 11: The student can select the responses of the customer and then be linked to the next part of the sequence.
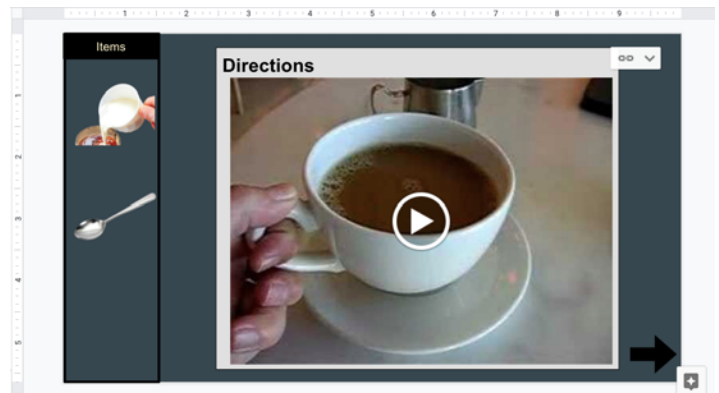
Image 12: A video of how much cream to add to the slide along with a visual list of ingredients needed to complete the task..

in your slideshow to teach what to do next and add the level of visual support necessary for the student. This could include text support for social scripts, images of materials needed for the classroom activity, or a video of how to complete the novel vocational skill.

Troy is a student who is working at the school coffee cart

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and is learning how to take and fill orders. Before using Google Slides, Troy struggled with knowing what the next step in the sequence was when someone ordered a coffee and was unsure what to do or say. Now with a contingency board set up in Google Slides, when a customer orders a coffee, Troy taps on the coffee image (See Image 10), linking to a slide prompting them him to ask, "Would you like cream?" (See Image 11) If the customer responds yes to cream, he then taps yes, which links to a slide with a visual ingredients list and how-to video (See Image 12).

How to Link to a Slide:

Select the object you want to link and instead of adding a link or search, select Slides in this presentation and scroll to the slide you want (See Image 13). Linking slides makes it easy to organize your content and customize it. If you decide to link a video in your slide, we recommend that you add that video to your slide and link to that slide versus linking to the website with that video. You eliminate the need to wait to load the page and also allows the video to be trimmed, if necessary.

AAC SUPPORT

10. Aided Language Stimulation: Aided Language Stimulation (ALS) is a communication strategy used to teach and model language. The communication partner pairs their verbal output with the selection of vocabulary on the Augmentative and Alternative Communication (AAC system). AAC learners are exposed to the language on their devices in the context of motivating activities that occur frequently throughout the day. Google Slides provide an opportunity to continue that language exposure virtually. By emulating a student's AAC device and saving their home screen as a background in Google Slides, you can create multimedia content that is motivating to your student while targeting the language on their device.

Sam is a student who has been using AAC for about a year before going remote. She transitioned to a new team this fall and they are not familiar with her language system. Sam is participating in remote learning but the team is struggling with ways to engage her and incorporate her AAC device. Google Slides was suggested as a way to create a virtual way to model language using motivating activities such as watching videos and listening to music. By saving the student's home page as the background of the slide, the team was then able to link motivating content associated with the target word to model during
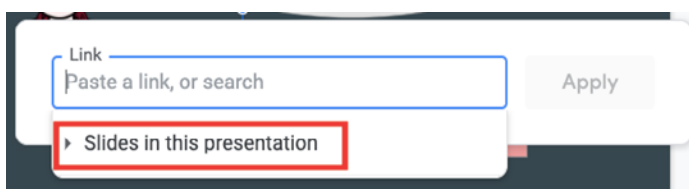

Image 13: The Slide number you pick will appear when you click on the object you linked.

remote learning. This resource can also be used to teach new team members where vocabulary is located on her device.

How to Save an Image as the Background:

Select **Background** on the toolbar and then **Choose Image** to browse images to insert as the background. If the image becomes stretched you can resize it by going to **File -> Page setup** and try a different slide ratio. If you decide to create a custom image by adding objects to your slide you can save it by going to **File -> Download -> and select JPEG image (.jpg, current slide)** -or- **select PNG image (.png, current slide)** and then select **Choose Image** to select the slide that you saved as an image.

11. Communication Dictionary: A communication dictionary is a way of documenting how a person communicates. They outline and describe what a person does to initiate communication (ex. waving my hands), what it might mean (ex. I'm feeling anxious), what you should do in response (ex. take me somewhere quiet to relax). Communication dictionaries are often created by people who know the student well and are able to help interpret what these behaviors mean. Team collaboration is important when creating a communication dictionary because the team needs to be on the page with how we are interpreting a student's unconventional communication. By sharing the document with team members, everyone will have access to the same information and can add to that document as needed.

Tim is a student who uses body language, gestures, vocalizations, and sign approximations to communicate. He is also diagnosed with both hearing and vision impairments. At the time of our consultation, his school team was not sure exactly how many signs he knew. We started a

communication dictionary to gain a baseline of his current communication strategies. In the beginning, the team documented about 10 sign approximations that he used at school. We shared the slides with the entire school team and included the family to make sure that we were all interpreting and responding to his communication in the same way. The family allowed us to use a video of his sign approximations to the dictionary slideshow. After a few months, Tim's sign inventory exploded and the team documented over 100 signs that he knew and could use appropriately.

How to set Share Permissions:

Select the yellow **Share icon** in the top right-hand corner of the screen. Type in the team member's email address and use the dropdown to indicate if you are giving them permission as an Editor, Viewer, or Commenter on the slideshow. Select **Send** and then **Done** when finished.

12. Partner Assisted Scanning: Partner Assisted Scanning is a communication strategy where the communication partner reads aloud messages in a consistent format, like a computer.
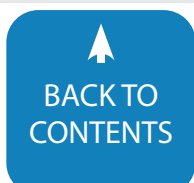

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Image 14: An example of a Google Slides remnant book.

Image 15: An example of a Google Slides sentence frame activity as part of music class.

The student relies on their understanding of the vocabulary to formulate a response using "yes/no" indicators. The step-through nature of a Google Slides presentation provides an excellent way to present visual and auditory information for this purpose.

Charlotte is a student with a complex physical and sensory profile. We first introduced this communication strategy remotely using a Google Slideshow with choices including Charlotte's favorite music artists and dress-up items presented over Zoom. We then gathered an inventory of vocabulary and created a shared Google Slideshow with her Mom and her team. Mom was able to add images of people, activities, and positioning equipment at home. Charlotte's teacher of the visually impaired was able to review the photos and provide input regarding size, contrast, and background color. We used a website called remove.bg to reduce the visual complexity of the images and take out the backgrounds. We organized the items by category/context (ex. people, places, activities I do, etc.). By putting the slideshow in present mode, her Mom used her iPad to read aloud her choices as she tapped each slide. When Charlotte looked up for "yes" we acknowledged her choice and started that activity. This Google Slideshow was only the start of our AAC intervention, but it helped us teach a strategy and develop Charlotte's "yes" response.
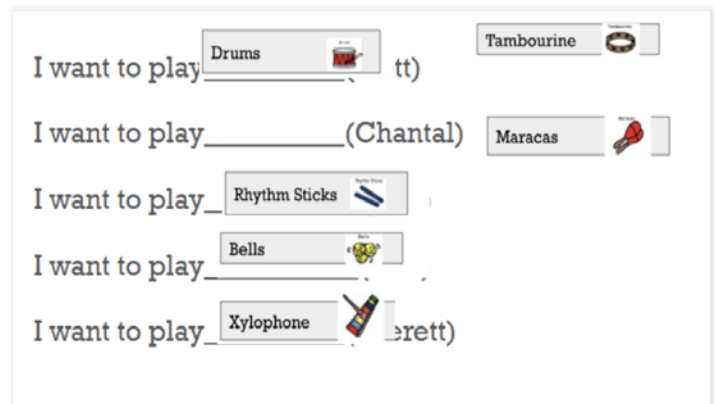
EMERGENT LITERACY

13. Remnant Books: Remnant Books are a way for emergent literacy learners to record their experiences. Typically these books are visual/tactile items that the student has selected. Students can use the contents of their remnant book to support memory and understanding, establish context for communication, share information, and select topics for writing. Google Slides is a multimedia way that teams can create Remnant Books to record important events by inserting images or videos. These books can be shared with the team so that experiences can be added from both home and school. (See Image 14)

14. Sentence Frames: Sentence frames are a consistent, multi-step shared writing activity that teaches emergent literacy skills such as early vocabulary, early word reading, and print concepts. By setting the sentence frame as the background in your Google Slides your students can add their part on top of the sentence frame. Students can complete the sentence frame using shapes with text to drag and drop. Sentence frames can be used to share information about a particular topic, talk about something that happened, or give reasons for their opinions and preferences. (See Image 15)

How to add text to a shape:

Once you have added your shape, simply double click on the shape to reveal the cursor. You can also format your text within the shape using the alignment tools in the toolbar. On the fly, we have found that it is easier to format the text within a shape versus a text box.

15. Captioning Photos: Captions can provide struggling readers with additional print exposure while engaging in a picture viewing activity. Google Slides can be used to add these images and then caption bubbles using the Shape icon. Students can caption these photos themselves by typing into the caption bubbles using the keyboard or their AAC device. Students can use screenshots and caption bubbles to create graphic novels to

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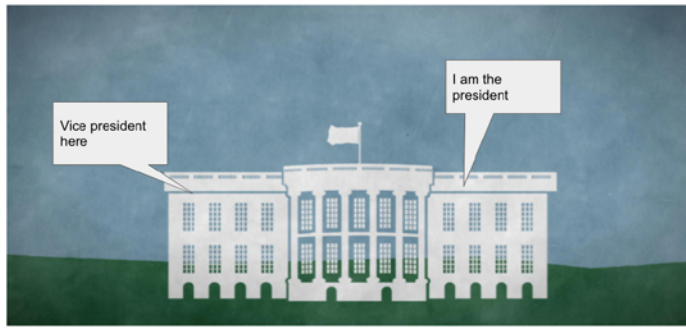
Executive Branch

Image 16: One of the slides Amber captioned for the executive branch.

demonstrate understanding.

Amber is a student who has an intellectual impairment and motor speech disorder. She struggled to take notes on the videos shown in social studies class. Initially, Amber's support staff took screenshots of the videos used in the social studies lesson for her to caption. Over time, Amber began to pause then screenshot the video on her own at parts she felt were important for her notes. She used an additional word prediction software to support spelling within the caption bubbles. (See Image 16)

AND BEYOND...

The activities and resources presented in this article are just the tip of the iceberg. Adding Google Slide activities or recreating your in-person materials for remote learning can be extremely overwhelming. Start with one activity or skill that you can use over and over again. You've got this! ∎

product spotlight

Wheelchair Smarter – Introducing LUCI, Smart Wheelchair Technology for the Most Fearless People on Earth

WHEELCHAIR SMARTER.

INTRODUCING LUCI, SMART WHEELCHAIR TECHNOLOGY FOR THE MOST FEARLESS PEOPLE ON EARTH.

LUCI prevents tips, collisions and falls before they happen, so wheelchairs can see objects like curbs for what they really are: just harmless little pieces of concrete separating the sidewalk from the street.oesn't require any download or installation on a computer with a supported web browser.
LUCI adds smart technology to your existing power wheelchair for stability, security, and connectivity.

ENHANCED VISION – SMART READER HD, A FULL PAGE SMART SOLUTIONS FOR EASY TEXT READING

The Smart Reader HD is a lightweight, portable reader/scanner with large built-in user friendly tactile control buttons.

A fully integrated solution, the Smart Reader HD offers the advantage of a built-in HD camera and OCR (optical character recognition). Smart Reader HD enables individuals with low vision to retain the pleasure of reading by listening along or by attaching a monitor to view the text. Users are able to view in color, enhanced high-contrast positive or negative modes, allowing for higher contrasts and easier viewing. With easy-to-use buttons and dials, customers can enlarge or reduce the text in seconds and change viewing options for easier visibility.

PRC-Saltillo – Via™ Pro: Designed for CommunicationT

When you order a Via Pro, you get your choice of industry-leading PRC-Saltillo apps pre-installed. Choose from two of the most popular research-based AAC apps: TouchChat® with WordPower™ or LAMP Words for Life®. Either choice comes with Spanish options already integrated for seamless bilingual communication.

THE VIA PRO INCLUDES:

- Splash-resistant design, meeting or exceeding all federal standards for durable medical equipment.
- Sturdy handle and stand for extended durability.
- Choice of Active or Classic wrap.
- Compatibility with a variety of access options, including direct touch, wired and wireless switch compatibility, and head tracking within TouchChat.

LEARN MORE

FORBES AAC – The NEW WinSlate is here!

STREAMLINED. LIGHTWEIGHT. AND READY TO ROCK

Meet the NEW WinSlate 12 with the Adapta multifunctional hub! With its tough, rugged case and Corning® Gorilla® Glass,-FlexABLE® it is ready for any real world use. Computing power is from the Microsoft Surface®, with the PixelSense display, so it's easy to stay current with updates and the latest features. The modular, sleek design allows users to remove and change auxiliary methods and keep the contemporary appearance.

They listened very closely to SLPs and clinicians and established a strict design goal; prevent snags, 'hangups', breakage and to protect the device and users. Using the Adapta multifunctional hub attached to the back, we kept the minimal footprint and provided channel ways to conceal and secure cables and create better ways to utilize multiple USB ports. It also comes complete with an integrated IR control!.

LEARN MORE

Time Timer – How Much Longer?

HOW MUCH LONGER?

For anyone who wants to measure and manage time more effectively, Time Timer® is an innovative visual timer designed to "show" the passage of time through the use of a patented red disk that disappears as time elapses. Unlike traditional timers that fail to make the abstract concept of time concrete, the award-winning Time Timer's visual depiction of "time remaining" provides stress-free time management at work, school and home to make every moment count.

Over 20 years ago, Time Timer® inventor Jan Rogers' youngest child struggled to make transitions from one daily routine to another. Whether it was time to get ready for school, or for homework, practice or bed, her young daughter often felt frustrated and anxious because of her inability to grasp the concept of elapsed time.

LEARN MORE

Microsoft Translator – Breaking the lnguage barrier at home, at work, anywhere you need it

MICROSOFT TRANSLATOR

Breaking the language barrier at home, at work, anywhere you need it

FOR PERSONAL USE

Translate real-time conversations, menus and street signs while offline, websites, documents, and more using the Translator apps

FOR BUSINESS USE

Globalize your business and customer interactions by translating text and speech using the Translator API and Speech service, both in the Azure Cognitive Services family

FOR EDUCATION

Create a more inclusive classroom for both students and parents with live captioning and cross-language understanding

LEARN MORE

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Present Pal supports presenters with interactive and accessible flashcards for presentations

Present Pal is a presentation support software which acts like a set of interactive flashcards on your smartphone or tablet, integrating fully with Microsoft PowerPoint through our new add-in feature.

- Create – accessible flashcards
- Access – multible notes
- Personalise – colors & fonts
- Control – slides as you present

Improve your public speaking with Present Pal – the presentation software which is "putting an end to stage fright"

Present Pal is a presentation support software which acts like a set of interactive flashcards on your smartphone or tablet, integrating fully with Microsoft PowerPoint.

Present Pal has various expert advised features such as 3-5 bullet points per flashcard, line focus scrolling and pop up bubbles which have been tailored to the needs of individuals with SpLDs and mental health issues. Users can also personalise Present Pal to suit their individual needs by choosing from scientifically proven colour overlays and accessible fonts to reduce visual stress whilst presenting.

LEARN MORE

Ava – Making communication barriers disappear

Ava Desktop — for Web, Mac & Windows   Ava App — for iOS & Android
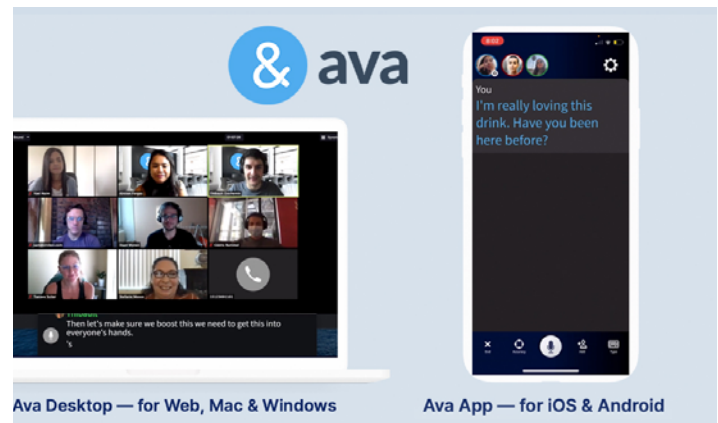
Online Meetings

Conference calls, now one-click accessible.

In just one click, display instant captions for your conference calls, no matter the tool you use. For near-perfect accuracy, add a professional Scribe to correct them in real-time.

Ava for Mac & Windows will always display captions on top of the video call or the shared screen or presentation, so you can follow comfortably.

In-Person Meetings

Focus on the meeting, we do the note-taking.

With instant captions, no one is left out of the discussion, and you can work together productively.

Share your Ava Room Link to coworkers so they join your conversation, no app download needed. What everyone says will be transcribed & color-coded for great real-time meeting notes.

Use Ava Scribe for 99% accuracy.

Request (even last minute) live professionals Scribes who will correct transcripts in real-time.

LEARN MORE