- [Jim] With that, I'm gonna turn it over to our presenter.

- All right, hello everyone.
My name is Yarely Ramirez.
I also go by Yarely Ramirez, and this will be the importance of multimodal communication.
So just the disclosure, I am receiving a monetary compensation for this presentation.
I'm currently a clinical lead here in Houston, Texas, non-financial relationship.
I don't have anything to disclose.
This is a learning event.
It does not focus exclusively on any specific product or service.
And then this course is presented by AbleU.
After this course, participants will be able to define multimodal communication, identify the different ways to model using multimodal communication, structure an activity for parent coaching, and it'll be regarding multimodal communication.
All right.
And then I just wanted to say this is the agenda, and we will cover what is multimodal communication.
We'll also cover modeling multimodal communication, goal writing and data collection, parent coaching, a case study summary, and questions and answers.
And before we get started, if you are new to AAC, or this will be like a learning curve for you through your learning journey, and you're afraid of making mistakes, I just want to let you know that it's okay to make mistakes.
Mistakes are actually your teachers.
We learn from mistakes, and that makes us just better therapists and human beings.
And then there's a quote by Johnny Cash, "You build on failure.
You use it as a stepping stone.
You close the door on the past.
You don't try to forget the mistakes, but you don't dwell on them.
You don't let it have your energy, or any of your time, or any of your space." So let's get started.
So what is multimodal communication? So multimodal communication is using multiple modes of communication in order to get a message across, and that can be used via unaided communication, meaning vocalization, natural speech, gestures, or even signs.
And then aided communication will be using either a non-electronic or an electronic augmented alternative communication such as a low-tech or light-tech core board, or using a speech-generating device.
And then I really like this quote, "One is just never enough." It is not just about choosing one or the other, but considering using all of them to maximize the message you're trying to convey.
So for example, if a kid were to use the sign "More," and select the icon for juice, and then say "Please," then that is a three-word utterance.
The kid just said more juice please.
As human beings, we technically use this mode all the time.
When we talk with, as I'm doing right now, I may be doing a lot of hand gestures to emphasize a message.

Whenever I'm mad, I may be, you know, frowning, making faces too, so that message can get across.
So this is something similar to that.
And then I usually get this question a lot, multiple communication, is this different than total communication? So total communication is a method in which we use signs and words at the same time to convey a message.
So we would say "More," and just signing the word "More," so that's the difference.
Multimodal will be encompassing all types of communication versus total communication is just focusing on that sign and spoken language.
Total communication was also a type of educational program used for deaf individuals.
So it was back in the day, whenever we have that oral communication program versus total communication program, where communication was basically the deaf individual go to school and only receive services via spoken language versus total communication, that's when they started to use spoken language and signs, so then an individual could learn and convey messages that way as well.
And then multimodal communication, will this just assist expressive language skills? Not per se.
Actually, a lot of research has shown that multimodal communication or using several modes will increase receptive language.
So whenever you combine sign language with spoken speech comprehension has increased.
Same with using other light or high-tech device, it enhances the message so the kid or the adult can understand what is being said.
And then it is interesting because, as human beings, we technically learn by using all of our five senses.
We learn via hearing words, seeing, touching, and doing different things.
Therefore, what can we communicate that way? If we learn via all different modes, then we should be able to use different modes to convey a message.
So when it comes to language development, interactive multimodal process, that involves different channels of communicative expression.
So who can we use for this method? It can be used for individuals with disabilities, with developmental disabilities, genetic conditions, language delays, or even poor intelligibility of speech.
I feel like a lot of clinicians and parents tend to hesitate to using anything more than spoken speech because we feel like it's going to hinder the acquiring of spoken speech, when in reality, speech therapy is supposed to be, it's meant so the individual can learn how to communicate, and we all communicate different ways.
So sometimes that's when you hear all the stories of, "Well, I wanna wait till they're a little bit older before we introduce a software." Or, "I want them to be a little bit more agile before we start, you know, working on the sign more." And it's completely okay to use AAC and multimodal communication at any time.
You don't have to wait for it as a last resort.
It will facilitate natural speech and it will support development and comprehension of language skills.
Modeling.

So what is modeling? Modeling is basically when you as a therapist or a parent is using either unaided or aided language in conjunction with spoken input.
So we all do this already in our therapy sessions.
If you ask a kid, "Do you wanna play," and you sign want and play at the same time, then we're adding more meaning to that utterance, and we're modeling how we can also request play or want.
Another example would be like whenever we state that we like something, "I like red," we're simultaneously selecting the icon like.
"I like red," so we're using spoken language still, but we're modeling with other types or modes of communication.
It requires a lot of exposure.
So the more you do it, the more there's exposure, the more exposure, eventually the child or the patient will eventually reciprocate the message.
We're constantly using signs, gestures, and/or icons to promote language without any expectation of him responding right then and there.
It's similar to how we communicate with babies.
Whenever we have a baby, we are constantly using the same word over and over and over, and then we tend to use short phrases.
So if the baby's favorite toy happens to be a ball, we say ball, bounce, bounce ball.
We start using the same repeated words into short phrases, and we typically give, like, plenty of wait for utterances, "Bounce ball, red ball, throw ball." And sometimes we even add gestures to add meaning, "Do you want to throw? Throw ball." We don't typically expect for the baby to even say it back.
We're just teaching the word and the meaning behind it.
So it's similar to multimodal communication and modeling.
We're doing the same thing.
We're modeling how to use spoken language, but now we're adding either signs, or we're adding gestures, or we're adding icons.
It's just so the message can be understood and eventually reciprocated.
And then do we have to use all modes communication at once? Not precisely.
This is a learning curve, and it's something that takes time.
Just like whenever we are in grad school and we're given all of this information at once, and we go to practicum and we're expected to just use them all, it's very overwhelming.
So you don't have to, you know, use all modes of communication at once.
You can start gradually, get comfortable, and then once you're a little bit more comfortable with one, start adding another one, and then add another one, and then add another one.
So you can start by using gestures and spoken language.
We technically already do this as human beings.
We would sometimes, you know, let's say there's a toy in the high shelf and we point up, up, to show and display with our index finger that the item that we want or desire is on top, it's up there.
We can also use sign and spoken words at the same time, such as more.
I think that's our favorite word as therapists.
We tend to use more all the time.

"More, more, please, more." And then we can start introducing icons.
Once we feel more and more comfortable using gestures and signs, let's go ahead and add icons to the equation.
We can either use a light tech or a high tech, and this is where the learning curve starts as well.
We're so used to using spoken language, that now we have to use this accessory, this additional tool, and we have to learn where the icons are in different places.
So take your time, pick a word.
One of my favorite words to use is my, well, turn.
My turn is probably my favorite two words to use all the time.
So if you're playing or taking turns during an activity, you can say 'My," while gesturing to yourself and pressing the icon turn, "My turn." Some techniques that can aid modeling will be picking core words, so words that are high frequency in our vocabulary, and we can either say them, or sign them, or point to the icon.
Again, some of my favorite core words will be my and turn.
So those are high-frequency words.
We can use them for everything.
You can also pick a word based on the activity.
I currently have a graduate student, and one of my patients happens to love sharks.
He is obsessed with sharks.
So what she decided to do was to pick a word bite 'cause it's a puppet shark that we play with, and the puppy shark tends to bite, too.
So she started combining the word stop and bite, "Stop bite, stop bite." They're two words that are very meaningful to the activity that we're using.
Another great thing that we can use is asking less questions and commenting more.
Try avoiding, "Tell me what you want" to the patient when they're already indicating what they want.
It's better if you model too, so you can show us an example of, like, what you can say or use to request.
So we can avoid the whole, "Tell me, what do you want? You want red or blue ball? Tell me, what do you want? Come on, the red ball or the blue ball? What do you want?" Instead, we can start commenting, "Look, red ball, it bounces.
Blue ball, it's round.
You're playing with red ball, bounce, bounce, bounce, my turn.
I got blue ball.
Kick blue ball." So you can narrate what the kid is doing or what you're doing, so you add more meaning to the utterance, and you're modeling spoken language at the same time.
Now we're moving to goal writing.
So it all sounds good in theory, but how can we create goals to include or accept any and all forms of communication? Is it possible to do so? So when it comes to writing those long-term goals and short-term goals, you need to state the parameters of multimodal communication, and that's based on your observation after you do the initial evaluation, or during treatment session, what can the kid do, and what can we enhance it? So some of the parameters you can set for multimodal communication could be using gestures, signs, and icons, or it could be words, gestures, signs, and icons.

It could be words, signs, and icons, or approximations, signs, and icons, or intelligible words and icons.
It all depends on the parameters that you set based on that observation with the patient.
And then the beauty about multimodal communication or any type of goal is that you can target this via a structured or a non-structured activity.
Structure meaning doing flashcards, right? "Show me where the ball is," and you have two pictures, or you can do it during an unstructured activity, so during play, like, "Where's the ball? Get the ball." So you're still targeting the same concept, it's just one is being structured and one is not, more core play.
So what would a multimodal goal look like based on the SMART criteria? So where I work, we have an AAC committee, and we all got together, and we all got to write SMART goals to kind of assist SLP.
So this is one of the goals that the AAC committee where I work from created.
So long-term goal, I remember it has to be within the SMART criteria.
So it has to be specific, measurable, achievable, relevant, and time-bound.
So in this goal, we have and X amount of months, the patient will utilize multimodal communication.
We set the parameters, so words, approximations, gestures, pictures, and/or a speech-generating device to advocate for themselves.
So stating they need a break, stating what they need, like a bathroom break or food or drink.
Protesting, don't want it, seeking attention, changing the environment.
So we put the parameter of what advocating for themselves is and then we put it in however many opportunities we want given minimum, moderate, maximum assistance in order to be able to communicate and be understood by safety officials in a case of emergency.
So then under that long-term goal, we have short-term goals.
So again, within those short-term goals, we set the parameters of what multimodal communication includes.
So again we have word approximation and gestures to indicate a break, to indicate dislikes, or to refuse and to seek for assistance.
Data collection.
Right, so now we have established how we can write a goal.
However, how can we collect data on a goal? Isn't it like a little too broad? Well, as long as you set the parameters for what you're looking for regarding multimodal communication, then you should be good.
You will be collecting data based on those parameters, and every time the patient uses either or all of those, then they get credit for it.
So this is an example.
So we have a patient, Mr.
Jimmy.
He is an eight-year-old, he has Down syndrome.
He's able to communicate using word approximations.
He has a low receptive and expressive vocabulary.
He is highly unintelligible and cannot request basic needs.

So the therapist offered the initial evaluation, created long-term and short-term goals, and one of the short-term goals happened to be that he would utilize multimodal communication.
So this person set the parameters, doing either approximations, gestures, or a speech-generating device, and/or, to indicate dislikes.
So like, "Don't like it, turn it off, stop it," during an unstructured activity, and two out of three opportunities given maximum assistance across three data collection sessions.
So then you're doing treatment and, you know, we're playing with pretend food 'cause that's his favorite thing to play with, and he points to a tomato.
He then selects the icon "No," and says, "Like, no like." Would this be counted towards the goal? Well, let's dissect it.
So the short term goal stated that he can use approximations, gestures, or a speech-generating device, and I highlighted which one was which.
So gesture was pointing to the tomato, an approximation was "Like." He tried to say "Like," and then the speech generating device, he selected the icon "No," and then it was during an unstructured activity.
So to answer that, yes, he produced, technically, a three-word utterance 'cause he pointed to the tomato, he said "No," and "Like," so he doesn't like tomatoes.
He stated that.
And then, I don't know if this happens to you guys, but as soon as the SOP prompted for, like, two different things to see if he liked them or not, he completely stopped.
He didn't wanna say like anymore, he didn't wanna work on it.
So then maximum assistance was provided, he still wouldn't respond, so then he got a one out of three in this activity.
So not quite meeting the goal, but heading towards that.
Parent coaching on multimodal communication.
I think whenever we get therapy, parent buy-in is just the most essential and crucial part.
If there is no parent buy-in, then there's not gonna be a follow up.
Carryover is not gonna be there, and the child's just going to be using or the patient's gonna be using just those strategies in your treatment session.
They're not gonna be using them when they go to McDonald's, they're not gonna be using them when they go to soccer practice, or when they go horseback riding, or when they're at home and they wanna read their favorite book.
If there's no parent buy-in, the more likely there'll be abandonment of that speech-generating device, or that light-tech board or the usage of sign.
So it's important for us to include the parents when it comes to multimodal communication.
So how can we have that parent buy-in? Well, it'll be great if we start inviting the parents through the sessions and have them direct activity.
So then you're coaching them throughout the whole session.
Some activities I have personally used all the time and that helped me would be using shared books, the shared book activity, or using pretend food toys, or using cars, or Play-Doh.
And then you can, with those activities, pair it well with one word so they can utilize that word, or which words to focus on, and then you tell them how many times to use it or when to use them, how to model.

You talk them through the activity, and just know that, just as you a therapist learning this and being a learning curve, it'll be the same for the parent.
So I think for parents it's really crucial to introduce one mode at a time, and once you see that the parent is very comfortable using that sign, or using that gesture, or using that icon, you can start combining them all.
So here comes an example.
And the parent comes in, the patient comes in, and the child really loves the pizza toy.
He just wants to play with it.
So then he picks it up, and then the therapist tells the parent, "Okay, I want you to now narrate what he just did." So the parent starts saying, "Oh, you got pizza." Then you tell the parent to start commenting and pointing and gesturing, technically pointing is a gesture.
You start to comment and gesture as the child plays.
So the parent decides to make comment like, "Yummy pizza," and starts to point to the different slices and the different toppings, and then you do a gesture of, like, pretending to eat the pizza.
All right, so that was session one.
Had a good session.
We tell the parent what we did and what we worked on, the homework, they go home.
Then rolls in session number two, so that's when the parent and child come back again.
And you know what? That child really likes that pizza toy, obsessed with it, so he picks it up again.
So that's when you as a therapist, you introduce the core word eat to the parent and you show the sign, "Eat, eat." So then you encourage the parent to sign the word and to say it whenever they are interacting during play.
So now the parent is saying, "Eat pepperoni.
You eat.
I eat," so the parent is still using spoken language and the sign in conjunction.
So we're working with, you know, the word eat, pepperoni, you, I, and you know the session goes well, you tell the parent what they did well on, what they need to work on for homework.
They go home and then we roll back into the third session.
Again the parent and child come in, and yet still again, that child is obsessed with that pizza toy.
I know you guys have kids like that that just wanna play with cars all the time, or they wanna play with a ball, like the little labyrinth ball toy that's really popular right now, or that Critter Clinic, they're just obsessed with it, they wanna keep playing with it.
Let's use it to our advantage.
So again, the child picks up that pizza toy, and now you as a therapist introduce the icon "Put," and you have it on a little light-tech board, and you encourage the parent to use the icon during play, and it's a little bit easier to, you know, use our hands and gestures, so it kind of throws everyone off whenever you tell the parent, "Okay, now point to this little icon here." So the parent's kind of looking at you confused, and like, "Can you show me how can I do that?" So that's when you as a therapist play with both the parent, the child, and you show them, you have the light-tech board, and you point to the word put, and you get the pepperoni, "Put pepperoni" and then the parent kind of understands what you're talking about.
"Okay, so you want me to point to the picture and say it and then add to it." So now the parent is now using the icon put, and gets the peppers.

So now we're putting peppers on the pizza.
And you know what, you tell the parent, "Oh, you know what? You're doing great, keep doing that.
Let's do it for homework.
You can take the, like, core board with you.
Come back next session and bring it." So then we roll into the fourth session, and yet again, that child really wants to play with that pizza toy.
So now you tell the parent to try and use any of the strategies you showed them.
You can either say it, you can sign it, you can use a gesture, you can use the icon.
So now the parent is using the word "Put mushroom," so we're pointing to the icon "Put," and then we're getting the mushrooms.
Now we're saying "Put pizza in," and we haven't introduced the icon "In" or the sign for in, but the parent is still using spoken language to model it.
"Put pizza in," and we put the little pizza in the oven.
Now the parent is saying, "Take pizza out." And again, we haven't introduced either the icons or the signs for take or out, but the parent is still showing the kid during play what it means and modeling that spoken language.
Then we have the parent say, "Eat mushroom pizza.
Eat mushroom pizza," while signing that word eat.
So now, as therapist, you're like, "Great job, you're doing fabulous.
Let's, you know, bump it up a notch.
Let's now use the word more." And the parent's like, "Okay, do I have to say it and point to the word?" 'Cause you introduced the sign and the icon, and then the parent, you show the parent what you mean, you know, "You can sign it, you can point to it, or you can do both at the same time.
Do whatever feels comfortable, do what you feel is best." So then again, the parent goes back to playing with the kid, and now is using "I want more," while signing the word more at the same time.
And you know what? The parent now is getting a slice of pizza, another slice of pizza.
And now the parent is saying, "Put pepperoni," while again pointing to the icon "Put," and putting the toppings on the pizza.
Now the parent's saying, "Put more pepperoni." So we're pointing to the icon "Put," we're signing the word more, we're picking the toppings.
So now the parent is putting more toppings on the pretend pizza, they're doing great.
You let them know, "Hey, I really like how you were modeling and even using work that we haven't even introduced.
Keep doing that for homework, keep practicing with the word more.
If the kid really wants something, have them like, you know, say it, sign it.
If they're not responding, then you'll go ahead and sign it and show them how to use that word." And then just four sessions just with one activity, one activity that is very much child led, and the parent was involved, the parent modeled language via low and high-frequency words.
So some of the high frequency words were: you, got, in, want, take, out.
And the low frequency words were pizza, yummy, pepperoni, peppers, mushroom.

The parent was able to model signs with high frequency words, so eat and more, and the parent also modeled using icons of high frequency words such as put and more.
So we model 16 words, four being via aided communication, and then the 12 being used on spoken communication or spoken language.
So one activity literally yielded 16 words.
And then some of the things that I've heard frequently are challenges using a speech-generating device in parents.
Again, that buy-in is not quite there yet, so that's when you can use multimodal communication to kind of help the parent out.
So a lot of things that parents have expressed challenging would be doing morning and bedtime routines.
"You know what? Device was used throughout the whole day, it's dead.
The kid really wants me to read a story, but it is at its charging station.
What could I do?" Okay, well, if the kid points to their favorite book, that probably means they probably want to read it, so you can take that as a request, you know, point it to that book.
"Okay, you wanna read that book? Go ahead and read it while the device is charging." And social situations, let's say that you run into someone when going to a coffee shop, and it happens to be the parent and the kid that you interact with the most.
Instead of, you know, the device is in your mom's purse or always left in the car, you can just say, "Hi," or try to say, "Hi," or waving, you know? When it comes to outdoor and physical activities, I have a lot of kiddos that do horseback riding.
I don't know about you guys, but when trying to put a speech-generating device on a saddle, it's not a good idea and it's not safe.
How can we let the horse know that we want to go, aside from kicking the sides and making it go? We can use the sign go to let the instructor know that we want to go, we want to make the horse, you know, walk, instead of, you know, having that bulky device being carried with you, or you know, attempting to put it in the saddle of the horse.
Another thing that I've heard a lot of parents complaining was weather.
Sometimes you're on the playground, and it's probably sunny.
Sometimes when it comes to technology and the sun, there's glare on the device, you can't really see it because it's too bright outside, the screen is completely black, so we can just point to requests, like, "I wanna go to the swing.
I'm pointing to the swing.
Let's go to the swing." Some multimodal communication could aid in those situations in which a high-tech speech-generating device is not available, and that's completely okay.
As I said before, as human beings, we use gestures and spoken language all the time.
So our patients should have the ability to use both, or all modes of communication.
All right, we have now a case study.
So this is Mr.
Mason.
We did the initial evaluation back in 2001.
During the interview, parent reported that Mason has words in his vocabulary, that he's able to sing them.
However, he cannot ask or respond to questions.

He sometimes repeats what he hears from the television, so delayed echolalia, and then he's able to gesture often instead of using words to communicate what he wants or needs.
Sometimes he'll take Mom's hand and guide her to what he wants.
He has a little bit over 50 words in his vocabulary.
So the therapist, I didn't do the initial, the therapist goes ahead and does the testing, you know, he qualifies.
And here are some goals that were back from that initial evaluation in 2021.
He had receptive goals.
Some of the short-term goals were following routine directions, transition between preferred and non-preferred activities, identifying food items, identifying common animals.
And with expressive language, short term goals were labeling animals, pointing to requests, and then using total communication to request recurrence.
So that would be saying more and signing the word more at the same time.
All right, and then I do have a video of whenever he started using the multimodal communication.
Just to give you a little bit of background, he's one of those super hyper kids.
He could not stay seated during his treatment session.
We had to kind of chase him around the clinic to do any type of activities.
Very hyper, but however, his mom did tell me that he really liked books, so I grabbed a copy of one of my books.
He was really into it when he saw it.
So this is the first time I ever saw him sit down and stay seated for like three minutes and engage in the activity.
So for the book, I think I chose the word see because it was a word that was being repeated multiple times throughout the book.
So I focused on the word see, and then I included that fringe vocabulary, so colors, the animals, things that were in the book.
I still was using spoken language, and at this point, he was able to say more and sign more, and select the icon more.
We were getting stuck in using just more than more, and I think a couple of sessions after introducing the core word see, he started to use it, and then he would stop using it, but then he would start combining the word more with the different things that were in the book, and see.
I was modeling this video.

- [AI] Red bird.

- [Yarely] I see a red bird looking at me.

- [AI] More, red bird.

- [Yarely] Okay, go ahead.
We gotta flip the page, we gotta-

- [AI] Turn the page.

- [Yarely] Turn the page, please.

- [Patient] Okay, page.

- Turn.
I did not show in this video, but I was very excited that he said, "I turned the page." I used this book for maybe like four or five sessions, and I kept modeling, "Turn the page, turn the page, turn the page." And this was the first session he verbally said, "I turned the page." So I was really holding back my emotions in this video so I could show Mom what he had accomplished during the session.
Turn the page, that's right.
We have to turn the page.

- [AI] More.

- [Yarely] Uh-huh.

- [Ai] Red bird.

- [Yarely] Okay, I heard you.

- [AI] More red.

- [Yarely] Okay.

- [AI] More red, more red.

- [Yarely] I hear you, I hear you.
Red bird, red bird, what do you see?

- [AI] Yellow duck.

- [Yarely] I see yellow duck.

- [AI] Looking at me.

- Looking at me.

- So I gave a pause after modeling that, "What do you see," that question.
I get some pause, and he was able to tell me there was a duck next.
So then I model, I select icon "See," select icon "Yellow duck," select icon "Looking at me." So I was modeling that spoken language and those icons throughout the whole book reading.

- [AI] More, yellow duck.

- [Yarely] Okay, we're gonna do more yellow duck.
Please turn the page.

- [AI] More yellow.

- [Yarely] Okay.

- [AI] More yellow.

- We'll do more yellow.
And then, as you can see, he really liked touching that top bar to say the message over and over and over again.
I acknowledge it.
"You know what? I hear you.
Yeah, let's keep going." Let's keep looking and see what happens after the yellow duck.

- [AI] Red bird.

- Oops, oh, there we go.
All right, so then after three months into the treatment, as a CF, I requested a trial device.
So he started 2021, three months after the initial, we started a trial device.
Some of the words he started to say after the introduction of the trial device were mom, more, want, stop, carrot, cucumber, and one.
So I would say, one, two, three, three of those words happen to be core words, and then the rest happen to be very meaningful words, Mom obviously, the one that brought him to therapy, the one who interacts with him all the time.
And then he really liked numbers, so one was his favorite number for a while.
And then carrot and cucumber were from a toy that we use all the time, the pretend talking toy.
He really liked those.
So those are both core words and meaningful words.
After the trial, he was successful.
He was able to use a one-hit sequence, I mean, selecting one icon to request.
And then after that 90-day trial period, we were able to request a permanent device.
So that's six months already into the treatment.
The goals were modified to reflect multimodal communication eight months into the treatment.
Why did I wait eight months into the treatment to change them? 'Cause I made a mistake and I had no idea I could do a progress note anytime.
So again, you learn from mistakes.
I made a mistake, I learned, moved on.
And then once I changed the goals, I reflect them.
So he would be able to say the word, sign the word, gesture, and use his speech-generating device.

And data was collected based on those.
And then after 12 months, so 18 months into the treatment session, he finally received his permanent device.
That is the case sometimes where it takes forever for a kid to get that speech-generating device.
It happens.
During my treatment sessions, I used my personal speech-generating device until he got his own.
The parent was encouraged to use sign and spoken language when modeling.
Another mistake I made was I could have given the family a light-tech copy of the speech-generating device they were using.
Now that I'm a little bit more into the career, I'm able to realize, oh yeah, I could have also done that.
And then despite the fact that he didn't have a speech-generating device until 12 months after, he was still displaying carry over skills in therapy and at home.
And the good thing is he started school, very exciting, and after the IEP meeting, the board decided that it was okay for him to bring his speech-generating device into the classroom.
And he uses it in the classroom to communicate with the teacher, and at home to let Mom know what he likes and doesn't like, and uses it in therapy to boss me around, so love that.
And then 2023 rolls in.
So currently, based on his most recent eval, Mom reported that he's able to use his permanent speech-generating device, and that he is using it functionally at home to express what he wants, what he needs, and just to comment.
He is really good at requesting the meals and snacks he really wants.
He really likes popsicles, by the way.
And there was one time Mom was out of popsicles, and he was, like, "Popsicle, popsicle, popsicle," and Mom was like, "I know you want a popsicle, but there's no more," as she modeled no more via words and via the icons.
He still was persistent that he wanted a popsicle.
He's also used his speech-generating device to request different toys, to count, to say the alphabet, to protest, and to joke.
He really doesn't like to share.
So sometimes whenever I will try playing with him, he would look at me and point to the icon "Stop." He did not want me playing with him at all, and I always thought that it was funny.
Now due to HIPAA, I have another video of him using spoken speech and icons to communicate.
However, there was no way for me to blur the video.
He is running all over the place, so I'm just gonna play the audio real quick.
All right, let's see if that's possible.
Put in.

- [Patient] Put in, put in.

- [Yarely] Put in.
What do you want now?

- [Patient] More.

- [Yarely] More what?

- [Patient] More, get.

- Oh, you want to get more, all right, ready, set, go, go, go! In this activity, we were in the ball pit, and he thought it was the funniest thing ever for me to take all the balls out and to dump them out.
So he wanted to get more balls to be thrown out and to put them in.
He said, "More," and I asked, "What exactly do you want more?" Mistake, but I did ask him, "What specifically do you want?" And he went to his speech-generating device, he ran towards it, and he said, with icons, "More, get," that he wanted to get more balls, so that's when I threw them out again, and then we were working with that activity.
I think that activity engaged him for a good five minutes.
And then he was tired because we kept running back and forth.
So currently, he is using the following core, he's using the following core words consistently: yes, my, like, put, want, more, help, stop, in.
And then we're currently focusing in therapy on no, hi, by, get, and your.
The beauty is he's now using language for different pragmatic functions.
He can request, protest, state likes, and label.
Since introduction of the speech-generating device and the usage of multimodal communication, he's been able to use three-word phrases to request.
He likes to say do a lot.
So he would say "Do want more," because I would ask him, "Do you want more?" So then he would say, "Do want more." He is also observed to use three-word phrases to indicate likes, such as, "I like the ABCs." And then he's been observed to count with and without device.
His favorite activities are counting, colors, and the alphabet.
So can never go wrong with those.
And then in summary, children learn through hearing words, through seeing, touching, and doing different activities.
Therefore, us human beings, we should have the opportunity to express ourselves using those multiple modes of communication.
Modeling multimodal communication can be introduced gradually or all at once.
Remember, this is a learning curve.
It's gonna take a while for us to get used to using signs, gestures, icons, and using spoken words at the same time, so take your time.
And then when it comes to parents, it will be overwhelming as well.
And if you feel like it's going to affect the buy-in, then definitely start introducing them slowly but surely.
The great thing about multimodal communication is that it not only is good for expressive vocabulary, it is good for comprehending what we're being asked, and to do, and to mimic.

And the beauty of it is you can always have parents in every session, or perhaps every other session, to show exactly what we're talking about, and how we can use different modes of communication.
It can be a little bit overwhelming sometimes having the parent in the session, especially if you're new into the career, it can be very overwhelming, but you gotta remember, sometimes parents, parents don't know the strategies we do.
We are the experts, we're guiding them, and it's okay to make mistakes.
Mistakes are our teachers, and we get through, we get to teach the parent exactly what we want them to do at home and every day, and how to communicate with family members as well.
So do we have, Jim, do we have any questions right now?

- [Jim] Yeah, there are quite a few in the Q and A.
Do you want me to read them off for you?

- Yeah.

- [Jim] All right, the first question is, "I've been trying to teach a child who uses some vocalizations and ASL basic signs how to use high-tech AAC device in order to increase their vocabulary/have another way to communicate during communication breakdown.
They usually rely on sign to make requests.
I wanted to ask if under the model of accepting multimodal communication, is it okay to acknowledge, 'Oh, you said more with your hands, great.
Can you also tell me with your device?' I wanna continue encouraging the patient to use ASL and vocalizations, but wanna teach them to use the device as an additional mode of communication."

- That's a good question.
Yeah, so when it comes to multimodal communication, we're supposed to accept if they said it, or if they sign it, or if they use their speech-generating device.
In this case, the kid did let you know that he wanted more via words.
That's where you probably get to model using the device, "More of what? So do you want more play, do you want stop, do you want to color, do you wanna use the blocks?" I would really encourage, if the kid already said more with the word or with the sign, then add more meaning to it as opposed to asking for them to use that word yet again on the device 'cause the meaning is there.
The kid is probably gonna get frustrated if you ask, "Okay, now can you say it with your device?" And I know because I've been there and I've done that, I made that mistake of telling the kid, "Okay, I heard you can you now say it with your device 'cause I want you to practice with your device.
Can you say it again with your device?" So that's where you could probably add more meaning to it.
So more cars, more stop, more want, model that fringe vocabulary since you have already that core word more down, you can start expanding the vocabulary, or you can even add another

core word like want, want more, more in, when you're putting blocks in a container, you can add a couple more to it.

- [Jim] All right, the next question, and Joan, if you're still here, if you have specific questions about specific devices, if you could put that in the chat, that'd be great.
"Can parents request these devices to be purchased through Medicare or Medicaid?"

- Good, and Jim, you can also correct me if I'm wrong with this one.

- [Jim] Sure.

- Technically, a speech therapist has to be the one to request the device, just because we're the experts, we're supposed to be able to state what the child can and cannot do with that speech-generating device, as well as explain, like, how it can be used, or if it's successful.
We definitely wanna trial before we get into the purchase just because, I know at least here in Texas, once you request a device, you're stuck with it for five years.
So when it comes to Medicaid, yeah, you can request Medicaid for a speech-generating device as a therapist.
As a parent, I believe you cannot, correct me if I'm wrong, Jim.

- [Jim] No, I believe that's correct.

- Yeah, and if the parent is interested, definitely you can talk it over and see what the options are, which softwares are available based on the language.
And then from there, trial them at least 30 days.
I feel like 30 days will give you a good idea if the software is successful or not, and then trial three different ones, and then pick which one you feel like is the best fit for the kid.

- [Jim] All right, the next question, "How do you feel about goals that instead of using a ratio of opportunities designate a number of times per session, such as five times per 30 minute session? I find that it can often be difficult to determine what is an opportunity."

- That is true, yeah.
Yeah, you can definitely do it per times.
It all all depends.
I know here at work, we definitely love those percentages, we love percentages.
I often have difficulty collecting data and opportunities.
Definitely a learning curve, but yeah, you can definitely do five times, three times, two times, that's perfectly fine.

- [Jim] All right, "Do you have a rule of thumb when considering whether a multimodal," excuse me, "Whether a multimodal utterance is considered one multi word utterance versus multiple word, one-word utterances? Referencing your example with 'No like tomato.'" Do you need me to reread that one?

- [Yarely] Yes, please.

- [Jim] Okay.
"Do you have a rule of thumb when considering whether a multimodal utterance is considered one multi-word utterance versus multiple one-word utterances?"

- I think it's based on the wait time.

- [Jim] Okay.

- So if it's between, you know, a couple of seconds, definitely no more than a minute, and it's within the same time they did the other utterances via sign, gestures, or vocalization, then technically it will be counted as that phrase.
So I think wait time will be definitely a key factor in determining when to count it as a phrase or as a single-word utterance.

- [Jim] All right, the next question is, "Have you had success incorporating eye-gaze boards with vocalizations and gestures?"

- Actually, yeah, I have.
I do have an eye-gaze patient, he happens to be a teenager, so love that.
He's been in a very sassy mood lately, so when he doesn't wanna do something, he'll sometimes shut his eyes and not request via eye gaze.
However, he will tell me with his words when he doesn't want something, he will say, "No," and that technically counts.
Sometimes he'll use to sign more and select an icon with his eye-gaze device to request more of songs.
He is really into songs lately.

- [Jim] Right, "I have a number of kids in my caseload who are verbal but highly unintelligible.
Is it okay to respond, "I did not understand.
Can you tell me with your device?"

- Yeah, that's where those parameters come into the multimodal thing, unintelligible utterance plus an icon.
I had a colleague that once told me that sometimes she really likes using the intelligible word plus an icon in her goals, especially for kids that are highly unintelligible, just so they understand perhaps the message is not quite getting across, maybe you wanna use this.
I think the word, the way it can be worded, instead of saying, "I don't understand you," it was like a specific wording that this therapist told me in order to prevent the whole, like, "Can you say it with your device?" I think you can say like, "I didn't quite understand.
Can you show me?" And from there, they can use either gestures or the device to let you know exactly what they're talking about.

- [Jim] All right, the next question is about your "Brown Bear" book.
Did you make a folder specifically for the "Brown Bear" book?

- The program that I was using already had, like, a folder with it, and Mason happened to have find it during the treatment session.
So I didn't even know until he pointed it out.
I'm like, "Oh, yeah, we can use that." But if you want to just focus with using the core words that are on the main page, that would be best.
I think focusing on those core words as opposed to using that folder that has those, but again, use whatever you feel is best during the treatment session 'cause it all depends on how it goes with that.

- [Jim] All right, "Do you recommend making an icon for yellow duck or modeling yellow and duck, two different categories of fringe vocab?"

- Hmm, good question.
I feel like you could model using the two different fringe words if possible.
I know it could be possibly a lot of navigating back and forth, so you feel like the kid can do a one-hit sequence, then probably the yellow duck icon will be the best, but if you wanna practice the two to three-hit sequences, then you can have him request via the color and then the animal.

- [Jim] "Any suggestions for when a student doesn't like for you to model language touching his speech-generating device? I have one that often gets upset and doesn't want me to touch his device for modeling.
He grabs it and generally tries to keep others from helping or modeling."

- Yeah, that was Mason.
I have another video where I was reading "Brown Bear," and he did not like the fact that I was using or modeling on my own iPad with the speech software.
He was upset that I was using my own and he didn't want me touching it.
He wanted to just use it on his own.
Something that you could do is, if possible, if you have a copy of the light-tech board of the software they use, you can model using that one, or if you have your own iPad, and you have the software available, then you can model using your own.
Sometimes, and I get it, it's their voice, it's their personal space, it's, you know, their bubble.
We don't wanna, you know, take it and just use on our own.
If possible, have your own, either light-tech or iPad and model via that.

- [Jim] All right, "What communication app is that for the 'Brown Bear' activity?"

- I did use TouchChat WordPower 60 Basic, English.

- [Jim] Oh, and I see another comment there that the page is already programmed within the early book folders.

- Yes, they are.

- [Jim] "Do you agree or disagree with allowing children to babble on their speech-generating device or narrowing it down to core only?"

- No, I definitely like them babbling because it's their own voice, so to me, and I need to see if there's research behind this.
If they're pressing different icons, they're trying to discover what's there, it's babbling, they're trying to see what's available, so it encourages the usage of the device and increases vocabulary as well because there's the icon, so receptively, they understand what that is and then they're getting that input.
I do allow it.
If you wanna redirect to the activity that you guys are doing, that's great, but I definitely do encourage the babbling with the device.

- [Jim] Okay, "I have two first-grade students who are nonverbal and in the autism support program.
I'm trying the gestures, signs, speech-generating devices, vocalizations, just trying to get any communication.
I will get some vocalizations of different sounds and happy facial expressions, but will not attempt to sign or use the device.
Do you have any ideas of where to go from here? Or do I just continue to model everything in hopes that progress will be made? We have made progress in terms of them enjoying therapy and activities, but the communication is not increasing.
I'm in a school setting, and this is the beginning of the second school year."

- Okay, that happens pretty frequently.
I think when I was doing my research for this presentation alone, I ran into an article that explained that sometimes speech gain takes between six to 25 sessions in a meta-analysis.
It took between six to 25 sessions before the individual even used their words.
And I'm assuming that could also be applicable when it comes to icons, gestures, and signs.
So definitely keep modeling, keep doing, definitely try not to do hand-over-hand.
I believe, to the most current research, hand-over-hand actually messes up with the motor plan, and then they finish becoming dependent on you using hand-over-hand multiple times in order for them to communicate.
We definitely wanna avoid that.
So definitely keep modeling, try one at a time, try multiple at a time, see what works best.
If joint attention engagement is there and it took till now, that's a good sign.
Keep working on it.
It might take a while.

- [Jim] All right, and the last thing is a comment, "Just as a multimodal communication can be used very effectively with adult neurogenic patients as well.
I've often used combination of speech, writing, communication device, and or drawing with patients with aphasia."

- Yeah, absolutely, I believe that that is where it came from.
I think multimodal communication came from patients with aphasia, and that's when therapists decided to use all modes of communication to get a message across.
So absolutely, it can be used for any age.
Thank you for that comment.
I completely forget, sometimes we not just work with kids, we also work with an array of individuals.

- [Jim] All right, and that is all of the questions.

- Oh, I do see the chat box quite full too.
Okay, I see comments.
All righty, well, I hope I was able to answer your questions.
If not, feel free to email me.
I'm open to clarifying anything that, you know, was confusing or perhaps I did not explain very well.
So that's my email, that's my first name, .ramirez.gonzalez@hotmail.com.
And then these are all my resources.
Thank you so much for today, I really appreciate it.

- [Jim] All right, thank you, Yarely, thank you very much for your expertise.
It was a fantastic presentation.
For anybody still here, make sure you complete that assessment if you are looking to earn those ASHA CEUs for this session.
Thank you for attending and have a great day.