

SPEAKER: Good morning. Our session this morning is called The Student Using AAC Augmentative Alternative Communication: No Longer the Quiet Child in the Classroom. I'm very pleased this morning to welcome here Gail Van Tatenhove. Gail is a speech language pathologist with 30 -- more than 30 years of experience working with students who use AAC. She's currently the associate coordinator of the AAC Special Interest Group 12 of the American Speech Language Hearing Association and consultant with Semantic Compassion.

Gail also does speak internationally on the subject of augmentative and alternate communication, and particularly that of core vocabulary. We have been very fortunate before today to have her speak here in Pennsylvania a number of times, most recently just a few weeks ago. The first time that we had her here, I'd like to mention that her session was entitled Extreme AAC Makeover. Well, what we have -- what we know and believe, though, is that Gail's approach that she will be talking is not an extreme approach. What it is is an extreme need.

Gail is a practicing speech language pathologist so that, although she is speaking all over the country on this topic, her experience and her insights are welcomed by all of us because she works many days a week doing this week, and we are so pleased to have with us today. Gail Van Tatenhove, welcome.

GAIL VAN TATENHOVE: All right. Yeah, thank you very much, Susan. And I want to give my thanks as well for being here today to both Susan as well as Donna Salkin. They have been wonderful in collaborating with me and arranging for me to be here today. So I'm very grateful to be here today, and I've enjoyed all the little bits of chocolate I've seen everywhere around this conference center. Not good for the diet, but good for the soul.

But today we're going to be talking about the student using AAC, augmentative and alternative communication. How many of you are practicing people supporting kids who use augmentative and alternative communication systems? All right, so let's -- then let's do the reverse. How many of you really don't work kids using AAC and you're here because you don't know much about it? It's okay to admit that. You know, this is -- we need that. We're going to -- you know, I've kind of couched it today with the subtitle of No Longer the Quiet Child in Your Classroom.

Now how many of you might be general education classroom teachers? How many of you are gen ed teachers? No one? Okay. See the hands, only one general education teacher. Special ed teachers? Special ed teachers. Administrators? Okay. Speech therapists? All right. How about OTs? Any OTs? And the AT people? Okay. AT people.

You know, this idea of the quiet child. If you're a general ed teacher, the one gentleman we had who's a general ed teacher, I don't know, come on, I have several aunts and a sister and I got a niece who's a general ed teacher. They really like that quiet child in the classroom, you know. Let's admit it. You know, we like that

kid who's not always talking out of turn. We appreciate that. Some days, they come home and they just wish every one of their kids of their classroom was a nonspeaking child. Those -- well, it's a rough world sometimes in that gen ed classroom. You know, they've got those kids who just -- how many times have you walked down a hall and you're telling those kids out in that hallway, now be quiet. You got to be quiet out in the hallway.

I've been shushed many a time walking through a classroom hall because I'm talking to the kids, hey, how you doing? Where you going? And they're like, no, no, no, no, they can't answer. They're not supposed to answer. You know, and you know we've got those kids in general ed and special ed that you got to put in timeout or they're just doing stuff they shouldn't do.

So this notion of a quiet child, I want to just kind of touch on briefly this morning as it related to the augmentative communicator. Now there's nothing wrong -- you all know Dr. Oz. How many of you try to get home in time to see Dr. Oz or you watch him in the later in the evening? The Dr. Oz Show. I have a friend whose daughter, they love coming to my house because they don't have cable at their house. And she's only ten, and she likes to be able to come to my house and at night and watch Dr. Oz. Go figure. I prefer the TV cooking show, but she likes Dr. Oz.

And Dr. Oz on one of his programs, as well in Time magazine, talked about the charms of the quiet child. And as we think about the quiet child today, for some of you, you're -- you were quiet kids. You're quiet adults. This is a -- some of you aren't. I see your heads shaking, you know, but there's nothing wrong with being quiet. There's nothing wrong with it. You know, that's sometimes a kid's personality. You know, sometimes there's just healthy introversion. You know, there's that healthy introvert versus the extreme shyness. You know, there's a difference.

And you know, Dr. Oz would say if there's a case of extreme shyness, you got that kid that's terrified to speak or has some depression, now you got to deal with it. That's not who we're talking about today. Then there's another person from the field of education, James McCroskey. I hope I'm saying his name correctly. He's professor of speech at West Virginia University. He's written quite extensively about the quiet child in your classroom.

And he identified six factors that could make a child be considered quiet in your classroom, the first being social introversion. You know, there are some kids, you know, that's a fairly established personality trait. You could have a kids in your classroom today who is kind of the quiet kid. They can communicate if they want to, but they frequently choose by their own choice not to talk too much.

In fact, I was sharing with Susan last night as we were having dinner of a gentleman that I've just started working with who's, at the age of 72, has gotten his first AAC system, 72. And it's not because of a

acquired disability. He was born with cerebral palsy. And when I speak to his brother and I speak to his sister-in-law and even his mother in the moments when her dementia is not so bad and she's got some lucid understanding, they've described him as quiet. He never was much of a talker.

And I can understand about 60 or 70% of his speech. He would have been considered an introvert. And he got by for quite a while without any AAC because they all figured he just didn't have a lot to say anyway. Even if he could speak, he wouldn't have said too much. But that's a story for another time. But generally, the person's who's socially introverted by choice, they're quiet.

Then you know, Dr. James I'll call him, said, you know, some of them might be quiet because of intellectual challenges. Now that is a stereotype most often. Teachers do perceive children who are quiet to be less intellectually capable than kids who are more verbal. But we all remember, I want us all to remember, that quiet may or not mean low intellect. It could, but it might not.

Because we all have lots of examples in our own lives of people we know who are very verbal people, and you know, we would say they're anything but smart, you know. They're anything but smart. So we all -- you all thought of somebody? We all think of somebody.

Then they could have just general communication skill deficits. There are those kids who are self-conscious about a funny ah that they say, or they have other language or communication challenges, so they choose to be quieter. They're just quiet. And for those students, we would say we need to do some intervention. You know, those kids are getting put into speech therapy in first grade, second grade, third grade because of some challenges with their communication.

Then some kids can be socially alienated. Any of you raising teenage boys about 12, 13, 14, 15, 16? Now I wouldn't suggest they're socially alienated, but we do know, especially during those teenage years, some people just go underground with their communication. You know, I have nephews who we used to chat all the time and now they basically grunt. It's like what happened to you? And they don't -- you know, ask them how was your day? Okay. What'd you do? Nothing. You know, and some -- but some kids, they just feel like they don't fit in, they're so awkward, things are going weird in their lives, and so they become quiet. They withdraw.

Then there can be ethnic -- ethnic or cultural differences. Where I am in Florida, we have some schools that speak eight, nine different languages. Other schools down in South Florida, you might 16, 17 different cultures and languages spoken. And we know that how people interact and communicate, especially kids with people in authorities, there's differences. So sometimes that could lead to it, where a kid might be quiet at home -- or quiet at school, excuse me, but hardly quiet at home or in his own community.

And finally, there can be communication apprehension. I have never struggled with communication

apprehension. And I credit it to my father, who at the age of eight said, I need somebody to give tours at our family cheese factory and you're it. You know, and what I didn't know, I made up. And -- but I've never struggled with standing before a crowd. Some of you, I could pick you up here and your knees are shaking and you're about ready to fall over. And you're not raising your hand in class, and you're not wanting to stand in front of a group and give a speech. So we know communication apprehension or pressure, pressure can drive our desire to communicate down low.

But of all these different -- the six reasons that Dr. James mentioned, he did not mention one really important one. He and I left -- I'm going to put the blank up at the top there because he's working under assumption that most educators work under, is that kid that's going to show up in your classroom on the first day of school, that kid speaks. He -- every teacher, especially the general education teachers, assume those kids have speech skills. And yeah, they say, oh, I might have a kid or two I got to send to speech therapy, but they're not anticipating that a child has no or even low functional speech skills.

So we got to put that up at the top of our list today and ask ourselves when that -- when we've got that AAC child in the classroom, they're fundamentally quiet obviously for that first reason. They have no or they have low functional communication skills. But for these kids, being quiet is not their choice. It could have been the choice of the kid who is a social introvert, but you don't say, oh, you know, he's just a social introvert. We don't need to worry about AAC and get him talking. He likes sitting there being quiet.

I haven't met very few augmentative communicators who, unless they're like Brindley who is 72 years old, hasn't been trained to be quiet. You know, that little kid generally coming into your classroom at kindergarten, first grade, second grade, is not quiet by choice. Don't work under the assumption they're a social introvert. They're not generally quiet because of a low intellect. Now yes, there's a high percentage of kids who have disabilities resulting in nonfunctional speech that also have significant cognitive disabilities. I wouldn't pretend otherwise. But generally within our field, we need to be working under the philosophy that we have to presume competence. We just don't look at him and say, oh, he's really low functioning, he can't communicate, there's no need for all that. Because our kids need every possible opportunity to learn how to communicate, so we can't just say, hey, he's quiet, it's low intellect. It's good enough.

Then, obviously, you got a kid coming into your classroom who's quiet because they have no speech or low speech, you better be thinking towards what kind of therapy, what kind of intervention. That's kind of, I hope for all of us, a no-brainer that the full complement of therapies are necessary for this kid. The PT, if they're physically challenged, the OT services. Obviously the speech pathology services. The help of your AT team. This kid needs a lot of supports.

How about do they ever get quiet because they need help fitting in? Yeah. Many of our kids, they need

to be placed in an environment, and we're going to talk -- touch on this a bit today, where they are wanted and they are accepted and where communicating with an AAC device is encouraged. I've seen many a classroom where that kid has been subtly reinforced for not using that AAC system because an AAC system is slow, it's different, and just subtle little things and we're going to address that a little bit on, a little later on in today.

Could they be much different communicating at home than they are at school? We see this all the time. There's not an IEP meeting that you aren't going to sit in where a mother or a father at that meeting and the school staff are comparing notes between what the kid can do at home and what the kid can do at school. We know that that's a difference. So it could be, you know, there's something going on between schools.

And then finally, there's that pressure to communicate. Any of you ever try to actually talk with an augmentative system and have people watch you do it? You know, I could -- I'm totally fluent with an augmented system. Oh, well, don't get smart-alecky, Rick. But when all eyes are on you and the teacher's asked you a question and you know that she's trying to hold back the 23 other kids in the classroom shouting out the answer, sometimes your body goes weird. You know, you can't select something, you're missing things, there's just challenges. So we're going to address a little bit today about how do we reduce that pressure so that we can reduce that kid's quietness within the classroom?

Rick, are you working on a response for me? I see I need to tell the camera that we have an augmented communicator in the room by the name of Rick.

RICK CREECH: Speaking about pressure.

GAIL VAN TATENHOVE: There you go, put you on the spot. Thank you. He said, speaking about pressure, just a little sarcasm there. Thank you, Rick. All right.

So let's think about how do we help the child who is quiet, who's quiet primarily because they have low speech or no functional speech skills? And here's our big assumption. The big assumption I'm making today is that we all agree that a student who has low or no speech skills needs to have access to an augmentative and alternative communication system for spoken language and/or for written language.

We're going to look at a couple things this morning that remind us that this assumption, which many of us sitting in this room battled for in the late 70s and the early 80s, is still not fully integrated within our thinking. I started off seeing my first nonspeaking people as a graduate, I was a college graduate in 1977. And I'm looking around here, that's before some of you were just twinkles in your fathers' eyes. But in 1977, the American Speech Language Hearing Association did not sanction what I did. Did not sanction what I did. Was not recognized, and it was considered relatively controversial. It was not assumed that a kid would get access to an augmentative communication system.

And obviously, in 1977, I couldn't walk to a commercial store and buy some tablet computer with an app, and I couldn't go to a conference where I could look at a lot of technology. But even making simple manual communication boards that were pictured based or implementing gestures or manually-coded signs was looked at a little askew. But we know today, after many years of practice, and there's more than enough documentation out there that having access to AAC system for school kids coming into the education system makes a difference and is an educational practice that works.

So that's -- you know, that's the theme of your conference. There should be no controversy today that an AAC system makes a difference and is an educational practice that works. But today, you know, that is no guarantee. There's still absolutely no guarantee today that, for that student who's coming into your school district, whether they're a preschooler or they transferred in and they're a middle schooler or a high schooler, that an AAC system is currently in place.

And I'd noticed this morning, I wake up early every morning and I have a very bad practice. I keep my iPad next to my bed. How many of us keep our iPads next to our bed? And so, you know, I'm up at 5:00, 5:15, and I'm not even getting out of bed yet and I pull out my iPad, and I'm checking different emails and I'm checking different bulletin boards I check every morning.

So this morning, I checked the ASHA community. Any -- for those of us who are speech pathologists, are you hopefully members of the ASHA community? And I took a look at one of the postings that was posted yesterday by someone in the SLP, in the schools discussion group, and this is what the person wrote. And I will read it out loud for the people listening to this broadcast.

I have a student who I have been working with for a few years. You know, we're not talking for like two weeks. A few years. He has -- he is ten, has cerebral palsy, and only uses moans or babbling. No way of forming words at this point. All right. I have been focusing on sign language and picture symbols with him. Should I have a -- oh, a goal? That's -- that was my typo. This was at 6:30 in the morning, I'm typing this in this -- into these slides because I had to put this in. Should I have a goal for him at this point to improve his use of consonant sounds or to encourage babbling? Now we're talking ten, not ten months. Okay, ten years, I'm assuming. Please help. This is the only student I've worked with for this long who has this type of severe disability.

So that's been posted out there into the schools discussion group that has thousands of members. So this morning, boom, pops up a response. And the woman starts writing, Albina her name is, and I don't know who these people are and I've yet to consider how I'm going to respond to this, says, considering the age of the child. And I'm reading that and thinking, well, that's encouraging, because my head is thinking he's already ten. He's already ten.

Back in the early days of our field in the very late 70s, early 80s, Howard Shane at Boston's Children's Hospital had this flowchart about when you should consider AAC. And I think today Howard would say, oh, please don't bring that up, because in the flowchart it says have you tried working on speech? Have you tried this? Have you tried this? Now if the kid's already -- if the kid's now five, don't implement basically until they're five. Give them a chance to develop speech. Again, Howard would say, no, no, no, we now intervene right away. But the thinking at that time was, you know, five, so I'm reading this. Considering the age of the child --

RICK CREECH: [Inaudible] 22nd century.

GAIL VAN TATENHOVE: I'm sorry. I missed the first part, Rick?

RICK CREECH: Are you sure they are in the 22nd century?

GAIL VAN TATENHOVE: Are you sure they're in the 22nd century? I'm not quite sure, I'm not quite sure, Rick. But I'm still a little encouraged by this, you know, considering their age. The amount -- oh, here's another typo. You can see how I was just frustrated. The amount of therapy over the years, because she's had him for years, and the skills you describe, he moans and babbles. I would probably, and this is probably I was like, ugh. I would probably start continue with a goal targeting oral motor skills to increase range, strength, and controlled movement of lips, cheeks, jaw and tongue. In the process of therapy, I would decide which consonants could be elicited.

I'm like, oh, crap. Sorry, I'm on the -- I'm going to have to ponder for a little while how I'm going to respond to this. Because everything in my head says, considering the age, he's already ten. You've worked on it for years, he's got cerebral palsy. It ain't going away. You know, you should be augmenting. You know, and I'm going to have to ponder how to respond to that in a polite way.

But this is posted at -- this is the discussion of what's going on between speech pathologists in our schools. So have we -- do we have a guarantee? Obviously not for this ten-year-old that an AAC system is in place because, from what she's saying, I'm guessing in therapy she's doing a little sign stuff and she's doing some pictures. Nothing's making it into the classroom. Nothing's going home and nothing's on the IEP. So no, there is no guarantee. So for those of us who have been fighting this --

RICK CREECH: [Inaudible] some speech therapists I had.

GAIL VAN TATENHOVE: It reminds you of some speech therapists you had, Rick is saying. Yes. So Rick, you've gone around the block a couple of times. We know this battle, we keep fighting. So for those of us whose hair is only this color because of our good hair stylists, those of us gray-headed people here, we have to keep fighting this battle. There is no guarantee.

And for those of you who are school administrators, I would hope if you're administrating the school where this kid is and you know this kid, you're encouraging that therapist that AAC needs to be with that kid. But there is no guarantee.

There is also no guarantee that the augmentative system provided supports this student's real language potential because I could show you a plethora of more postings from the ASHA community. This one, by the speech pathologist, who are members of the AAC discussion group, that I read one a while back that I'm going to have to go back and harvest it out and put it in where she says, I'm looking for something for this kid. And basically, I don't need much. Just enough for him to get by. And she said, I tried this thing, and I really like it. I'm not going to name any system because I think it's just good enough for him. Since when is let's just help kids get by and when is just good enough?

She said, and we don't want to spend money, and we don't want something that the staff's going to have to learn how to use, and we don't want something the kid's going to have to learn how to use. When did I got to teach a kid this go out of fashion?

When did all of this -- so we're now at the point because our field and -- you know, the elephant in this room is, you know, apps have changed the field of AAC considerably for good things and bad things. And this notion of -- we're losing this notion of providing an augmentative system that lets this kid meet their full potential. Good enough and just get by is not acceptable.

The words, there's also no guarantee that the words in the AAC system supports generative language. And we're going to talk a lot about that today because an augmentative system, if Rick Creech back there did not have a system with generative language, you could not be making your comments and the smart aleck remarks, you know, that we all love from you. Because if you had just names of the planets and the names of body parts and the names -- I mean, you could make me a list of vulgar words, you know, or words that might shock me if you're into the body part thing, but you can't generate language.

So we're going to talk about that extensively today. Nor can we -- is there a guarantee that the student is receiving appropriate intervention in the augmentative system. If that ten-year-old kid with CP, the families fights to get an AAC system for their child, that therapist is going to need help. And the reality is most general education school-based speech therapists need assistance providing appropriate AAC intervention.

And here's going to be my soapbox. It is not until the American Speech Language Hearing Association requires training for every speech pathologist in the area of AAC will we ever not have to deal with that issue that somebody graduated and did not even have a course on AAC. And you know, this is our battle. You know, and being on the ASHA Special Interest Group steering -- or coordinating committee and dealing with ASHA, we

are making inroads gradually, but working within that association and that structure is challenging. So we as speech pathologists, yes, we have to applaud, we have to have loud voices, we have to fight for this. We have to constantly keep fighting for that. Or we're still going to have speech pathologists saying, well, he's ten. Let's work on speech for a little while longer.

So let's think about access to an appropriate AAC system. You are a very fortunate group of people. You live in Pennsylvania. You work in Pennsylvania. And here in Pennsylvania, you've got one of the most historically strong systems for evaluating and getting AAC systems and assistive technology systems to your students. Be glad you're not in some other states. Not every state has the kinds of teams that you have who can come in and help you, help you assess that student for an appropriate AAC system, as well as teach them. Because I know from my many years now of collaborating -- I got to change something here. Collaborating with many of your folks in your programs, like Susan Gill, that you have knowledgeable strong people here who can help you. So we want you to -- you know, it would be deficit of me here today to say, talk to your IU people. Talk to all those people you have because you have resources in Pennsylvania.

If you're in the trenches, I just wanted to mention this one tool. This one tool, this is the only infomercial I'm going to do today. It is from our colleague Tracy Kovach. It is my favorite tool. It is tool I hand to every general education speech pathologist who used to think it was argumentative communication. Okay? I said this is easy to use. It allows you to create a profile for a student because, you know, it's going to be Miss Susie this year. And then she gets pregnant is going to be Miss Britney next year in the speech therapy chair. And then it's going to be Tom, who's now going to stay there for a while until he decides to specialize in AT or go into administration.

So what I like about the profile is it allows you to track a kid over time because AAC does not happen in one school term with the current speech therapist they have today. It allows you to track over time, and it allows you to track a student in the area of their operational skills. That's their skills in actually being able to operationally use this device. And it was based on Janice Light's, again, another person working here in Pennsylvania, her competencies. It allows you to look at the kid's development of their linguistic skills. So you can track that. It allows you to track where they're doing socially because communication is social. It's all about talk -- you know, you can be talking to yourself versus talking to another person. It's talking to another person, is social, as well as strategic skills.

So I think it's a really nice tool. If you have nothing else at your disposal, if you have to wait, you know, six weeks before your AT team can come out and help you, this is a nice tool to track a kid through their years that they're going to be in a school until we can deem that they've reached competence. So I like using that tool. So you have one thing, if you know nothing you can go home and get that. You can say, I'll try that.

So let's think about, what does it mean to have an appropriate AAC system? Which is whatever we're going to talk about for the next hour and a half, a system that allows me to participate, whether I happen to be in a special education classroom or I'm in a general education classroom and allows me to talk. And that might be, you know, talking to the kid next to me when I should be quiet. It allows me to answer questions when the teacher asks me things, to find out if I've learned anything today. It lets me recite, whether it's the pledge of allegiance or a speech I'm giving on the planets. It allows me to work on my reading, my writing, my computing, everything. What does it mean to have that kind of an appropriate AAC system?

That's not a system necessarily that's good enough, that helps me just to get by. An appropriate AAC system. And what does it mean to have a supportive classroom that actually embraces the use of an AAC system? And when I talk about this today, I'm going to be talking more in light of the general education classroom because, most often in the special education classroom, we've embraced AAC. I'm seeing some faces that maybe not. So it could apply to that, but it's more in the general education classroom.

As well as, how do we have a team that collaborates to support this student? This again, those simple topics going to be another two-day workshop, so we have to touch on some high points here. But for me, my definition of an appropriate AAC system is one that provides the student with words they need for their entire life. Okay, these are not just words I need for some lesson I'm doing in the next ten minutes or for some activity like coloring or doing a puzzle. These are the stuff -- I mean, I need these words my entire life.

And the nice thing about saying that's what I want to give my kids is that we know what these words are. These words are highly predictable. Across this room, there's not a one person has different pronouns than I have. We all have the same 35 pronouns. We all have the same conjunctions. We all have the same prepositions. We have some differences in our names of people and our things we talk about, but generally, these words that we're discussing today are what we all call core vocabulary. When I started in the field, we did core vocabulary most often, and we didn't even call it that. The very first device, and I know Mr. Creech has used this device, the Handy Voice 110. The Handy Voice 110 --

RICK CREECH: Yes.

GAIL VAN TATENHOVE: You know, was core vocabulary. And if there was a word that wasn't provided, you had to go to the color code four, whatever that color was, and spell the thing. Because I remember working with a young girl, I can't think of her name right now, but it was 19 -- oh, let's see, I graduated in '77, I went out to work at the school in Ohio where I was the first speech therapist ever in this building. We had 101 kids who were classified sever profound multiply impaired because it was '77. Nobody hired a speech therapist when 90% of the kids in this building didn't talk.

You know, and so I had to figure out what I was doing. And at that -- just a few years later, out was coming the Handy Voice. So we got her this. And I have an old video, one of those three-quarter-inch videos, that I got to get digitized of her telling a joke. And like Rick, she was using a head stick to the Handy Voice going, what do you get if you give one, because that's all core vocabulary, then she hit the spelling bit and did -- and it was spelled not with letters, but with phonemes. So you didn't spell banana by doing B-A-N-A -- well, however, N-A. You had to figure out what was the ah, you know, you had -- versus the aa. I mean, you had to be like a speech pathologist.

So she got pretty close to spell out banana. What do you get when you give one banana to, then she did the word two, monkeys. And then she had to spell out monkeys. You know, the answer is what of course? A banana split. But what do you get if you give one? All core vocabulary. And she could do that all with one hits on this device.

That was -- we knew give kids core vocabulary because who we were augmenting at that time in the history of our field, because it was all printed words, was literate adults. And you would have been Loony Tunes giving literate adults a whole bunch of nouns. All right, literate adults like the Rick Creeches out there would have said, I can't do anything with this. I can't talk with people. And it's as we've moved down to less literate people and less cognitively intact people and younger people, we've lost that focus on core.

But core are the words you will say to -- when you're five and you're 15 and you're 25 and you're 59 and you're 72. You will say them. 80% of what you say today is all core vocabulary. And only 20% -- and where we've sometimes got off-track in the field of AAC is we've put 80% of our effort on working on the 20%, and we've given only 20% of our effort working on the 80%.

And this whole notion of core vocabulary is a statistical concept. It's all about numbers. I am a -- I am a speech therapist that has number issues. I'm number-phobic and I'm math-phobic. I count on my fingers, I confess it. I can't calculate anything in my head. But I have embraced this idea it's a statistical concept. Again, 80% of what you say are these frequently-occurring words. 80% of those 80% of those 80% come from a set of fewer than 350 to 400 words.

We're not talking about we've got to make sure our kids learn 3,000 words. This hunk of 300 to 400 words is a manageable size. It's very manageable. And even if you've got kids, you say, oh, why, my kids could never even learn 300 words, I think they could only learn about 50 words. Well, even the 50 most frequently occurring words account for 40 to 50% of what we say, while the 100 most frequently occurring words represent 60%.

So if you've got kids who are struggling with cognitive deficits and they can't -- the idea of giving a kid a

vocabulary in their AAC system of 400 core words is just way too much, maybe 50, maybe 100 is a more manageable number. And it's still good. It's not just good enough thinking. It's good.

And all of those figures were based on speaking people. Those figures hold true for people who use AAC if their AAC system actually has those words in them and has been taught it. Because you could do a research project where you look at, well, what words do these nonspeaking kids say? Because they're dependent as -- if they're non-literate on an externally selected vocabulary set, means we picked out what words go in there. It isn't till they become literate and can spell that they can internally begin to say more things that we haven't actually programmed in there.

But because I could do a research study. In fact, I read one not too far back in one of our AAC journals where they were trying to say, no, these nonspeaking kids don't use core vocabulary. Well, when you actually did a look at what words were programmed in their device, it's hard not to -- it's hard to say core vocabulary if nobody's put them in there.

RICK CREECH: Vocabulary, however, the core vocabulary should not be what the teachers wants them to say.

GAIL VAN TATENHOVE: That's correct. The vocabulary should not be -- in terms of the vocabulary, the vocabulary should not be just what the teacher wants them to say. And we are definitely going to touch on that in much more detail, Rick, so thank you for reminding us of that.

Anyway, so we want core vocabulary. And if you -- if this is new to you, or if you're a person who says, I can't make decisions if I don't have the research that backs up my decisions, here's some of the research. This is the research that basically says what speaking kids use as well as what do nonspeaking kids use. So take a look at that. As well as here's some more references for if you're not quite sure what that list of 300 to 400 words is. We got lists out in the field, so here are some references. You have that in your handout. If you chose not to print out a handouts yet, you know you can go online and get them.

So here are the resources, whether they're AAC lists or they are those lists of high-frequency reading and writing words. Because teachers for years have taught these kids to read. These kids have come into their classrooms and these teachers have assumed that the kids know these words. You know, they can say these words, and now their job is to teach them to read those words and write those words. So you know on that Dolch word list, it's all core vocabulary words. So there's lots of references for that.

Now not all core words are created equal. Okay? So if we look at how core are some of these words, you know, and we know at circle time or whatever, early in the morning, that teachers had to do that lunch count. You know, and whatever they're having for lunch, they're checking with their kids what they want to have for lunch today. And you know, so I threw in the chicken fingers.

So if we think about how core is a word, well, there are some words that are in the top 100 words. And that would be like what are we having for, and we're having. They're in your top 100 most frequently-used words. Now I just want to say one thing about that top 100. There are some words in that list, particularly if you're working with kids with emerging communication skills, that although they're in that top 100, they're probably not your top priority right now.

And a good example of this one is for. You know, in terms of prepositions, if you're a kindergarten teacher or an early education teacher, the prepositions you're thinking, I got to make sure this kid can say the word for, F-O-R. No, you're probably working on over, under, around, in and out, top, bottom. So I just want to give you one caution about that. But the word what and we and have are all up in that top 100.

In the next 100, so in the top 200, we're getting a word like today. In the top 400, we're getting a word like lunch. So core is not necessarily not only -- they're that -- nouns do appear in the top list, so it's not like it's totally noun deficit. There are nouns there, but that word chicken fingers is not in that top. It would be classified fringe. Sometimes you'll see our literature call that fringe vocabulary. Sometimes you'll see the literature calling it extended vocabulary.

And I've drawn this little diagram here for us to think about where does a word fit? Because usually the first -- and I think my diagram, I might have changed something just a little bit. It might be just slightly different to yours. But all of us have pretty much the same kinds of words that I would call hardcore. And I've -- some -- I'll say it. Sometimes defining how a word is is a little bit like pornography. You don't always know how to -- what it is or how to define it, but you know it when you see it. Okay.

So if we think about the words that are hardcore, that's why I'm using hardcore, you know, we. The word we, are, have, for, to, those are hardcore. We cannot any of us survive without those words. And then we have words that we might consider softcore. You know, they're still core, but they're a little bit further out. And then we have personal core.

You know, for me, my glasses, you know, if I would have to have somebody attend to my needs, I need the word glasses in my device. You know, where are my glasses? Or I probably couldn't use my augmentative system if I didn't have my glasses on, unless I had good motor planning. I could probably say glasses. But we know we all have personal core the important people in our lives, important things and places.

I know that I'm augmenting Brindley. I'm trying to figure out for this gentleman, who's 60% intelligible, what are those words he's not saying and I'm digging for personal care. His medicines. The things he might need to say when he's on the phone talking to somebody. I'm really having to dig for what's unique to his life that needs to get into his augmented system.

Then we have extended words, and then I have some words that I might call double-X extended. Because a couple -- many years ago, I was out in Texas and I did a workshop out in -- way out in Texas in -- way out in the panhandle. You go to Amarillo and drive another two hours, and it's just flat and cows. But there's a state park out there called Palo Duro Canyon. Anybody ever been to Palo Duro Canyon? You ever heard of it? All right, so that's double-X extended. That's way out there.

And for me, it's double-x extended, but for people who live in Amarillo and all those teenagers who like to sneak off to the canyon to do, you know, what teenagers do in isolated spots, it's probably not double-X extended. You know, for some, it might be personal core. For others, it's extended, but they -- they're going to say it a lot more than I do. So it's kind of very fluid as it goes out there.

And if we think of the word chicken fingers, you know, in that classroom, if they eat it every single week, it's on the menu. You know, for me, I don't eat chicken fingers. It's double-X extended. But for those kids, it's extended. Ad for Joshua, who it's his favorite food, he'd eat chicken fingers every single day as well as my nephew Luke who's on -- who has Asperger's. I had him for two weeks when he was 12, and he ate chicken fingers for lunch and dinner for every single day of those two weeks. It's personal core. If he were a non-speaker, it has to be in his device or we're having meltdowns at restaurants.

So the issues raised by this scenario is, while chicken fingers is the meat of the response and is a -- yeah, you knew something was coming, it's a valid and necessary question. You know, or answer to that question, what do you want for lunch? But, and Rick touched on this already, we're going to touch upon this together, if we keep our focus always just on those nouns and those topic-specific, we are going to perpetuate our guys, first off, being responders. Because we are playing the Q&A game and they become responders, and we know that's a long-term problem for our guys with AAC. And it can't be the type of stuff that goes on in a classroom all day long if we ever expect that guy to be able to communicate once they leave school.

Because at some point, 22 is going to roll around on their birthday calendar and they're out of there. And then what happens? And I want to show you this video of life after school. And I think it's the best video I have in my collection of stuff of why it's worth investing working on core. And this video is posted at my YouTube channel, so let's take a look at John. And I'm going to try not to say anything while this video's running.

[VIDEO BEGINS]

JOHN: I. Wait. More. I wait more.

GAIL VAN TATENHOVE: But John, you've told me quite a story. Why don't you hit speak display so everybody can hear the whole story? Thank you.

JOHN: It was time to eat. I went and wait. No one there. No one come. I afraid no one here would help me eat. I wait more. [inaudible]. She go away. I wait more.

GAIL VAN TATENHOVE: Well, I'm glad you could tell me about it. Is there something you need me to do to fix it? You'll take care of it yourself? Excellent.

[VIDEO ENDS]

GAIL VAN TATENHOVE: And if you were paying attention to what John said, 100% of what he said was core vocabulary, 100% of what he said was core vocabulary. He had been waiting outside my door, ready to talk to me, and it was as far into that where I thought, oh, man, I need to be videotaping this. I need to be recording this. Now I had the transcript from his language activity monitor I could download, had the video. And obviously I had to do something because I now have knowledge about abuse going on.

But when I look at John, you know, focusing on core vocabulary, and I picked him up about three or four years earlier because he had nothing. I'm -- this is at an adult facility. I'm getting people at 22 when they're graduating from my local school districts and I don't live in Boondock, Mississippi. I live -- nothing wrong with Boondock, Mississippi, okay, but I live in Orlando, Florida. We're a major metropolitan area. We are a major metropolitan school district. We got money in our city.

So why is he showing up at 22 at this adult facility with nothing? With nothing? And he's 32 now, so this is ten years old. So it was only ten years old. So he's -- he had federal law saying you got to do stuff for him. And we worked on getting him a system because what he had been doing is using a pencil to a piece of paper because he has hand skills and drawing little scenarios of what he was trying to communicate. He was an early scene communicator.

And so I look at John and say, you know, I'm so happy we focused on your core. For your guys, I don't like to show this video to suggest to you that what life might be like for some people who are trying to live independently, but the reality is it's a hard-knock life out there. And if you don't have the ability to manage your healthcare, manage people who are attending to you, stand up for yourself, your kids are at risk for being abused.

All right. So it's going to be hard to teach core. I would never say to you, oh, teaching core is just a snap because it's not. We know even for speaking kids, if they have -- because for some of our guys, it's not just that they don't have access to those words, they also have language impairments. They're like that Down's syndrome kid where you're working on correct pronouns and you put down a picture of him, you're using -- of course, I used to use Polaroids because that's how old I am. You're now using digital pictures you took of the kids on your iPad. And he's saying, I am running. I am going. I am jumping, and he's working on all that verb

tense. And I ran, I jump, and he leaves the room and say, Miss Van, me see you 'morrow. Yeah, me see you 'morrow too.

You know, I've just done 25 rehearsals of I in the first-person subject position, and he replaced it with me. It's -- language therapy and working on core vocabulary is a hard job, but I hope that video of John says doing it far outweighs the benefits. I'm not accepting good enough. I do not accept, you know, that just get by. Just get by is not good enough for John.

So if we also want to think about John's augmentative system, and many, many years ago, this back in 1985, Bruce Baker introduced this idea of a communication equation, where the other factor that comes into all of this is that effort and time and cognition that, for John, how motivated was he to talk to me? He was highly motivated. He was sitting outside my door and he was eager to tell me. His motivation was very high. And it was high enough to balance off the physical effort.

Because augmented communicators, it takes effort. It takes effort. Rick Creech in the back there using his head stick, you've paid a price with the physical effort over your lifetime of doing that motion. That's hard work. And it's a cognitive effort that, hopefully as they get better at the system, they have to think less about it. They're just doing it automatically. I would dare say I could put a mask -- a sleep mask over Rick's face, and he'd get pretty close to where he needs to be on that board. I wouldn't put the pressure on you to do that today.

And then there's time. There's time factors. And add on that, if a kid really wants, you got to overcome social pressures and you've got to overcome those communication partner barriers that put up roadblocks for you using that device. And for John, you know, he knows that I will give him the time it takes to do that. I will fully accept that I'm not going to go somewhere else, I'm going to sit there with him. I don't say, come hurry up, hurry up. Come on, I got someplace else to go. I got other people I got to do -- or other things I got to do, other people I got to see. I'm not putting up any barriers. And so even if he were lower motivated to communicate, you've got to control all those factors.

Plus, an appropriate augmentative system is one which organizes those words. Because if you're going to try to give kids 350 to 400 core words, you don't put them all on one big sheet of paper. You know, nobody's got a device this big walking around with it, trying to communicate, or a paperboard. They all have to be organized some way. And we want them to be organized in a way that it's not physically as hard to use it, it's not as cognitively hard to use it, and it's fast to use.

And I don't want to spend time today really talking about the whole range of augmentative systems out there because the majority of you are not novices in this field. But in the days now where I see this thing coming up where people aren't assessing like they used to. People are going to online bulletin boards to put a

couple three-word descriptions or three-line descriptions of a kid and saying, what augmentative system could I use? You know, and I'm seeing stuff at the ASHA AAC community like, well, at our school, we all use this app. You know, there is no one size fits all. Has never been, will never be. Because this is a very diverse population. And there will be times that there's no one thing made out there for your guy that fits because that's definitely what I'm finding for Brindley. No manufacturers sat down and thought, hmm, what should I pre-make and sell for a 72-year-old man living with his 92-year-old mother with dementia, who has -- probably only goes out of the house two or three times a month to do something, has got people managing all his healthcare stuff, and he's 60 to 70% intelligible? I know what to make for that guy. Well, please make it because I don't quite know what to make for that guy. I'm having to dig. There is nothing that fits him. There is nothing.

So we always have to go back to, say, particularly for Brindley, all augmentative -- all -- we always say augmentative and alternative communication systems. The person who bought Brindley the device, which wasn't me, bought it as if it was an alternative to replace his speech. And what I have to do is figure out how it is an augmentation to his speech. And that's my challenge.

And I have to figure out what unaided things are useful and what aided stuff. What is he doing unaided-wise? What is he doing with his body? What is he doing with his speech? What's working? And what's not working, I have to fix with some sort of aide.

So I'm looking at his speech, I'm looking at his gestures and his manual signs. And recently, Carol Zangari, in her blog PrAACtical AAC, reminded us that most of us do not teach sign language to our kids. We do manually coded English. You know, we're really not teaching American Sign Language, so let's just be cautious about this.

And then there's lots of, obviously, augmentative systems out there, from simple things you make out of paper, manual boards, to low-tech dedicated devices or speech-generating devices, high-tech stuff. And of course, all those over the counter tablets and mobile technologies and apps.

And there's a place for everything. There's a place for everything. I still do lots of work with manual boards. And I'm not throwing apps out, but I think we have to be wise in all of this. And particularly when we think about how do we create augmentative systems for classrooms? We want to be able to consider how the kid is going to not just give answers, as Rick pointed out earlier.

The teacher -- ah, yeah, the teacher's going to want the kid to give answers, but kids engage in social interaction, they express opinions, they make comments, they ask questions. We want that richness in our augmentative system to do all those kinds of talking things. There's a lot of writing things going on. Now not so much in special ed programs, but in general ed, the writing demands of our kids go way beyond being able to

write the ABCs and print out a few words. They have to take notes. They have to write papers. They've got to do a lot of those things. I've been very privileged in my career to have supported two people who I picked up as little kids and have seen them through middle school, high school, and college. And as they've moved through that, they've had to deal with writing. And how are you going to write?

And then there's interfacing to other computer technology. And you know, when I started in 1977, I didn't worry too much about how is the augmentative system going to interact with other assistive technology, educational technology, or informational technology in the classroom. Now I got to think about, oh, how is this device going to help this kid tweet? You know, and blog.

And in Joshua's classroom, his full reading curriculum and his full math curriculum is done primarily off of computers. The kids truck on down to the computer lab and there's a program that they use school-wide for working on math. There's a program they use school-wide for working on reading. And every kid is sitting in front of a computer with headphones on, doing the reading and math program. Yes, there is some live instruction, but there's 20% live instruction and 80% computer-based instruction. And if Josh was going to be a part of that general education classroom, his augmentative system or whatever else he's going to do, he's got to be able to play nicely with all of that system. So these are robust kinds of AAC systems that I'm talking about.

And when we're thinking about, again, particularly augmented communicators, students who use AAC, going into the general education classroom. One of the first things that I warn those teachers about is noise happens. When we're thinking about this issue of the quiet child, you know, no longer the quiet child, there are times that this kid -- that it's impossible to be quiet because some kids want to have their beeps on. Now Rick has been in here, he may be taking some notes. I see he's doing stuff. He may make a comment, but I'm not hearing him beeping. I'm not hearing beep, beep, beep, beep, beep, beep, beep, beep as he pushes keys on his device. Some kids need that feedback. And some teachers will go loony with that beep, beep, beep that's -- and other kids are distracted by it.

But how long does it drive them crazy? They get used to that, they adjust to it very, very quickly. But some kids included in the mainstream might be using auditory scanning. Jonathan I supported with auditory scanning, and he went in through mainstream middle school and high school. And his device was always saying, row one, row two, row three, and he picked a row and walked through the items in the row. Of course the teacher wants him to wear headphones.

And you got this [inaudible] guy who was going like this with his huge headrest kind of thing with switches all -- try putting headphones on this kid. Half the time, they'd adjust it to this position, you know. He hated the in the ear stuff. You know, and when he's listening it -- to that intensely with it coming right in his ears, he can't always hear what going on in the rest of the class. Whenever I sit on the plane, I was on the plane

yesterday and I was resting. And I had my music playing with my iPhone. And the flight attendant had to come and tap me on the shoulder because I'd missed the most -- the important announcement about turn off everything. You know, and it made me, again, think, boy, when you're wearing those headphones and you're intensely listening to something, those kids are going to miss the instruction going on in the classroom. So noise happens.

Then you ever got kids that say something, you know, the speech is distracting when they're working in groups? Because you got somebody over there that's got a device that's talking loudly. You know, and doesn't whisper well when they're working in small groups. Jonathan -- not Jonathan. I got all these guys whose names start with the letter J. I got Jonathan, James, Joshua, Jordan, and Jeremy. And I just all call them J some days because I'm so confused.

But with Joshua, he's got a macro. He's got a little code he brings up that switches his voice to a whispering voice when he's working in small groups. And then he switches back to his regular group. And he also has access to the speech off because sometimes a peer will just read what he's saying. And he also has access to volume up and volume down. But noise is going to happen.

And kids are going to make mistakes. In the middle of the lesson, they're going to say penis sometimes on, you know. And it's going to come out and just like you guys, every kid in the class is going to laugh. You know, they're all going to laugh and the teacher's like, no, we're talking about bugs. You know, we're talking about insects.

You know, and sometimes they did that on purpose. You know, and sometimes it was just a mistake. It happens. You know, Joshua, because he's -- not only does he have cerebral palsy, he walks on the edge of Asperger's. He hasn't got the official diagnosis, but he's walking right at the edge. And he likes to disrupt. He likes to bring up the animal sounds during -- in the thing, so we had to temporarily hide that activity row, say you can't have access to that during school because you're doing it on purpose. Or the kid who hits -- they've put up a whole, you know, something they did in their display and it's five sentences. It's lots of lines and they hit -- they lay on their switch and hit speak display three times. So it does it over and over and over and over. It's going to happen.

So we want to think about, how do we deal with this? We're talking about being a supportive classroom that really embraces that system and collaborates to support it. And the first thing I want to mention about that is in light of what we were talking about about noise is I know I always spend some time talking with those teachers, whether it's mostly general education teachers, about you manage. You don't punish intentionally disruptive communication. Because that augmented communicator is going to disrupt your class. There's going to be things coming out of that device, and it's going to be loud and it's going to make the kids all

laugh, but you don't take away the AAC system. How many times have we seen that?

With Jonathan, who's an auditory scanner, it is taken away all the time. We just can't have him do this. Or they isolate him. I'll go put him in this little -- it's basically a closet. And you got to work in there with the aide because we cannot have you with the rest of the group. And what does that tell that kid? Is that very motivating to want to learn to be a communicator? No. You don't take the system away. You don't isolate him. But you do have to deal with that disruption.

Now Joshua, who likes to disrupt, his mother -- his mother was raised in a military family. That woman takes no crap from her son. Okay, none whatsoever. She thinks I spoil him rotten and I'm too easy on him and you smile too much. I'm like, smile too much? And you do jokes and you've taught him to negotiate. Because she said flat out to them, you take away a privilege. He does that, it's no second chances. It's no warnings. He's doing it on purpose. He's know how to navigate to two or three things to get to that. He's a very reliable accessor, so he's not making a lot of mistakes accidentally. Make it clear that, you know, saying that word during the lesson to make all the kids laugh is not acceptable, and you're now going to lose a privilege and you keep the device.

And, like Joshua, we have to remind him sometimes to adjust those features in the device. Is it appropriate sometimes to turn the speech off because it's disrupting? The teachers like the speech off when they're doing tests because she said, Joshua is a smart kid. He gives an answer. All of a sudden, you see all the other kids writing it down D. The answer's D. You know, speech has got to come off. It's -- you know, because he's giving away those answers.

Don't make the AAC system a burden or a punishment as well that I've heard people say, I guess we'll have to take your device. I guess we'll have to get out your device, but it -- oh, it just takes so much time when you use the device. Can't we just do yes-no questions? You know, this whole idea that you're going to be able to communicate with this device at the same rate as a speaking kid? Get over it. It isn't going to happen. Even our most fast communicators cannot keep up with the speaking rate. We average kids -- the kids sitting next to him averages 150 words per minute. That's what they say. Our augmented communicators, generally really good ones who can touch the display whether with their hand, a head stick, or with eye gaze, are talking at 8 to 12 words per minute. That's the average.

Now, of course, the more automatic they are with the system, the more they don't have to think about how to say something, the speed will go up. The average rate -- oh, I see another typo. The average rate of a student who uses AAC who's a scanner is probably only five to six words per minute. Jonathan, who's an auditory scanner, because then you even have to scan much more slowly, he is three words a minute. And that's as high as he will ever be. That's as high as he'll ever be.

Yesterday, was it -- no, it was Wednesday I was with Philip. Philip is a senior. Philip's making a choice of which of the two college he's been accepted in he wants to go to. And I have this app that calculates words per minute. And so he knows I use it because one of our measurements of is he getting better with his device is is he increasing his words per minute? And so he knows I start using this.

And he wanted to try to beat 47 words per minute. He's communicating at 47 words per minute. Now he uses his hands, and sometimes he uses two hands, so he's like a touch typer. And he has -- he learns how to beat the system because I don't do a lot of therapy with him, I have to confess, anymore. But don't tell the insurance company. He knows if he wants to beat 47 words per minute, and that's when he's doing conversational chatting, when he's having to do schoolwork, he'll -- the numbers go way down. But if he's just talking about prom is -- and he's got the word prom in his device, prom is coming up and I was thinking about asking Tiffany if she would go with me this year. She's thinking that they'll all just go as a group, but I hate that kind of group dating. I mean, his mother passed away a couple years, and I see him once a month and I hear all the girl problem issues. What should I do to try to get Tiffany to go with me? Like ah, I thought ask her, you know.

His plan, his plan is he's taking her to a Disney event. He's going to go to the magic kingdom on a special event they're holding. And when they're doing the fireworks, he's going to invite her to the prom. How could she say no, he said. How could she say no? I'm like, well, she could be cold hearted and say no, but I don't know how she could say no. Good plan. I'll let you know how it turns out. But he knows if he really wants to get fast --

RICK CREECH: Excuse me.

GAIL VAN TATENHOVE: Yes, Rick?

RICK CREECH: And expect a response to something you were discussing five to ten minutes ago.

GAIL VAN TATENHOVE: About expecting a response to something? When you ask a question? You need to expect that they're going to respond.

AUDIENCE MEMBER: That it will be delayed.

GAIL VAN TATENHOVE: Oh, yes, yes, with the timing. Absolutely, thank you. That you might ask him something and realize it's going to take them five minutes or so to compose an answer, and then you got to be ready to go back to what you had asked them and accept their response.

RICK CREECH: Yes, yes.

GAIL VAN TATENHOVE: All right, all right, good. Thank you, Rick. Excellent example of that. All right, so Philip

knows that if he wants to beat his record, he brings up phrases like I am going, which he can do two hits on his system. He's using Unity 144, and get -- that counts as three words. I am going and she is going and we are going. And if we are all going, then we are all going to have a good time. So he brings that up, and he can do that so fast and hit 92 words per minute with that. And he's like cool.

But he is -- he is actually touch typing. He's got good enough skills that he doesn't have to do this. He could do this. Because he's hoping he can get to the point of almost speaking in real time, but he's working towards that. I'm going to be happy if his average rate over time, whether it's academic or conversation, is somewhere around 25 words per minute. And that meant for him, in his augmented system, I did keep putting in more and more and more words that were part of his personalized core. Like prom and all the Orlando Magic players and all that stuff is in there, so he doesn't have to go back to typing on that. Typing will slow him down.

But this whole idea of, you know, oh, it's so slow, it's ugh. Be careful about that. Don't make it some sort of burden because it's so slow. Can't I just use a faster yes-no? No, you can't. Not all the time. Now not to say that there's not a place to ask a quick yes-no, but when you look in a kid's device at the end of a month or at the end of a week and you download their language activity monitor, I'm very upset if all I see are answers that look like they've got nothing but multiple-choice talking or yes-no talking all week. You know, those are people who are saying, we're just taking the shortcut approach because it's faster for us. Well, that has too much of a cost to our guys.

And also, I've heard teachers say, if you don't stop doing that, whatever they're going to do, you'll have to go with Miss Gail and walk on your -- work on your talking machine, like I'm the punishment. I think I'm fun. But we know that that -- those are reflections of how people look at the augmented system. And we know it's different and it takes time and it takes effort and it throws off my flow with the rest of the class. And we have to address that.

You know, I'm going to have to pick up my speed here a little bit. We have to establish behavior and interaction rules. When that kid goes into the general education classroom, now we've all witnessed them where they're being treated initially like the pet or the baby in the class, which drives those bright kids crazy when somebody pats them on the head. We know we have to establish the rules of how you touch the student or how you touch the device.

You know, generally, you know, I know parents are terrified of kids handling a device, particularly when it might run somewhere between 10,000 and \$15,000, but we figure out what can we do. I love kids to touch the device to do something called aided language input or aided language stim, but we have to establish those rules. We have to figure out for those guys how much do we prompt them, how much do we modify their

materials. We have to figure out how we're going to react to physical or behavioral issues.

When Jordan, who's in a mainstream classroom, he is on feeding tubes and all sorts of contraptions, he's got beepers and buzzers that go off all the time. You know, so the kids had to be clued in that, you know, when Jordan's feeding tube gets clogged and you hear this beep, beep, beep, beep, beep, beep, beep, beep starting, he's not dying. You know, this isn't like, you know, some medical show where people are going to rush in and take -- we just got to clear this out and he'll be fine. And again, after a week or two, nobody hears those things anymore.

But we also have to figure out how to deal with the behavioral issues. You know, with Joshua who likes to disrupt the class, you know, that other kids have to, as best as you can, try to teach for fourth-graders not to laugh at those things. And as well, never -- how do we establish rules with the kids how they need to be quiet? And when I ask Jonathan a question, you can't answer for him. You know, you can't preempt those opportunities that we're giving to the student who uses AAC.

You know, and the elephant in the room for most of our guys is many times they're afraid to teach about the augmentative system and how this kid is different. And I generally approach this to say, let's meet it straight on. You know, the kids, when Jordan went into the school the first time, I was with his mother. They live in Celebration, Florida, which is that community Disney developed. It's like Stepford with -- Stepford wives with Mickey. It's a very regulated community. It's a lovely community, in case anyone from Disney is watching this, and I would be so pleased to live there someday.

But kids were coming home. I was with his mother, we were wandering around downtown Celebration waiting to pick up Jordan. We ran into another mom. And the other mom was telling her about what her son had come home from school to talk about with Jordan. And she was saying, oh, he's skinny, because he is really skinny, you know, and he's got these tubes and we don't have to worry about when the tubes goes off because that means he's just getting more to eat. He gets to eat all the time at school. Isn't that wonderful? And he -- and he's also got a machine, and he talks with the machine, and the machine is really cool.

And this kid was just go -- mother was just going on and on about all the kids, and he's just my favorite kid in the class because there are subtle things that we teach our kids if we don't mention it. We teach them that this shouldn't be talked about. This shouldn't be talked about. And my best personal example is I was on a flight and this little kid is looking over the seat, and he looks at me. He's like maybe four, maybe three, says, you're fat. And the mother says, shh, don't say that. You're not supposed to say that. And I said, why? He's got an obviously good vision. You know, I am fat. I mean, I'm not -- this is who I am because you telling your kid not to point that out just has said fat is not good.

Now, no, I mean, she's not thinking, well, it's not good for your cardiac. No, she's made an evaluation this is a rude thing. You don't point that out to people. You know, and pointing out that this kid uses AAC is not a bad thing. It is what it is, not something that any kid needs to hide and be afraid of. And in that -- in light of that, I think it's very appropriate to think about how do you conduct, with your kid, some AAC awareness activities because they're not going to shut up and wait for this kid to use their system unless they've tried out using one and they experience that it takes time to do this. And wow, this is hard. Boy, Jordan must be smart if he can do this.

So I love making sure that, at the start of a school year, kids get manual communication boards to try out talking like Jordan talks or try talking like Joshua talks. I love having adults who use AAC to come to the classes to speak. I'm sure, Rick, you've had experiences in this where you've been invited to speak at classes. I'm fortunate in the city of Orlando, which is Orange County Public Schools, that we have a peer mentoring adult program that they have hired a woman. She is an employee. She had to be fingerprinted, she's got a contract, and she uses augmentative communication with the dot on the forehead to an ECO. And she hits 30, 40 classrooms a year speaking to kids about augmentative communication. And so we love that.

It's -- we love using Sharon Draper's *Out of My Mind*. Are you familiar with this book? It's a wonderful book. Many times it's used for AAC awareness month. Orange County Public Schools has officially adopted October as the month they read Sharon Draper's book because the ISAAC, the International Society of Augmentative and Alternative Communication, which is an NGO with the World Health Organization, has officially designated October as AAC awareness month.

So in our community of Orlando, we have things going on, whether they're write-a-thons or eat-a-thons or anything for awareness things. And that's also been then adopted by Orange County Public Schools as well. We will do October is AAC awareness month. So they do school-wide things as well.

And that took some -- that took, I guess now it's been about four years in the process of getting that to happen, starting by first having Faye work as a volunteer and then getting somebody to donate the money for her to be part of the school program. And then, finally, she's in her two years now that she's officially -- it is an official position within Orange County Public Schools and hopefully will not be cut.

But I think that's part of a respectful AAC permissive classroom is you're using AAC. And I like to have kids use AAC for some activities during the day. When Jonathan is in -- was in math class, so when he was a younger student, his teacher just used eye gaze to give two-choice answers when she was doing math. So when she was working on these number line kinds of things, is this number more than, less than another, she brought off two cards and every kid had to give their answer by looking at the right answer. So you had 20-some kids quiet, using eye gaze. They needed to understand that's how Jonathan might communicate with his

manual board. He uses eye gaze.

With Joshua, he's got a peer helper that they have three minutes a day that they work on conversational chatting. And the peer uses Jonathan's paper version of his augmentative system and Jonathan uses his, his device. With Jordan, he's got another kid who comes to speech therapy. And they do a chat, practicing turn-taking, and that kid actually reaches in and uses Jordan's device. So these are very simple things for some time during the day that kids be augmented communicators. General ed teachers love it. She said, well, yes, I know for about ten minutes everybody's quiet. It's really nice. But it doesn't happen if you don't plan for it.

We also want to think about outlining use of how do you use this peer supports. In general education classrooms, you've got peers who might theoretically follow these kids for three or four years through the grades. And they are a resource we haven't been using well enough. And obviously, there are some things that are appropriate for kids to do and some that are not. Nobody gets to touch Jordan's feeding tube. You know, that's a medical thing. Nobody does that. But can we use some of those kids to help make our visual support materials? Oh yeah. Because there's just not enough time in the day for us to do that. And you'll see later on some visual support materials I'm going to show you that were a part of lessons that were all made by peers. Because kids are sitting at computers, they're doing answers to questions, and we've got software that will help us make visual support materials. So that's appropriate.

I have peers doing programming. And in the older grades only. And I've gotten in trouble with some parents for this. Because when a kid comes home and says some version of the F word, you know with pro coming out of the device, you know you get that phone call to say, did you put that in there? I did not. That was her friends. They're programming for her. Take that up with Ben. You know, I didn't do that. I would have, though, if I had been asked by her to do it because you all have to have access to certain things that are forceful. You just have to learn when to say them.

How about technical supports? Yeah, again, by older grades, older kids. And in Jordan's classroom, even when he was in second grade, kids plugged in his device for him. When they heard it go duh, duh, nuh, nuh, nuh, nuh, whatever that funky sound is it makes, they said, get the charger, plug it in. I mean, they can plug in. So we figure that out. And then if you can do more one on one work. Like who works well with the kid? Don't always look for the smartest kid. It's not always the smartest kid. There's all sorts of kids that could be really good peers, mentors, and supports.

And if you really want to look for some great resources on how do you train kids to be good augmented communicator partners, look at anything that's done by Binger and Kent-Walsh. Cathy Binger is at the University of Mexico, and Jennifer Kent-Walsh is at the University of Central Florida. They have written a lot on

this subject, as well as ASHA, this past year, 12, Special Interest Group 12, sponsored a webinar all on communication partner training. And these two ladies organized this and some really good stuff there, and it's all archived at the ASHA website. If you did not take the webinar, you do have to pay to get access to any of that stuff.

As well as there are buddy programs. How many of your schools have buddy programs? You know, buddy programs, again, another way to help outline those kinds of peer supports. It's been several years now, but I followed a young girl. We did a lot of these things. Her name was Melissa, all the way through the schools, we started in kindergarten with her. We did a lot of these things here. I implemented, and then we started, you know, phasing out my work with her. I used to only see her once a month when she was in high school.

I remember walking through a high school hallway and some boy came up to me that was like way over my head, he was this tall lanky kid. He called me Miss Gail. Like, who the heck is this kid? And he said, I remember when you came to the classroom and you work with Melissa and you work with Lindsey, and I -- he still remembers how to get stuff out of Lindsey's device. He said, I see her in the call room and I tell her she's got to do this, and then I tell other people not to talk for her. You know, that investment paid off. I know today he is working in that local community and he -- I think he's an insurance agent. You know, and I know now we built a community that's permissive. All right. It all started with that buddy program and that peer helper.

Then we want to commit to creating communication opportunities. We have to create opportunities for our guys. And you know, and if you as a teacher don't know how to create the opportunities, if you're stuck, you can hear this message, create opportunities. But you're like, I'm not quite sure how to do this. Get some help, get some training. I want to show you just that kind of instance. This was a teacher who said, I've been to a lot of your workshops. I've been to these workshops where you've talked about creating opportunities to use core vocabulary, but I don't know what you mean by that.

So I watched what she was doing, I saw how far off she was. You know, because she was asking for nouns and nouns. She's -- and she said, I just don't know what you mean, how I have to do things differently. So I jumped in. I hadn't planned on it, but I jumped in and said, what's the next activity you're going to do? Because this is a special needs classroom. She says, an art project. And I've made this little display because we're going to make these flower pot things out of paper. We're going to glue the pot. We're going to glue the stem, the leaves, and the flowers to a piece of paper. And so she made her little manual board --

RICK CREECH: Excuse me, excuse me, excuse me. For some reason, I always attracted the troublemakers to help me. I wonder why.

GAIL VAN TATENHOVE: Opposites attract. That Rick always said, for some reason, I don't know why, I always

attracted the troublemakers. I can only say opposites attract, Rick. Opposites attract. Or birds of a feather flock together. Whichever thing you want. They were fun, weren't they? Yeah. All right. Thank you for that comment. Again, another good example, that teacher's going to have to be ready that whatever comment a kid might make for something is going to come five minutes later, and it may tax your short-term memory. I said, what was I talking about five minutes ago? But thanks, we never discourage that.

All right. Let's look at how do you create opportunities? Because we knew in this activity, she had made a little manual board. She'd taken the time, she'd fired up board maker, she made a manual board that has pot, leaf, stem, and flowers on. I mean, not a lot of words that these -- these kids are not going home to be gardeners. They're not working for a landscape company. Let's take a look at -- I just wanted to show her. Now this is a six-minute video, but we're going to only look at, for our time's sake, at about two minutes. So I'm just using a manual communication board. Nothing fancy.

[VIDEO BEGINS]

TEACHER: [Inaudible]

GAIL VAN TATENHOVE: Oh, it's because you're talking with your voice.

TEACHER: You boys know what we're going to do?

GAIL VAN TATENHOVE: Oh, good using your hands. What we're going to do. All right, so you want to know what are we going to do? Well, let's take a look. Oh, now everybody's up* Who wants to be the person? Who wants to look? You do? Who?

STUDENT: Me.

GAIL VAN TATENHOVE: Whoever wants to look needs to raise their hand. You want to look? Who [inaudible]. You want to look? You want to look?

[VIDEO ENDS]

GAIL VAN TATENHOVE: All right. I know for time's sake that I'm not going to show a lot there. But I want to say that I know when I went into that activity, because it's not my first time at this rodeo, I know what my core words I'm going to target. And I probably have about 10, 15 words that I know I'm going to target. I have a routine I'm going to do.

I know I almost start every activity where I'm creating a barrier that they got to ask for the word what. Because I know our literature says our kids don't ask questions. So basically, you are reengineering, you're rethinking through the activity to say, how am I going to make it sensible and logical to use this core word? This is not drill and kill. This is create a natural condition that makes saying that word logical.

So you're going to have to do things differently because her plan was we're all going to name what they want, then the aide's going to help them glue it down on the paper, and we're done. You know, that's going to take ten minutes. This activity took 45 or 40-some minutes, where I'm modeling the core words. I've chosen which words I want, I've engineered the activity, I've gotten the stuff, the materials, whether it's a box that I can hide stuff in or it's a bag I can hide stuff in. I'm going to have to be stupid sometimes. I'm going to have to create more barriers like when it came time to glue, the glue -- I used dried up glue sticks and glue bottles that were sealed shut. You just no way you could get those things open. And they need to ask for help. You have to think in advance, how am I going to restructure this activity?

And then, as well, I think a respectful and AAC permissive classroom is aware of the pressure that kids are under. And at times, we're going to have to adjust those pressures because there's lots of things that go on with pressures. With Joshua, his teachers were concerned that he was saying very little in class. And it was such hard work for him physically. He was using his hand to a device. And we, you know, we said -- and they were always saying, come on, Joshua, put it in a whole sentence, put it in a whole sentence. Well, that's that pressure of put it in a whole sentence. It's hard work to go like this to everything you're going to say.

So it wasn't until -- I picked him up when he was -- I wasn't going to see another kid. I had just had seven people pass away in less than two months' time and I just -- I mean, I had to go home to Wisconsin for a month to just kind of regroup because I thought this might be time -- it's time to just quit this and go work in the family business and help make cheese. I just couldn't face it anymore until his mother sent me that picture of him up there, looking like this, and said, oh, please, please, please, won't you see my son? How could I say no? Look at that face.

And then he went from Springboard, we got him more language, he went to the Vantage, wasn't my choice, but his other -- rest of his therapy team was hoping he would be a walker someday. I didn't think he was going to, so I want something light. Well, eventually now he's on an ECOpoint, and he -- that's him from third grade last year.

But with Joshua, what we noticed with him, the change in access changed him completely in that classroom because we made the switch in August of 2011. And when he was using his hands, he was talking with roughly about 1.5 morphemes. So he's giving one and two-word responses. Literally within hours, he jumped up to 3.5 words, and he's been steadily going up. Now he's averaging six to seven-word sentences.

But that for us was all about going back to what was the effect of all that effort and time. It just made a huge difference. Those are pressures that, once we could take them off him, all the other kind of his acting out behaviors were all a disguise to get the pressure off him. And just that kind of change. But it was dramatic. It was very dramatic. Again, we've already talked about get help. Get help to learn how to model. There's so

many things that I forget that people need help and training and modeling to learn how to do it because I've just been doing it for so long.

AUDIENCE MEMBER: Could you just tell people how many words that special education classroom students are using [inaudible]?

GAIL VAN TATENHOVE: Oh, in that one in that class? That class that I showed the video clip, very, very -- how many words are those kids using now in that class? I went into that class, it was -- they were just introduced to a 50 location board. They are now -- some of them are at 110 boards. They're using at least 100 -- about a 100 core words they now have within their vocabularies. And we started at the elementary level. In a couple weeks' time, I'm going back up because some of those kids have rotated into middle school.

So if you're feeling like, this is just an aside, that you're in a school district and you're trying to figure out where should I start with this, I got to take some baby steps, I'm so glad we started at the elementary level. And now as these kids have moved to middle, we're training the middle ones. And then after that, we'll train the high school ones. But we're going to spend some time later on in this morning talking about modeling and adjusting lessons. But I just want to -- again, I want to give you a glimpse of some of the advice that the students who are using AAC who are going back to the classrooms are telling these teachers. It's two people who use AAC here. And again, I've just -- I have them hit speak display because they're -- it's just faster for us.

[VIDEO BEGINS]

GAIL VAN TATENHOVE: Robin, can you tell me why do you think it's important for younger children who use AAC devices to meet adults like yourself who are successful using AAC devices?

ROBIN: We can show them how easy it is for someone to be clearly understood.

GAIL VAN TATENHOVE: All right.

PHILIP: To learn from them, such as life experiences, how to keep track of my homework and managing the basketball team.

GAIL VAN TATENHOVE: That's the guy who could go so fast. For teachers to meet people who are good with their AAC devices.

ROBIN: Most teachers don't know anything about these devices, and many times they are scared of new things. I can show them there is nothing to be afraid of. I can also teach them about the device and a little about how it works.

GAIL VAN TATENHOVE: Philip, would you tell us what has been your experience with some of your new teachers when they heard they were getting you?

PHILIP: My freshman and sophomore years, my teachers were afraid of getting me. But after four or five weeks, they say I'm just like the other students.

GAIL VAN TATENHOVE: What are some important things for regular general education teachers to know when students using AAC devices get included in their classes?

ROBIN: Don't ask them really hard questions at first and give the person time to come up with the answer.

GAIL VAN TATENHOVE: Okay.

ROBIN: But when you ask them questions, don't ask them to say words not in their devices, and don't put them in because it's a waste of everybody's time. Instead, help the student learn to say simple words to give answers because these are the words they need to learn to talk, read, and write.

GAIL VAN TATENHOVE: Thank you, Robin. Philip, what are some important things for regular teachers to know when students using AAC devices get included in their classes?

PHILIP: They will need to tweak the class a little, such as the homework load, and ask questions that the student can answer with words already in his or her communication device.

GAIL VAN TATENHOVE: Well said, well put.

[VIDEO ENDS]

GAIL VAN TATENHOVE: All right. So that's Philip and Robin. All right, so let's think about working collaboratively on that core vocabulary because Robin and Philip have both clearly said we've got to help those teachers use those words already in the devices. Use those core vocabulary words to give answers. I love when Robin says don't waste my time. You know, she doesn't have time to waste on that, those kinds of things.

So for me, that means that teacher and I, we have to have kind of a shared vision that started with, what's her goal? Her goal is to make sure her kids learn. And we know there are pressures under these teachers with all of our state standards. And I know in Florida, next week we are doing the Florida Sunshine, the FCAT, the Florida Comprehensive Assessment Test is starting. And you know, they're all stressing out about how Jonathan's going to do and Joshua's going to do and Jordan's going to do. But we all have that goal, these kids have to learn.

And we agree that communication, if your kids can't communicate, they cannot be as actively involved in learning as we want them to do. We agree that it's through language that we talk, read, and write. You know, we're not bees making little buzzy things that people identify. We use language. And if you're going to have language, you need core. Core is -- language cannot exist without core vocabulary.

So in terms of the educational team and the family, I haven't really been addressing the family, but the family is a key issue in this as well, that we want to work collaboratively to figure out how are we going to keep our priority on core and generative language? And then immerse that priority in how are we going to teach our lessons so that we are using that core and we are using that expressive language? And we could spend a couple hours on talking about and how is this going to address our core standards and our state standards. But we know we want to keep the priority on those core. And that starts by helping that teacher recognize the dominance of core vocabulary.

And I like -- I reminded you earlier on that every general ed -- every general education teacher assumes that they take that kid's ability to talk with core for granted. You know, they assume, hey, by five, these kids have all learned to talk. They're coming into my classroom, they can speak. But they don't take that ability to read, so that's why they work on the Dolch words list. That's why, across every classroom, there's not a classroom you're going to walk into at an elementary level that doesn't have some version of a word wall. They're all up there.

And you take a little glance at those word walls and you look at, you know, any number of those words, the Ts: two, the, this, that, they, them, there. It's all core vocabulary words. We know that if they're going to do any kind of writing activities -- this is an augmented user, Anusha. This is a non-augmented user, Megan -- or Madison, I'm sorry. And they both had to write about -- they're doing a lesson on the Sunshine state's -- the Sunshine state of Florida. They're doing lessons about weather. They're doing -- you know, it's all part of social studies and our industry being orange groves. And so you look at what Madison wrote. It was very cold here. It hurt my trees and oranges. Some of them died. I was sad. So they had to write something from the perspective that they owned an orange grove and we'd had a freeze.

Anusha wrote, cold outside. Orange all gone. No eat. It's core vocabulary because we weren't asking these kids to give me an answer. You know, tell me an answer. It was write from a perspective of. So we want them to be aware of much of what you do in school is not just rote answering. You're not just training your kids to be on the TV show, Are You Smarter Than The Fifth-Grader? You know, we are asking them to do lots of other educational activities such take the perspective of being an orange grove owner. And what would you write? Core vocabulary. It's everywhere.

Now trees and orange and oranges I underline because you could say, no, those aren't core. And I put died in italic. Because if we're thinking about those circles, how far out does the word die get? Is it in the top 400? Probably not, but it is in the device. It is in her device. If Madison were using a Unity program or some other of the programs, that word is in there. So not -- just because a word isn't core doesn't mean it hasn't gotten into the device. Because I know the trees, the word trees has gotten into the Unity program. I know

orange and oranges are. But what Madison had is 83% core. Anusha was 83.3% core. So don't tell me nonspeaking kids don't use core. They use core. If you give them access to it, it will -- they will use it. It's the field of dreams of AAC. If you give it and build it, they will use it. Okay?

Here's another one. Now I could ask you to do this calculation, but we don't have time and I'm assuming many of you are math-impaired like I am. But if you read though this passage to calculate what percentage of core is in this reading passage, because sometimes we ask our kids to show us they're really reading by reading the passage with their device so we can hear them. That's our equivalent of read it out loud.

My mother was saying she was taking care of one of her grandchildren, and she has -- she hates reading. And so she has to read for a certain amount of minutes. And my mother knows that she cheats when she's reading. She's like, oh, she's doing other stuff. So grandma makes her read it out loud to know she's reading. And she'll say, well, I don't have to read out loud. Well, grandma's rules are you read it out loud so I know.

But if you calculated this, this passage is 84% core. So why can some of our nonspeaking kids can't read very well? Because they don't have core vocabulary they practice saying. And if you can't say it, you aren't going to read it. Here's an assignment they did. These are the kinds of things I like going through with that teacher to say, we got to get on the same page. If our kids don't know core when they come into your classroom, I know you want me to put the word Saturn in their device and planet and gas and rings and moons, but I'm telling you, I'll find ways to help you communicate those things differently. Because if we don't get on the page and teach core, your kid can't do this assignment. Your kid can't do this assignment.

So this is what one kid wrote, 75% core. This is -- they asked him to write some sort of application thing because what we teach in school is not just the facts. Kids ask to do -- are told to do all sorts of things. If you teach based on, let's say, Bloom's taxonomy of learning, you know, there are multiple levels. At some points, you have to analyze and apply and evaluate. And that kind of thinking is important. Again, this kid wrote -- a peer wrote 88% of what they wrote was core.

Here's what Joshua wrote. Now yeah, he's got the word Saturn in his device. It came in there already. And he wrote what he wrote. He had his facts. Saturn is six ring around it. It goes around fast. It is light. Does he tick off I know the fact stuff? Yes. How about application? I don't want to live Saturn. No fun because cold. No Cars movie there. It's one of his obsessive compulsives. I wouldn't live there either if there wasn't the Cars movie. So we know he's at 81% core.

Again, you can't read, you can't write if you don't have access to core. Now that's not to say the non-core words like Saturn and moon and rings are bad, evil words, and I'm going to smack your fingers if you teach

it to them. No. Our kids have to learn that. This is all a part of that life enrichment and learning. But for me, if the kid doesn't at this point know their core, it's not the best use of my time to spend my time teaching you how to say Saturn when you don't know how to say big and fast and little and around. It's a matter of picking your battles.

And as they master all those core, yeah, I'm going to -- I'm going to put more focus on the content words. But for me, the first line of intervention is teach those core words. So that's keep our priority on core because it's everywhere. You can't do anything in that classroom.

And then, again, just like we did in thinking about our core vocabulary, we have to figure out what are the most important ones to teach? And definitely your general education teacher does not know what those words are, and she doesn't know how to get them out of that machine. So we have to provide strategies to make that easy because you could send her to a conference like this, she's not going to go home later on and say, I now know how to help the kid get the word out of the machine. I know how to get show him how to say it big, go fast. No, she doesn't.

You have to provide visual supports. Our field talks about visual supports for our kids. Our teachers needs these visual supports. For me, if I'm supporting that kid who could maybe only learn 150 words, I've got my big wall chart. These are the pictures, these are the words. If I've got a kid who can go up to 350 words, I got my wall chart. It is nothing more than a great big, visual dictionary. It's my core words I need to say at a glance. And it works on under on huge assumption, that teachers know how to read and match pictures. Okay. And I've not yet found a teacher who couldn't do that. Because if you can read and match pictures, you can say, okay, if I want him to say the word drink, he has to stop at this and at this. This is the skill. Read and match pictures.

Can peers do this? Most definitely. You know, when teachers do lessons, we -- oops, this is not the one I want. Going back one. We've got that big wall chart. That wall chart might be on the wall, it might be on a PVC frame we've built that moves around with the kid. And if you know you got to model a lesson, you can pre-circle it in advance, do all sorts of things to help you. But my message to the teacher is there are thousands of words in this kid's AAC device, but we're -- our mission is to have our kid learn to say these 350.

I'll tell you what words we should work on, and I'm going to give you the stuff that you know how to push the buttons on the machine to say it. Because you can't expect her in a year's time or even two years' time, if that kid's in the classroom two years, that they're going to have this.

And sometimes, you know, if you're on the move because kids are on the move around the school, I take that chart, I make it into a flip-book. So we say, I'm going to keep our priority on core. I'm going to give

you the visual supports that you need if I expect you to do this. Because if I don't, she will simply lie to me throughout the entire year saying, yes, we've worked on it. And they haven't worked on it.

And then we want to teach lessons in ways that promote this core vocabulary. The teacher's going to have make a change, but it's not a drastic, extreme change. So I say -- you know, I talk about the aware, prepare, declare. That's my little thing that I do with the gen ed teachers that they can remember this. First off, be aware how your teaching style affects whether or not that kid's going to talk in class. Because teachers, we know how they teach in terms of the state curriculum, they use materials. You know, teachers, general education teachers are curriculum dependent. They don't make up lots of new stuff. They use what they have in the school district. They give kids lots of different ways to learn. They use lots of strategies, lots of materials, and they're always keeping their eyes on their prize, which is their state standards and those national testings.

But we know teach -- they teach facts and information. Lots of different formats we use to test kids, but basically all teachers teach two ways. They do descriptive teaching and referential teaching, and all day long they're juggling those two balls as they try to give information to kids and draw back from kids what did they learn.

And with the referential style, these are the fact stuff. You know, which number planet is Earth? Or which is the third planet? Is it Earth? Okay, so let's say it's Earth. Okay. I used to know a little acronym, My Very Easy. Yes, it's Earth. My Very Easy. Yes, it's Earth. So which is the third planet? You need the word Earth.

And for some kids, this idea -- some of the ideas you teach in a lesson are new to them. And your answers are generally quick and one word. The descriptive style, on the other hand, draws from words kids already know. It's a lot of that oral question and answering. And it's a lot of multiple-word explanations. You can't just give an answer with one word.

So teachers, with that referential style, because it's designed for short quick answers and we're so worried about the time it takes a kid to answer, we lean towards those. But -- and they're easy to grade. They're efficient. Everything suggests to them this is the way we want to go with our nonspeaking kids, but it reinforces talking with one word. It forces us to do all this programming of all those words that Robin said is a waste of time. And it places the emphasis on stuff you're never going to use.

In looking at Robin's language sample, I have never, ever, ever seen her use the word Mercury, Venus, Mars, Pluto. It's not come up in any conversation in the ten years I've supported her since she graduated. So she knows it's a waste of time. Versus the descriptive style that takes more than one word. And when you have generative language challenges, it's hard. It takes more time. It takes more practice. But in the long run, it does what we need to do. It gives kids practice saying those words in lots of different context and fundamentally

supports their literacy.

So they prepare for a lesson. You know, I do want the teachers to do all these things: figure out how we're going to have prompt them, develop a lesson plan and modify it, look at the key concepts, define -- here's the key thing, define or you could say paraphrase your key concepts with core words and make simple materials.

I'll have to have you go look at some of this later on, at the scaffolds to support learning and the prompts that support learning. There's nothing here that's going to be radical for you because I want to quickly look at the lesson plan of growing plants. Spring's coming. Of course, in Florida, we planted our gardens back in January, okay. You're going to -- your kids are going to be going out planting stuff pretty soon, so this is the different things kids have to do.

And Jordan's teacher says, I know all kids are going to grow plants in the classroom. For Jordan, he's going to participate by directing others and making comments. Her general plan for anything that involves physical stuff that Jordan can't do is he will direct others and comment. So you can see some of the things she's planned on that she's going to model for Jordan and then Jordan -- encourage Jordan to say and create the opportunity to say it.

Well, you know, how do you create the opportunity for Jordan to say put in more when you're planting seeds? Well, if you're supposed to put in ten, and you drop in one, he's got to look in the hole and tell you, what do you think, Jordan? Should I -- is that enough, or should I put in more? And he's going to tell you.

She's decided he'll describe the parts of the plant, not name them. Because one of the Florida standards says they will describe the parts of the plant and the function. It doesn't say you have to name them. So he'll describe it using core. So they're the pretty, the long. In the lesson plan, he'll discuss the functions, just like the other kids got to tell you the functions. And all the functions normal kids would say to describe it you could do with core.

So we know based on words within Jordan's system right now, I don't have to go program anything tomorrow afternoon to do this, it's right there. He -- other kids will draw. Yeah, we'll separate the plant parts into pieces and then he'll direct somebody. Because remember, it's a physical activity. Any physical activity, Jordan's job is to direct others and make comments if they're doing it right. So he's like the big brother. No, you didn't do that right.

He'll do modified worksheets and he'll answer application questions. So he's doing the same thing other kids will do. So at the end of the day, when he was asked why are plants important to us, he said food to eat, and he said make clean, nose. So he's -- has he got something? Did he learn what he needed to learn here?

Yes. For Jordan, he picked up something.

And so we did know what's the vocabulary of this lesson, we looked up which words were in the device, and we made some visual supports. And this is what a peer did because his device software's running in the computer and he's using a program called the PASS. So a peer has done this for him. And then we as a teacher said, let's make some simple definitions and let's make visual support materials. Because we want somebody to model these words for Jordan. We want to help him. We have to prompt him. He doesn't know all these words.

And this is a way, when we take a look at all of our visual support materials, I start ticking off -- one of my jobs is to tick off where we know we've taught certain words. So I can track at the end of, you know, six weeks, we've introduced him to 25 prepositions, 10 verbs, you know, 25 adjectives. It's a way of tracking information. But in Jordan's definition, 84% of what we were asking him to say is core. And that's how we collaborate with him.

So we're aware, we prepare our lesson, and then he just participates with lots of modeling. And I'm not going to have time today to model modeling. I apologize. But in the talking that's going on, we want that teacher to be constantly modeling one to three words. We want to model on the wall chart that we had in the classroom, we want to model on his device. It takes time, it takes practice, but modeling is a good thing. We model one on one, we model in small groups, we model targeted. I know I'll do lessons or the speech therapist does lessons, and we model a specific word we want him to learn. In lessons, we model the key concepts. And I know I have to stop.

These videos that are here that I'm not going to show you are at my website. Or not -- at my YouTube channel, so please go look at those. We make sure that we have the wall chart where kids can use it, and we model with a various prompt hierarchy. So, ah, and this video here which you're not going to see is at the wall chart. So I know I hate -- when I used to use overheads, when I was skipping past stuff, you didn't know I was skipping past it. And now you do. But I want to show you this. Don't start modeling and think, well, I did it for two days and it just doesn't work. Okay. That's what I -- modeling, where you reach in and show kids the code and you talk with that device yourself and you learn to talk with it yourself because you can't teach what you don't know yourself. You can't.

How many models? You need a lot of models. You know, you have to model a word sometimes 100 times before the kid's going to just start using it. So modeling is a good thing. So I just want to say I hope that, after today, there's no -- you have no reason for a quiet -- the AAC kid to be quiet in your classroom, that they need an appropriate system, that that should be a part of core, that you go back and make sure that you have respectful and permissive classrooms. And think about how we use what we call this descriptive teaching style,

using core to paraphrase non-core words as part of your classroom. All right. So we'll just leave that little last slide up. Thank you so much. And I pass things over to you, Rick

RICK CREECH: The code for this session is BSG52.

AUDIENCE MEMBER: Can you repeat that one more time?

RICK CREECH: B as in bright, S as in star, G as in glows, 52.

AUDIENCE: Thank you.

SPEAKER: Thank you so much, Gail.