

- Welcome to A Guide to Embedding AAC Use into Daily Routines and Activities.

Just a quick introduction, I am a speech-language pathologist with over 15 years of experience working in number of settings.

And some of those settings include public schools, private practice, and early intervention.

And by way of a financial disclosure, I am the Founder and CEO of VoiceTech, LLC, which is an AAC app company.

And so, the learning objectives for today's webinar are that participants will be able to identify the steps involved in embedding AAC use into clients' daily routines and activities.

Participants will be able to identify strategies for addressing common barriers that limit the effectiveness of AAC use within clients' natural environment.

And participants will be able to identify strategies for effective caregiver collaboration in promoting generalization of communication skills.

So, we'll go kind of going back to our definition of AAC, which is really an all-encompassing term to describe multiple ways to communicate that can supplement or compensate, either temporarily or permanently, for the impairment and disability patterns of individuals with severe expressive communication disorders, and that's coming directly from ASHA.

And so, we talked last time about the different types of AAC tools and devices.

And so, you have those that are unaided such as gestures, facial expressions, manual signs, and ASL.

And then, we have those that are aided such as communication boards, picture boards, computers, and speech-generation devices.

So, all of these are considered AAC.

All of these are considered alternative augmentative communication.

And certainly, one of the things to keep in mind is that when we're thinking about AAC use as a whole, we're thinking about the use of one or more of these modalities.

And one of the things to really keep in mind also is that the purpose of AAC is to enhance the ability of individuals with communication disorders to express themselves effectively in all the environments they're apart of.

And this is really key to some of the things that we're gonna talk about later on because some of the barriers that we might encounter when it comes to implementing AAC use come from really this idea that AAC means using one specific modality and only using that specific modality and having that replace an individual's natural use of communication.

And that's just not the case.

And one of the ways that we really wanna look at this is to consider the fact that language is a tool that we use to communicate with people, but communication includes so much more than our use of language, whether it's verbal, whether it's non-verbal, it's all encompassing this idea of what we as humans do, which is we formulate thoughts and ideas and we have or use a variety of channels to express those thoughts and ideas to individuals around us.

And so, when we think about AAC use and the purpose of using AAC tools and devices, we really want to think about what we want to accomplish, which is to support an individual who is not in a position to communicate effectively using the natural tools that they currently have.

And so, the second purpose of AAC is really to supplement existing communication modalities for individuals with communication disorders.

And so, again, that's saying that we're not replacing what an individual might be using or might be most comfortable using, we wanna supplement it, we want to enhance it, we want to expand it, we wanna make it more robust so that that individual is able to communicate whatever their thoughts, whatever their needs, whatever their desires are.

And then, we really wanna think about instances where an individual had a skill and then lost it due to an injury or due to disease and how that individual might then benefit from compensatory use of AAC tools and devices to be able to resume expressing themselves in the manner that they were already accustomed to.

So, again, we wanna talk about some of those barriers, which really come down to motivation.

So, lack of client motivation, sometimes this lack of caregiver motivation, certainly the lack of availability or accessibility of different AAC systems.

An example of that could be when there isn't an AAC system available that matches a client's needs, where that device or tool might be helpful, it might be effective, but it's not appropriate for that particular client.

And then, that limits their ability to use that tool or that device, and certainly limits the ability of that device or tool to be effective for their unique needs.

Another barrier, just an inadequate or inconsistent teacher/caregiver training, which goes back to some of the things that that can make it challenging for providers to be able to encourage carryover and consistency in use of AAC devices.

And one of these things that really can impact that as how much exposure caregivers and teachers have had to AAC devices as a whole, as opposed to how much exposures they've had to perhaps

the one tool or the one device that's being used by a client or a student that they are familiar with.

Another barrier is decontextualized learning, which kind of goes back to some of the things that can happen when we are teaching clients how to use a particular skill, or a particular device, or a particular tool, but we're not teaching the use of that tool, or that skill, or that device in the context that they're gonna use it.

And so, an example, I think a great example is when we want to maybe teach social skills and we don't have peers for a client to practice social skills using their device with, and that can create a scenario where they may be able to push a button or they may be able to hand someone a picture, they may be able to look at or sort of localize a particular communication tool that they wanna use, but they haven't learned how to use it in the specific setting or the specific environment that they would naturally use it in.

And so, that can lead to a disconnect between their ability to actually acquire this skill and their ability to use it, and to use it independently and certainly to use it functionally.

Another barrier is just the type of vocabulary that's available.

And when we think specifically not just about speech-generating devices, but also thinking about computers, also thinking about pictures, communication boards.

In many cases, those pictures or those buttons or those tools are being presented or created by someone who has an idea of more tangible things that might be present in a client's environment, but not necessarily a lot of insight into how they might access those items in other environments or how relevant those items are to them.

And an example of that is when a client might have a picture board, or have a device, a speech-generating device with pictures of something that are just not motivating to the client.

And that creates a scenario where there might be vocabulary available, it might be a tool or a device that is generally effective, but for a specific client who does not understand the vocabulary or is not motivated by the vocabulary, you know, they're not going to really benefit from the use of that tool.

Another example is in a sense where a device might be set up for things that are present at school or things that are present in the home, but that the client or the student doesn't have access to when they're in one or more of those environments.

And so, there becomes a scenario where there's a lack of generalization and certainly there's a lack of motivation as well on the part of the client to use the device because, again,

the vocabulary is not relevant to what they're finding or what they're encountering in the environment that they're in.

So, when we really think about the steps to embedding AAC use into daily activities and routines, we wanna think about why it's important to do that.

And the reality is that, as with anything else that we learn, what we need is consist consistency of exposure, and consistency of practice, consistency of use.

You know, any skill that we have acquired requires consistent input over time, requires consistent practice over time.

And one of the things that we wanna really keep in mind when we are thinking about embedding AAC use into daily routines and activities is to recognize that when we are successful at embedding these things into what's already happening every day for a client or for a student, they're gonna get that consistent input over time naturally because it's happening within their daily context, and it's going to be much more meaningful to them, and they're gonna be much more independent with it as they are with all the other skills that they've had the opportunity to acquire in that similar manner.

So, when we think about a functional profile, we really wanna start with the case history of the client.

And this is important because we wanna understand what types of tools and devices have they used previously and how effective were those tools and devices? And this is important for a variety of reasons, but especially because this really provides us insight into what the client is familiar with, and what has worked for the client in the past, and what has not worked for the client in the past.

And we will also wanna identify what barriers existed with the previous use of AAC.

So, an example could be if you have a client who has used communication boards in the past, and this client would only use the communication board if they were provided with a tangible motivator and only if they were maybe sitting at a table and being presented with the stimulus item that corresponded to the picture board, you kind of wanna think about how that's going to translate into presenting the client with a communication board outside of that context and whether they are at the place where they would be able to transfer that knowledge or that understanding to be able to recognize what the picture or what the symbol is, and how that corresponds to their level of motivation or level of wellness to engage with that particular modality.

Another thing to consider is, again, what caregivers know about particular AAC tools and devices as a whole, but certainly what their previous experiences have been with using AAC.

And that information is helpful for identifying then based on what AAC tools and devices have been used in the past, which ones to present to trial with the client, and what needs the caregiver might have for training and education.

So, for instance, if you have a caregiver who is uncomfortable with the idea of using AAC tools and devices based on maybe a prior negative experience, then you'll already identify that that caregiver would benefit from specific information, perhaps counseling, I mean, perhaps opportunities to get a model of how to use the device and something that's gonna help them to recognize that this is gonna be a different experience with their child, and that they will be able to get the certain, the level of support that they specifically need in order to become familiar enough with those tools and devices to use them independently.

So, we also wanna identify the client's functional skills in the developmental domains, and I'm gonna talk about each one specifically to be able to illustrate just how significant this is in the process of determining which tools to use and what combination of activities to use them in, and any other considerations that really help to make the process of embedding use of AAC much more effective.

So, when we think about sensory motor development, what we're really saying is how does this child, or how does this client interact with the world around them using their senses? And so, there are a lot of clients in a lot of the populations that we work with who might have really strong sensory preferences or needs in sort of particular areas.

Many clients will have needs, for instance, with for just visual stimulation, or they might have really strong preferences for a certain level of auditory stimulation or a tactile input.

And so, all of these factors are extremely important in trying to identify which types of AAC devices and tools might be the most effective and sort of certainly might be the most appropriate for the client based on how they're developing with their sensory processing skills and also how they're developing with their motor skills.

And so, thinking specifically about clients who maybe have delayed fine motor, gross motor skills might struggle with using tools and devices that require a lot of controlled movements.

And so, that's a really important factor to consider in identifying which types of tools or devices to trial with them, and certainly which ones to start with or which ones to rely more heavily on, which ones to introduce first, which ones to train caregivers and teachers on and so forth.

When you think about social-emotional development, that's also a really important aspect to consider because if you have a

client who is working on some emotional development, emotional regulation, they are not yet in a place where they are able to regulate how they're feeling.

So, when they have really big feelings, there are really big actions and really big behaviors, and that is something that is occurring more consistently than not.

That is a factor in identifying which tools or which devices would be the most appropriate certainly to trial, but also would be the most appropriate to rely heavily on.

For example, if you're thinking about a client who does have emotional regulation needs and does have tantrums or meltdowns that are either sustained or maybe result in self-injurious behaviors, that you want to consider AAC tools and devices that are more unaided as you also work to incorporate and use aided communication tools and devices.

And the reason for that is because we really want to in that moment or with that particular type of client, prioritize their safety and prioritize their ability to access and use the most immediate, the most effective tool to communicate.

And so, if a child is having a really difficult time managing their emotions in the moment, they're not going to respond to a prompt to use a speech-generating device because they're just not in a place where they're able to access that tool, but they still have communication needs then that there still are communication opportunities, you know, even while there's a tantrum going on.

And so, that's a really important factor to consider in identifying if you do have a student who would benefit from initially being exposed to more unaided tools as they work on increasing their emotional regulation, that's an important factor in identifying how to support their communication using any of these tools that are unaided.

When we're thinking about cognitive development, that's, again, a really important factor because cognition is what enables everyone to be able to create a context and make an association between what they see and experience and what it means for them personally.

And so, simply put, when we're thinking about a client's cognitive development, we are thinking about how able they are to be able to look at a picture or look at a symbol and then understand that it's associated with a particular action, it's associated with a particular response, and they really understand the connection between their action and the resulting response.

And then, of course, we wanna think about receptive and expressive communication to be able to identify which tools and devices would be the most appropriate for that individual.

And we're really thinking about the range of understanding vocabulary to being able to use vocabulary, being able to use phrases and sentences, and then identifying based on the characteristics of each specific tool or device, what would be the most appropriate to introduce and when it would be the most appropriate to introduce it.

And again, we wanna think about identifying what caregiver's specific goals and priorities for communication are.

And in many cases, caregivers will say, "I want them to talk, I want them to use sentences, I want them to, yeah, I want them to have conversations.

" And of course, this is a really, really big broad priority that is quite significant and it's something that we want as well.

And what we really wanna do is to be able to narrow that down to understanding how caregivers are expecting or wanting to see communication happen and how frequently they're wanting to see that happen, and what the context is like.

And an example of that could be being able to identify whether a caregiver is prioritizing a client using communication to ask for something that they want either during a particular routine or during time that they are spending with them, you know, just outside of routine.

And this is important because it really helps to bring the caregiver into the process and it really helps to identify also what the caregiver's expectations are for the client's communication, and how that matches up with how the client is currently functioning, thinking about all these different developmental domains that I just mentioned.

And then, what we wanna do with that is to be able to recognize based on the data that you collected about functional skills, you know, what is the impact of sensory motor development on the client's ability to use AAC and the type of AAC tools and devices that they are able to use.

What's the impact of their social-emotional development on AAC use? And what's the impact of their cognitive development and their receptive and expressive communication? And one of the really important things to consider here is really having an understanding of how these specific areas are developing correlates with the ability to identify the impact on the client's ability to use AAC tools and devices consistently and effectively.

And certainly, some of these areas are not within the scope of a speech-language pathologist.

And this really provides a great opportunity for interdisciplinary collaboration and an ongoing professional development to be able to really be better identify how all of

these different developmental domains work together to present us with really a complete profile of the client's functional skills.

And then, again, we really wanna be able to use the data that we've collected on caregiver's specific goals and priorities for communication to be able to identify what needs may exist for training and education.

And certainly, in instances where a caregiver might not be able to articulate a specific priority beyond just talking and wanting the child to speak or wanting the child to communicate in a particular way, then that really sets up for training and education about what communication means and about the role of AAC and supporting communication so that there's an opportunity for caregivers to understand that communication includes all of these different modalities.

And based on how the client themselves is developing, there might be one modality that is most appropriate for them based on the level that they are currently, but certainly that's something that therapy would work to change in the future.

And so, next thing when think about a routines-based interview, which is what sets us up to be able to identify which specific factors about the clients and the environments they are a part of allow us to better identify what we can do to embed AACs into those environments.

And so, we wanna think about the home environment, and we wanna think about the classroom environment, and then we wanna think about any other environments that the client is in.

So, when we think about the home environment, we're really thinking about not just certainly the physical location, we're thinking about how things are set up, we're thinking about who's in the home, we're thinking about who has the opportunity to interact with the client, and we're thinking about what things or what specific items are present in the home because that really allows us to be able to then go through this process of identifying which vocabulary is relevant to the client, which vocabulary does the client understand and use, what are some of the other tools that are available, or what are some maybe barriers or challenges that might occur based on how the home environment is set up.

An example of a barrier could be if you have a client who in the home environment, they are not exposed to consistent communication partners or they're not exposed to consistent opportunities to increase their expressive or receptive vocabulary, that's going to be an opportunity to identify what maybe that could change about the way that the home environment is set up in order to be able to then support the use of AAC in that environment.



And then, we would be able to identify relevant factors that are pertinent to the classroom environment, thinking about how many students are in the classroom, thinking about what the structure of the school day is, and thinking about any other factors that would create opportunities or create barriers to embedding AAC use into that particular environment.

And then really, again, thinking about all the other environments that the client is in and really relying on teachers and caregivers and other communication partners in the client's life to be able to get this information.

And then, to be able to identify what would support the use of AAC in those environments, and what could create a barrier? And then, really using that data to be able to identify these three things, which are key to being able to embed AAC use into all of the environments, and to do so consistently.

Exposure to vocabulary, communication partners, and then those natural communication opportunities that exist just because of the interaction between the client and their communication partners.

So, again, we want to identify the client's daily routines and activities.

So, where do they go regularly? What do they do regularly? And who do they interact with regularly? These are all opportunities for communication.

These are all communication partners.

These are all places where they could be exposed to new vocabulary or have existing vocabulary reinforced.

These are all opportunities to be able to incorporate the use of an AAC tool or device to either supplement their understanding of vocabulary or to enhance their understanding of vocabulary, and then to give them opportunities to practice consistently, which is what will enable that to become a part of that particular context for them.

And then, again, we wanna think about how we collect data based on each routine or activity to be able to identify what vocabulary is a part of each routine or activity, how often are they exposed to that vocabulary on a daily basis within that routine or activity? And then, again, who the communication partners are, whether it's the same communication partner, whether it's different partners, whether it's multiple partners at the same time.

And again, what those natural communication opportunities are.

So, when we really think about the AAC assessment itself, this is where we wanna think about the diagnostic process.

And the diagnostic process is being able to review a client's previous history, being able to review a client's prior medical history, being able to understand what age expected or what

skill, functional skill expected norms are for each client.

And then, being able to observe their responses to determine how their responses line up with or how their responses maybe support the skills that they should be presenting with or that we would like for them to be presenting with, and what needs may exist, what skills may not yet be present.

And this is really a process that is unique to each individual, and really as a part of developing clinical judgment and being able to navigate the diagnostic process, there's really there's some strategies that can make this much more effective.

So, when really thinking about using dynamic assessments, so observations, teacher and caregiver interviews, and really expanding knowledge and understanding of some of those developmental norms can help to be able to paint a much clearer picture of each client's unique communication needs and each communication opportunity that exists within the client's natural environment to support those needs.

And then, really thinking about using multiple AAC tools and devices to be able to get a really complete picture of what is most appropriate for the client's needs and what particular settings or what particular context certain tools and devices might be more appropriate to begin with.

So, an example of that could be if you are working with a student in the school environment and they have a speech-generating device that they're using within that environment, but that device doesn't go home with them and their caregivers don't have access to the device at home, or perhaps their caregivers are not, they don't see the value of using a device in the home environment because they are comfortable with the client's, their understanding of the client's communication needs.

You know, that really is an opportunity to recognize that there's gonna be a starting point for incorporating different tools and devices into the client's home environment as the client's communication needs change.

And that's really an opportunity for caregiver education on how these different tools and devices can be effective at enhancing communication.

And so, if you have a parent or caregiver who is maybe not comfortable with using a speech-generating device, but maybe finds value in using a communication board or picture exchange, it's really an opportunity to be able to provide education on the value of expanding the client's use of vocabulary using all these different tools as opposed to perhaps a scenario where a parent or caregiver believes that the use of AAC is limited to the use of a speech-generating device.

And so, when you think about all the data that you collected

throughout this process, it's really during the assessment that it is the most necessary to apply that data to be able to identify.

So, if you have a client who has needs in the areas of cognition, who has needs in the areas of social-emotional development, that client is going to benefit from different tools, different devices, different approaches than a client who doesn't have needs in those areas.

And being able to collect that data and being able to really put it into the context of the client's natural environment will allow you to be able to recognize when a tool or when a device is not compatible or maybe is not yet compatible with the client's needs or with the client's environment.

So, when we really think about teacher and caregiver education, that is what helps the consistency of practice and AAC device use to be possible because the time that providers are spending with clients is just not enough for the amount of consistency that will allow clients to be comfortable with using their tools and devices, will allow them to be independent, and will allow them to really find value in using it.

And so, being able to work with, collaborate with, and really train and educate teachers and caregivers is really key to being able to promote the use of AAC tools and devices consistently across the board.

And so, really thinking about some of the barriers that we had talked through earlier as being just either inadequate or inconsistent training for caregivers, really recognizing that data is your friend.

So, when you have data from talking to teachers and caregivers and any other sources that are available and you understand what caregivers' main priorities are for communication and for function, then there's the opportunity to be able to point to how AAC use will help to meet or support those priorities.

And so, that's really thinking about collecting the data and then using the data and making sure that you do have those concrete opportunities and concrete examples to be able to tie the use of AAC to the specific priorities that the caregivers have described.

And the reason why this is important, this is the reason why this is effective, is because we all are much more invested and motivated to do the things that we care about.

And so, when parents have the opportunity to recognize that AACs will help overall communication skills, not just in terms of being able to provide the evidence and the research that supports it, you know, they're gonna be much more likely to buy in.

And so, one of the ways to do that is through goal writing.

And so, when goals are specific, measurable, achievable, realistic, and timely, SMART goals, there really is the opportunity for caregivers and parents to see the connection between the goals that are written and their child or the client's ability to use the tools or devices much more effectively or much more consistently.

And then, to be able to communicate a need that they were not able to communicate previously or to be able to participate in an activity that they were not able to participate in previously.

And so, sometimes caregivers just need to see one small step forward to be able to recognize that the tool, or the device, or the tools or devices that are being used are actually effective.

And with that small step or small amount of progress, they can be much more encouraged or much more motivated to learn how to use the device more effectively and then do so more consistently.

So, I'm really thinking about how there are some barriers that are related to just where the caregiver is in their journey and just what depending on the level of severity of the client's needs, this can be really challenging for the caregiver to consider.

And in many cases, you'll have caregivers who are resistant to, or reluctant to try AAC tools and devices because of the belief that it's going to impact their child's ability to speak or impact the client's ability to speak independently.

And this can really be coming from a place where the caregiver is worried that the client may never speak.

And so, this is really an area where in addition to being able to provide evidence, in addition to be able to provide training and education, there really is a need for counseling and really for acknowledging the concerns that the caregiver has, and being able to collaborate with the caregiver to provide the support that's necessary, whether that's within the context of the provider-caregiver relationship, or, you know, with the caregiver's consent by a referral to any other providers that might be more appropriate to support those needs for the caregiver.

And then, really thinking about providing ongoing training and hands-on practice on the use of these tools and devices during the client's daily routines and activities.

And this is quite possibly one of the more significant strategies for effectively collaborating with caregivers.

'Cause sometimes what can happen is that caregivers might have opportunities to attend a training, or opportunities to watch videos, or even opportunities to look through the device and get a sense of how the device works or maybe get information about

how AAC as a whole is effective or helpful for communication.

But one of the more significant ways that this can really be embedded into caregiver's perception of how AAC supports overall communication is when there are consistent opportunities to practice and to get feedback from the provider and also to give feedback to the provider.

And so, an example of this could be when having a conversation with the parent or having a conversation with a caregiver or teacher who who has stated a specific observation, or has maybe stated a specific need, or just has a question where there is a specific answer to the specific question, you know, based on the child's needs, based on the client's needs, based on what the caregiver has expressed as a priority.

And then, being able to set that up for that caregiver to understand that as they've gotten that very specific answer or that specific opportunity to practice hands-on, they then have an opportunity to practice more consistently.

So, as an example, I once had a client who had a.

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So, she was nine years old, a non-speaking diagnosis of autistic disorder, and she had a speech-generating device for a really long time that she never used.

And so, one of the things that I had noticed when I started working with her was that the specific speech-generating device just had a lot of buttons on the home screen.

And so, she would just push all the buttons and then try to exit from the home screen to the camera.

And so, her caregiver would get very frustrated and would then stop using the device because she was playing with it.

And so, one of the first things that we did when we started was to talk about the value of providing exposure to the device so that this client could get more familiar with it and could get more comfortable with the idea of using this device for whatever purposes that she wanted to use the device for and get familiar with the pictures and the symbols.

And this came after just several conversations with the caregiver who had expressed concerns that the client just would not learn because she wasn't using the device for communication.

And so, one of the things that I did in having this conversation or having follow-up question conversations with the caregiver was that I started out by talking about the value of AAC as a whole and talking about this client's particular communication needs as really being such that although she was using words occasionally, her use of words was not consistent and she was not responding to questions about her needs and that was causing significant amounts of frustration, and it was

creating several breakdowns that that meant that she wasn't really making progress with her communication as a whole.

And so, in pointing to that, the goals are really to be able to provide the caregiver with information that was very specific to the client's needs for communication.

And in doing that, I spoke to an area that was also a priority for the caregiver, which was the fact that her daughter was having these communication breakdowns and she was getting really upset, and she did not at the time have the means to be able to communicate why she was so upset or to respond to questions related to what was making her upset or related to what her needs were.

And so, based on that particular client's needs, what we did was to identify what would be the most effective for her to communicate when she was upset and what it was in that particular instance, or what we started with in that particular instance was having her respond to yes and no questions using the device.

Not only when she was upset, but whenever there was a communication opportunity or whenever she had a particular need or whatever there was something that she wanted or might want.

And so, what that did was that in providing her with a screen that only had the yes and no buttons and providing her with opportunities to answer the yes no question after getting a model both from her caregiver and myself, she began to associate the use of the device with communicating and would then approach her parent and point to the device in order to initiate a communication exchange.

And then, that really opened up the opportunity to teach the vocabulary using the device.

And so, in that particular instance, what embedding these strategies looked like for this client and also what working with the caregiver looked like, what was really identifying the primary communication need outside of the general communication needs.

And then, really being able to engage in conversations with the caregiver to understand the caregiver's perspective on those needs, and being able to then provide opportunities to support those needs using communication and also using an association with the device and the specific communication responses that we were looking to elicit.

And so, when the parent had opportunities to practice asking questions, yes and no questions, specifically to her child and using the device or modeling the use of the device to respond to those questions, she felt more comfortable using the device independently.

And once she got to a place where she felt comfortable using

the device to model the responses to yes and no questions, she felt much more comfortable with engaging with the device as a whole.

And so, really thinking about how to bring caregivers into the process is one of the most effective ways to support embedding these strategies, embedding the use of AAC tools and devices into a client's natural environment.

Again, these are my references, and I appreciate the opportunity to talk more on this topic.

And I've included my email address there if you have any other questions, and I'm looking forward to hearing from you.

I'll toss it over to you, Jim.

- [Jim] Thank you, Deborah, for this wonderful follow up.

For anyone watching that would like to earn ASHA CEUs, please be sure to complete the assessment.