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Christine Austi...:	00:00:26	Hi, my name is Christine Austin and this is my colleague Erin Lombard. And we are here to talk about how to ensure treatment integrity. We work specifically with children with autism but this could be applied for anyone who works with anyone in regards to behavior management. So I'm the director of clinical operations here at step-by-step and that's a position that I've had since 2009 and I currently have a master's of science and Applied Behavior Analysis. Just finished that and set for the BCBA exam in two months.
Erin Lombard:	00:01:01	And I'm Erin Lombard as Christine mentioned, I'm a behavior consultant here at Step-by-Step Academy. I'm originally from California. Received my undergraduate degree in child and adolescent studies and then moved here in 2009 Step-by-Step since.
Christine Austi...:	00:01:23	Okay. So let's go ahead and get started. Our objectives today are to identify and implement data collection methods and ensure accuracy of the data. In addition, we want to identify and implement evidence based teaching strategies to ensure treatment fidelity. And then we're going to finish the presentation by giving you some resources on how to increase staff buy in and decrease staff burnout. But just to give you a little bit more overview of exactly what it is that we're going to be talking about in this presentation. First we're going to talk about appropriate measurements and the importance of measuring behavior, whether it's for increasing or decreasing behavior. We're also going to give you some examples of data sheets that we use so that we can ensure that we are collecting in our observer agreement. And then just a little bit of a visual analysis.
Christine Austi...:	00:02:13	The importance of the visual analysis and a graph is basically what I'm talking about is to make sure that everybody can communicate. So it might be Erin Lombard and I you know, creating the graph from the beginning, but then also using that as a communication tool for the staff and then also the parents or other professionals that serve the child. And then we'll talk about later on about how it's effective to use that graph as a reinforcer for your staff so they can see how their behavior change has changed the behavior of the child that they're

working with. Then we're going to lead our presentation into talking about evidence-based training methods for the staff. And what we really want to do is detail what step by step has done. So you're going to get a lot of information about our supervisory model, how we train our staff, and then also how we ensure treatment fidelity.

Christine Austi...:	00:03:05	And then we're going to talk about you know, just some, some basic things that we've done here at Step-by-Step to gain the staff buy in and try to prevent the burnout. So that's a little bit more detailed of our presentation today.
Erin Lombard:	00:03:19	And also remember this is a live presentation right now and so you are free to ask questions. There should be a chat area for you to ask your questions and we will be able to see that throughout the presentation as well.
Christine Austi...:	00:03:34	Definitely. Okay. So first of all, how complicated is changing behavior? Well, what we've done here is we've listed all of the evidence-based behavioral interventions for both increasing and decreasing behavior. Under increasing behavior. You can see that we use discrete trial teaching, natural environment teaching specifically for communication in place skills. We also use a task analysis and response chaining in addition to pivotal response training.
Christine Austi...:	00:04:04	And through that you also have to obtain the ability to prompt use a time delay. And then also differential reinforcement. That's everything a behavior analyst needs to teach a staff member working with a child. So just so you're familiar with some of our language, we call our direct staff team behavior technicians. So when we say a behavior technician, that's the person that's working directly with the child. So just to increase behavior, just to increase those adaptive skills, communication, play, socialization, pre academic skills, that's everything you have to learn. So it's a bit overwhelming. You know, I think Erin and I have both started out in the field as a behavior technician or at that level. And you know, just through our experience of being a behavior technician and also in our supervisory roles, we think we've created a pretty good supervisory package here at Step-by-Step in addition to some of the tools that we'll be sharing with you throughout the presentation.

Erin Lombard:	00:05:04	But that's everything somebody has to know. And then you have to do it consistently across everyone on the child's team so that the child is actually acquiring skills. So it's pretty complicated. And then, you know, looking at the behavioral interventions for decreasing problem behavior, specifically to positive behavior support we have a functional behavioral assessment antecedent based interventions response interruption and redirection, differential reinforcement extinction and functional communication training. So not only do you have to learn all of the different methodologies for increasing behavior, you also have to learn all of the methodologies for decreasing problem behavior. So it's a lot and I really help that as we show you how we train our staff, you'll have a really good idea of how to successfully do this with the staff that you're training as well.
Speaker 2:	00:05:58	So Erin and I really, you know, when we sit down and we have a problem on our team. so we have a child who might not be acquiring a skill. He's having difficulty with discrimination, whatever it is. You know, the team flags us and says, Hey, we need to have a team meeting. There's an issue that's going on right now and we need to let you know what's going on. Or here's a problem behavior that we're currently treating, but we're not able to decrease that problem behavior. The things that we ask ourselves as a behavior consultant are, are the reinforcers effective? You know, do I have the appropriate reinforcement schedule, have identified the accurate maintaining variable of the target behavior? Does the child have the prerequisite skills required to meet the IEP goal, et cetera, et cetera, et cetera. But really, before we analyze any of that information, we really have to ask ourselves, are the data accurate and are the staff implementing the behavioral interventions the way that they have been trained?
Christine Austi...:	00:06:58	So that's really what the focus of today's presentation is, is one, how do you ensure that you actually have accurate data? And then two, is the staff trained appropriately so that they're implementing it with fidelity. So that's really what we're covering today. Are those last two questions because it doesn't matter about the other questions that you have until you've rolled out these two things first. Okay. So what is the need for measurement? You know, in Applied Behavior Analysis, it's our cornerstone. It's how we make every single decision that we

make. It's to evaluate the effects of a behavioral intervention. First we collect baseline data, then we collect data throughout treatment, and then we also collect data at follow-up. Like I said, it guides the decision that we make within applied behavior analysis. We always ask where is the data? Show me the data first.

Christine Austi...: 00:07:53 And if the data's inaccurate, then it's just misinformation to us. So it's really important, again, to make sure that you have accurate data. And then it's, we also collect data to prevent mistakes. We want to make sure that we continue effective treatment and discontinue ineffective treatment. When I look at a graph the very first time and it looks there's a lot of variability going on and it just looks like the intervention is completely ineffective, the very first thing I do is I go in and I check for inner observer agreement and make sure that whatever the staff member is collecting data on, is it what I had trained them on first, and we collect a IOA to ensure that that is accurate. So we'll talk about that a little bit later on.

Christine Austi...: 00:08:39 So here's an overview of data collection for challenging behavior. First, we have continuous measurements and then we have discontinuous measurements. Basically, a continuous measurement is something that you, you're going to collect the data the entire time. So if you're here at Step-by-Step Academy, our hours are from nine to four, then you will collect data on that target behavior from nine to four. But the reality is many people out there are unable to collect data all day long. We're very fortunate here that we're able to provide one-on-one behavioral intervention based on the child's need. So we are able to take you know, pretty rich date data. But if you have limits because you don't have the one-on-one support, then there's other options that you can use. And those are the discontinuous measurements.

Christine Austi...: 00:09:31 So first we want to look at frequency. And this is the measurement of the occurrences of the response. So this is a continuous measurement. You're going to collect data every single time the target behavior occurs, and you'll use this for discrete behaviors. So a discrete behavior would be something where every time, basically a discrete behavior is something that only takes a very short period of time to complete. So how many times does the child hit himself? How many times does

the child get out of his chair? Those are discrete behaviors. Also they need to be free operant behaviors. It's not something that another person has to elicit that response to take the frequency data. And Aaron, we'll talk later on about trial by trial data. And that's really for those operate behaviors that are followed by a discriminative stimulus.

Christine Austi...:   00:10:29   In regards to frequency data, it's best to use with behavior that have relation to a specific action or, or a relation to an object. And the reason why I say that is because it's easier for the person who's recording the data. So the behavior technician that's working with the child the entire time, if it's related to a specific action such as hitting, hitting me, hitting myself or engaging in property destruction you want to detail it like that. And you can take the frequency data that way or in relation to an object. And the example of property destruction would be a good example. How many times he rips up his paper or how many times he throws materials across the room. Those would be some good examples of a behavior that you would record using a frequency measurement. In addition it's difficult to use with behaviors that do not have a discrete beginning or ending.

Christine Austi...:   00:11:22   So as I was saying before, it's very obvious when somebody hits you, there's a very discrete beginning and ending to that response. If it's something like screaming that's going to be harder because or you know, the example that we have here is humming if they're humming, are they humming now or are they speaking? Now it's really hard to identify that and we'll talk about the duration measurement a little bit later. Also using a frequency measurement, it's difficult to use with behaviors that have extremely short in our response times. So if someone was to hit you numerous times like this, you're probably not going to take a frequency of how many times the right hand hit versus the left hand. You would just call that an episode and we'll talk about that later on. And another example that we have here is self-stimulation.

Christine Austi...:   00:12:14   It's impossible to take frequency data on how many times a student engaged in hand flapping. And if we wanted to look at hand flapping one time versus multiple times, we might want to look at it in regards to time instead of just the occurrence. And then also it's not ideal to use for behaviors that are lengthy in duration. So if I wanted to take frequency of how often a child

tantrums, that's not going to give me much information. If the child engages in tantrum behavior one time a day, but on Monday it's for five minutes, and on Tuesday it's for two hours. That's when you want to switch over to a different type of measurement.

| Christine Austi...: | 00:12:56 | So some ways to ensure accuracy of your records include a paper and pencil. You could simply just write it down hand tally digital counters. And I do have a picture here. This is what we really use at Step-by-Step. There's also some other examples like a wrist counter or a shoe string counter. But we don't use those here at step-by-step. But another method that we do use is masking tape. So really what we've bolded and italicized here is what step by step uses. And we find that it is very accurate. So if you're sitting at the table you know, you really want to look at what's the manageability of being able to collect data. I could say, I want Aaron, I want your child to collect, or I want you to collect data on your child in regards to frequency of how many times he hits himself. |

| Christine Austi...: | 00:13:46 | But if it's three hundred times a day, there's no way you're going to be able to get accuracy of that if you were taking a paper and pencil. We have a student right now in Newark who's engaging in self-injury. I think it was two hundred times a day the other day, and he's only there for three hours. So high rates of problem behavior, there's no way that that behavior technician could have used a paper and a pencil. And because he's engaging in self-injury you're not worried about how many times it really happens if you're not able to protect him. And then, you know, again, for aggression towards other people, you want to be able to protect yourself as well. So you always really want to think about manageability, you know, what are those environmental challenges? Do I sit at the table with the child the entire time to where I can take paper and pencil data? |

| Christine Austi...: | 00:14:35 | Or is it more of a natural environment teaching method that I'm using to where we're going to go from the bedroom to the kitchen to outside and you know, chase him around and really look at his motivation. You want to move that over to something else that your staff can manage. And really we use a lot of digital counters here. It's really helpful if you put on the digital counter what it is that you're collecting data on. I believe Aaron has just done a presentation on mandate and that's |

something that we would use a digital counter for. You know, how many times did he independently manned in a certain timeframe. But you could do it for problem behavior as well, so you don't have to carry around a pencil and paper. And something that I used to do it within a home environment is used masking tape. So I would just put a strip of masking tape on my thigh so I'd have a pencil with me. And this was really because the parents didn't have a digital counter. But I would put the masking tape on my thigh and then just write down the frequency that way, because then it voids out the need for a clipboard or a binder or some other type of material that you'd have to carry around as well.

Christine Austi...:   00:15:44   Just an overview of the difference between a frequency or rate. It's really the same if you look at the literature differently you know, you're just taking an account but with frequency of the occurrence over time, it really gives you it really gives you an idea of how frequently the problem behavior is occurring or how well the child's doing. So for example, the boy that I was talking about out in Newark, he engaged in self-injury of hitting himself or headbanging a hundred and fifty times within three hours. If I just told the parents he engaged in self-injury a hundred and fifty times in one day, that's not going to look as severe as a hundred and fifty times within just three hours. So it really speaks to the severity. And then it also provides a reference to the reader. Here at Step-by-Step, we have a multidisciplinary team.

Christine Austi...:   00:16:40   We have behavior analysts, a psychologist, a psychiatrist, our social work department also our parents. And then in addition, we have speech pathologists that we work with. And then obviously our behavior technicians, but then we work with outside providers as well. A lot of the students here will receive services here center-based. And then they also have a home team in the evening. And that might be with a different consultant. It might not be with somebody at Step by Step. And you really want to be able to provide the reader a reference of the severity or the improvement. So maybe, you know, the child raised his hands ten times and you know, that seems like a great deal, but maybe it was just within reading and now he's starting to participate more in reading a previous skill that he didn't want to participate in. So provide a timeframe for everyone so they know exactly what it is that you're reporting on. And just

so you know, when we look at some of our examples here at Step-by-Step just know that we usually provide a total frequency per day and that's because we have standard hours. So we're always here from nine to four. So the parents know exactly how long their child is here.

Christine Austi...: 00:17:54 So this is an example of a data sheet that we use for frequency and this is something that you can purchase in the store. We have links at the end of this presentation to all of the three, all of the free tools that we have in addition to some of the tools that you can purchase. But this is an example of how we really ensure integrity or you know, gaining the inner observer agreement of what the behavior technician is collecting data on. So here's an example of a frequency data sheet. First, what we're going to do is write out what the behavioral definition is so that everybody knows what it is that we're targeting. And this is something that you might have to change over time. Typography has changed the way that it looks changes. So this is something that you will continually assess and we'll talk later on about the importance of direct observation.

Christine Austi...: 00:18:45 But this gives the team that's working with the child a specific target response that they're recording. So if you look at the behavioral definition, we're looking at aggression towards others and objects. And this is any aggression or attempt to aggress toward others and or objects topographies of aggression include but are not limited to hittings spitting, slapping a licking hand then slapping, biting hair, pulling, pushing, scratching, grabbing, swiping or throwing objects and or throwing objects toward others. And we even put on there how the behavior technician is supposed to record the data. Sometimes if you look at that, what if it was an aggressive episode? Well, we know that this child that we're targeting, this problem, behavior with is very short and it doesn't happen in close succession. So if he was too aggressive, so it would be one time, regardless if it was any of those topographies, he would still only do it once.

Christine Austi...: 00:19:46 And then there's a couple seconds in between them. So it is able or the behavior technician is able to actually collect accurate data. But that's what we do. We give them examples under elopement this is any instance of the child walking, running or crawling away in a direction that's away from the

instructor without the instructor's permission or knowledge. So we gave them that behavioral definition as well. And then also you know, some additional information. So one thing I was asking the staff about, and you know, this is how you can get observer drift in what you're doing. He was sitting at the table and she wasn't giving him things to do, so he was at the table, they had completed a teaching session and she said, nice job buddy, you're awesome. Here's a little reinforcer. And then she starts collecting her data and then he gets up and walks away and they were considering that elopement but really he was just bored.

| Christine Austi...: | 00:20:46 | He was done playing with his reinforcer. He didn't really know what was coming up next. So then he, he just walked away from the table. That's not elopement. Elopement is purposefully trying to get away from someone, either to go after someone or something that he wants or to get away from an activity or a person. So that is why we put that in there, you know, without the instructor's permission or knowledge because we want to make sure that everyone is a very sure of what it is that we're collecting data on and what it looks like because anyone who else who's out there who is a behavior technician or is a supervisor, you know how hard it is in the moment to, you know, make that judgment. So we'll talk about our training later on within our presentation, but we just wanted to give you some of these tools. |

| Christine Austi...: | 00:21:36 | A little bit information that we do put in here. If you notice, we always have the date. I mean when we put nine to eleven and then eleven to eleven thirty, eleven thirty to twelve, et cetera, et cetera. Those are our sessions. So from nine until eleven, we have a one on one intensive behavioral intervention session with a child. So this reflects the child's schedule. Then he has lunch, then he has recess, then he has a second session and a third session. And then we always have the behavior technician put his or her, her initials in that box. That way if something looks off, like there's super high rates in the morning or super high rates in one certain session, that's a flag to someone like me or Erin to then go in and start observing. So if everybody else doesn't have problem behavior, but only that person does, then maybe it's tied to that time in the day. |

Christine Austi...:	00:22:27	But it might be tied to the implementation of what the BT is doing in regards to either his programming or a behavior support plan. And it looks like we have a question.
Erin Lombard:	00:22:40	How do you ensure data collection validity?
Christine Austi...:	00:22:44	Well, really what you want to do is your behavior technician will have this form. You will have the same form and then what you want to go in is in collect your IOA. Now we'll talk later on about how we structure our training because we would not ever expect a behavior technician to walk and be able to collect data. We actually provide a two week intensive training period to where we slowly integrate that staff member into sessions, ensuring that he or she can collect appropriate data and then we send them on their way. So what we're going to show you later on in the presentation is a seven day example. But then really it depends on the size and really how well that staff member's doing. If he's unable to acquire the skills that he needs to become independent by the end of seven days and we provide that additional support.
Christine Austi...:	00:23:38	So that's an example that we have. Again, it's best to write down what measurement that you are using, but take this form in with you. That's what we do. So if I was to overlap Mary from nine to eleven, then I would have that form, she would have that form. And then we collect data the exact same way in the moment. And then we sit down and we review that. Anything else you wanted to add to that? No. Okay. Okay. So here's an example of the data that we were collecting and this is where a little boy who's diagnosed with autism and he also has down syndrome. So here this is how we were able to identify if our methods were even effective. And actually what was interesting was at baseline you can see how it started to decrease a little bit, but really we're looking around fifty times a day.
Christine Austi...:	00:24:29	When they implemented the DRO at three minutes, the behavior analysts didn't go in and check for IOA from the very beginning. And that's something that we're going to talk about later on. You have to get buy in from your staff from the very beginning because it's tough. If you look at that, you're collecting data. There's one data point where it happened four hundred times a day and that's aggression. So you know, looking at that, you want to make sure we'll talk about that later

on. But there was so much variability here. You can see it was all over the place. And then they go back to baseline and then there's low rates. Now obviously there's something wrong there, right? It's either the data's not accurate or the implementation of the behavior plans not accurate. So then what we did is we scratched it all. We stopped, we went back to baseline.

Christine Austi...: 00:25:14 You can see extremely low rates. And then we implemented a new intervention of just planned ignoring and then we changed his schedule. So those are some of the things that you want to do, especially when you're trying to ensure you know, just burnout. If you're being aggressive toward four hundred times a day, you're going to get burnout. And when you have this data, if it's accurate, if it's not accurate, just stop what you're doing. Go back to baseline, retrain your staff. And then you can see here where when we implemented the treatment, the new treatment of planned ignoring, it started to decrease a little bit, but it started to pop back up. That's because the staff were exhausted at that point. So then there was a schedule change. So then when they put that in place, it popped back up. But then you can see a decrease again.

Christine Austi...: 00:25:57 So not only is the data going to show you, is your intervention effective and is it worth the effort that you're putting out, but then it also gives you an idea of how to support your staff better. And sometimes you just got to change the schedule and start fresh with new staff. I know that many of you out there might have home teams to where that might not be the easiest thing to do. And we'll talk about how you can get in there and support them. But we are pretty lucky here. We have about hundred and twenty behavior technicians that we can rotate through when someone is a burnout. Okay. So if there's no other questions in regards to frequency, we're going to move on to another method. And that is just taking duration data. Again, this is a continuous measurement. So for every occurrence of the target behavior, you're going to record the total duration from onset to completion of the target behavior and the best thing that we use as a stopwatch.

Christine Austi...: 00:26:54 We've gone through a lot of different ones. But I'll, I'll tell you a stopwatch is one of my favorite tools ever. You can just hit it right away, deal with the problem behavior at hand, and then

when the child has completely ceased engaging in that problem behavior, you just hit it again and you never had to look at a clock. A lot of the staff really liked that as well. And you know what you can do again, just like the counter is label them differently. If you have two different target behaviors obviously this is what you want to use for a behavior that's lengthy in duration. And some of the examples that we have are screaming or tantrums or noncompliance. But there's much, there's many more problem behaviors or challenging behaviors that you can target as well. You want to use this for discrete behaviors that occur in quick succession.

Christine Austi...:   00:27:40

So as I was talking before about maybe they hit you, but it's very quickly, you might just want to label that behavior a physical protests like hitting quickly because there's no way you're going to be able to count that. Protect yourself and protect the child as well. So does it matter that he hit you fifty times versus fifty five times? Now, does it matter if he hit you continuously for one minute versus five minutes? Most definitely cause it really speaks to the severity of the problem behavior. Unlike we do with our frequency data, SBSA usually provides a total duration per day. So what you'll see is you know, sometimes we use a bar graph, sometimes we use a line graph. It just, it doesn't matter. But what you'll see on our reports is a total duration of the problem behavior per day. If you want to show multiple occurrences per day and show those different durations, then I would suggest using a bar graph.

Christine Austi...:   00:28:38

So here's an example of our sample data sheet for duration. Again we wrote out noncompliance and define that. As you can see here, we were really trying to identify the severity of the problem behavior for this consumer. So we have noncompliance to find his refusing to give up a preferred item, grabbing it, blocking you from removing it, putting the item out of your reach, refusing to complete a presented task, which includes leaving the table or instructional area, falling to the floor, swiping or throwing materials, kicking the chair, elopement [inaudible] in the body to resist a prompt. This all happens together. So this he might start to refuse and he turns away. And then you then try to re-engage him in an activity and then that's where he then puts the item out of your reach note. You can't get that from me.

Christine Austi...:	00:29:29	And then it's like he's provoking you by being noncompliant. Then it leads to him falling to the floor or you know, throwing the materials and then he elopes, this all happens. There's no way that a behavior technician could say, okay, he engaged in noncompliance, meaning that he grabbed it or now he's blocking it. Or now there's just no way to do that, to take all those frequency counts. So we just call it a noncompliant episode and then take duration around. How long that lasted because then it really gives this idea of what percentage of his time is he engaging in inappropriate behavior, which is then hindering his ability to engage in functionally appropriate behavior. And then what we do to make it easier on the behavior technicians is we'll put in noncompliance with aggression toward others. So if any time during that situation, if he then engaged in aggression towards others, it still might be three minutes.
Christine Austi...:	00:30:21	But if he hit you a couple of times, it is now with aggression. If he engages in self-injury, we're going to Mark that as well. But again, only put around the duration. So it might've been three minutes and aggression occurred and also self injury occurred. So what we did down here to help the behavior technicians and please know that what we always do with our staff, and we'll talk about this later on, is we ask them what's going to make it more manageable for you? Their job's tough. You know, if you sit back, we already talked about it, but think of how much they have, how, how much responsibility they have and how much they really have on their plate. They have to know how to implement things with fidelity. They have to be able to keep the child safe. They have to motivate the child.
Christine Austi...:	00:31:07	I mean, there's just so much going on. So we say what makes it easier on you? Because if you can't make it easy for your staff, you're not going to get accurate data and then it doesn't even matter from that point. So it's so important to interview your staff and ask them what's manageable. So just the example again, like what we had with the other data sheet is here we have nine to twelve, then the child has a lunch and then recess for a half hour each. Then another session at the end of the day. So this is actually a student that's out in Newark, the one before was here in our Worthington campus. So it just depends, but make it easy on the staff. So then the staff knows if it's Lyda working with the child in the morning, then we know from nine

to twelve Lyda always works with the child or John always works with the child from one to four.

Christine Austi...:	00:31:56	It just gives us an idea of where, we as behavior analysts need to spend our time. So just one way that we made it easy on the staff as we put noncompliance. And again, we put duration data just as a little visual reminders so they know what data they're supposed to be collecting so they don't move over to frequency. But then we put in here we have noncompliance and then the next row is noncompliance with aggression and then they just simply star self-injury occurred during that time. So here's an example of our graph here. We started off with a simple token economy system and then we implemented a fifteen-minute DRO. What's interesting here is if you look at the, it progressively got worse. So then we had a simple token economy system, I believe it was, we just taught him what a token economy system was in the beginning.
Christine Austi...:	00:32:47	So you engage in one discreet response, you get a token, second one, you get a token, continue that you get five, you get your backup reinforcer, but then you can see problem behavior started to spike. So then we put in a fifteen-minute DRO for the first couple of days it went pretty well. We were pretty stable and it was lower rates, but then we noticed there was higher. There was just a lot more variability. And then we noticed noncompliance with aggression started to occur and I was like, what is that? What happened? Well, down here on my notes on two six twelve the staff stopped using the token economy system and that was just a way for me to identify what's going on here. What happened with the data. We had low rates, it was starting, you know, it was at least stable at that point and then all of a sudden there's a lot of variability.
Christine Austi...:	00:33:34	What's going on. So then they stopped using the token economy system at that time. And then the next line that you see is when we implemented it again. So you know, here we have some variability, but then we took that information and gave it to our psychologist and our psychiatrist and now the student is actually being evaluated for possible oppositional defiant disorder because of the variability. But if I didn't go in there and check immediately in regards to the data, I would've just assumed that the data was incorrect. But now we're looking into a dual diagnoses.

Christine Austi...:	00:34:13	Okay. The next example that we have is response latency. And this is a continuous measurement that you'll use. And this is the elapsed time between the onset of a stimulus and the initiation of a subsequent response. So basically, how long does it take for someone to start a task? One thing I was measuring was we had a consumer who is six, eight and we were unable to physically prompt him due to his stature and he was very resistant to a physical prompt. So trying to follow through or even use errorless teaching procedures was very difficult for us. So we basically had to shape that response by him just responding more quickly, but not using physical prompts. So here we had a response latency and unfortunately, unfortunately the response was getting out of bed. So how long does it take for him to get out of bed by just changing the environment, opening the blinds, taking the sheet off of him, maybe guiding his legs to the floor.
Christine Austi...:	00:35:17	But those were all very, very gentle prompts. We just knew that if we tried to assist physically, he would just become aggressive. So what we would do is just take baseline. It took him, I, I think when he came out of residential and went back into the home, it took them about forty five minutes to get out of bed and now we're able to get him out of bed within one minute. So a response, latency is important to use for that in regards to reducing noncompliant behavior. But then also you can also use that for measuring increasing adaptive skills. So just, you know, some of the examples we have here are starting a challenging task. We have some students that have a hard time completing challenging tasks. You might want to measure how long it takes for him to start completing Math problems or initiating a social interaction. And then also looking at just non-preferred tasks. Maybe he just doesn't like to do it, so he resists a little bit. And some of those examples might be cleaning the bedroom or getting dressed and that was one of the consumers. And you know, one of the tools that we use is just to stop watch again after you've given the command, you just hit the stopwatch and then see how long it takes for the individual to start responding.
Christine Austi...:	00:36:28	Inter-response time, this measurement is the amount of time that elapses between two consecutive instances of a response. And this is, you know, a basic measurement for differential reinforcement of low rates of behavior. So just in some examples that we had given you were how much time elapses

between eating or how much time elapses between watching TV or raising a hand in class? We have some students in our transitional building and that will just raise their hand immediately because they always want to participate. It's not necessarily a bad behavior, but it's annoying to the other students and they really don't have the opportunity to participate. And then, you know, another example that we had was drinking alcohol. So really just how much time in between those responses does the behavior occur because then you want to slowly increase that time.

Christine Austi...:   00:37:23   We did give you an example of one of the tools for free at the beginning of the presentation. But this is an example of partial-interval recording. And we use this when we can't take continuous data. So if that's not a reality for you, move over to something that you can take data on. We use these types of measurements. The, the time interval measurements for higher ratios. So we have a classroom in our transitional building and there's one teacher and there are six students. He can't take continuous data. There's no way. But what we do is we have our supervisors go in and collect the data. You know, on the same time every single day, but using a partial interval recording or a whole interval or a momentary time sample and we'll talk about that. But if you look at the tool that we gave you, this was an example of a sixty minute observation broken up with a one minute.

Christine Austi...:   00:38:26   The line that you see here and the presentation is just the first ten minutes, but the tool that we gave you is for a sixty-minute observation. So what you would, in a partial interval, a recording method is just write down, did any of the did any, was there any occurrence of the target behavior during that time? So you don't have to stick to a one-minute. We just find that it's manageable at one minute. There's no way that I could have someone teaching a classroom of six students and also collecting data on a ten second interval. It's not going to be manageable. It's just unrealistic. You could divide it into a ten-minute observation period. You could divide it into a one-hour, whatever you want to do, just so you can collect manageable data. But again, here with partial interval recording, you're just going to record in that time interval from zero to one during that one minute did it occur at any time.

Christine Austi...:	00:39:20	You would then put a mark in there like a plus or a check. If the target behavior did not occur, then you just leave it open and then that will provide you a percentage of the time that the child's engaging in the target behavior. With whole interval recording, you'll use the exact same data sheet except you're going to record did it occur during the entire interval? So not just did it occur at the twenty second mark, but did it occur for the entire one minute. So you know, when you look at data collection, if you use the partial interval, it's going to underestimate the occurrence of the problem. Or I'm sorry, it's going to overestimate the occurrence of the problem behavior because even if it only lasted for one second, you're going to put a mark in the box. Whereas if you use whole interval recording, you're going to record did it last the entire minute. So then it underestimates the occurrence because if it lasted for fifty nine seconds, you're not going to put a mark in the box.
Christine Austi...:	00:40:20	So the way to kind of bridge that is using momentary time sampling and this one's a lot more manageable, at least for me. I don't know about you Erin. Is this one more manageable for you to do? Yeah. So what you do is you just divide it up again the same way where you have one-minute observations and then you at the end of the one minute. So on the one-minute mark on the two-minute mark on the three-minute mark, you just get up and you observe, okay, is the problem behavior occurring or target behavior regardless if you're increasing or decreasing behavior. Did the behavior occur at the one minute? And we did pull out this grid here that we actually took from the Cooper's text. That shows you how if you're taking data on a behavior that has long durations, you can see here that if you use the whole interval recording, it's only going to say it happened about thirty percent of the time. Or then if you use the partial interval recording, it's going to say it happens seventy percent of the time. But then if you use the momentary time sample, it's a nice blend. It's a nice average and it says that it happens fifty percent of the time. And I just know for myself it's much more manageable to do this. You could set a timer that set always at one minute. That thing gives you a prompt to then look up
Christine Austi...:	00:41:34	And observe the child and see if he's engaging in that target behavior.

Erin Lombard:	00:41:39	And we're going to talk about some data collection for increasing behavior on skills that you are positive working towards your treatment plan or working towards goals of behaviors of desirable behaviors that you're trying to increase. Remember when you develop a plan to decrease a behavior ethically, you should also plan on teaching a replacement behavior or alternatively behaviors to increase. So it's always important to think of the behaviors that you're trying to improve upon and trying to increase even on those behavior plans of maladaptive behaviors that need to be decreased. You know, if there's a function to access something a child engages in behavior to access a tangible and his whole life he's gotten access to the items he wants by throwing tantrums to just simply decrease it, but never show him how to functionally get that.
Erin Lombard:	00:42:40	It will be very frustrating for an individual. So always keeping in mind that you still want to always have a plan to increase behaviors. So when you are increasing behaviors, again, you're going to look at continuous measurements and discontinuous measurements. Some of the discontent or the continuous measurements like we talked about are ones that you're taking in the moment. You're seeing it happen as it occurs, we're taking data. On the discontinuous measurements, meaning that you're not necessarily taking data for every single occurrence. For a continuous measurements, we're looking at discreet trial by trial. Meaning that you're actually taking data on every time that you give an SD, discriminative stimulus, and then the response, what happened, did they engage in the correct behavior or not? Also it's very simple to just put down plus or minus, yes, no, correct, incorrect. However, for some individuals who may have a slower acquisition rate that may be very difficult. What you may see is the minus, no, incorrect for many days in a row. In those cases it's nice to take some prompt level data as well. This way you can see if the child is making progress just not as quickly towards independent responses. For example a child may start out needing physical prompting to engage in the correct behavior. Perhaps you're teaching him some functional communication instead of tantruming. Well, what you would do is maybe you need some physical prompting to help him do that picture exchange to give a picture. But you'll see after a couple of days, although it's not independent yet, he

now only needs a gestural prompt that's making progress. And so adding those prompt levels for consumers or individuals who have a slower acquisition rate is a really nice way to monitor progress. I'm also looking at event recording frequency and rate. Also we have time and we're gonna talk more about these as they, so you go a quick overview though. And then timing, duration, response, latency, inter-response time. And then of course discontinuous measurements, first trial or probe data whole interval recording and momentary time sampling.

Erin Lombard:	00:45:20	So our trial by trial data as I mentioned earlier is a way to take that up for every single response following an SD. Now one of the concerns with this method is that it is time consuming. You're recording every instance of this behavior. You know, this requires your BT, your direct care staff to actually access a data collection form for every instance. Now for individuals who really need a lot of that repetition they're probably going to be sitting in one location with their data collection form, taking this up, maybe easier. For those individuals so who really needs to be more active and moving around, this may be a very difficult method to take, to collect data on. And that's really important to choose the correct data collection method to ensure fidelity that ensure that the data does have validity.

Erin Lombard:	00:46:22	If you're requiring an individual to take data and they're actively moving around, well, yes, your IOA is not going to be, you know, as consistent. Whereas if you have an individual who's going to be working at a table on specific skills and that's the only place that we're working on this. Well, yes, a trial by trial data, you know may be very appropriate and you probably will see higher IOA in that, in that occurrence. One thing, when you are monitoring your data, look for patterns of that prompted trial. One thing that can happen with your trial by trial data is if the first response is consistently a prompted response or an incorrect response, but then the rest of the data is correct responses, although it may look like eighty percent accuracy if he always needs that first prompt, those subsequent trials really are technically could be prompted trials.

Erin Lombard:	00:47:29	He just needed that little prompt in the beginning. Now he's got it. He may not really have it independently. So really you want to still monitor your data and look for some of those patterns. Another one to look for is if it's correct in the first trial, so the

very first square, your first trial data, you see a plus consistently across all sessions, all direct care staff, but then your subsequent trials are hit or miss, incorrect, not correct. It's very variable. What you may be seeing is that the consumer is bored and by repeating the SD over and over again for this particular individual, he may just be simply trying to tell you, I know it. I got it. You don't have to keep asking me again. So, and so you kind of look at that data to kind of see if you do need to change your data collection methods.

| Erin Lombard: | 00:48:28 | And in those cases you may want to move to a first trial type data, which we'll talk about next. So in your first response, also known as probe data or discontinuous data, this method records only the first trial of a learning opportunity, even if the individual presented ten more opportunities. They're only taking data on that very first presentation. Like we mentioned, this is a great method of taking data if you are in a natural environment. If you are working on something that you're not limited to a table that you're out about functional communication is one you typically aren't only going to be functional deep breaking up functional communication at the table. You're probably going to be out playing as he's reaching for something. You might kind of hold it back a little bit. Enticing it, trying to get the individual to requests for that. |

| Erin Lombard: | 00:49:24 | You're not doing that at a table. So first response is really preferred for that naturalistic environment. Now, one of the concerns of this type of data though is that you're not observing that progression. It's harder to tell prompt levels. You're not looking at every single trial by trial data, how the individual is progressing through an individual session. By we say you have to weigh the pros and the cons based on what the individual needs and based on the type of teaching that you are providing and how you're going to be able to provide the best fidelity for data collection process. So now one of the big questions has been is continuous or discontinuous data collection preferred? Which one is the better data collection method? And really they both have their, their pros and cons and neither one is, is better in all situations. |

| Erin Lombard: | 00:50:26 | It's always going to be chosen on an individual basis based on the individual that you are working with. And also based on the individual circumstances, meaning what program you're |

working on, that the staff that you have, what they are. What works for them. Like Chris had mentioned, talking to the staff, I know, does this work for you? Because we're all individually, we all have our preferences, our strengths, our weaknesses. If something is not working for somebody, I mean, you keep trying to push and it's not working. It's just makes things worse and just change. That's okay. You know, and if you look at the research, you know, there's been found that acquisition rates, you know, were faster among this continuous data. However, in that same study, they found that though, however, maintenance of the skill, the skill maintained in the continuous data however other research found no differences.

Erin Lombard: 00:51:27   So it really, again, it just goes back to the individual preferences and needs of the people you are working with. I think on, we're gonna talk about interval recording when increasing a behavior. Chris had mentioned the partial interval and there's a great tool that you have an interval recording which you can use for both whole interval or partial interval available as a downloadable tool. When you're increasing a behavior, if you cannot take continuous data. And you need to move to a discontinuous data of an interval recording. Partial interval is not the best method when trying to increase that behavior [inaudible] that really great visual partial interval will almost always overestimate and well overestimate the behavior. And when you're trying to increase that behavior, you don't want to overestimate, you don't want it to show that it looks really good if your intervention really isn't working.

Erin Lombard: 00:52:31   So therefore whenever you are trying to increase that behavior and you really do need to do interval recording, you're going to want to use whole interval recording. As Chris mentioned, it's simply recording. Did the behavior occur the entire interval or not? Even if it occurred, like she said, fifty nine seconds in a one-minute interval, that is not the whole time. It is not. That means that it did not occur for that, that interval. Now that will, as you mentioned, underestimate the occurrence of the behavior, but when you're trying to increase the behavior, it's better to underestimate than it would be to overestimate. And as long as you're recording, although it's not accurate because it will underestimate if you're consistent, if that's always the recording method that you're choosing, it's okay to use that. You'll still be able to tell if there is a change in the behavior as

long as you're consistent with it. And there is fidelity in the implementation of that data recording.

Erin Lombard:	00:53:42	And I think that inner observer agreement, I know Chris has mentioned this a lot and I talked a little bit about some IOA. This is the degree to which two or more independent observers record the same observed values after measuring the same behavior. This is really the heart of ensuring treatment integrity is the IOA. If you are not going in there and, and seeing if the data collection is the same across two people you really don't know if your data is accurate or not. And because we base so much on that data, we decide to either stop an intervention, continue intervention, change an intervention based on that data. We need to trust that that data is accurate. Some things that are going to be a threat to the measurement include a poorly designed measurement system. You know, it has to be managed.
Erin Lombard:	00:54:40	I know we've talked about this so much, but it really goes to the heart of this presentation is if you, if it's not designed correctly, if you don't take the time to really consider who is taking the data, the, the behaviors of the individual. Does this match, is this appropriate? Is it going to tell me what it, what I need it to tell me? Then is it manageable? If it's not, it's just you're not going to, you're not going to have fidelity. You're not going to have strong IOA. Poorly-defined behavioral definition. This is very easy thing to fix. Many times if you're seeing data that's just IOA is not clear, not consistent, lots of variability. Look at that behavior definition. Find out what are they recording? Why is this person recording every time the child just does this, you know, is the behavioral definition to simple as it just saying hit.
Erin Lombard:	00:55:41	Do we need to say with force, do we need to say with you know, making contact where you can hear the contact that may be something that needs to be changed, where somebody is counting every instance of contact even if it's just a tap. Whereas somebody else may contacting only if it's a slap that you could actually hear the contact being made. That will affect your data collection. And also inadequate observer training. Make sure everybody is fully trained on the plan. And how to take the data collection role play at which we'll talk more about some of these training strategies later. Now, the benefits of IOA, we mentioned this is really the basis for determining

competency of the new observers. You know, when you have somebody new you want, you don't want them to get into any kind of bad habits.

Erin Lombard:	00:56:36	You know, we really want to go in there in the beginning, help somebody become a strong technician, help somebody come to become a really strong direct care staff. That's going to help you in the future as well as hopefully they won't need as much training and much time. If you can really help them in the beginning become strong, it's much easier to help somebody in the beginning than it is to go back and change some bad habits. Also IOA can detect observer drift. You know, when somebody stops collecting data at some point what's happening, you can adjust some things. You can train better on how to, how to take the data increases your confidence and behavioral definition. You know, if you have strong IOA across individuals, you can be pretty confident that okay, I think our IOA, our definition is pretty good.
Erin Lombard:	00:57:28	You know, we must all be taking the same data. Increases confidence of the obtained data. Again, you have to be confident in your data. If you're not, I mean really it's kind of a waste of time. I mean the data, if it's not reliable, I mean it's a lot of work taking data, let's be honest. It's, you know, for the individual taking the data, they have to, not only are they doing that Chris described as working with the individual, but now you're telling them to like click every single time and then use the soft watch and do this. And if it's not, if you don't trust it why are they doing all that extra work? You know, we need to really ensure that what we're making our staff do, that it's going to be live and that we're going to use it. There's nothing more defeating than knowing that I did a bunch of work and nobody even used that. So that's going to be important.
Erin Lombard:	00:58:29	Okay. And accurate implementation of the intervention. Gresham which was cited actually in Digennaro-Reed and colleagues defines treatment integrity as the consistent and accurate implementation as the behavior plan was designed. I know that, you know, as behavior analyst we take a lot of pride in our, our plans. I mean we don't just copy and paste. I mean, you know, it's a very individualized approach. I mean, you're taking, even if two plans are similar, there's no two plans are exactly alike. I mean there's always something that's different.

The behavior definition is different. The duration if you're using a DRO-type procedure based on time that might be different. The criterion-based might be different and we take into consideration all these factors and we can create the most beautiful, great design that will change this behavior. But it won't, it won't change behavior if it's not being implemented as it was designed. You know, and one thing tothat can be a problem with that. Not only is it frustrating as a behavior analyst don't have your plan being implemented, but in addition, you may look at data like Chris was showing some examples of some graph data.

Erin Lombard:	00:59:52	It can appear to be ineffective and there's nothing more defeating for staff than to feel like the work that they are doing is not effective. And sometimes there are some things you can go back and you can check it. And if there is a lot of variability and we might look at some other causes like Chris had mentioned, some other diagnoses and other medical conditions. But sometimes remember where behavior analysts were parsimonious. So look at the simplest explanation. Can you first rule out though? Is it simply just not being implemented as designed? Sometimes it's that simple. Sometimes it's going back and really training and observing and then retraining so that everybody's implementing it correctly. You will see maybe an effective plan. So it is important to have accurate implementation and we're going to talk next about methods of actually teaching that behavior. So now that you've got that data collection down, let's look at how are we going to train our staff?
Christine Austi...:	01:00:52	Okay. So what we want to do is, as Erin has already talked really in depth about data collection and ensuring accurate data collection, how do we achieve that? So, you know, how are we going to be able to do this with our staff? Well, there's a lot of different teaching methods that you can use. This is an overview of what it is that we're going to talk about, but let's go ahead and dive in. Under the didactive method that's basically just providing your staff some lecture notes or some PowerPoint presentations or a training manual, maybe a checklist or handing them over a book. And then, you know, just giving them some instructions of implementation and then say, have at it. So that would literally be me explaining what it is that I'm talking about. And then just giving that over to Erin and

expecting her to do that. If someone does not have a lot of background in Applied Behavior Analysis or implementation of behavioral intervention, it's not going to be enough. So the real, the advantages here is that it provides the opportunity to teach the language. But it may take less time for both and it may take less time for both the trainer and the trainee, but alone, it's not going to give you favorable results. And it definitely, definitely leads to instructional draft.

Erin Lombard:	01:02:14	And Peltier and colleagues found in research in 2010 that the written portion, the guidelines, instructions, directions they found actually be ineffective when it was the sole method of staff training. However it was found to be an important component of the training. So without it, there was also ineffective, it was poor staff implementation. So definitely keep that as part of your package. Right.
Christine Austi...:	01:02:46	The next one is demonstration and this is basically providing the trainee a live demonstration of the behavioral intervention. So you would sit down and you would just roll or you would just demonstrate exactly what it is that you want your behavior technician to do. And the advantages is that it provides the trainee a model to imitate. They have that in their memory. And it also allows the trainee to observe what he or she will be required to do. The disadvantages again is that it does not produce favorable results to new trainees when alone and will definitely lead to instructional draft. So when I say demonstrate, I could say, Erinn, this is exactly how I want you to implement this program. And then I walk away
Erin Lombard:	01:03:29	And according the literature of Petra and Bailey had found that while it was an effective method for getting you know, the percentage of correct implementation. They actually found that over time though it was ineffective. They did not see the promising results until it was part of a whole package. So demonstration again, maybe a component of it, but it should not be the only your only training method.
Christine Austi...:	01:04:00	The next one is immediate feedback. And this if you look in the literature, you're looking at verbal feedback such as positive comments on the components performed correctly. Like nice job getting his attention prior to delivering the command or I like how you've provided a lot of different reinforcers. You can

also provide informative feedback on components that the behavioral support person needed to practice. So Hey, next time only allow three to five seconds for response next time before you prompt or make sure you use a physical prompt. If he doesn't respond to your gesture prompt when you're in your errorless phase of teaching. The advantages of this is that it can sometimes be used alone with staff that had been previously trained. So if you have staff that are not new to behavioral intervention, you can just sit in, you know, provide them a written guideline of what to do and then provide them feedback in the moment.

Christine Austi...: 01:04:54 But when we're talking about training new staff, we're going to talk later on about that training package. Another advantage is that there's no prep work for the trainer. You just sit there and provide them the feedback. But the disadvantages is that it can be really overwhelming to the trainee if that's the only thing you're going to do. If someone came in, handed me a piece of paper, I'd go ahead and start implementing this and all I'm getting is positive and negative feedback. It might be really overwhelming to me. And it may allow the trainee to implement positive or it may allow the trainee to implement behavioral intervention incorrectly before you're able to get in there to provide him or her the feedback. We also like to give video feedback here at Step-by-Step and this is providing the training with feedback on performance after viewing a video recording of the training session.

Christine Austi...: 01:05:46 And this also includes self-monitoring by scoring performance. So I know one of the questions before was how do you ensure IOA? Well, you can ensure IOA of data collection by you going in and doing it together live. Or you could take a video and have both of you score the data and you can do that preventatively before even going in and implementing an intervention by using someone else's data. Or you can give them feedback as well. And the advantage is here is that it provides, the trainee was specific information about their performance. You can back it up and say next time, don't do that, but do this instead. And video feedback, although delayed, allows the trainee to provide themselves or to observe themselves and receive information on correct or incorrect implementation of the behavior plan, they get to see what they're doing.

Christine Austi...:	01:06:36	But again, it's tough, you know, to watch yourself on video sometimes. It's also tough to have to give yourself a feedback. So you just, you want to make sure that you're very supportive of your staff and we'll talk about that later on in regards to buy in. But some of the disadvantages is that video feedback must be recorded and requires time to review the video. So you're adding more, you're not just going in and doing it right away. You're adding more to your to do list. And you know, to determine the behaviors, to provide feedback and additional time to meet with the person individually, you're just adding time to your schedule. If the feedback is too negative, this may impact the staff self-esteem, like I said. And it just might be ineffective. So a lot of these implementation training procedures are going to be individualized based on the person that you're working with. And again, you know, it might be a little bit uncomfortable to view yourself on camera
Erin Lombard:	01:07:31	And looking at the feedback, reviewing the literature. Really this has been a really great component to training staff. Whether and it has been found effective whether it's live feedback, feedback that the supervisor has given after viewing the video or even self-feedback if the person monitoring themselves watching the video. Either one has been in much of the literature shown to be very effective as a component of training
Christine Austi...:	01:08:06	Video modeling. This is a video demonstration of the behavioral intervention. I think this is one of the greatest tools that you can use and this something that's going to get buy in with your staff. If you, as the behavior analysts go in and work with the child with super challenging behavior and show them how to implement that behavior plan, you're going to get buy in from the beginning. It's something that we're going to talk about later on. But if you're willing to do it, then your staff's willing to do it. I have had so many supervisors in the future or in the, in the past where they wouldn't implement the intervention. So then as you ask them questions about the logistics of the intervention or even concerns about the severity of problem behavior, they've never actually felt it before. So it's great if you as the behavior analyst can go in and videotape the implementation because then your staff can go back and look at how it was implemented and use that as a guide in the future.

Christine Austi...:	01:09:04	And that'll really help with consistency. So, you know, it can be used to demonstrate small discrete responses. We use that here at Step-by-Step. We'll videotape how to implement programs. So if I'm not available to sit down with a staff member and demonstrate that I can show them a five-minute clip, so easy. We do it with complex behavior as well. Doing behavior chains or even a behavior reduction plan like I was talking about. It allows for an addition or alternative to live demonstration. If you don't have the time as the behavior analyst to get in there or maybe your child lives forty five minutes away, like some of our individuals do, you can just create a library so that they can go back and reference that or even the parents can go back and reference it as well. Some of the disadvantages is that it's more prep work at the beginning, but what I would say is bring your video camera to all of your team meetings so you're just videotaping it and then you can go back and timestamp it and cut that down so that you can then use it for the future alone.
Christine Austi...:	01:10:11	It may not produce favorable results for new trainees and it could lead to instructional drifts. So we'll talk about the importance of that training package
Erin Lombard:	01:10:21	And also in the literature supports this method as well as part of the training package. It's been found effective in modeling the videos or modeling the behavior in video, but then also just even training using the video modeling. Just recording yourself. If you don't have time that could say get to all your staff members and your staff is in different locations. They found that actually video training was found more effective than live training. And you know, it doesn't go into the details but you know, you do have an option of rewinding. We'll see again if you miss something. Whereas in live training, you know, something could have gotten missed and nobody knows. So it's interesting that you know, whether it's modeling the actually behavior or just modeling the training in through video has been found effective.
Christine Austi...:	01:11:17	And one of the very last ones is role play. And this is, I find one of the most important methods and this is where the trainer demonstrates the behavioral intervention for the trainee. And then the trainee demonstrates it immediately to the trainer. And you can do this with confederates. We do that within our training or you can use the actual individual that you're working

with who's receiving your behavioral intervention. This provides the trainee, a model to imitate and allows the trainee to practice his or her skills. You can do this quickly prior to teaching a new skill to the individual. So you don't have to have this elaborate training. You could sit down with your staff members say, this is exactly how I want it, how I want you to implement this matching program. Here's how you do it. Now I want you to do it.

Christine Austi...:   01:12:07   Great. You got it. Go ahead and work with the child or maybe she didn't demonstrate it appropriately. You can role play it a little bit more and then have her work independently with the child. It allows the trainer and opportunity to provide immediate feedback. So right there. Great. You're perfect, Erinn. I love how you implemented that. Go ahead and work with the child or again, let's practice it so I can make you better before you could start practicing inappropriate behavior. It's great for teaching during individual training or group training. So you can do either, sometimes it's great when you do it as a group cause you can see that behavior technician does not do it the same as this behavior technician. If you have a behavior technician that performs very well, you could have that person be the one to demonstrate it all.

Christine Austi...:   01:12:52   Those are some of the ways you can build in, buy in, you know, praise the staff that do it well. Obviously you're not going to single out the person who doesn't do it well but have them practice it and let them be the leader and that'll build a confidence in themselves. And it also, you know, gets the buy in not only with the child but the agency as well. And this definitely leads to, it's just less likely that it's going to lead to instructional drift because you got to see them demonstrate it and then provide them feedback much like we do in the field of Applied Behavior Analysis

Erin Lombard: 01:13:28   And then talk about a new, relatively new training system. It's called train-to-code. It's actually a coding software system is what it is and it's a frame by frame coding of behavior showing a video and the individual participants will then code that behavior as either correct or incorrect implementation. It's relatively new in that there's has been a lot of application in the discrete trial or with behavior plan management. However, there was a reason application showing promising results when

shown videos of how to implement discrete trial training approach method to paraprofessionals. The only training that was received was this discrete trial training train-to-code program. And in baseline there was only an average of twenty six percent correct implementation and by the end of those who completed the train-to-code software, they were able then to implement the discrete trial training instruction at over ninety percent accuracy.

| Erin Lombard: | 01:14:43 | So really great results cause mean that doesn't require an actual live instructor. I know that's definitely a concern in many places where you just where your staff is either in remote locations or you just don't have the funding to do a lot of live trainings with some staff. So, so this looks like a promising training procedure, but might look for more research in the future in this. In Pyramidal training this is a "train the trainer" type training. It's also like a package type training that's been used for a couple of decades now. But the idea is you train, one person's implemented behavior intervention and then that person teaches that another person to train others. So it keeps going back and forth. You train somebody, they train you, then they train other people and then those people train. |

| Erin Lombard: | 01:15:43 | But it's showing that when you train somebody else, when you're practicing it with somebody else kind like the other things you're talking about demonstration and role playing, like when you have that opportunity to teach it, it solidifies that knowledge and that implementation. So this has been very successful for parents and professionals in both center-based and residential settings. Again, like you mentioned, it's the pyramidal approach as a very much a package-approach with didactic demonstration. There's some video modeling, sometimes role-playing, and then of course feedback. And the research has been really promising and this. It's been effective in increasing correct implementation of specific content area. The only concern that has been is that because it is specific training on a specific, in one intervention, they didn't see a lot of maintenance across other skills or generalizing it to other interventions. So you still need it to continue that training, which is, which is we found have been, has been important to, you can't expect because somebody was did well at one training or one intervention that they don't need training still for other interventions. |

Erin Lombard:	01:17:07	Now the importance of a training package we can't emphasize enough the from especially from our own observations, but then also looking at the scientific, reviewing scientific literature that it's definitely been proven that something alone is likely not to be effective. But it's when you have that whole package, that didactic information, giving instruction, demonstrating video modeling, role playing and giving that feedback that that creates a more likely scenario to have good implementation of your plans. The characteristics of good training training should be practical and time efficient for both the trainers and the trainees. The training received to be judged favorably. Again, asking your staff, you know, finding out what works, what doesn't and the preference and style, level of difficulty. If you have a staff member who get so anxious when watching himself on video, that may not be the best training approach for that individual.
Erin Lombard:	01:18:16	Competencies of staff are objective and criterion-based. You know, again, going back, you know, as behavior analyst make sure that we're measuring the behavior we want to see in observable, measurable terms. Competencies of staff acquired during training, maintained throughout employment. Don't rely on just you, you trained initially and that's going to be enough to get them through the next five, ten years of their employed with you. I mean, you will have to do some ongoing training. And that's where you need to get resourceful with using some of these video management other technologies as your resources may be limited.
Christine Austi...:	01:18:55	Exactly. So now what we want to do is show you an example of how Step-by-Step trains, and this is a typical seven-day training period. If we have to hire a lot of staff members. And it takes a lot of time to do the role play. It might be extended if the staff member did not acquire it within the seven days. Again, it might be extended so it can be as short as seven days or all the way up to ten business days depending on the size of the group and how quickly the staff had acquired the behavioral interventions. So during this time we have implementation, we train on implementation of all methodologies, discrete trial teaching, natural environment, teaching mix and vary, just all of our teaching methods in addition to data collection for increasing and decreasing behavior. And then we also just so you know, I think Erin already talked about this so many times.

Christine Austi...:	01:19:49	It's just how we use evidence-based training methods. How we provide our ongoing training is we have our initial training, but then every single day, at the end of the day, we have the availability to meet with our team, whether it's small groups or an entire team altogether to go back through and role play all of the programs or behavioral interventions in regards to reducing problem behavior. We also talk about how to structure your teaching session to make it more motivating to the child or more manageable to the staff. So we might not just look at what it is that we're teaching the child. We might need to step back and look at how to teach our staff yet again how to implement those procedures or make their time more manageable. And then we also take that time to identify where there is a barrier to learning. So through all of this presentation, you have seen that we talk a lot about how to ensure treatment integrity in regards to data collection or implementation.
Christine Austi...:	01:20:49	But when we know that those are consistent, then we look at what's the barrier to the child learning that skill or acquiring that skill. And that's how through our daily training or initial and then our daily training, we can ensure that. And then we do have the pyramidal structure to our clinical team. We have three buildings here in Worthington. And then we also have some classrooms in the schools in addition to a small clinic out in Newark. In each building here on our main campus, there's forty to sixty individuals that we serve. And we have a clinic director, that's a BCBA. Then we have a program manager that has fifteen to twenty individuals on his or her case load. And then from there you have a behavior technician. So the clinic director trains the program manager and then the program manager trains the behavior technician and the parents.
Christine Austi...:	01:21:39	So you can see how we have that structure built in and how it trickles down for to ensure treatment integrity. So just to give you an overview of our initial behavior technician training on day one, you got to go through human resource stuff, then you take a break. Then we do a review of the history of Step-by-Step, introduce everybody, give a general overview of ASD. We are governed by the Ohio department of Mental Health. So we have to talk about our own internal regulations. Obviously we're going to review HIPAA and compliance. And you know, just looking at special treatments and safety measures because safety is number one. We want to make sure that all of our

consumers are safe. Then we really get into what is autism later on in the day. Then we're talking, then we provide an overview of behavior, just what is behavior.

Christine Austi...:   01:22:31   Some people don't know what behavior really is. So we give an overview of that and then we give test, to test the competency on some of the information that we had given earlier that day. Then we go into increasing behavior and we provide a video of that. So that's our didactic component in addition to PowerPoint presentations. And then we roleplay preference assessments. So if you're a behavior analyst out there, you know that you can't change behavior without a reinforcers. That's a very first thing that we talk about and we provide video examples. Then on day two is when we really talk about the meat of what it is that we do. We're gonna talk about the methods of programming. We're gonna provide a videos. We give them a video demonstration, we give them a live demonstration, and then we start role-playing.

Christine Austi...:   01:23:20   So we're gonna role play errorless or error correction. And then we talk about the different methodologies including discrete trial teaching, mix and vary, and then we start practicing data. So at this level we have confederates. If it was me training, then Erin would be my confederate and we would role play that back and forth until we were sure that we can take accurate data and implement with fidelity. Then after lunch we come back and then we start demonstration and role play of natural environment teaching. And then again mix and vary, cause it's tough, you know, you're targeting a lot of different targets within multiple programs. Then we talk about verbal operants. Then we talk about behavior chains while we're practicing data collection. So again, we're not with the individuals yet. We're slowly placing demands on the new trainee.

Christine Austi...:   01:24:11   Then we put them in the building. So they've received training with us all throughout the day. And then the second half of the day they go into the clinical buildings and they start practicing how to conduct preference assessments and how to practice methods of programming. So we set it up here for demonstration and roleplay with immediate feedback. Then they go down into the building. Now, one of the tools that we had provided you, one of the free tools was one of our training checklists. And this is excellent tool to use because each

individual, I'm sorry, each staff member who overlaps the new trainee can provide them immediate feedback and it's written and it allows them a guideline of what to improve the next time. We'll talk about that in just a moment. On day three, again, we roleplay for an hour and a half to make sure everybody feels confident.

Christine Austi...:   01:25:04   We can provide the immediate feedback and then we talk about how to structure your session. When we're done with that, cwe provide video of how to decrease problem behavior. We're not going to start with how to implement a differential reinforcement of other behavior or how to put a child in timeout. We're only going to talk about neutral redirection. So first we demonstrate that and then we provide a roleplay. So obviously we're going to neutrally redirect problem behavior occurs. Don't draw attention, redirect them to something that's functionally appropriate. We make sure that every single one of our BT's knows how to neutrally redirect appropriately while you know, ensuring that we're not invading the client's rights before we ever look into a behavior plan and trying to modify some of those videos. Then we have a video on problem behavior again, and then we talk about the functions of behavior.

Christine Austi...:   01:26:00   We don't expect our staff to be able to identify what the function of a problem behavior is. That's our job, but we want them to have the language. So then we role play and then will be demonstrate again, and then we role play a neutral redirection again. Then for the second half of the day, they're in the clinical buildings conducting the preference assessments implementing the methods of teaching. And now they're gonna start collecting ABC data on how to collect appropriate antecedent and consequence information regarding a target behavior. And during this time the trainer demonstrates and then the trainee demonstrates program by program. The next day we fade it out to where we do a demonstration of picture exchange communication system so that if our child's non-vocal, this is what we typically use here at Step-by-Step, we need them to be aware of how to do that.

Christine Austi...:   01:26:52   We also talk about the need for possible restraints. So we go over some of the procedures within step-by-step and then they're down in the clinical building again and here everything's

on them except the trainer demonstrates again and then the trainee demonstrates. So here you have immediate role play and feedback, but without putting the stress on that new staff member, cause you can see it's still just date for, and this might be completely new information. Then we come back and we review behavior chain videos with a role play and practicing the data collection with that. On day five, because we do have some individuals who require physical restraints. In case of an emergency, all of our staff members are trained in nonviolent crisis prevention intervention. We do this on day five, because we don't want to scare our staff. Not every single one of our children will acquire some kind of emergency plan like this.

Christine Austi...: 01:27:46 We want to have them feel acclimated. So then after you know, they've met the consumers, they've worked with the individuals, then we'll talk about a CPI or nonviolent crisis prevention intervention. And they use the same evidence-based training techniques that we do as well. On day six, they're in the building and the entire time here the trainee demonstrates and the trainer collects IOA, so no longer is there, the demonstration and the role play, the trainee is in there, he or she is working independently, but now you have your trainer collecting IOA to ensure the data is accurate and the implementation is appropriate. On day seven, same thing. You're going to have the trainee demonstrate and the trainer collect IOA. And then because we do use direct use direct instruction, we provide a video of that. And then also peer training. We do have typical peers who come.

Christine Austi...: 01:28:43 So we want to train them on how to work with the peers, then they're by themselves. So what we do is we do have our BT, our initial training checklist here, and this is what we would use. And here you can see that we talk about the daily schedule, how to use how to collect data on an ABC chart, all of the different data collections the management component that we have for setting up the day. This is all very important and this is one of the tools that you received. But just stepping back just a little bit, we need to assess for staff competency. So that's why we use this checklist. It's very important because Step-by-Step insures that we are going to be highly competent and the interventions that we implement and we produce a measurable outcome. So we promise that to our consumers, whether it's the consumer himself or his family.

Christine Austi...:	[01:29:43](#)	And we want to make sure that we are implementing all of our interventions with fidelity and that our data is accurate. Otherwise we've wasted our time. So we do use evidence based interventions using applied behavior analysis and using these training protocols. This is what leads to competent staff. We have our initial training, but to make sure that the staff really knows what it is that he or she needs to do. We make sure that the task is clarified. We provide written guidelines, we provide direct observation ourselves and we also perform or we provide performance feedback. And we also provide praise and you know, really a combination of all of this provides the greatest gains. So again, here's our checklist. This is what we use for our trainer behavior technicians within the training, the initial training. But then we also provide a task clarification of what is expected of a behavior technician.
Christine Austi...:	[01:30:45](#)	So some of the tools that you can buy are the evaluations. But what we have provided are some of the examples of a phase A, a phase B and a phase C to build them up for independence as a behavior technician. So the first thing is you must clarify what it is that you want your staff to do. You also want to make sure that it's criterion based. We hear say, eighty percent accuracy. A behavior technician is not going to be perfect in a session. It's just not going to happen. You can't expect that from anyone. So we want to meet the criterion of eighty percent. And you know, this should be done over time. When we observe this, you don't just want to do it up front and then leave them alone. Here what we do is we have a guideline of one formal evaluation a quarter, but we also provide feedback prior to that.
Christine Austi...:	[01:31:39](#)	So if you look at your phase A teaching procedure, what we've done is we broke up the entire evaluation into a phase A, B, and C, and we'll only provide them in phase A because they, if they can't meet the criteria and for phase A, they're not going to be able to meet the criteria for phase B. And we'll talk about that when we get to those slides. But here's an example that we have. Here's a level one instruction evaluation form and this is taken right out of here from just instructional delivery, well, I'm sorry, this is just the overview of a level one evaluation and a level two. And you can see what the difference is here. As a level one, you're only required to meet seven areas. As a level two, you're required to meet nine. And the difference here is as

a level two, you have to have acquired all skills on the level one evaluation for you to get that promotion.

Christine Austi...:   01:32:34   And then when you become a level two, you're now an experienced veteran behavior technician. So your goal now is to increase leadership skills and professionalism. In addition to program support duties for your manager and then also transferring the technology. That's one of our key components as a behavior analyst is to be able to train others. And that, you know, really builds into that pyramidal training. So here's an example. Phase A, instructional delivery. The only thing we're asking someone to do within this one area is to secure consumer's attention before delivering the first SD. Provide a clear and neutral SD and then follows three to five seconds. response time. In addition to the tone of voice needs to vary between your command and also your reinforcer. And this is what we provide our behavior technicians is a clear example of what it is that we're asking for.

Christine Austi...:   01:33:36   So if we're asking for the BT to secure the consumer's attention before delivering the first SD, the consumer is facing the behavior technician or is presented with stimuli. Self stimulatory behavior has been redirected as much as possible. The consumer's name has not been overly used. And the gradients have been appropriately exchanged. Examples, SD to secure student attentions are quiet hands come here or sit down. So we give them exactly what it is that we're asking of them and just detailing so they know what's expected. But then here you can see when we move on to phase B, after they've acquired all areas and phase A, now the expectation gets a little bit harder. Now they have to provide a clear response expectation. They also need to follow the discrete trial format. Also provide no inadvertent prompts and use master targets to build behavioral momentum.

Christine Austi...:   01:34:30   So as you can see, it starts to get tougher as it becomes a little bit more challenging. We also provide them an overview of what's expected as well. Then we move on to phase C and now we're asking them to put it all together. They have to be able to follow an errorless format correctly when indicated, and then also implement a mix and vary format. Or now they have to know every phase of PECS. It's very important for them to do this. Again, we provide them a detail of exactly what it is that

they're expected to do. When we're developing our evaluations, we want to make sure that there is a systematic observation and this is where you might need to adjust it. Right now we provide the feedback for an entire evaluation in all areas at least once a quarter. But that does not mean that you don't get in there once a week and observe your behavior technician and make sure that they're implementing with fidelity.

Christine Austi...:	01:35:28	And you can use the phase A, B or C feedback forms to provide them that inner, that feedback. And again, you can get that at the store. Also you want to make sure that there is consensual validation. The behavior technician must know what they're going to be evaluated on. And then also the standards of practice. You want to make sure that you're using evidence-based practices and the presentation has already given you all of that. And then of course you have to look at your organizational policy. You know, using professional language. You just want to make sure that not only is it the implementation of the interventions, but then also, you know, what is it that your organization is expecting as well. Some written guidelines are always helpful for the staff. I know I'm a visual learner, so it helps when you have these items.
Christine Austi...:	01:36:23	So one of the free tools that we gave you was the current items list that'll show you exactly what it is that you're supposed to do. So we don't ask our behavior technicians to be able to implement something from memory. The child has an entire book and we'll talk about a system that we use that has actually cut down on our time which is called ABA web tech. But first we'll talk about some other examples. Another tool that we gave you was the behavior plan. That behavior plan should go around with the child. So the staff knew exactly what to do when something happens. And then a quick reference form that breaks down the behavior plan. But here's just some quick examples of outlining what it is that we're asking. Obviously we're always talking about the A, B and the C.
Christine Austi...:	01:37:09	So here we just want to show them, you know, how the antecedent and the consequence changes behavior and what the reinforcer is or what the discriminative stimulus is. Also, here's an example of correction procedure. You know, here's how we will say no. And then on a transfer trial, we'll ask them again, provide them a prompt and then reinforce that behavior

or I'm sorry, first we have our initial trial, then we have our prompt-to-trial and then our transfer trial to make sure the child really has this. Correction procedure is very hard for our staff so posting this up in their room really helps them to acquire that skill. Just an example of, you know, transferring a receptive skill over to attacked. That's something that we do when we're going operants. And this is an example of how you can do it again, post it up in the room so they have quick reference.

| Christine Austi...: | 01:38:02 | This is just the example of a current items list. I know we gave you a blank form so that you could use that within daily practice. But here's an example of what we're looking for. We have our SD, touch item, we have our response expectation. We also have the prompts that you're going to use, and then additional notes. So within receptive labels, you're going to target a hundred labels. You don't just stop at twenty, you're going to go up to at least a hundred. Then you're going to move on to another response expectation asking for two hundred. And then we tied this back to the ables so that the staff could see how our initial assessments of the skills teach the child. And those are just some examples that we had. Direct observation is key. You cannot go without this to ensure treatment integrity. |

| Christine Austi...: | 01:38:49 | So you always have to make sure that you are going in and observing and giving yourself a schedule is very important. You can do this by conducting this while the staff is working directly with the individual. Or you could do video. It really depends on your time. I prefer live feedback. But if you are tied, you can have them videotape a session and you can provide them feedback as well. And then the performance feedback this is important to make sure that you're always giving feedback and you know, really one of the things that you want to do because as a supervisor you're asking them to do a pretty difficult job. You will always want to begin with praise. You know, I really liked how you did this and you know, here we have some examples of everything that you need to talk about and some examples of what to say, but really you about three times the amount of praise to one corrective feedback because you don't want them to feel disheartened when you've walked away. |

| Christine Austi...: | 01:39:45 | You want them to feel empowered. Praise immediacy is key. That's why direct observation is key. Try to make it behavior |

specific. "I like how you gained his attention.: "I like how you implemented correction procedure. It was perfect." And you know, really you want to make this individualized to the staff member that you're working with. You might not want to praise them in front of others if they get embarrassed. And again, we've talked about it, you wanna make sure it's criterion-based. So as we had show, we have phase A, you meet all areas to eighty percent criterion. Then you move to phase B, eighty percent criterion and across all areas you move to phase C. When you master that, you now move over to being a behavior technician level two. So again, this is just an example of the additional areas with the leadership and professionalism and then also supporting the program and also transferring technology to new trainees.

Christine Austi...: 01:40:45   And this was just an example that we gave you all areas of professionalism, you know, self monitors on time is punctual to meetings, you know, dresses appropriately, uses professional language, but then when we move over to a level two, you're now required to model positive, professional behavior at all times and also redirect negativity to inappropriate outlet. So as a level two, you become a model for a level one. With the development of evaluations, again, just a systematic observation, make sure there's consensual validation the standards of practices are presented and the representative literature. And then you also want to look at your organization as well. So how are we supposed to get all of this done as a behavior analyst? One tool that we use that saves so much time is ABA WebTech. And this is basically a web-based management system where we input all of our different programs.

Christine Austi...: 01:41:49   So think of our current items list and it's just that, but it's on an iPad. So the system allows you to define therapy plans, provides detail, a progress tracking helps you to identify problem areas and suggest improvements. And then also provides predictive suggestions for therapy plans. We'll provide you the website, which is right here. It's autismwebtech.org. Michele Lamarche actually is providing the audience a thirty day trial period to use this. And I'll give you her email address toward the end, but this is what it'll look like. And it really helps you organize what it is that you're trying to get your behavior technicians to do. As a behavior analyst, I no longer have to sit down and create a

binder. I know a lot of you out there create binders. But we don't have to do that anymore.

Christine Austi...:   01:42:44   You can then make a catalog of all of the programs and then share that with the other behavior analysts that you work with. It also allows you to choose your different teaching methodologies by program. It automatically moves predetermined targets forward for the behavior analyst. So I don't have to go back and look at, okay, he mastered this target, now I have to put in this. It automatically does all of that for you. And it also just automatically generates the teaching session for the behavioral therapist. So no longer do they figure out what it is that I need to do. It presents it for them. It's all systematic and it saves so much time so that we can actually get in there and directly observe much more often. One of the great things about the program is it has detailed progress tracking. We have a rule of three.

Christine Austi...:   01:43:32   If it's discrete trial teaching, it's eighty percent accuracy three times consecutively moves onto the next phase of teaching. If it's any of the other ones, it goes from errorless to correction procedure to mastered. If the child is not making progress, it will revert them back to errorless automatically. There's no more looking at your data and trying to figure out where the child is within the teaching phase. It just does it for you and you don't have to wait for your staff to say, "Hey, there's an issue." It'll bump them back to errorless automatically.

Christine Austi...:   01:44:06   Again, you know what, identify as problem areas and suggests improvement. So it has an automatic progression and an automatic regression. And it really helps with IOA cause if I see that the child has reduced two times, I go in and I say, "What's going on here?" It's just an automatic flag to you to say, get in there and directly observe. So you don't just move forward, then fall back, move forward and fall back. It stops all of that automatically. And then it also has predictive of suggestions for therapy plans. And that's an SD track. You don't have to wait for your child to acquire all skills. You can just move quickly. And those are some examples where you move from body parts, from receptive to expressive or features receptive to expressive to intraverbal. It just moves you along very quickly. So how has this improved Step-by-Step?

Christine Austi...:	01:44:55	What saved so much of our time, Erin and I travel a lot and you know, it cuts out a lot of our time of, you know, digging through paperwork and trying to find where the sheets are. It really just moves us very quickly. We no longer have to create the data sheet or even our progress reports. It collates the acquisition rate for us so we can identify how long it takes for a child to acquire a skill. And I just suggest that you utilize the thirty day trial period cause I think it'll really benefit you and your agency or you as an independent behavior analyst as well. And really it just gives us more time to be with the consumers so we can really make sure that people are implementing things with fidelity. So now what we want to turn it over to for our last part of our presentation is how to gain staff buy-in. And I'm going to turn this over to Erinn so that she can talk a little bit about, you know, how to gain buy in from being a supervisor.
Erin Lombard:	01:45:57	You know, when you sign up to be a manager, behavior analysts and you're overseeing other people's behavior, you must first change your own behavior for increasing and decreasing behavior. It really does start at the top and it does trickle down in this instance. Meaning that you really have to gain staff buy-in by first showing that you know what you're doing and that you are confident in the plan by even being demonstrating that plan like we had talked about earlier. Role modeling yourself with that consumer gain that buy in that way. Starting at the top, showing that you are not afraid to get in there with the consumer. And then reevaluate your training and reevaluate your data collection but it needs to be continual monitoring. As we mentioned earlier we need to make sure that we're not wasting any time on having people do something that we're not even monitoring it. We're not looking at them. We're not using you know, simplify the task for it if needed. These are things that are going to help. As we mentioned it's hard implementing a behavior plan. One of the things that makes it difficult is the lack of educational identifying the function of the behavior. It's hard identifying the function of the behavior and there's many things going on as multiple functions going on, you know, implementing punishment procedures , doing with an extinction burst, it's very difficult. It's hard to continue implementing a plan with fidelity when it seems like it's getting worse. And then you're trying to convince it's just an extinction burst.

Erin Lombard:	01:47:49	Lack of instructional control, really emphasizing that pairing period, how important it is to establish the individual as the reinforcer. No functional communication. If a child can't communicate that makes it very difficult. You don't know what they need and what they're looking for. Home support, it works really well and everybody's on the same page and if you don't, if you're lacking support, but anybody with a relationship with that child, it makes things even more difficult. Consistency, trying to keep everything consistent and team buy-in, everybody, not just the staff but with the caregivers at home, with the teachers if you're working together with the school. You need to have all that by everybody and especially a guardian's initial disapproval of consumer's performance. You know, they really want to see their child improve more than anything.
Erin Lombard:	01:48:50	And so that's something you really need to work on to gain that buy-in across the board. And then managing behavior plans, materials. If you spent the time designing that behavior plan and collecting that data and you're monitoring that data, that takes a lot of time. You need to be able to have everything in one place. When you have that plan, you have to have the timer to go with it. And token economy system has to have the tokens, the portability of the reinforcer, can they access the reinforcer if they're at PE today, you know the data sheets with a clipboard, you have everything you need. If you are utilizing a time out are is it accessible? Where is it at? Is it safe? Is it a safe environment?
Erin Lombard:	01:49:43	You know, what else is difficult? Data collection is difficult. You know, your time, sample data, your clicker, you know, do you have a stopwatch? Do you have your clicker? Are they ready? Do you have two clickers? Are they taking it the right time? Lack of time to prepare new staff. You know, there is unfortunately in our field it's a very rewarding field, but it's a very difficult field. There is a lot of staff turnover, resources. Time is one of our most valuable resources and the lack of time preparing new staff. You know, overlapping with experienced instructors can help for sure. Difficulty with controlling the motivating operations. A reinforcer is only effective if the child wants it. You know, I'm trying to help with buy-in with that, trying to make that reinforce or even more effective if a child is satiated on a reinforce or it's not going to be effective for your session.

Erin Lombard:	01:50:40	So that's going to be difficult to deal with. We mentioned staff turnover, especially when there's aggression, another problem behavior, it's very challenging. And if actually if they find that a plan is ineffective, it's even more discouraging to staff. You know, and then sometimes there's not a lot of formal training or quality training. I know in Ohio, and it is kind of on average with most States, we only have hundred and forty one behavior analysts in our state. I know there's a few states, you know, like Florida and California that have well over five hundred, but most states it's a hunt around a hundred, you know, sometimes even less so. You know, that's difficult. And then also the possibility of staff or parent injury. You know, we have to, because of the high turnover, because of the difficulty we need to protect our staff, protective equipment is vital sometimes.
Erin Lombard:	01:51:41	Without that, I mean we want to limit the injury. Who wants to continue getting hurt every day. So protective equipment is very useful if you are using aversive procedures, pairing the procedure with the instructor. I mean, if the consumer, if the individual sees that instructor as only implanting these adversive plans, that pairing has gone, like that instructor is no longer reinforcer. And that's difficult to deal with. You know, and some consumers just don't understand the contingencies that are required to learn a replacement behavior to access more reinforcement. And that's difficult. Can you see, there's a lot of difficulties in implementing a behavior plan? You know, the size of your strength of your staff. If you have, you know, in our field there tends to be a lot more females in our field. Unfortunately a lot of the consumers, I mean autism is a higher rate among males.
Erin Lombard:	01:52:39	So boys as they reach adolescence and they're very big, they're usually much bigger than our staff. That can cause problems. You know, and then sometimes too, if the age of your consumer is, if their adolescents or older and they've been engaging in this behavior for, you know, ten, twelve, fifteen years, it's now, I mean a very established behavior. Extinction is going to be more difficult to attain on that behavior. You know, how do you maintain one-on-one ratios for consumers? You know, the funding issues, it's very difficult sometimes finding the resources to provide what you need for the consumers you have. And of course the correct intervention. How do you choose the right intervention? So again, just many things that

are our difficulty and this isn't to bring everybody down at this end, but we're trying to show like, how difficult is it, how important it is to really plan things all the way through. And of course to gain staff buy-in, which Chris is going to end with.

Christine Austi...:   01:53:38   Right. And the reason why we wanted to talk about the difficulty with implementing a behavior plan or even just teaching replacement behaviors or appropriate behavior is it may seem negative with all of this, but this is everything you need to look into. That's how difficult it is now. You now, now you need to modify it all and make it manageable and you also have to make sure that your staff have the resources that he or she needs to be successful. So now just to end it, just a couple of ways to gain buy in with your staff. Consistency is crucial. Without it, you don't have a plan and that's why it's so important to make sure that you're collecting manageable data and that you have provided support to your staff so that they are trained well. Also as a supervisor, you want to pair with your staff.

Christine Austi...:   01:54:29   You don't want to be viewed as the person who's always giving corrective feedback. You want to build yourself as a reinforcer with them as well. So they can come to you. If you can allow your staff, he or she is working with, that'll make them motivated. You want to stay organized as a supervisor or you want to stay organized with your team as well. You also want to choose a method of communication and be consistent. I know for me, I travel so much. I say email, just email me. If you call me, I might be in a meeting and I might not be able to return your call, but if everyone knows to get ahold of me is email, then that's what they're going to use and I'll be able to follow up with them and that just leads to follow up. If you don't follow up with your staff, they do not have your buy-in whatsoever.

Christine Austi...:   01:55:17   Even if you say in the moment, you know what, I'm not sure. Give me a minute to think about it and I'll be right back. That's okay. You're allowed to say that, but you must follow up. And it's also very important to ask for their opinions. They are the ones who work with the child. Whether you're working with staff or parents, they're the experts. They're the ones who knows the child the best. You're just there to collect the information and help to change the behavior. We've said this so

many times throughout the presentation, but implement the plan first and have the staff overlap you. That's what we try to do here is if I'm creating a behavior plan, I'll implement it with the staff sitting next to me and then I slowly fade myself out until they can do it with fidelity. And as the same with our children, use the same errorless approach for teaching with the staff that you do for the children. Don't expect them to just know everything. You have to demonstrate roleplay, provide them feedback and consistent feedback

| Christine Austi...: | 01:56:16 | And we just want to end with, again, you have to look at the size and the strength of the staff. If you have a large consumers or individuals that you're working with before trying to start a behavior reduction plan, please make sure that you have the resources that are needed so that it matches up with the size and the strength of the consumer. I'm also, like Erin had said, look at the history of the problem behavior and you know, really make sure that you have everything ready to go. And then also, there's a need for one-on-one. She said it before. You know, a lot of our kids need the one-on-one. Without it we're not going to make change. And also. just moving onto the next slide, you want to make sure that you reinforce the staff and the guardian with social praise. So immediate feedback for everything. Quickly rotate staff in and out for aggressive consumers. Always have a backup plan. Don't just think what you're doing right now is going to be the end-all-be-all. Be prepared if something doesn't work. And then allow for the staff to choose, the consumer again that we talked about. And one of the best things is graph the behavioral data, whether it's increasing behavior or decreasing behavior, show the staff the results of their hard work and then reinforce them when they reach a criterion. We showed that through an evaluation. But you could do that through you know, you had the child manned a hundred times this day, good for you. Make small, obtainable goals and then reinforce your staff for that and you know, reinforce them for everyday behavior. Like I said, manding trials or you know, just having a positive attitude is huge. And then videotape the sessions because this will allow you for opportunities to collect IOA and provide feedback. So those are just a handful of ways that you can increase buy in with your staff. And I did want to end with Michele's email for the ABA WebTech. It's |

michelelamarche@msn.com. It's M I C H E L E L A M A R C H E
@msn.com. So let us know if you have any questions.

Erin Lombard:	01:58:33	Thank you.
Christine Austi...:	01:58:35	Thanks.