

Identifying Communicative Competence and Developing Communicative Competence through Academic Content - Part 3

JANE KLEINERT: Ready? Going to the afternoon after that lovely lunch, hard time staying awake. Nora? Nora and I talked a little bit afterwards, and she had a couple more comments about Hunter. And you want to say those, and then maybe we'll talk about him for just a second? And then we'll move on.

AUDIENCE MEMBER: Oh, my comment's related to the -- thank you. I think the last thing we spoke about before the break was about adding additional comments onto his device. And there were comments about adding please and thank you. and one of the things that I have an opinion about --

JANE KLEINERT: Everybody's got an opinion. AUDIENCE MEMBER: Is about what kind of comments should be added. And I spoke about possibly listening to what Hunter's peers are saying in his classroom, and then adding those comments on rather than what we as adults think should be added, like please and thank you. Because not many four or five year old kids are saying, I would like, you know, juice please. Thank you. That's what we as adults are saying. So just thinking about gathering the information from what the other kids are saying and adding those as social comments.

JANE KLEINERT: Yay, you're a hit. JACQUI KEARNS: Wow. JANE KLEINERT: Did you pay them? AUDIENCE MEMBER: I did not. And I don't have any money to give you. JANE KLEINERT: Just going from that a little more, every time I watch this tape, I see something else, every time I watch any of the tapes. And you know, realize - - and we might have said this, but you know, Hunter's kind of saying, get the fireman hat, get me this, get me that, rather than we didn't put a phrase on there like what do you want to play, you know, to his friends. And then just comments like -- now on another one of his, we do have something that says that stinks and things like that, but this was a little earlier one. But every time, you know, you watch him, there's more that we should have put on there. And Jacqui always talks about that, putting the content on and the words on that your friends are using, as opposed -- that's really Nora's point. You know, we say maybe please and thank you, but five-year-olds might not. AUDIENCE MEMBER: But if we expect our other kids, like if we're going to be teaching please and thank you, wouldn't that be appropriate? JANE KLEINERT: Yeah, I think it's just looking at what you're teaching everybody else, yeah. So if that's what everybody else is learning, then absolutely, we'd want that on there. That's a good point. Okay, so remember we said we were going to do just a brief tutorial on AAC. I apologize if you've already got all this information, but it's a quick and dirty way to teach somebody else, and there may be some folks who be -- who are interested. So, unfortunately, many of our kids go through school, they don't have AAC. There's some -- there's all kinds of wonderful measures out there or tools out there that say to select AAC, do this, do this, do this. And so those are out there. You know, Miranda's book, Miranda Beukelman. So you know, all those are out there. All I just wanted to cover today is that there are some big ticket items that we have to think about when we think about AAC. So among the many are how will the child or the individual access the system? You know, is he going to touch it? Is he going to scan? What's he going to do? What representations go in his system? Should it be signs? Should it be real objects? Should it be pictures, whatever? How complex can the system be? And sometimes we miss this one because we underestimate the student himself, but when you start, you'll see that, and then you can build him up. What's the cost of the system? I hate to put that on there, but in terms of families, that's huge. So we say, oh, well, hey, we used to spend and still spend \$7,000 and \$8,000 for a DynaVox, so I can get an iPad for \$400 and I can put a free app on there. Well, \$400, I know when my kids were

younger, I mean, I couldn't get them to the dentist and pay for it. \$400 is a lot of money. So it's all very relative. You know, it may seem smaller to us as practitioners because it's not \$8,000, but it's still \$400, which is a lot. The ease of the use and the portability. I have a friend now, he's 20, 21, and he is very much like Bruce, but much more physically impaired -- involved. And he had a DynaVox for years and he just hated it. There was nothing wrong with it. It's a fantastic instrument, but it was big and heavy, very difficult to program, very hard to get different places, didn't mount well. Never did get a mount for it that was any good on his wheelchair. He has a power chair. And so when he went to college, we're arguing and I'm going, no, you need Aug Comm on your computer. And he's like, no, I want an iPad. And he won. And entered college with Proloquo2go on an iPad on a very light mount. He's had repeated spinal surgeries, was in the hospital forever, and they just unclipped the mount and put it on the rail on the bed. He did not take one pill or do one thing without questioning the nurse and the doctor intensely, which is really what we're supposed to do, isn't it? Well, he did that, you know. And it was because that instrument for him was very portable, very lightweight. And of course when he went to college, he loved it because everybody loves those kinds of technology, and it worked very well. So he was absolutely correct. And then he did his papers on his Mac. So it worked out beautifully. And then do we want a dedicated instrument, which means one just for communication, or a multipurpose instrument? Which could be an iPad or something like that, or a computer with communication software. So let's look a little bit. Okay, so what do we mean by access? How's the person going to turn the instrument on and use the instrument, okay? And remember, there are several ways to access. Direct selection is the best in quotes in the sense that it's the easiest to teach, it's the easiest, you know, to get at an instrument. Not all people can do that. It's just too hard. They don't have the physical ability. But remember that direct selection includes eye point because you're pointing directly at something. That's considered -- that's considered direct selection just as if you touch the picture, okay. The little lasers, the little dots of the forehead that accesses the computer, and now the eye gaze instruments where you calibrate actually the eye gaze on the computer screen and then you pick what you want, that's all called direct selection. Some is extremely complex and some is just you put your hand there and touch what you want to touch, okay. So eye dwell is considered direct selection. Head pointers, laser pointers, eye pointers, touching with any part of the body. We have a little girl that -- I don't know if we'll run her tape or not, but she does it all by a knee, okay, by accessing direct selection with her switch at her knee. Okay, so that would be one way to go, okay. The second is called scanning. And that's if I have an instrument and I want this square right here, but I don't -- you may scan all the way across. You turn the switch on, it lights and goes across. When it hits the one you want, you hit the switch again and it says that. But of course, that's very what? Time consuming. It's super slow to scan. So of course there's lots of ways to cut down on that. I just pick the row and then -- I mean, I pick the column and then I pick the row, and that kind of thing. So there's ways to cut down on scanning. But the disadvantage of -- everything has an advantage and a disadvantage. Direct selection is fast, but it may be too hard for me. Scanning is easier, requires a lot less work on the part of the user, but it's kind of slow, okay? So there's pluses and minuses to everything. There's an old, rarely used system called encoding I'll show you, but I don't think you'll probably ever see it anymore because we don't need it. Okay, so direct selection, remember, it can be of any complexity, okay. So it can be a single switch. It could be a dedicated device. It could be pictures in a book, touching them. And you could touch with a head pointer, or you could eye point to them. If you use text to speech, you're using direct selection because you're typing it in, okay.

This little boy is eye pointing with -- I mean, this couldn't cost \$10, okay. He's got Plexiglas, a little hole in the middle, and it's clear so you can redesign point. And when you have a clear one, you could actually have more items there because you can see more completely where his little eyes are going. And this is the very high tech, about \$17,000 that DynaVox has, and it's run by eye dwell. And I'm sure somebody here has used it. And it's essentially you're just calibrating the gaze. And once that's done, you can select on the screen whatever it is you want by looking, okay? It's used a lot with people with locked-in syndrome, where everything -- nothing moves except the eyes. End stages of ALS and MS, okay, works good because you might -- you probably still have your eyes functioning. Okay, but that's all direct selection. Scanning, you laugh at that, but kids love clock scanners. My friend makes that tip red like a fingernail so it goes around like that. I've got one that I love because as it scans, it says the option, okay. So the children, if they have a vision impairment, they can use auditory scanning. It whispers until he gets the one he wants. You hit it and then it says it out loud, okay. So you can auditory scan as well as visual scan if you don't have vision. Here's an instrument where the kid just hits a switch, it turns on, and the pictures light up till he gets what he wants. And then he hits a switch again. That's the same thing, although on this one it's very cool because you click first the row that you want, and then the second switch is the column, or vice versa. Okay? And then this gentleman is using scanning with eye dwell. So he's turning the scanner on, it goes across till he hits what he wants, and then he turns it off with his eye dwell and it speaks. Okay, this is old. Don't even worry about it. It's just fun. It's encoding. We used to use it with kids who -- before we had technology who were very bright kids, and they would have a list of phrases or something over here. And if I pointed to A2, what did he say? Yes. So he'd eye point A, eye point 2, and you know what it was. Used to use it with folks right after a laryngectomy, something like that, but now we have so much technology, you would rarely see encoding. But you might read about it. Okay, representation. What are we going to put on there? We forget real objects. Please don't forget real objects, okay? They're perfectly fine. Or miniatures. And these happen to be very simple devices, but there's nothing in the world wrong with holding up the cheerios versus holding up the milk. And he goes to, looks at, touches, or picks the thing that he wants. It's perfectly fine. If that's where the kid -- the student is, that's where you're going to start, okay. So don't forget that real objects are an excellent representation, one of the best. Picture displays could be any and all kinds. Can be black and white, can be colored. Charity Rowland did research years and years ago, and there is no -- we used to have to memorize the sequence. I will have photographs, and then I will have colored pictures, and then I will have black and white pictures, and then I will have schematic pictures. You know, we knew -- no. Kids are who kids are. If they understand photographs, use photographs. If they understand black and white pictures, you use black and white pictures, okay? The more you can pull pictures off the Internet, the better. But if he doesn't understand them, you use photographs. But if he understands all those, why would you go through this ridiculous sequence when you don't need to? Okay, we're just going to go where the child is, where the student is. Okay, print to text, you're familiar with that. I can type in my answer, hit the key, and it says exactly what I'm going to say. Or type in my initiation. Okay, the complexity. I'm always hesitant to say high tech and low tech because people get insulted about low tech and blah, blah, blah, this tech and that tech. So I don't do any techs. I just talk about simple, homemade devices, which can be picture boards, picture books, anything along those lines. Items, shelves. Shelves. Shelves. Where, you know, he can just pick from the box the thing he wants, anything like that, okay? Simple commercial. You can buy commercial picture books. That's fine if you're really limited in your time. Most

people tend to use BoardMaker because you can -- it's very, very fast to do. You just go in, put in the word that you want, three or four possibilities come up. You click it, it goes right into the communication grid, which is made to match whatever instrument you happen to own. You print it out, you slide it in the instrument, and you're ready to go. But you don't have to have BoardMaker. You can go on the Internet and find virtually anything, or you can use clipart if you want. Okay, so but you can -- there are commercially available where you just -- you know, they have all the stickers or all the pictures or whatever, and you put them in. AUDIENCE MEMBER: One thing. Can I add one thing about clipart? One thing I want to add about clipart is when you're making a selection to use clipart, use iconic pictures of whatever it is and be careful about what the picture represents. Because you can -- if you use clipart and you type in water, you'll get a water faucet, a water bottle, and a water -- and land with water in it. So you want to pick the picture that represents how it's going to be used so that it's the most iconic representation that you can get. JANE KLEINERT: For that kid. AUDIENCE MEMBER: For that kid for that situation. JANE KLEINERT: Yeah, yeah. Okay, we can go to electronic and it can be very simple with just a few switches. We can have simple boards. I really love the ones, they're not terribly expensive, where I have maybe 8, 10, 12 pictures. I can go from 1 to 12 possibilities if I have a little grid there. And then there's levels, okay. So for math, I'm going to use this grid. For science, I'm going to use this level. For circle time, I'm going to use this level. You know, that kind of a thing. For lunch, we have this level. It's the less expensive substitute for the dynamic linking, okay? There are some kids who learn the dynamic linking really well and really quickly, but there's some kids cognitively that don't get that, so we can simply have the different levels made, okay, on a less expensive instrument. You can start with, as I say, less extensive instruments, or you can go into things like DynaVox and the [inaudible] instruments, which are multi-thousand dollars. But for people who need them, they're exquisite technology. Okay, DynaVox is the one that has the Eyemax, EyeX, eye something, Eyemax. And that's the eye dwell instrument. They have some instruments that kind of equate to the iPad, so I'm like maybe so, maybe not. But the dedicated instruments have grids, okay. I don't have a grid that works on the iPad yet, but somebody needs to tell us if you have found them. But what if your student is visually impaired and it helps him to know that he's going over different slots to get to the picture, okay? Or he knows it's two or three in. Or I can't take and Velcro fuzzy on one picture and something that's rough on the next picture to help a kid get started, but I can do that on other instruments where I have a cardboard under the -- I have an overlay, so to speak, where it's not going to harm it, okay. So you have to decide what you want and what would fill that. Unfortunately, what people sometimes do is say is what they know. I know DynaVox. I'm going to buy it for everybody. I know iPad. I'll buy it for everybody. Probably not, probably not a good idea, okay? We have to select the instrument, as you know, to the specifics of the student. And the unfortunate thing is we go into classrooms and open the cabinet and good god, there's a DynaVox there, there's all kinds of -- there's a cheap talker too. They're all sitting in the closet, you know, because somebody said that might be good, but then it didn't work or whatever, and there's this whole cabinet full of stuff, a goldmine, but nobody's using it. Electronic too, of course, is computer. You know, there's software that goes right on the computer and makes my computer a communication instrument. One of the biggest and easiest to use is Speaking Dynamically Pro with Boardbuilder. It's all integrated. You bring it up, you bring up a grid, and then you go into -- you go into Boardbuilder and make your boards very easily. It links. If you have a computer that has a touch screen, it'll work just like the iPad would, okay. But it's more versatile in the sense that it's a computer that all the kids could use.

You have to look at all of those kinds of things. What's available. If the computer is the only thing that's available in the classroom, then I may have to go with that, but there's excellent software that will match it. Okay, so now I said there were dedicated instruments and multi-use instruments, okay. So dedicated instruments would be something like this. The Prentke Romich instruments are primarily all dedicated instruments. DynaVox are too, which means they're for communication. Now Medicare and Medicaid will pay for dedicated instruments. Even if you don't need the \$8,000 expense of the DynaVox, you might end up with that because they won't pay for the less expensive, multi-use instruments. Now I ran into one woman from Arizona who had used Medicaid, I think, but I've not run into anybody else. So I don't know how she did it, but she did. But I've not met anybody else who's gotten that through Medicare or Medicaid. And one thing we have to do, I'm not saying everybody needs an iPad. Please don't think I say that. But where it's appropriate, it's less than one-tenth of a DynaVox, okay? And so we need to educate -- now guess who's already getting educated? Private insurance companies. They're no fools. I can spend \$500 or I can spend \$8,000. Hmm, let's think about that. I think I'll spend \$500 if it's appropriate, okay. So private insurance, we're getting some headway. We've not been able to, right now, with Medicaid and Medicaid, and so that might be an advocacy kind of thing that we want to think about. But again, where these instruments are needed, they are fabulous, okay? These are just more DynaVox instruments. One of the things we talked about was portability and access. With some of our students with the most significant cognitive disabilities who only, let's say, use one switch, but they're mobile as that young man, does he have to drag a switch around with him? That's humiliating, you know. Nobody's going to do that. There's these cute, little wrist things that look like a watch. That one's a little bit larger. That's too large, but there is one that looks just like a watch. Has a single switch that's right there. There's the hip talker, which has either one, two, it goes up to 12 options. It's right here. It's like a little -- what did we use -- fanny pack, yeah. It's like I remember we used to wear them, but I couldn't remember what they were. Okay, looks like a little fanny pack. It's great. Alex that you saw, you'll see him later, he's got one. It works great to say please come here, I want your attention, whatever, you know. So that's important. This is a hip talker here. He doesn't look like he needs it. Okay. Okay, so you have to think about those things. That's why Nick, my friend Nick who went to college, didn't like the DynaVox, because it was so big. He never did get a mount for his power chair that worked. There's something else to think about, and those are called hybrid systems. Now there's some systems that are just text to speech, okay. And there's some systems that are just pictures. But there's wonderful hybrid systems, DynaVox makes them, Prentke Romich makes them, iPad, iPod, and iPhones are all hybrid systems, because you can download for those both text to speech apps, picture apps, all those kinds of things, okay. So if it's appropriate for the student, you think he's -- like Bruce. It would be incredible important for Bruce because had we been able to stay with him if he wanted to stay, he would have learned to read, so he would have moved from his pictures to literacy-based, and then hopefully then text to speech. So you would want to buy -- like you'd buy Proloquo2go and an iPad for him, and he'd be in business. I don't think he could handle an iPhone. It would be even better, but I think those would be too small. But sometimes people absolutely fool you. I was so mad at my friend Nick because I'm going on about the computer and everything, and his mother says, well, he texts me when his brother is driving him crazy. He texts you? On what? His iPhone. I was like, Nick! I was so mad at him. You know, he never told me that he could do this teeny, tiny iPhone, you know? And I'm doing all these things. What is this? You want to make my life miserable. We've known each other since he

was 13 months. And we, again, go for opposite basketball teams, and so we have problems. Okay, so we would want, theoretically, then to look at do we want pictures, prints, or text to speech? Do we want -- what kind of access? Many systems have both scanning and direct access. That's important. Now does the iPad have scanning? Only a little bit. You get like from RJ Cooper, his Bluetooth switch, and it makes scanning work, but only on the apps that have scanning. Guess how many out of the millions of apps have scanning? AUDIENCE MEMBER: More and more every day. JANE KLEINERT: Oh, aren't you sweet? You're so positive. Okay, thank you. Okay. About three that I can find. You got more. Okay, great. Okay, so scanning has exploded, which is really needed to be done, so that's very exciting. Okay. And you're going to have all kinds of levels that you want to go to. Okay, so, you know, so do you -- what do you want? Do you want multi-use versus dedicated instruments? Do you want electronic versus non-electronic? Do you want pictures versus print to speech? All of those kind of questions you're going to have to answer. What's important beyond anything is that if we look at the literature on post-school outcomes, kids that are finished with high school, the two elements that come to the top reported by persons themselves who feel like they have a successful life, they have a disability or multiple disabilities, but they feel successful in their lives, are two things. One is self-determination. The other is communication. You cannot have -- please let me stress this. You cannot have self-determination without communication. We can run around and self-determine all we want, but it isn't going to be there if you have no way to express yourself. So it has to be communication coupled with self-determination, okay? We must have the communication system. Okay. So a caution. The communication device can only be selected after individuals have been assessed by qualified personnel. So the first person we think of the SLP. The second person we think of is the AT person. Then we have the teacher. We must have the family and the student themselves. I told you Nick and I fought round and round about what kind of an instrument would be best. He was right, I was wrong, okay? And you can tell him that. He'll be happy to hear it. We have to have OT and PT for access methods. We have to have visual. We didn't put a thing over here for visual impairment specialist, okay, VI people. They -- you can't -- you can't do it with so many of our kids who are truly, truly involved at the most significant levels without VI people, okay? What kind of textures should I use? Where should they be arranged? All those kinds of things. What are his auditory skills? And so -- and the family. And so it has to be a team. That's first caution. Yeah? AUDIENCE MEMBER: I've worked a lot with OTs and PTs and ATs. JANE KLEINERT: Extensively. AUDIENCE MEMBER: I've never worked with a vision specialist before. JANE KLEINERT: Really? Oh my god, they are such a goldmine. AUDIENCE MEMBER: Where do we find a vision specialist? JANE KLEINERT: They should be in virtually every district, at least. Yeah? Oh yeah, they'll be in every district, wouldn't you say? Or where you have a child at least. Okay. Okay. Yeah, and then they might -- yeah, okay, okay. They're fabulous people. I just love them. The instrument has to be specific to that student, not any other student. And it has to match that student's needs. You match the child's needs to the instrument, not the instrument to the child, okay? And that's where we fall down sometimes is we're matching instruments to kids because we have them. And of course, it doesn't work out because it's not the right one for him. Okay, so we said what are the elements we're going to do in intervention before we actually show some more tapes? And that was we'll talk about AAC. Next, we're going to talk about effective teaching behaviors. Yes, then we're going to talk about teaming, and then look at -- do activities about how we might intervene with some of the students that you saw this morning. JACQUI KEARNS: Okay, great. Thanks, Jane. So you can mark AAC off your list. We're done with that one. And

we're going to -- I'm the teacher, I'm the educator. I would have been the special educator in the classroom. So what I'm going to talk about are some of the effective teaching behaviors that we'd like to see either -- and hopefully in both general ed classes and special ed classes, but we'll see how that goes. I also have some -- while you all were having the lunch speaker, I added some examples. I have a fabulous, fabulous research assistant, and she has done some really -- put some books on for Smartboards. Now we don't have a Smartboard here, but I'm going to show you what -- how she designed those books. And they're books that are in the literature. They're in the -- they are literature that is used in third, fourth, fifth, sixth grade, and then you can see how we kind of did that so you can make your own. And you're probably far better than I ever -- well, I didn't do them, Panina did, but I'm sure you all have the skills to do those kinds of things. And you probably have a wealth of them stored places if you -- if a student -- we loan them to schools in Kentucky, but they have to verify that they have a copy of the book in their library or in their possession. So I'm going to show you some of those. But first, we're going to talk a little bit about effective teaching behaviors. Because these are the things that are going to make skill acquisition, communication skills as well as academic skills, come into being. Okay, effective teaching behaviors. These are nothing new. This is McDonnell 1998, so it tells you how old it is. But it's a really great article. Effective teaching behaviors. We need high levels of engagement, right? High levels of engagement. We're excited to be here. We've got interesting stuff that kids want to get their hands on. We've got a high level of engagement. Frequent opportunities to respond. Got to have opportunities to respond built in across the day. If we don't have those opportunities to respond, not going to get very far. We're certainly not going to get skill acquisition. So we've got to get lots of -- lots of trials in there. Now we don't want those trials to come one, two, three, four, five, six, seven, eight, nine, ten. We want the trials to go one, do something else, two. We want those trials interspersed throughout the day, not necessarily -- it's okay to do mass trials. It's quite fine, but we get better skill acquisition when the trials or the opportunities to respond are distributed across the day. So we want distributed trials. We don't want ten mass trials of X, Y, Z. Now if you're in the initial stages of learning, you might do that in an errorless format. You know, sometimes when I'm working on math facts with my son, we'll do some errorless trials where I'll tell him the answer of the math facts. You know, go through three or four of them, tell me -- tell him the answer, zero second delay. Then we distribute the trials throughout the day. You know, every time a math multiplication situation comes up, say, oh, well, so John, what's two times three? And you know, and we'd go on like that. But we want to distribute the trials across the day, and hopefully we want to distribute them within natural contexts, natural opportunities. So that's the point there. We want high levels of success, so that's where I was going with that errorless learning. We want errorless learning models as much as possible, particularly with individuals that have intellectual disabilities and severe multiple disabilities. We want to make it -- it's okay to make mistakes and we learn from mistakes, but too many mistakes impede learning, so we want to make it as errorless as possible. There are lots of errorless -- you all know about errorless learning techniques in the literature. You've all heard of time delay, yes? There are all different kinds. It's been adapted for general education classrooms. It's easy to use. There's also systems of least prompts and things like that. You just have to think about errorless, high levels of success. You want to make sure the kid is successful as quickly as possible. Systematic presentation. This is the one where it takes some thought. And in -- and this is where the general ed -- the special educator working with the general ed person comes into play. In general ed, the general ed teacher tells us, I'm going to be working on, oh,

let's see, got to think of something. I'm going to be teaching about Kentucky history and we're going to be focused on specifically on geography. And there are six regions and blah, blah, blah. And the special ed teacher is going, okay, so how am I going to get this kid to learn six regions? How are we going to do that? How can we do that systematically, very systematically? Our presentation is systematic, and how can we link that with some other types of systematic learning? So we want to think systematically. How do we present the information and we present it in a way so the student can grab onto those salient clues? We want it to be as salient, as concrete, salient as possible. Be able to grab onto those salient cues. So systematic presentation. Immediate feedback. Oh yes, you are correct. The answer to two times three is six. You are correct. The answer to two times three is six. You did a great job multiplying, or you did a great job adding. What I hear teachers do all the time is good job, good job, good job, good job. What's wrong with that? What was good? I need to know specifically in the reinforcing event what I did that was good. Oh, great job, you -- I'm working with my seven-year-old on picking up his clothes because, you know, he just takes them off and they just -- bless his heart. So we're working, oh, good job, you picked up your clothes and you put them in the hamper. Great. You know, we want to give specific feedback in the -- specific feedback about what the student did that was correct. Because very often, the kids in the population we're talking about, they miss the salient stimuli, so they really don't know what they did -- they really don't know what they did that was good. So we want to emphasize that. So, and then the final one, and this is the one that people seem to find the most difficult, or I think. How many of you all see people actually collecting data on student performances? Two, three, four, five. Okay, good, that's good. There's more than I thought. Well, I can tell you my own data collection story. My son is in the fifth grade, and we got a little problem with math. And they decided to pull him out of Spanish. Of course they didn't tell mom, which very bad thing to do, to go do math practice. You're laughing at me. I thought you'd enjoy this story. And to go do math, and so I had to write them a note. Take a deep breath, mom. Okay, can you tell me what the target is? Can you please tell me what the math target is, and we'll work on it at home, but can he please go back to Spanish? They never could tell me what the math target was. They could tell me -- well, they could tell me what the target was. We want him to do multi-digit subtraction. But they couldn't measure the target. They couldn't measure it. They didn't know how to measure it other than the test they gave every quarter. Well, I don't care about the test every quarter. I wanted to know on a week to week basis because they said he needed this extra help. I don't doubt that he needed the extra help, don't doubt it at all, but I wanted to know on a week to week basis how much progress we were making, right? Oh my goodness. So mom goes to -- mom, me, trying to be very, you know, please, you know, I'm not trying to do your job for you. I'm not -- I'm really not trying to be a pain in the you know what parent. I'm really trying to help here. So I go to the progress monitoring website. Have you all heard of progress monitoring? And I downloaded the math section. And I -- on a Saturday afternoon. And I administered the quiz to my ten-year-old, nine-year-old. And I -- how many -- collected how many digits he got. And then every day for about three weeks, every afternoon for 15 minutes, we did multi-digit subtraction. He had five problems. He had all the time he needed. We practiced, we checked. Every Sunday, I would do the probe. Every Sunday, we did the probe for three minutes. We'd see how many digits he got correct. Because I wanted to know if he really could do it. So we did. And at the end of all of that, I shipped the teachers the data and they said, oh, we're doing a great job. I said, absolutely, you are doing a great job. But see, this is the kind of data that I'm looking for. And similarly, we had a conversation about reading. And I wanted one-minute

reads. If I had a one-minute read once a week, I'd kind of know where we were. Or every two -- I would have taken a one-minute read every two weeks on grade level material, not on second grade material. I don't care about that. I know he needs to practice that, no problem. He doesn't like that because the subjects for fifth grade aren't there. So if they want to him to do a character analysis, it's really hard to do a character analysis on some of the reading material in second grade. It's not there. He can't answer the questions because they're not there to answer. So, hmm, we had to have a conversation about that too. I don't think I ever made my point, but I tried to be as nice as I could and not let them hate me or hate him and still come out with something. And, well, the jury is still out on that. But ongoing analysis of data is really, really important. And being able to select -- not only to select the target, but to measure the target efficiently and effectively, and not test the kid all the time. Now I didn't want them to every day, okay John, you got to do three minutes. No, no, no. Once a week is fine. Once a week, twice a week, once every two weeks. But know what the target is, measure it at regular intervals, and look at it. Is he making progress? Is this data going up? Is it starting to look like an S? Or does it kind of look like this? Well, if it's looking like that, I think we have a problem. So something's wrong. But if we never look at the data, we never know if they're making progress. And I think it's particularly important with new instruments. We coach teams, and we'll say, the very first thing on our coaching calls is, so, what is your data telling you? And they're supposed to ship us the data. Yes, well, they forget all the time. We'll say, so what is your data telling you? And if they don't have it, it's very hard to coach them. It's very, very hard to coach them. So spending some time teaching people how to collect the data on the target that we want, communication, and we're going to show you some tools in a minute, is really, really, really, really important. So we have here six things: high levels of engagement, frequent opportunities to respond, high levels of success, systematic presentation, immediate feedback, and ongoing analysis of data. These are all essential for increasing students' acquisition of knowledge. And then, you know, we've got to have interesting stuff. And that goes to that high level of engagement. I know you all are starting to go. Oops, we got the -- JANE KLEINERT: It'll go away. JACQUI KEARNS: Okay. Anyway, pay no attention to the woman behind the screen. We used to record it. We used to record the -- we had to record it for -- JANE KLEINERT: I thought I took that off, sorry. JACQUI KEARNS: Anyway, social interaction. We used to do a really great job of teaching kids to greet other people, because we could put that on a switch and put them out in the hall. Hi, hi, hi, hi. But if you don't have anything to talk about after hi, what's the point? I mean, really, you've got to have -- kids got to have stuff to -- that they're excited about and want to talk about, right? So how many of you have young kids? Okay, so what are they talking about these days? Anybody want to share? AUDIENCE MEMBER: Thomas the Train. JACQUI KEARNS: Thomas the Train, yes, I have -- I have a collection of Thomas the Train. In fact, I have a whole train layout in my dining room. It's taken over. Yes, so yes, Thomas the Train. What else are kids talking about? AUDIENCE MEMBER: Sharks, dinosaurs. JACQUI KEARNS: Sharks, dinosaurs. What else? Pirates. Where's your water? Okay, Angry Birds. Angry Birds. Where's my water, Angry Birds. Do you know what my kids really like, besides the tractors and Pokemon and Star Wars? They really the app called Stack the States. Really? But you know, so we got -- kids have to have interest. Now what we see with kids with intellectual disabilities is that their interests don't necessarily match their age. Now why do we think that's the case? I hear -- yeah, who said -- AUDIENCE MEMBER: We never progress them beyond that. JACQUI KEARNS: Yeah, we never progress them beyond that. They're never engaged in -- oh, and Harry Potter is becoming a favorite in my family [inaudible]. Harry Potter literature, we're into it.

And my boys carry -- oh, and Diary of a Wimpy Kid, right? That's all literature. And if you're not around other kids who are interested in that, you're not going to be interested in it, right? And if you read The Very Hungry Caterpillar every year for all five years of school, you're only going to know about The Very Hungry Caterpillar. And guess what? The Very Hungry Caterpillar does not have the elements of literature in it that you're going to need for the common core state standards. They aren't there. They're in Harry Potter, and Harry Potter is what every kid wants to know about. My kids carry around the books. What's up with that? They carry around the books. I don't think my seven-year-old can read Harry Potter. I mean, he's pretty good, but I don't think he's quite ready for, you know, book seven of Harry Potter that's that thick, but carries it around because it's cool. It's fun. Yes? AUDIENCE MEMBER: You know what's interesting about that is I have a -- he just turned five in June, and I thought he was too young for chapter books. He loves them. We have gone through all the Junie B Jones books. We have started going through The Magic Treehouse books. But I never would have thought to engage him in those because I always thought he was too young for them. But now he loves them and I have to literally cut off, no, I'm not reading anymore right now, because he would keep going. JACQUI KEARNS: Right. And you know, we're told -- thank you for sharing that. I've seen the same thing. I read chapter books to my kids, but you know, they're not necessarily reading them. AUDIENCE MEMBER: He's not reading them. I read them. JACQUI KEARNS: I'm reading them, yes. I am reading them. We read -- in fact, my seven-year-old got mad in first grade because I had already read the Boxcar Children, and the teacher was reading the Boxcar Children, he's like, I already read that. I'm going to read something else. So he wasn't very nice. Oops. So anyway, but we've got to give kids -- we've got to keep kids with their peers and we've got to keep them learning age-appropriate things. Now age-appropriate materials and learning has been around since the early 80s. This is not a new thing. This does not come with the common core standards. It predates the common core standards by years and years and years. The simple difference is the context of academic instruction. So we want kids to be literate. Now why would we want kids to be literate? Kids with intellectual disabilities, why do we want them to be literate? AUDIENCE MEMBER: Why would we want them to not be literate? JACQUI KEARNS: Well, right, but I'm looking for some specific -- I'm looking for some specific reasons that go to life, participation in life. AUDIENCE MEMBER: Empowerment over yourself and your environment. JACQUI KEARNS: Empowerment over yourself and your environment, yes. AUDIENCE MEMBER: Literacy, especially for a lot of our kids, is their way of learning about the world. It gives you vocabulary and experiences. JACQUI KEARNS: Yes, it teaches you vocabulary. It gives you new words to use. It gives you -- it gives you common understanding about the world that you share with your peers. So in first grade, if everybody's reading Junie B Jones, well, we all know about her. And you know, or if everybody's reading Harry Potter, we can share that experience. Or if we're doing medieval knights in cub scouts, which we did this summer, everybody gets to make a sword and learn about medieval knights. You see what I mean? And wow, that's really fun and that's cool, and kids talk about it for years to come, years to come. I'm only hoping that my kids talk about our camping experiences for years to come. But anyway, that's how we develop concepts and skills, and it's socially valid. You know, because people will say to me all the time, well, you know, Dr. Kearns, I don't know. It's socially valid. If for no other reason, it's socially valid. It's what other kids are learning about. And if we don't want 15-year-olds who like preschool toys, who have interests, we have to keep throwing those interests out there. It's very important. So where do you start, though? If you've got somebody who's 15, and we have some tapes of some kids like this, where

do we start? And what do we want to teach them about if we're starting from ground zero and we don't have a general education classroom where we can draw exciting ideas, we don't have kids of our own, and those interests don't seem to be there? Well, we have to do some preference testing, all right. Any of you done preference testing? Yeah, a few people? Okay, I want to talk about. And when teams tell us that they can't get this kid interested in anything, we say, okay, we have to do some interest preference testing. And you're going to have to go talk to the family about what this kid likes. And nearly every kid will talk about or be interested in talking about their family, their friends, and their favorites, even if right now they're favorites aren't what we'd like them to be. So we encourage people to develop a booklet on family, friends, and favorites. Interview the family, find out what they are and write them down. And then you can get pictures of them, you can get -- you can use the book to facilitate conversations and share the pictures that are in there. Because you've got shared understanding if you're both looking at something and you know what it is. So preference I like to talk about. Then if you're in a segregated situation and you have peers who are coming in, they're learning about the student and what they like. And then we can build preferences that way. So family, friends, and favorites, we encourage those. Because remember, we want to shape preferences towards those that are chronologically age appropriate so that we can increase social interactions. We absolutely want to increase appropriate social interactions with other people. If we can talk about things that we have in common, it's more likely to happen, right? Makes sense. We want to increase the opportunity to respond. Well, there aren't too many people who are going to want to play with the preschool toy. They'll be interested for a few minutes, but then, nah, I'm done with that. I want something else. And we want to increase -- we want to have high levels of engagement. Now we might be -- have high levels of engagement with that preschool toy, and that's okay, but it's not getting us these other two things. So we've got to work on things that are going to get us all three things, hopefully. And remember, so I like to remind people that preferences are like teaching kids to eat vegetables. You've just got to keep throwing them out there. But it helps to have people, friends, who also like the same things. So we had this little girl in our -- this little cute as a button little girl in our -- in one of our preschool settings. And the team came back and they'd been through our training a couple times. Said, we just can't find anything she likes, nothing. We said, there's got to be something. There is something. There is something she likes. And we also encourage people to get beyond food. Everybody's got some food preferences, but you don't sit down to dinner to do the cheerio thing. So we started saying, now we want you to watch her, just watch her. Well, it turns out that she does have some preferences. She has some preferences for friends, peers. JANE KLEINERT: Yeah, that'll happen. And you don't see it if you don't -- if you're not watching. And it's the perfect setup. They prefer somebody's voice or whatever. That's really important. JACQUI KEARNS: So once the team took a step back and watched, she had very clear preferences for being with her peers. And so what they did is they took those -- what do they call it? JANE KLEINERT: Talking bricks. JACQUI KEARNS: Talking bricks. They took the bricks apart and all the centers in her preschool classroom, they put a talking brick. And they taught the preschoolers, the other typical preschoolers, to record messages on the talking bricks. And they taught this little girl to use the talking bricks because the peers would record messages on them, and she absolutely wanted to use it because they did. Talking bricks. And they're not very expensive. You get three for \$120. They took them apart, they taught the kids to record the messages, and they left them in the center. So every center she went to, there was a talking brick. It was recorded, she could -- they could change the message if they

wanted to. But if the peers recorded the message, she would use it. JANE KLEINERT: And the thing I love about them is there's a magnet on the back. You know, it's always so hard to mount this stuff. It's a magnet. You just stick it on the metal cabinet which is in that area with the dress-up stuff. JACQUI KEARNS: So if there's a talking brick -- let's think about the -- think about our six things. We have -- we've got high levels of engagement for communication because we have kids who are recording the messages, and being with other kids is her thing. She loves that. We've got a talking brick in every center in the classroom, so there is no time throughout center time or center day that she cannot have access, so we've got frequent opportunities to respond. The messages can be changed. They're easy to use. Wow. So we've got -- and she's getting immediate feedback from her peers. The only thing we don't have are little preschoolers collecting data, but that's not their job. JANE KLEINERT: We could teach them. JACQUI KEARNS: We could probably teach them, absolutely. We could probably teach them. So just some real simple strategies like that. JANE KLEINERT: I think that's one of the best contrasts to mass practice that I've ever heard. You know, what do we do? We go to the speech room, we sit the kid down, we give him a switch, we hold up something, and you say, tell me, tell me. Hit the switch, hit the switch. That's not communicative to hit the switch. The point is not hit the switch. The point is to communicate about something. And we do mass trials, and then we take them back to the room and they don't use the switch in the room. Well, most of our -- many of our kids who are very -- have very significant involvements learn in one environment, and they don't readily transpose it. Now that's why we don't do mass practice, because the research says that mass practice doesn't generalize. That's the bottom line. So this is distributive practice, but it's meaningful, it's done all day long. Even if the kid does nothing more than hit the switch and listen to their friend's voice because they love their friend's voice, that is fine, okay. And they can do that in each of the things, but she's getting her mass practice, but in a meaningful way. It's distributed, but she may choose herself to do it many times, but it would be meaningful because she's hearing her friend's voice. JACQUI KEARNS: So just -- that was just an ingenious solution. Unfortunately, it happened at the end of the year, so we didn't get any tape of it. And so that's very sad. But one of the ways to collect data. So you're watching this little girl, Araya is her name, and you're watching these peers do this. And you're thinking, how could I collect data about that, see if this -- you know, this ingenious idea I've just come up with really works? Well, in your packet you will find this communication matrix. This is not Charity Rowland's matrix. This is a matrix for collecting data, okay? It's a little bit different. You might want to thumb through. I think we put an example in your packets. JANE KLEINERT: Yeah, it's in there. You know, if you want, because it does -- it's confusing because it says communication matrix and so does Charity Rowland's, so you could just call it classroom matrix or home matrix, whatever. JACQUI KEARNS: But anyway, down the side you will see the routine. You could -- for older kids, you can substitute content area if you wanted, what content was going to be taught or taught, what concepts are going to be taught. And across the top are the communication goals that we might be interested in. So this one happens to say request attention, receive information, express preference, make a choice, and refuse. Kids always need a chance to refuse, and we never give it to them. Just so you know, we forget that. We want to give them a chance to refuse. So, and if you didn't -- if you only wanted to focus on requesting attention or two of them, you could. But then you look for the opportunities to practice that in opening activities. So how many opportunities do you think there would be to practice requesting attention in opening activities? One or two maybe? Okay, what about reading, during reading lesson? One or two maybe? So then we've got four, right? What about

during writing workshop? Requesting attention, one or two maybe? So now we've got six. Specials, that's music, art, PE. One or two? Opportunities to request attention? JANE KLEINERT: A lot more there. JACQUI KEARNS: Maybe more? Okay, so five, so now we have 11, right? Six and 11? Do you see where I'm going with this? How many -- so by the time you get to the bottom, how many opportunities have you had -- has this kid had to practice requesting attention across the day? How many -- how many opportunities distributed? Maybe 20? Easily? Easily 20? Wow. Wow. JANE KLEINERT: This works two ways. It works -- you can take your data there, and it works to give the child opportunities, but it also reminds the people working with the child that they must be given choices. If you look at make a choice all the way down there, you can build in choices in every single one of those things. You can get 30 opportunities in a day if you choose. And it doesn't just give them opportunities. It forces the adults to remember that this person is supposed to get choices, or they're supposed to request. I don't just give them things. Or they have to request at a certain level. We're no longer accepting uh, uh, uh. It has to be this more sophisticated way that we picked. JACQUI KEARNS: Now remember, when we say uh, uh, uh, oh yeah, you want it, but you've got to show me, you've got to show me using your switch that you want more. And then you demonstrate how to do it, and then you let them model it. and then you wait the next time. That's systematic presentation. And next time they go, uh, uh, uh, and you say, got to use your switch and you stand back and you wait, 1001, 1002, and then they -- then they -- and if they don't, then you model it. That's systematic presentation. So you want to make sure you do that. But -- and the way you collect data using this tool, because it's not really a data collection tool, but it could be, is you just simply put plus and minus for every opportunity. How many opportunities they have in that section, how many times did they do it correctly is the plus, and how many misses did they have, that's the minus. And then you can tally it up at the end of the day. JANE KLEINERT: I usually suggest that, you know, you just put 0 for every opportunity, a slash under a plus whether they did it or whether they didn't do it. So it's just a matter of getting people used to counting opportunities as well as whether or not the student did it. If there's no opportunities, then whose fault is it? It's not the kid's fault he didn't communicate. JACQUI KEARNS: So for communication goals -- yes, ma'am? AUDIENCE MEMBER: What's the difference then for express preference and make a choice? JACQUI KEARNS: Expressing a preference -- expressing a preference -- the question was, what's the difference between expressing preference and making a choice? You can express a preference, which I'm not really sure, but -- JANE KLEINERT: Expressing a preference might be more initiative. The problem with AAC if you look at the data even in adults is people only respond with AAC, okay. They don't initiate enough. So making a choice can be a response. Do you want this or that? Expressing a preference would be like when Alex was with his teacher and his preference was to do something else. He didn't do it in a great way, but he said I'd rather do something else. JACQUI KEARNS: Okay, so it's -- and also -- and then also we have a correct refusal. No, I don't want to, no thanks, that kind of thing. AUDIENCE MEMBER: But for Alex, pushing away is a correct refusal? JANE KLEINERT: It may well be. It's much better than pulling the teacher's hair and all that stuff. So yes, I would agree with you. I think that would be definitely a correct refusal to begin with. JACQUI KEARNS: Okay, so these came off the NJC document, which we're going to show you in a few minutes. So anyway, just a real simple idea. It's also -- the matrix idea is also used in inclusive classrooms to track academic goals. And so instead of these communication things across the top, you just substitute academic goals. So you could substitute reading fluency, passage, one minute. Or you could substitute multiplication facts. Or you could substitute geometry figures, you know, whatever. You

can put the goals, whatever the kid's goals are, at the top, and then look for the opportunities to respond. What it tells you is if there's not enough opportunities, we've got to make some choices about whether that's a good enough goal or not, or highly important if they're not, if they're truly not opportunities to respond. For example, in some -- I've been using this matrix now for 20 years because -- 20 years ago tells you how old I am, older than dirt. We did a training called Schools Are For All Kids, which is an inclusion training. And that's when we had real dial telephones. We didn't have cell phones. And so one of the goals, one of the functional goals that we always wanted kids to do was use the payphone. Well, you didn't find -- so if that were a goal up there now, how many opportunities would you think across the day we would find to use a payphone? Yeah, that's a problem. So, but that's the point. If you're not going to practice it often enough to use it across the day, across the months, then you've got to think about really is it important? Now, but I want to make -- there's a little bit of a caveat there. People will say, well, you know, academic content goes too fast for us. That's true, it does. But there are themes in the academic content that are repeated over and over and over again. So for example, if you are reading, if you're doing literature or you're reading, you're going to do theme, plot, and character in second grade, in fifth grade, in sixth grade. And when you get to Romeo and Juliet, you are going to do theme, plot, and character, every time. So our opportunities to practice that, you know, we're going to continue to build reading skills, all that kind of stuff. But in terms of the standards, the content standards, we're looking for those things that are going to repeat it over and over and over again, because then we can teach those things over and over again. If you're doing character sketches, the hero cycle, you've heard of the hero cycle? Heroes in literature go through the same process every story you read. So we teach kids about those cycles and they are repeated no matter what the content is, no matter whether it's Harry Potter or whether it's The Magic Treehouse or whether it's the new Diary of a Wimpy Kid. It's all about -- the same kinds of themes come up over and over again. So we teach the big ideas, and then we have salient content from which we can always bring the kid back to that they're familiar with. And we don't have to -- we don't have to reteach those things over and over. We don't have to reteach every time because we can pick out some salient processes that they can use over and over again. Okay, does that make sense? All right. So the other thing that I wanted to talk a little bit about is in order to do this trans-disciplinary service, me the educator, I'm going to have to do some things in my lessons. And I think I did this part of the presentation because some of the lessons just made me bite my fingers. Prior to lessons, you want to make sure -- this is the OT stuff, that you do small motor preparation and sensory preparation for the student. We're going to do such and such, and so you do all the things that your OT tells you to do. You prep the student, the students. And I don't mean just our kids. Prep -- if you're in an inclusive classroom, you should do this for everybody. And we're going to talk about this, and you're going to think about -- you're going to do some small motor kinds of things to get ready to write. You're going to do some -- you're going to do some sensory preparation, where to look, what to listen for, those kinds of things. Sensory preparation. If in a lesson, and this doesn't happen usually in general education environments, but if you're going to touch a student, tell him you're going to. We are terrible about grabbing onto a student and saying -- or we have a tape where it's just killing. The teacher's trying to get him alert, and she's rubbing a washcloth in his face. You'll see it. Oh my. And so if you're going to have to touch a student, just like a nurse or a doctor would, I'm going to touch you and I'm going to tell you -- I'm going to touch you on your hand if I want you to use -- give them information. Treat them, you know -- presume competence. And then orient

them to what the expectations are. We're going to read a story about gingerbread. We're going to make a gingerbread man. We need you to tell us what glitter you want to use. You know, I just made that up, but that's the kind of orienting we need. We don't need too much language, but we need some. We need -- if she had oriented this young man to what she wanted him to do with the triangles and why they were doing triangles -- JANE KLEINERT: Rectangles. JACQUI KEARNS: Rectangles. Presuming competence, he's more likely to cooperate with her. Also letting kids know when the beginning is and when it's over. We'll be done when we finish this. We'll be done when we finish that. And focus the student's attention on what you want them to learn. AUDIENCE MEMBER: [inaudible]. JANE KLEINERT: Absolutely. JACQUI KEARNS: Absolutely. JANE KLEINERT: Let's do him just real quick. I just want to run -- these are pieces -- this is kind of progress pieces for Jeremiah. You know, he slept most of the day as an escape, okay. It wasn't so much his meds. It was like this is the only way I can get away from these people, so I will do that. So one of the first things we looked at was preference. What keeps Jeremiah awake, okay? And this is the same kid. He doesn't even look like the same person already in the picture, doe she? Does that look like Jeremiah? You wouldn't pick him out. And so this is sort of elementary. I mean, it's not like you would stay with this, but we just asked them to look for some preferences that would wake him up. And he's just a totally different guy. [VIDEO BEGINS] JANE KLEINERT: He's kind of saying, I love that, I want some more. He's vocalizing. TEACHER: Good morning. JANE KLEINERT: Wasn't responding to anybody. He looks up to the person. TEACHER: You going to brush your teeth? JANE KLEINERT: Now I'm not saying we should brush teeth in classroom all the time, but look at the response. You want to brush your teeth, and he smiles. This is how we found out what he understood. He understood so much more than we were giving him any credit for. So they would do a little bit of this kind of stuff and get all the vocalization and the happy interaction and then, you know, move onto something not quite as interesting, but he would be awake. [VIDEO ENDS] JACQUI KEARNS: Right. So then during the lesson, you still want to increase that multisensory experience: visual, auditory, touch experiences, acknowledging and reinforcing communicative behaviors, acknowledging, oh, you're telling me even if you can't honor the request. Acknowledging it is important because it lets the person know, oh, I did the right thing if I want something. Provide adequate wait time between task requests. That's also a big problem. And sometimes we have to take lots of deep breaths. And if you don't -- if the student doesn't respond correctly to the task request, you model the correct response in the student's response mode. Okay? So if you want him to point, then you point to the correct response. If you want him to verbalize it, then you model the verbal. If you want -- you model the correct response, and then you get him to imitate it. Okay? That's systematic presentation. So that's what you do during the lesson. Now, unfortunately, these aren't as inclusive as we'd like them to be, but they're just examples. This is also another way we got him alert and ready to go was to do some exercise before. This is not necessarily the during the lesson thing, but this was a way to get him alert and ready to participate in a lesson. JANE KLEINERT: Now we were gradually learning about Jeremiah. What did he love? He loved tactile stuff. Well, we can't be brushing teeth all day. You couldn't go with food because he was tube fed, so there wasn't a lot of enjoyment in that. You can see he's got a trach and a Passy-Muir valve, so he does some vocalizations that told us that vocalizations is something that he could use because he did them when he was happy and excited. So maybe we're going to add that in because he has so many limited movements. But he has to start -- well, two things. We got to come down to where he's functioning right now so we can go back up. But he also has to start putting out, okay? So in this one,

the teacher says, what are we going to do next? And like he knows it's exercise. And she's like, well, you're going to have to tell me. You're going to have to tell me. And then she does the wait. And watch him, and then we'll show you later he uses a multi-choice cheap talk later on to answer questions and things. But we didn't realize all that then. So this was just to get him started. And he actually primes that little hand for a while, and then when he hits it and realizes it, then he just goes crazy because he's going to do his exercises. And then they went on to academics after that. [VIDEO BEGINS] TEACHER: What are we doing today? What do we do next? What do we do next? Hit the button and tell me what we're doing next. The button [inaudible]. JANE KLEINERT: And she's telling him where the button is. She touches him so he can find it. It always helps if it's turned on. TEACHER: Exercise. Good job, we're going to exercise. Let's exercise. All right, let's do it. JANE KLEINERT: So then Jeremiah gets to say it over and over again. Because how often does he get to be excited? And what does he get to be excited about? Just sit there and say exercise till hell freezes over, you know? He's getting to do it. He's happy about it. He starts to talk. He starts to vocalize. TEACHER: Come on. You're going to wear me out. Stretch that arm. Stretch that arm. Good job. [VIDEO ENDS] JANE KLEINERT: Okay, and with this kind of stuff, he was not going to sleep, so then they knew they could move on to a little more with academics, and you'll see that a little bit later. Whoops, I'm sorry, I've messed up here. Okay, that's just -- JACQUI KEARNS: And then at the end, you always tell him what you did. Tell them what you're going to do, tell them what you're supposed to do during, and tell them what you did at the end. And those are the things that in the tapes we get. Now I realize the tapes we get are just snippets. We don't usually see whole lessons, but we really want to see all of it because then that gives us a better picture about what's going on. We read a story about gingerbread. We made gingerbread men. You chose red glitter for your gingerbread man. Follows the lesson. So those are the kinds of things that we want to see. Does this tape -- is this not active? This tape was a young man, he was listening to a story. And we didn't think he was paying attention, but he answered every question correctly when they had the device turned on. JANE KLEINERT: Yeah, we'll show you later on. But this, look at him. That is actually Steven, the little boy in the green shirt with the switch. That's Steven, who Steven really is. He uses a four-choice multi-level device to answer questions after a story is read to him. JACQUI KEARNS: Once. A story read to him once. JANE KLEINERT: It didn't look like that when he had his head on the switch, you know? JACQUI KEARNS: So we want to make sure that we do those things when we're doing instruction. And let's see what -- I changed this while you all were on break, so I don't know what's coming up next. Oh, oh yes. You guys are going to be able to do this way better than I. And like I said, this is an example of a book that my research assistant, Panina, did for me. And we wanted kids to get involved in academic content as soon as possible. This is Grandfather's Journey. Have you ever heard of this book? It's identified in the common core state standards, I believe. It's usually taught in the fourth grade. It's a pretty complicated book. So what we did here is we adapted the book for white board -- or Smartboard, for a Smartboard presentation. And if it were in play mode, which it's not, when you click on the buttons down here, they do things. Okay, so the switches can be hooked up to this button down here in the right corner. But this is Grandfather's Journey and we'll see it go onto the next page. And she starts off introducing new terms, and she provides pictures of those things. Name an Asian island country, and of course it's Japan, but this is activated and animated in the bottom-right corner. And there's a -- and there is a bottom-right corner on every page that draws a student's attention to what you wanted them to get off that page. So you read the page and then at the bottom-right corner before you go to the next page, you ask

the question that focuses their attention on what you wanted them to get out of it. So what we wanted him to get out of this page was Japan is an Asian country. Now don't know how far that's going to go, but we're presuming competence. This is what other kids are learning. This is the one idea on this page. Then we go onto another -- the next page. The story is about a grandfather and his grandson and the time they spent living in California, and the things that the student's going to listen for. And of course she made a liar out of me and she didn't put a yellow box on -- okay, so then the story starts. And these are actual illustrations taken from the book. We can't give it out and you have to have a copy of the book in order to use it, but you can see how it works. My grandfather traveled on a boat in the Pacific Ocean for three weeks. And then the box over here, how did the grandfather travel? And she has the correct answer and she has an incorrect, not possible answer. Pretty distant. He didn't ride horseback, that's for sure. See? So before you go on -- JANE KLEINERT: And like then they spin and the wrong one goes rrrr, and that kind of thing. And you know, you could do it as simple vocabulary. Can you find the boat, you know, and grandfather on the boat, can you find a boat? Panina has if you want them, although the AT people probably already know how to do them, has all the directions. And it's just done from PowerPoint. It's just PowerPoint from there. JACQUI KEARNS: And then at the end, at the end of the story, after we've put on each PowerPoint slide the focus at the end, then we ask comprehension questions. We pick two or three of the most important things we want them to get out of that book, the big idea. What is it about? What's the big idea? And those are the things we put on the comprehension questions at the end. Now books can be used over and over and over again. It's perfectly fine, I hear from my general education colleagues, to read books over and over and over again. You might practice a book several times. And so -- and the class will probably spend maybe, maybe two or three days or more on Grandfather's Journey. It's not a very long book. Other books, I can't remember what John -- I can't remember anything John read this year because I'm standing here trying to, but certain books last much longer. The chapter books will last much longer. So you pick the big idea in each chapter and make a slide out of it so that pretty soon you have the whole book and you have the whole book on slides. So we get to share in the activity, everybody's participating, and we're focusing attention on the most important thing. Yes, ma'am? AUDIENCE MEMBER: I just wanted to ask you, I know you were talking before about errorless teaching. So if they hit the wrong button, I know it makes the noise, but then do you say, oh, you meant boats? And then just do it for -- JACQUI KEARNS: Absolutely, absolutely. So if they make an error, it doesn't do anything. But then you model the correct response, and the correct response says something and it's animated and it jumps out and all that. So that's what -- JANE KLEINERT: And I think -- I think we need to remember that we can simplify things as much as you need to simplify. So you might ask the student first time how so and so traveled, and you might say on a boat, on a boat. Can you find boat? You know, so you're setting them up for the correct answer if you just -- and that way you could just teach vocabulary. It happens to be within this elaborate fifth grade level book, but you're -- you know, you're down at the level that the student might need. AUDIENCE MEMBER: Thank you. JACQUI KEARNS: Yes? AUDIENCE MEMBER: Our intermediate unit for years has subscribed and bought a subscription to News To You, which provides you with weekly stories and monthly books that your students can use on a whiteboard or on a device or anything because you can load them on a USB and transfer them right over and do the same types of tasks. JACQUI KEARNS: Absolutely. JANE KLEINERT: Those are wonderful. JACQUI KEARNS: In fact, we have a tape of a young man. JANE KLEINERT: I can't remember who it is, but somebody's using News To You. It might be Steven.

JACQUI KEARNS: It's Steven. Steven's doing News To You and they're reading about oil during the oil spill in the Gulf, I think. But yeah, they were using News To You. So yeah, that's a great resource, absolutely. And there are places all over the place where you can download books and make your own adaptations, or they've adapted them already. So just encourage you to do that. Find out which books. You can actually -- the books that are -- in the common core standards have the literature, the sample literature listed in the standard. So if you go to the common -- if you go to the common core standards website on CCSSO and you go to English language arts, all the recommended books for a particular set of standards at each grade are listed. So you know, those -- and you know, they're things that you've probably heard of before. I mean, they didn't -- they didn't reinvent any wheels for them, trust me. They didn't do that. Yes, sir? AUDIENCE MEMBER: Hi. For the Pennsylvania, I think they had the standards aligned system website, and this will be a question for Sharon. Can you do the same thing that she's talking about for the books for grade level on the standards aligned system website? SHARON: They have a voluntary model curriculum where they have some suggested resources, but the PA common core standards are aligned with the common core standards, so you'll probably find a lot of correlation. So if you do go on the common core website, you'll see some of that. But you'll also see those resources in the standards aligned system too. JANE KLEINERT: Great. JACQUI KEARNS: So, and I think I've got some other books on here if you want to see them. We can bring them up after the break. We have another book that we were asked to -- we were asked to do a series of books on relatives from other countries. And I think it was third or fourth grade, and so we had Spanish and we had folktales from other countries. And we had one called Thunder Cake, and the little girl and grandmother bake a cake while the thunderstorm's coming. You all are smiling. You've heard it before. I put thunder into the PowerPoint, and this was before Panina, so it was just PowerPoint. Now I have somebody who knows about whiteboards and they're wonderful, and I don't have time to learn about that. So it's good to have -- it's good to have expertise in the room. So I've got some of those kinds of things that are much lower tech, but still doable and still useable. JANE KLEINERT: And the thing I like about these are, you know, it's not the firm end going up and down with the switch. There's a reason to hit the switch to make the thunder so that you're an intimate part of the whole story, you know. So maybe you're the kid that makes the thunder every time it changes. That's fine. There's a reason to be hitting that switch. The other kids like it. The other kids get a turn with the little kids. You know, so it's useful to be hitting the switch rather than to watch the fireman going up and down the ladder. JACQUI KEARNS: Exactly. So the last thing, and then are you all ready for a break? JANE KLEINERT: Yeah, definitely. JACQUI KEARNS: Okay. This is the solar system. Okay, it escaped you as to what it was. Now this is my son Wesley's solar system. He did this -- anybody want to guess how old he was when he did this? AUDIENCE MEMBER: Three. JACQUI KEARNS: Eighteen months. Now, now wait a minute. Don't think he's a genius. He's not. He's just a typical kid. JANE KLEINERT: He's cute. JACQUI KEARNS: He is a -- he is adorable, I have to say that. He's mine and he's adorable. But he was in a preschool, he was in a daycare, and they had things every month. And we've been learning about the solar system ever since. They actually did this when he was 18 months old. So he was just beginning to use oral language, and of course it does that. Just beginning to use oral language. I don't know when he was 18 months old if he could tell me which one was the sun and which one was the earth, but does it really matter? Because what other opportunities were involved in doing this? AUDIENCE MEMBER: Color. JACQUI KEARNS: Color, shapes, size. JANE KLEINERT: Fine motor. JACQUI KEARNS: Fine motor, glue, messy stuff. JANE KLEINERT: More. JACQUI KEARNS: More. AUDIENCE

MEMBER: Order, sequence. JACQUI KEARNS: Order, sequence. JANE KLEINERT: Following directions. JACQUI KEARNS: Following directions. AUDIENCE MEMBER: Number of objects. JACQUI KEARNS: Number of objects. We could have counted them, absolutely. Yes? AUDIENCE MEMBER: I just think this might be a good time for one of my favorite -- my favorite topics, which is all of these things you describe: using stories, you know, this path to standards aligned instruction or to -- or grade level, or age appropriate activities, or whatever it is we're talking about. Any of these things are a wonderful, engaging alternative to talking about weather or days of the week. JANE KLEINERT: Yeah. Yeah, thank you. JACQUI KEARNS: Well, I think you make an excellent point. My husband thinks the weather lives because he's an airline pilot. And we actually do have in our backyard a weather station. And he checks it every day, but I don't. AUDIENCE MEMBER: Every day, I check the weather. Every day. JACQUI KEARNS: But you make a really excellent point. I think the problem is, and it's very counter-intuitive, and this is my theory and you all can contest it and I would be happy to debate, fine with me. It's just a theory I have. I'm a special educator. I am duly certified in elementary education. I know a little bit about content, but I don't do content every day, so I don't know it very deeply. I know systematic instruction. I know what I'm supposed to do and when I'm supposed to do it. I know how to deliver reinforcers. I know how to do that stuff. Haven't done it in a few years, but I know how to do it. I know how to collect data, blah, blah, blah. I know how to do those things. It takes both of us to come up with those really cool things. And you know, in my kids' classrooms now, they really aren't doing the weather so much as they're having class meetings. They're doing the meeting routine thing. And every day is a different thing, and the kids are coming to their own class meetings, and the topics are different. But you, you know, absolutely make a really important point. Special educators don't always have the stuff to teach, so they fall back on what they know the best and what they've seen done, and content is not it. So they have to work really, really hard if they're in segregated situations to get the content, really, really hard. And they have other really, really hard work to do in terms of systematic presentation, blah, blah, blah. So it's counter-intuitive, but really kids with intellectual disabilities need content. They need people in their lives who have content expertise. They don't need people who are going to water it down. They need people who know it really, really well. Yes? One more and we're taking away the break time. AUDIENCE MEMBER: Right. And again, this is just because I go through school districts around Pennsylvania. It seems like a lot of schools are going with the, you know, what they call the dual teachers and the special ed and regular -- co-teaching model. And I wondered if you could speak about co-teaching real quickly. JACQUI KEARNS: Sure, I can. My son was in a co-teaching model 20 years ago. I train people to do co-teaching models. This is what I would say. Co-teaching models work really, really well if the people involved in them know what they're doing and they have a well-oiled system. Does that mean that I felt like my son got -- I think he -- I like the co-teaching model. There were some skill deficits that I felt like they had in terms of knowing how to measure the target. So I don't know whose job that was. Don't think it was necessarily the general ed teacher's maybe. So there you go. I have colleagues who have done -- who did -- who were in an inclusive school in northern Kentucky. They have since retired. They had a consultation model. All the kids, they had probably two units, 20 kids, 10 in each, that were fully included every day in general education classrooms. They did not do co-teaching, but they consulted every day and made the accommodations that the kids needed to participate actively in the content. And that worked well because -- for them because the teacher, the general education teacher, took ownership. So collaboration models if you're just starting out are excellent. There's lots of

negotiating that has to go on between the general ed teacher and the special ed teacher. My sister was a special ed teacher in a co-teaching model. It takes at least a year to get familiar with the content so that you are able to engage with it and support the teacher. The general ed teacher, the general ed teacher has to let you do the supports that you need to do. Likewise, in a consultation model, the general ed teacher has to use the supports that you develop. So it's a relationship and it's negotiated, and the success or lack thereof depends on the two people involved in it. So I've seen excellent, wonderful co-teaching models, and I've seen ones that are absolutely suck. And I'll tell you, I'm not so sure that, you know -- I guess my read on it is my son is -- my son is absolutely better off in a general education environment than he would be in a segregated environment, so I'm going to take the suck over the segregation. Sorry about that. So you asked my opinion; I told you. Okay.