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Karen Chung:

[00:00:10](#)

Hello everybody. My name is Karen Chung. I'm the CEO and founder of special learning and we have started a new series called SLP and ABA collaboration series. So collaboration is an area that's really been an interest of mine for it a long time. Our company's been around for eight years and we really started to get into training and education about five years ago. And so I am not a clinician actually and it gives me a really interesting perspective because I can look at it from top down and go, okay great. You know, I can see, you know we're ABA is really beneficial, we're speech occupational therapy, but there doesn't seem to be a lot of collaboration among the different disciplines. And we started out with speech and ABA because as you guys all know, there's a huge overlap between speech idea services. So I hope that you guys take a lot of weight and this is eventually a series that we'll be covering as well.

Karen Chung:

[00:01:02](#)

So like housekeeping, you can post your questions. We have a moderator if your question is selected and one of the moderators ask us to, well we trust a question. If you have technical difficulties, contact GoToWebinar's directly. There'll be about a five minute break near the halfway point and you will have 30 day access to a recorded version of this webinar and this is eligible for two type two CEOs speech. Not yet, but once we get, I'll show approved then we'll let you know so we can proactively get your ASHA credits. There's a survey at the end of the webinar, please complete the survey especially because this is a new topic and we really want to hear from you guys about what you want to learn about every webinar that we do and the education series is really mad to be practical. So we do cover some theory obviously because we have to but we expect, you know you are coming here because you want to know how I know more about how to actually apply what you're learning in practice learning outcomes very quickly.

Karen Chung:

[00:01:58](#)

Wanting to find the science behind speech language pathology and the role of speech-language professionals working with children with autism or other types of things. Obviously this just doesn't pertain to children but was just referred to them because there's a huge overlap between speech and ABA. One, the kids are younger by the size behind you know, applied behavior analysis and the role of behavior analyst and the



responsibilities on ethical consideration of collaboration. We'll get into it a little bit more, but I found it really interesting that both of the ethics code for a behavior analyst and a speech therapist actually speak to the importance of collaboration we want to start to address some really simple targets because, there's a lot of material that we cover. We can't cover, obviously we can't do this in two hours, but to make it really practical, we did want to talk about a specific example of a specific goal and how each discipline, which then we have three wonderful speakers that have agreed to be on the panel. I'm really excited

Karen Chung: [00:02:59](#)

and they bring different perspectives. We have to like Melanie who is both an SLP and a BCBA and a Jennifer as well. And Noor is, a behavior analyst. And so that kind of perspective is, I believe it's really important because we want to provide context. That's what's really important, being able to take things and looking at it from a different perspective so that really you can get to an understanding of where each are coming from. So Melanie, if you can talk to us a little bit about your background please.

Melanie Olson G...: [00:03:28](#)

Sure. so I actually entered the field of behavioral analysis, long before I became a speech pathologist in the, latter part of the 1990s. I was a one-on-one, behavioral technician at that time before that was the true, the true term. working with individuals in the home I worked for the may Institute doing home programming and I really felt that I was able to, work with pretty problematic behaviors and, help improve functional communication. But I decided to pursue my education in the field of speech language pathology because at that time it appeared there was more funding sources for speech pathologists. So I wanted to go on and get a little more education in that area. So I ended up in undergraduate and graduate work in speech language pathology. I finished my master's degree in 2001 and then I enrolled in a master's program for applied behavior analysis.

Melanie Olson G...: [00:04:31](#)

But I said, not at this time. I think the field is just not there yet. So I continued on with my work in speech pathology, always, you know, bringing the principles of behavior into everything that I was doing. And then as the field of behavior analysis started to grow, I felt like I was doing a disservice to my clients



by not being more well versed in behavior education and utilizing more systematic approaches to how I was doing my treatment. And I kept collaborating with behavior analysts as we would sit at the table and assess individuals for key target behaviors. And I just thought to myself, I need to do more. I'm not liking that. I can't do more. So I decided to go back to school. Ironically after the education requirements change, I had to go back and get a second masters in behavior analysis and I also did that with autism as well.

Melanie Olson G...:

[00:05:29](#)

So ABA and autism at Endicott college and I pursued that degree and then I became board certified within the last year in licensed in Massachusetts. And so now I'm able to truly refine my skills as a behavior analyst. But also my biggest passion and behavior analysis is collaboration. I'm also working on my PhD at Endicott college in behavior analysis and I have a very strong interest area in verbal behavior and swallowing and feeding disorders. I also truly enjoy organizational behavioral management because what that entails is really a performance behavior working in training other clinicians and training parents and training staff on how to make behavior change possible. So that's sort of the area that I decided to go in because I just think that this collaboration and the dual education is so critical.

Karen Chung:

[00:06:29](#)

Thanks buddy. I'm going to take myself off of camera guys. So don't think that there was a malfunction here.

Jennifer

Rumfol...:

[00:06:37](#)

Okay. You'd like to talk to us a little bit about your background please? Sure. I started out as a speech pathologist and I went to the university of Buffalo and completed my master's in 2000 and didn't think that I would be working necessarily with kids with autism. I did love working with children, so I did take a job, excuse me, at a preschool center based and worked alongside teachers and our school psychologist at the time and got really interested in behavior and intervention. Some, someone who was doing their coursework actually recommended that I go see Dr. Carbone, his introduction course and I was hooked after that. Everything instinctually felt right about what he was talking about and some of the challenges that I had been experiencing as a speech pathologist he had answers for. So I was really excited, to get in into behavior analysis.



Jennifer Rumfol...: [00:07:35](#) I did a little bit of work as a speech pathologist doing some online trainings and things to get myself a little better educated. And then I did complete my coursework through a F.I.T and their first actually online pilot program. So, that was a unique experience for me. and then did my field work after that and have been working, since 2008 as both a VCB and an SLP and was able to combine both fields into a consulting career. Currently. And similarly, you know, I felt like as a speech pathologist I really wanted to do more for my clients, and help them communicate at those early levels and was able to do that with the additional strategies that we hear analysis brought to me, in a practical application.

Karen Chung: [00:08:27](#) Okay. Thanks Jennifer. You guys, this was really interesting [inaudible] else's the other day and twenty percent of all of these CPAs actually graduated from my team, so that's a staggering to me anyway. Okay. Noor if you'd like to talk a little bit about your background.

Noor Syed: [00:08:43](#) Of course, Good morning everyone. And good afternoon depending on where you are. I'm Dr. Noor Syed. So I'm currently the clinical director for Lehigh university autism services, which is a brand new clinic that's just up at Lehigh university. We serve children diagnosed with autism. Currently our little ones are up to age five, but in my history in the field, I've worked with children with and without developmental disabilities from 18 months all the way to high school. And I've also worked with adults with developmental disabilities as well. At Lehigh I'm a professor for the, certificate and behavior analysis distance program. So advise students through that. I've collaborative as a classroom teacher, as the clinician, as a supervisor with different disciplines and have found that to be one of the most important skill sets that you can develop as an educator and as a behavior analyst. So I'm excited to be here and I'm looking forward to today's discussion.

Karen Chung: [00:09:42](#) I will thank you very much. I will let the audience know, we're going to walk through some of the slides really quickly. You will get a copy of the slides. So don't worry about that because I just wanted to make sure that you all had the information that you needed. I believe that in order to really understand each other's perspective, you have to understand. So I kind of the background and where people are coming from, that's why



there's a lot of betrayal about the educational background on such a, not necessarily going to spend a lot of time talking about that. So when I talk about collaboration, obviously collaboration is really important. We want it to start off by taking a look at it from different perspectives. So Jennifer, do you want to talk about the speech perspective and why there is some, you know, collaboration is important.

Jennifer

Rumfol...:

[00:10:26](#)

Sure. As a speech pathologist, we are, kind of accustomed to collaborating a lot depending on the, environment that you're working in, in a hospital setting, in a school setting, in the homes. There's just so much collaboration that's very natural and essential. So it's very interesting to look at the obstacles that we're facing as a behavior analyst and speech pathologists. With that kind of territorial piece that I, I feel like we're struggling with currently, but you know, Attia does support the idea of collaboration. and we'll see in some of the future slides, what that should look like. and it does, it shows greater improvement in academic, social functioning and all makes sense. But obviously there's some barriers keeping us, from that. So that's why we're here talking about this today. To set a foundation for how we can go forward.

Karen Chung:

[00:11:16](#)

Behavior analysis perspective. Noor, I think a lot of people kind of wonder about, why is it so intensive? Why does a child require 40 hours, you know, intense intervention. Can you speak a little bit to that place? Of course.

New Speaker:

[00:11:31](#)

So doctor Ivar Lovas you know, we consider him one of the fathers of applied behavior analysis and his work was really groundbreaking in our fields because, at the time, applied behavior analysis, really we had been sort of focusing on the experimental analysis of behavior. So really, you know, how do we, how do we understand schedules of reinforcement? and that's been, that was a, of work with pigeons and rats, things like that and so Dr. Lovas at the time said, Hey, you know, we, when we're working with children with disabilities, they're only receiving a few hours of intervention a week. What if we were to really implement this more intensively? And so he did just that. So he took a group of students and you know, one group of students experienced intensive behavioral intervention and another group of students received the typical amount of



intervention that was common, back in, I think it was the 60s in the 70s.

Noor Syed:

[00:12:24](#)

And he found that, the children who received intensive behavioral intervention, made greater gains that were maintained over time and he did a series of followup studies, after 10 years and after 20 years and found for those students who experienced the intensive behavioral intervention, those maintain those gains were maintained over the next two decades or so, which was wonderful. that study has been replicated time and time again. and you know, as recently as within the past year, you'll find studies that focus on the importance of intensive behavioral intervention and the outcome, to date. It's the only ABA is the only treatment that's recognized by the surgeon general as being effective with autism, in terms of measurable outcomes and academics, cognitive and so on. and then in addition, it's now applied behavior analysis and now being considered a medical treatment for autism through insurance with most, if not all States. I think there might be one or two holdouts at least there were as of a year or so ago. and so we've seen that throughout time, which is really exciting.

Karen Chung:

[00:13:30](#)

Melanie kind of putting it all together. Maybe if you take the third bullet point.

Melanie Olson G...:

[00:13:33](#)

Sure. So looking at both disciplines, you know, students with behaviors have that underlying language or communication disorder. and then students with language delays, can be viewed as non-compliant. Non-adherent you know, we have those difficulties with, behaviors, that can be problematic, due to language deficits. And so, you know, it's so critical to be able to look at how both professions are servicing the individual or the learner. Because here we have speech pathologists that are very well trained in the area of language and articulation and speech. but in behavior analysis we look at that a little bit more in terms of verbal behavior, or replacing problem behaviors, with improving communication skills. So it's critical as we have this overlapping area that we both can bring great things to the table if we can, you know, be able to share our specialty, skill set. To improve outcomes.



- Karen Chung: [00:14:40](#) Okay. Thank you very much. A little bit about the history, some of the things to note. You know, it's funny, I'm looking at this gun right now. The speech language pathology is relatively young fields. It's been around since 1940's. And then I compare that to the field of ABA and that's why I'm struggling here. The roots are on psychology. So similar to behavior analysis, there's a level of certification through ASHA and then licensing through the, not only at the state level but at the national levels as well. This up there's about 190,000 ASHA certified professionals you know, it would be more speech therapists actually. Some are dual certified, lots of dual certified, ABA people and speech. Unfortunately that stuff anymore where you can have to speak, become certified as a behavior analysis unless you have a background. And what I think is really interesting is Melanie or Jennifer, can you talk a little bit about the coursework? And I think this is where kind of the fundamentally, you know, the foundational knowledge starts to differ a little bit and you can kind of open up to them and go, Oh yeah, somebody knows something about this that I didn't call her, you know, my coursework. So I think that's kind of an easy way, I think to think about a scope of practice. I'm, you know, with the special team who's better able to work on the Y.
- Melanie Olson G...: [00:15:56](#) I'm happy to start this off and then turn it over to Jennifer because I'm in my studies as a PhD student in ABA. I'm loving to learn more about the history and there's a huge piece in this that we're going to kind of dive into. so in the history of speech language pathology, when we started our field, we have grown in numbers, but we have to do a lot of physical science and a lot of anatomy and physiology coursework. We have to do physics, we have to understand theory of sound, we have to do statistical coursework so we can understand as standardized testing measures. we have a strong focus in medical writing because we're funded by, the centers for Medicare and Medicaid or CMS as well as private insurances. And this dates back for the last several decades. So, you know, we have a lot of coursework around that type of writing.
- Melanie Olson G...: [00:16:53](#) Outside of that, we also have coursework in dysphasia, which is our term for feeding and swallowing difficulty. We do a lot with neuron anatomy and a lot of brain function. We also have advanced courses in language disorders, literacy, augmentative and alternative communication and communication modalities.



We have dementia coursework, practicum coursework and medical, with tracheotomies and things of that nature. And then we have a ton of core classes before we can even begin our graduate work. but I'm going to kind of chime in on the thing that we're not really thinking about is that back in the day as BF Skinner was moving on into radical behaviorism. We were following structure and form of linguistic theory under Thromsky and so we were trained early on in our profession. That form is critical. and therefore linguistic analysis became a core part of our training and in behavior analysis as normal probably talk about, you know, it's different, because we think more about function than form even though form can be a part of that.

Melanie Olson G...: [00:18:11](#)

And so that's a huge part of our history that we're not necessarily thinking about when we're thinking about how speech pathologists are trained. And even to this day, linguistics is part of their course core work. So you know, that was the first class I took in speech pathology. and then other things that we kind of adhere to in our graduate training is that even though our curriculum, expects us to do 400 supervised hours, those are 400 direct client contact hours. It's not paperwork, it's not preparation, it's not data analysis, it's direct treatment time. And our supervisors vary, our supervisors could be young in the field or they could be extremely experienced. So it really does vary based on the curriculum and training program. And then we have our Praxis. and we're very well prepared for our practices because we typically have to go through comp exams during our graduate training to prepare us for that. And then I'll, I'll turn it over to Jennifer.

Jennifer

Rumfol...:

[00:19:15](#) Yeah, I don't think I have much to add. I think I'm, from what I recall again, that was many years ago now I'm thinking about that, that court training. I feel like we got so much information about, the, the disorders themselves. And, you know, we've definitely got treatment structures, but I feel like the, the specifics, you know, we developed in our practicum and and beyond and, even that your practicum, you may have been in a school setting for both of your practicums or you may have been able to do a medical and a school or a home-based in a school. So really depending on what job you secured, once you graduated, your practicum may have been, somewhat superficial to what you actually go and dive into. And so you're,



I mean, we're all lifelong learners for sure. But I think that at the part to really point out is that, and when I was in even grad school, autism as a course wasn't even an elective.

Jennifer Rumfol...: [00:20:16](#) It was covered in, in a session maybe. and now in, to my knowledge, a lot of the, um, coursework and not that we're only, effective in treating individuals with autism, but that's a huge component of, obviously what speech language pathologists are seeing on their caseload. And then it's behavior analysts. Those are the individuals who are working with, that was, you know, it was just a small component of what we learned in our graduate school programming. And, I did some supervision work in the university of Buffalo graduate clinic and, the students

Jennifer Rumfol...: [00:20:47](#) that I was working with really had very, very little knowledge about Peter analysis, in terms of its effectiveness in the field and verbal behavior. And so it was very exciting to be able to introduce that to them and just plant those seeds for collaboration in the future.

Karen Chung: [00:21:05](#) Then if they just want to take a couple more points out here that you think are really relevant for the audience to understand.

Jennifer Rumfol...: [00:21:11](#) Sure. I mean, I think that, you know, we also have varied background levels. So even though a master's degree is required to become a speech language pathologist, we also have those that could be speech language assistance and every state is different in terms of how they view the SLPA because some states have licensure for them. In Massachusetts we do and other states they do not. ASHA, the American Speech and Hearing Association isn't a strong advocate. They really push the use of SLPs and so SLPs can vary it really depends on the supervisor and the state that they're practicing in because they're limited to what they can do. in terms of like the medical information and diagnostics, they can't necessarily do that. They're more in the school based setting. and then certification is a little bit I want to kind of touch on because you're going to see different levels of speech language pathologists.

Jennifer Rumfol...: [00:22:08](#) So, you know, the CCC-SLP is the clinical certificate of competence. That's when they've done everything.



They've done their master's degree and they've completed their clinical fellowship, which is typically a nine month period post their master's degree under a mentor. And I think this is a strong piece in our fields because we have, you know, for new clinicians we have strong mentorship programs so that they're not just going out as a new clinician and doing all these assessments and treatments and all of this. They have a supervisor even when they're done with their master's degree and have passed the Praxis. And then that CCC's LP is the, is the goal that we shoot to aim for, similar to what the BCBA used to be, but is now dependent upon your state and licensure. And then like I said, SLPs and ultimately all fifty states have some form of licensure for speech language pathologists.

Karen Chung:

[00:23:07](#)

The point that I want to point out is that the supervision part of it, but the supervision of SLPs on BCBA is speech language pathologists can only supervised two non-certified personnel at a time. And then on the next slide, when we're going to talk about the BCBA background, you'll see that we don't have that constraint. And it's really left up to the individual's discretion. So the quality sometimes differs because we don't know the ABS are relatively and feel this way we'll be discussing. And that's, I believe is a critical distinction that we can make. Okay. Some of the required competencies. So what is a speech therapist required to know this? You know, it goes back to this is what they have expertise said. Oh, Jennifer, do you want to start please?

Jennifer

Rumfol...:

[00:23:53](#)

Sure. Yes. you know, our, our national certifying body ASHA, requires certain competencies similar to the BACB task list, for us to be evaluated in and approved in, in order to graduate from our coursework and to be part of our CFY experience. It is interesting, I think the, even the terminology that we use as speech pathologists, it's not, it's not always terribly objective. When I was looking at these, again to refresh my memory, where the task list for the BACB is definitely very technical and very, objective. So I think when you look at these you know, I don't know that we need to spend time diving into all of them, but, you know, planning and priority setting, organization and time management. Again, those are the things that we're evaluated on as we get our certification and licensure, to make sure that we're proficient in those areas and



can demonstrate those competencies across environments and settings and, obviously showing independence as we go on.

Jennifer Rumfol...: [00:24:56](#) In our coursework and then, are ready to, really attain that licensure, in the state that we're working in. Diversity is a huge piece, so we need to demonstrate our competency in that, both in ethnicities and ages and cultures and all of those pieces that come across our caseload each day. And again, depending on, the populations that you serve and your demographics, it is more, prevalent for some case loads than in others. Especially, you know, in, depending on your urban, suburban, rural location, all of those pieces, contributing team-building is an interesting one. Again, being able to collaborate even with your colleagues as speech pathologists, audiologists, and looking at that and again, in terms of your practicum, peer relationships falls under there to that professionalism. Organizational agility, again, being able to think on your feet and change direction quickly.

Jennifer Rumfol...: [00:25:54](#) Depending on, what's presented to you in, in any session. Especially in evaluation sessions. I think, we don't necessarily know what's coming in the door, so we have to be very agile and being able to meet the needs of those individuals. And problem solving perspective and creativity. And I think this is a nice component, as well as conflict management to be able to facilitate the collaboration that we're looking to establish, with behavior analysts and other professionals in the field, administrators, parents, all of the, the stakeholders in that are involved in the treatment of the individuals that we're working with.

Karen Chung: [00:26:34](#) So Noor, I want your perspective. You and I are working on developing a supervision curriculum or supervision webinar for behavior analysts. We talk a lot about the soft skills and it's not

Karen Chung: [00:26:44](#) an area, a task list obviously. So of all of these, what does the BACB horse work with competencies we really touch upon? Do you understand what I would say?

Noor Syed: [00:26:57](#) I did such an interesting question. I loved hearing Jennifer describe the defined nine core competencies. And Jennifer you mentioned that, the BACB task list is more technical. It's more objective too, which I absolutely agree. And Karen, you and I



have had this discussion about the importance of what some might describe soft skills, but I actually identify that as, you know, a basic foundational repertoires that behavior analysts need to develop. So being able to, build a team is incredibly important. It takes a village, right? That's, we all agree about that. So being able to collaborate with your colleagues, engaging in active listening, you know, smiling, nodding, eye contact, bedside manner is incredibly important to be successful as a behavior analyst. If you walk in and you say, you know, to a classroom, a classroom teacher of 30 kids, you need to implement a token economy system and you need to reinforce on a, a variable ratio, you know, every three opportunities or about every three opportunities, the teacher will say, I have no idea what you're talking about.

Noor Syed:

[00:28:04](#)

You know, and, and you're not going to get any buy-in. So it's really important to be able to, be on a team and be successful. And just another, something else that I know and there are so many things that I could speak to, but dealing with paradox and learning on the fly. We are instructory course and behavior analysis and the coursework is generally for most, verified core sequences, introduction to applied behavior analysis. So understanding the basic concepts, what's up, what the supervisor then needs to do is teach the supervisees how to use the principles of behavior analysis to analyze your data and analyze what's happening in the moment to make effective evidence-based decisions. And that's incredibly important. And while the task list is technical and it's objective, I think a stronger emphasis really needs to be placed on understanding how to use those skills in different situations. And I think that the BACB absolutely is acknowledges that, but leaves that up to the supervisor and we just, we might need some more guidance on how to really assess for competency in those areas with our supervisees to really say that we're putting forth behavior analysts in the environment that will be effective and that we'll be able to use the skills that they've learned in their coursework. You know, so to be able to implement that pedagogy to practice is incredibly important. And I think that ASHA does a really nice job of discussing that.

Karen Chung:

[00:29:28](#)

Yeah, they do. And I think that this is really an area of commonality where one can leverage the Springs of the other as, as you can see, you know, she cover core competencies,



you'll a lot with, you know, this is what they're drilling drilled into. So they, when I take a look at this list, this is what I would consider, you know, soft skills or interpersonal skills. These are the areas that behavior analysts are not necessarily explicitly taught as nor had mentioned. And so working together to develop a, you know, talking about supervision and how do you do supervision I think is really important because you know, gain a lot from talking to each other and just learning about their backgrounds or competence. And so Melanie, can you talk a little bit about the deliberation of finish and I think I find it interesting because I actually define collaboration.

Melanie Olson G...: [00:30:16](#)

Yeah. So in our, ethical code in speech language pathology, you know, we're looking at like four key areas. So we incorporate ethics and values. There's mutual respect and shared values, to you know, roles and responsibilities that we have, the knowledge of self and others. I think one thing that we're well trained in, especially during our, initial training is understanding the role of the physician in the specialty areas, understanding occupational therapy, understanding physical therapy, understanding, you know, ear, nose and throat specialists. We have to understand so many different skill areas that we need to make referrals to. So that way we can understand what our role is and our responsibility is with our skill training. And when we're limited in that area, we need to make those appropriate referrals for collaboration. And so this is a huge part of our training and it even has, so in our clinical competency around, you know, making referrals when appropriate.

Melanie Olson G...: [00:31:22](#)

So that's a huge part. And the third area into professional communication. So really, communication is a key area of our ethical code and speech language pathology. And then lastly for participation in teams and teamwork. So continued work in team dynamics. So we're so part of a team. Most of the time those of us that go out in isolation, you know, where you're the sole SLP off in a school district or a nursing home or a hospital setting, you know, that can be challenging. But our goal is to be able to be part of a bigger team that may have a behavior analyst on the team. It may have, a neurologist on the team. It may have a developmental pediatrician on the team. It may have a dentist, a pediatric dentist on the team. There could be a variety of, backgrounds that are critical for us to consider in our



core ethical, code. So these four critical areas are utilized in our ethical training.

Karen Chung: [00:32:25](#)

Hey Noor, so compare and contrast as to, you know, what behavior analyst of what the definition is and the responsibilities.

Melanie Olson G...: [00:32:32](#)

In terms of ethical, in terms of the ethical code Karen?.

Karen Chung: [00:32:36](#)

Yeah.

Melanie Olson G...: [00:32:37](#)

Okay. So our code of ethics absolutely talks about,

Melanie Olson G...: [00:32:40](#)

Collaboration, talks about, being able to implement evidence based practices unless I've missed, you know, something big. It doesn't necessarily speak to shared values, knowledge of self and others. It talks more to things like testimonials, keeping up with the literature, which is incredibly important as well. And absolutely should be noted by all behavior analysts. It speaks much less to the idea of interprofessional communication and participation in teams and teamwork. We talk about that in the ethics course that I teach. I think many ethics syllabi do cover that. But it's one class, you know, which is X number of credit hours. It's not, it's something that should be pervasive throughout our entire practice. So I think perhaps it, you know, to be fair, it may may not be the code of ethics. Perhaps we do need to take a look at that, but it also needs to be something that we as behavior analysts understand should be part of everything that we do, from, you know, stepping into the classroom to working with our clients. So perhaps it's how we need to implement the code of ethics as well as looking at the code of ethics in general. But okay, just to wrap that sort of thing up is that we don't really talk enough about roles and responsibilities of self and others in practice.

Karen Chung: [00:34:02](#)

Well, thank you very much. We've got a lot of webinars on ethics with other than Bailey who actually was responsible for writing the ethics code. And it's very, very specific. So, you know, on one hand I think it's great to lay out a level that the [inaudible] offers but on the other hand, I feel like it actually constraints us because it puts us in a box, at least that's my kind of a feeling anyways. So take in generalizing, I think the code becomes a little bit difficult because a coded so very specific



and it's definitional you know, what's considered ethics and what's not. It does tend to be a lot more technical in nature and the ASHA code. So there's a little bit of kind of the foundational differences, you know, in the field and what the field values is.

Noor Syed: [00:34:49](#) If I can jump in there super quickly, Karen, I, I tend to agree with you and I think that's, I think part of it is also because it's more difficult as behavior analysts. You know, I know that Melanie and Jennifer can speak to this as well, to identify private events. You know, we're starting to really talk about things like acceptance, commitment therapy, and we're starting to look at, you know, memory condition seeing, but it's harder to objectively define that. And so we as behavior analysts and this is so great about what we do is that we operationalize and we make sure that we really implement those dimensions of applied behavior analysis. That being said, I, it seems to me that ASHA has embraced a little bit more, the things that are harder, a little bit tougher to operationally define, a little bit harder to, to see. And while that may not lend itself to operational

Noor Syed: [00:35:38](#) definitions that are, you know, extremely, technological, it does also incorporate a broader perspective of values that again, can be hard to define.

Karen Chung: [00:35:50](#) So we've talked a lot about operational definition in applied behavior analysis and that might not be a concept that's familiar with everybody. So Jennifer, can you talk a little bit about what does that mean and how is that important?

Jennifer Rumfol...: [00:36:02](#) Yes, I think the, really being able to define it, that operational piece that we can look at those behaviors, we can measure them. It's consistent across individuals who would be looking, to, take note of those behaviors to collect that data piece. And I think, as speech pathologists, we do talk about, the, that theory of mind and those private events and things that again, we as behavior analysts, we, we struggle with. Because there is no way to know, unless there's something to observe in the environment where something may be coming from. So I think it's really important to have those specifics are those observable behaviors. When we're looking at that, that term operational definitions, which is I think, pretty, I guess unique to the field of behavior analysis and, and psychology as well.



- Karen Chung: [00:36:58](#) Thank you, Jennifer. Okay. So the areas of the ethic code, I believe that we'll be making available to you, but the BACB code and ethic code as well, so you can take a look at it. What I did want to point out is on both codes, there are specific areas that actually talk about collaboration. And I think it's important to note that both fields think that it's really important. But in terms of medical practice, it's just not practice. And you know, it's difficult to figure out how actually to collaborate with each other. And hopefully we're providing, you know, providing with you to you a little bit of foundational information about that introduction to speech pathology. What exactly is speech and you know, what is it that clinicians need to know about speech pathology or speech and also how it's used. So Melanie, if you can take a stab at that
- Melanie Olson G...: [00:37:54](#) Sure so, you know, speech, language pathology, that term has been refined for us over the years. And it is a profession that engages in clinical services, prevention, advocacy, education, administration and research in the area of communication and swallowing across the lifespan. And so when we look at how it's used, we're looking at listening, speaking, reading, writing, learning strategies. It may be that we analyze, or contribute to a student's difficulty mastering curriculum in a school setting. It could be that we provide materials, strategy, data collection and analysis. It could be that we provide counseling and when we talk about soft skills, we're actually trained in counseling measures and types of counseling with our patients. So, you know, especially those with hearing impairments or you know, we're dealing with, potential terminal illness. So we have to be prepared to have those critical conversations.
- Melanie Olson G...: [00:38:54](#) And so we are trained in counseling procedures. And I think that's something that in behavior analysis, the question is how to train those soft skills. So this is kind of where those soft skills were trained for most speech pathologists. And then lastly to develop modifications and accommodations. So we're looking at those communication modalities where considering the learner in terms of their vision, their sensor, the sensory components, their physical legal components, their cognitive skills. We're looking at multiple areas, which can be a little bit tricky sometimes because again, they're more of those general areas, not necessarily operationally defined. And I think that this is just a nice overview, but we work with individuals across the



lifespan. A lot of people say how young, well, I've worked in, neonatal ICU. I've worked with 20 week old babies that have been born that can't swallow.

Melanie Olson G...: [00:39:52](#)

And so even though there's a reflex for swallowing at twenty eight weeks, their reflex for breathing is more important. So how do we shape them up to be able to tolerate something by mouth? and then that kinda sets away for those picky eaters problem feeders later on down the road. So we're part of that initial history when we're looking at feeding. Also as we deal with cleft lip and palate, individuals with, vocal cord disorders and paralysis or breathing, respiratory distress, upwards of your typical kiddo that's delayed language delays, language disorders, articulation. And then all the way through the lifespan with adults with disabilities, autism services, speech generating device assessments. We're looking at how we're managing all of these across the lifespan no matter what the communication impairment may be or potentially swallowing impairment where it's, that's the medical component that we're trained in.

Karen Chung: [00:40:53](#)

Okay. Well, thank you. Jennifer, what about you? So if you were to explain what exactly speed is and then how it's used to a lay person, now, what would you want to get across?

Jennifer Rumfol...: [00:41:03](#)

I think there's often a, when we hear they're going to speech or speech sessions or, even, you know, as adults that they have to go for speech therapy, people don't understand the language component that's so critical as part of our training and, and don't understand necessarily a difference between speech and language. where in the field we really delineate those two, practices and competencies, where the speech focuses more on the actual kind of physical side of things, articulation, motor impairments and, swallowing would fit into that, kind of, track as well. And then when we look at the language component is it goes from everything from communication to someone who's had a stroke and has lost language that they once had and need to regain or, traumatic brain injury, is another big component of, the development of our field to get involved with cognitive practices there.

Jennifer Rumfol...: [00:42:02](#)

So it's, you know, it is, it's such a vast field and, our training just continues, I think, to, to encompass so much



more in terms of the disabilities and the, disorders and like I said, traumatic brain injury and medical components, as well as the hearing side of things that, that's audiology. But again, so much of it is a crossover in both of those fields. So I think it's depending on the individual that you're speaking about and the disability or the medical, diagnosis that you're dealing with. It really is different. In almost every case, what we do and what our goals will be.

Karen Chung:

[00:42:45](#)

Okay. Well thank you very much. So the history of behavior analysis, you know, the field of behavior analysis is young and it's going through a lot of change right now. So we're in a state of flux for the professional of speech. While speech therapy, the profession is going through some changes. It's not going through undergoing nearly the amount of changes that our field or applied behavior analysis going through right now. So Noor, what do you think is really important for speech therapists to understand about a behavior analysis?

Noor Syed:

[00:43:19](#)

Well, I want to highlight that idea of supervision. so we also go through, we also take coursework as do speech language pathologists. And that includes, you know, introduction to apply behavioral analysis all the way through more advanced topics. but I, I think it's really important to discuss that idea of supervision. So currently under the fourth edition task list, which is what we utilized at this time as behavior analysts. A requirement is that we have 1500 hours of independent fields work that is supervised. And so that is working in the field with clients, and being supervised by a board certified behavior analyst. So there are so many things to think about there. One component of that is that, half of the hours should be spent working directly with the clients with the other 50% spent in what we call unrestricted activities.

Noor Syed:

[00:44:11](#)

So data analysis, writing programs, you know, conducting assessments, writing up these assessments, drawing goals, et cetera. When it's an intensive practicum course, only 750 hours are required, but there are additional requirements of the supervisor, so multiple super, multiple supervisory contacts per month, and additional hours are utilized. So it's really intense. All that being said, to become a supervisor, once you obtain the BCBA credential, you have to complete an eight hour supervision training course. And that is it. And so while you



have to complete continuing education as you do, you know, as a speech language pathologist, generally you can complete eight hours of supervision, continuing ed or coursework and then be on your way. And so what we're finding is that we have, sort of, a new or the behavior analysts that are coming through the field are absolutely wonderful and bring so much, knowledge and just insight.

Noor Syed:

[00:45:18](#)

Because when you're new, you bring so much insight to this field. But in terms of application to practice, it can be a little bit tougher because you just don't know if the supervisor that you're working with is qualified and that could be of no fault. So the supervisor, him or herself, you know, he or she may have had a not so great supervision. And so we're, we're finding a strong need for effective supervision curricula that we just don't really have at this time. There have been supervision curriculum that have been published. They need to be tested. That's a cornerstone of our fields, right, to see if things actually work through investigation. And we're just not at that point yet. So note that our supervision, is, you know, we do abide by this task list and we have to pass this exam for competency, but there's some work to be done in terms of being supervised. All that being said, as Jennifer and Melanie have mentioned, you know, the task list is objective and it is a comprehensive in terms of different, foundational concepts that should be noted and should be noted to fluency and really are the BACB is really touching upon trying to brought in not only your foundational knowledge but also leadership knowledge as well. So how do you implement these to practice, ethical competencies, things of that nature. I argue that there's more work to be done, but there have been steps taken, to address those.

Karen Chung:

[00:46:39](#)

The point that I'm here I think is really interesting. So to become a speech therapist, you go through a speech program. ABA or behavior analysis is a relatively on feel. So up until a couple of years ago. And the kind of the criteria to be able to sit for the exam was a lot. there are less constraints around it. So you had speech therapist who would be able to take the therapy core sequence, the additional courses that you would require that was required and to be able to take the exam. So you have dual credential professionals like Melanie and Jennifer and social work, as well and other degrees like that. The ABA programs are relatively new, so the people that are gone through ABA



programs are getting some pretty intense, intensive coursework and what ABA is, well, we still have psychologists, educators who are

Karen Chung: [00:47:30](#) able to take the additional coursework that's required and be called a behavior analyst as well. So Jennifer, Melanie and Noor. What's the implications of this?

Melanie Olson G...: [00:47:41](#) I can speak to that. I, you know, I can see both sides of it because I had to go back and get another degree. I missed that cutoff and I'm actually grateful because it's refining the profession, right? I mean, I think that we have a huge demand that is before us as behavior analysts. And we need qualified professionals. And not to say that you're not qualified with another master's degree, but just like in speech pathology, we wouldn't accept any other degree. I mean we have to take eight prerequisites before we can even take a master's degree coursework, or be accepted into a master's degree programs. So we're very specific about what we accept into speech pathology, graduate work, and therefore it is a graduate degree in speech language pathology and no other, so as the field of behavior analysis I think is moving towards being a more refined field and profession than our education has to be up to par to be training qualified behavior analyst and that that will impact us in terms of our coursework beyond the six core sequence. We really need to have the master's education.

Karen Chung: [00:49:00](#) Yeah, go ahead.

Jennifer Rumfol...: [00:49:02](#) Yes. So I was before the cutoff, so I had the advantage of using my masters as a speech language pathologist as kind of a springboard to allow me to take the core sequence. And do the field work, through, a local professional that I was able to connect with. And at that time I was grateful to have that opportunity. And, and when the regulations changed, I have to admit, I was somewhat disappointed because I had talked to a number of speech pathologists who really were interested in the behavioral field and I felt like there'll be a great asset, but then the regulations changed and then that was no longer an option for them. So then they weren't able, they didn't have enough motivation to go back to school like Melanie and really complete that, that requirement. And it is quite, quite an endeavor, once you go



into it, especially with the additional field work, that we are required to do.

Jennifer

Rumfol...:

[00:49:57](#) But at the time for me, I did feel somewhat just disadvantaged or, I guess I didn't feel legit almost, because they didn't have my masters in ABA. And my supervision was from someone who had just completed her own coursework and we were working kind of as business partners doing consultation and our supervision meetings were in the car while we were carpooling. And, so it did, I think, it does, I, I'm happy to see, I guess that the, that the field is becoming more refined because it is best practice and in no other field, medically speaking would we, would have accept loved someone without those prerequisites. So I would have love to see ASHA, even take a stand to kind of produce some kind of advanced certificate, where you wouldn't be considered a BCBA but you would be able to have some recognition that you have some more advanced behavioral training. So I still have hope that maybe someday that will be a direction, as we become just a more prominent field, independently as behavior analysis. So that was my experience. So it was stumble sided for me as well.

Karen Chung:

[00:51:11](#)

So Noor, obviously you're an educator and you have an applied behavior analysis, a program that your students are taking. So what do you, what's the implication? Because you know, we saved kind of laughing. They knowingly say, well, not all VC views are like, right. Depending on whether you went through an ABA program or your background was in psych or education, the knowledge level is going to be very different. So how does that, what's the implications of that do you think?

Noor Syed:

[00:51:39](#)

I think we can only move forward. You know, I think that when I need to BCBA don't ask, you know, what, what's your master's degree in? When you have that BCBA credential, then I believe that you are a competent behavior analyst. So, you know, in terms of looking back, I don't think we can, I think we can just look forward. And I think it's a really good thing to have this requirement to have a masters in ABA psychology or education. My masters and doctorate were an applied behavior analysis that allows you to really become an expert in that area. That is not to say at all that you, are an expert in any other area and that you shouldn't become proficient in other areas such as speech language pathology. It's saying, you're saying that I have



this knowledge base to spring off of which I think is incredibly important.

Noor Syed:

[00:52:27](#)

And I think that Jennifer and Melanie spoke very eloquently to that. You know, it's an integral part of psychology and it's really becoming synonymous in my mind to special education. You know, in terms of tier one, tier two, tier three. I think if you look at that positive behavior supports multi tiered systems of supports, applied behavior analysis is huge in those areas. You know, classroom management, better practice management skills. And so I think it really is doing the field a great service to change those requirements. Because again, it always comes back to how do we take these principles and then how do we implement them in different settings and in different conditions, which is that idea of generalized ability and applied behavior analysis. So I only look forward, you know, I never ask what your master's is in, but I will say that I think it's a great thing to move forward with having those requirements.

Karen Chung:

[00:53:19](#)

I do completely agree with you that I'm moving towards a little bit more formalized background and more intensive is definitely, you know, good for the profession and the professionals who practice. But the conflict is number of people that are diagnosed with autism, they can benefit from ABA services. So you know, the number of people that are diagnose that's exploding certainly with, you know, here in the United States with funding being available, there's a lot of opportunities for people to be able to have access to ABA services. But yet we have such a small number of behavior analysts that are able to provide services. So, you know, I understand both sides, sides of it. I just see this kind of conflict that we're dealing with right now. So let's talk a little bit about the growth of the field and the behavior analysis. So the board certified behavior analyst, actually the board was created in 1999 so between 2000, 1999 and 2015 we went from zero to you know, 30,000 BCBA, which when you look at the chart, you know it's explosive growth, but relative to where speech was right now with 200,000 speeches for colleges and the number of people that can benefit from services, we're just scratching the surface of time, you know, scratching the surface.

Karen Chung:

[00:54:33](#)

A registered behavior technician is a relatively new credential and this is a credential that's provided to individuals. We're



actually implementing the program as well. This just started in 2014 so between 2014 and also 2018 in just four years, we're up to 45,000 registered behavior technicians. So this is where there's a lot of tension in the field right now and there's a lot of questions surrounding the RBTs are required to receive 5% of the hours that they work. They need to be supervised by a BCBA, BcABA board certified assistant behavior analyst. This is, this is a problem because we're about a hundred thousand short, a hundred to 150,000 RBT short right now to meet the needs of the current needs of the, the field or the, the individuals or the consumers that can benefit from that. But we don't have enough, you know, BCBA is to provide that supervision. And what is the implications guys? Oh, you know what we're looking at right now, what we're dealing with, we're not going to problem solve. How do you look at it?

Melanie Olson G...: [00:55:42](#)

For me, I'm, you know, looking at the program that I did my masters in an ABA and I'm seeing what they're doing to kind of combat this because I get to be part of their adjunct faculty and they are building networks in the community. So when all of the programs, all of the ABA programs in the community, they are providing coursework that these individuals can participate in to earn a degree in behavior analysis. So that way they can go from an RVT to becoming a BCBA and they're trying to collaborate and all these types of places so that they can continue to build the field and a way that provides appropriate trading support supervision. So I see the graduate programs really stepping up, to be able to bring this out to the programs that are servicing these individuals. And I think that's something that will help us grow as a, as a field. But then in terms of our RBT's, the goal would be that they can move on to that level of BCBA. And I think it just comes down to, the graduate programs as well as the places that are employing these folks to be able to improve their educational knowledge.

Karen Chung: [00:56:58](#)

Noor or Jennifer any thoughts.

Noor Syed: [00:57:01](#)

We're in the middle of a crisis. A lot of things, you know, you spoke, so well to that idea that, you know, the CDC just released that. Now the statistics have changed to one in fifty six. Children are diagnosed with autism as opposed to one in sixty eight and when I started in the field, that was one in six hundred thirty two. So this is, that's changed exponentially and I think that the



BACB really was striving to meet this need by introducing the idea of registered behavior technicians. And I think that was absolutely well intentioned. I think with many behaviors and many interventions, um, there are unintended consequences and I think one of those unintended consequences are now that our behavior analysts are RBTs are extremely strained. This BCBA is now have the responsibility to supervise registered behavior technicians, board certified assistant behavior analysts and BCBA supervisees, which arguably leaves them less time to supervise their actual clients.

Noor Syed: [00:58:02](#)

And so we're in a, we're in a pickle. It's definitely a conundrum. I think one, one way that we can possibly address this is, you know, for registered behavior technicians to, possibly start to do continuing education or do make, it's a 40. And for those who are not aware of the process, it's a 40 hour coursework that you can take, a competency exam or assessment that you take until mastery. So you can practice and practice again until you pass and then, a test. And so I think we need to maybe make those requirements just a little bit more stringent the way we do have them for BcABA and BCBA's we need to consider that, you know, I know that it is, we think that we believe that there are 80 million or more people in the world that are affected with autism and there are some countries that have no board certified behavior analysts.

Noor Syed: [00:58:50](#)

In fact, if you look on the BACB website, some countries aren't even listed, to drop down and search for behavior analyst. So it's far reaching. It's beyond just the idea of too many RBT's and not enough BCBA's it's we need to take a step back and really look at our system and figure out what solutions that we can put in place. Again, one quick thing can be continuing education and making those student those requirements a little bit more stringent. And then now starting to reach out a little bit more let's look into tele-health. Let's look into making the BACB coursework more accessible. Let's into supervision being more effective. Because we really do need to reach those 80 plus million people in the world that are affected and I don't know that we are at the point where we have the tools as of yet to effectively reach every single person that we'd like to

Karen Chung: [00:59:36](#)

So Noor and I are working on the supervision, the webinars and the training we're really trying to focus on is capacity. How do



you increase the capacity of the existing group of very small group of 30,000 some behavior analysts. And especially because ABA is such intense work and there's so many in the way it's delivered, it's person to person. It naturally is going to provide that natural constraint. But we have to figure out a way to break through that. And you know, the first step in the process is how do you optimize and maximize the productivity in the, you know, the capacity of the number of BCBA's we have right now. Speech doesn't necessarily have the same level of urgency. So I, I know that there's a great shortage of speech SLPs not in the US not only in the US but internationally as well. But with the behavior analyst, there's just a lot of, tensions that is brewing right now. And it'd be interesting to see how we're going to, and we'll be on this and as Noor said, get us out of this pickle.

Karen Chung:

[01:00:38](#)

There's a couple more slides and then we're going to take a break. So just quickly, so BACB require competencies in three major areas, basic behavioral analytics skills, client-centered responsibilities and foundational knowledge. Let's see. Jennifer, you want to talk a little bit more about the different areas of competency? As you can see, they're very specific and very technical,

Jennifer

Rumfol...:

[01:01:01](#)

Right? They are for sure. Yes. So you know, again, I think when you, when you look at all of those, it's, it's a long list. And you separate them into those, the basic behavior analytic skills. So that's the meat and potatoes, right, of what we're doing every day in terms of getting those skills. The, the problem behaviors decreased in the skill acquisition piece increase. And then the second major area being client centered responsibilities. So, really looking at, those, those pieces, to establishing report with your client and their team. And then all of the components that come from, you know, using evidence based, research to drive your skill level. And then the foundational knowledge piece. So, and then all of those, you have the A through K, you know, again, pretty, pretty in depth there in terms of measurement, being able to provide, systematic data collection and analysis, experimental design.

Jennifer

Rumfol...:

[01:01:58](#)

So depending on your, where your role is in the field. I don't do a lot of research as a consultant currently, but we certainly need to know to be able to analyze the research that's coming out. And, to look at that objectively as well and



knowing those, if we're implementing interventions, you know, we need to make sure that interventions are the, the, the reason for that behavior change in data collection is obviously the Keystone there to be able to prove that, behavior change considerations. Again, looking at that increasing of, of skill acquisition and anything from language to toileting, to, tying shoes, completing a routine and arrival or departure routine dressing, and then decreasing problem behavior. Sometimes very extreme self-injurious behavior, aggressive behavior down to things that, you know, I'm calling out in class or, some self stimulatory behavior that's interfering with instruction or social interaction. So again, I don't know that I want to go into detail about all of those components, but looking at them, and realizing that, that the hallmark pieces again, kind of outlined in those, the top three, things there. I don't know how much more you want me to dive into those competencies.

Karen Chung: [01:03:19](#)

So I think we're good. I'd like your perspective on the required competencies. Where are the areas that, behavior analysis addresses that speech? You know, it doesn't address and the, Nope. Oh, sorry, go ahead.

Melanie Olson G...: [01:03:34](#)

Well one thing I think that, speech pathology is really well trained in our standardized measures. And we're really, knowledgeable about group design, right? So everything we've learned in our research methodology is about group design and it's about, standardized measurement to determine what the communication impairment is. But one of the things about behavior analysis that I think really refines us as a profession is we are so well versed in measurement systems beyond what we're necessarily taught in speech pathology because everything for us is behavior. It could be a complete continuous measurement or it could be a discontinuous measurement. We're speech pathologists are really trained in a particular type of continuous measurement. We're trained in event recording, we're trained very well in that, but we're not always trained in other management procedures. So that can impact our data collection. And not to say that we don't have our own great data collection methods, but one thing that we don't specifically do is we don't typically graph our data.

Melanie Olson G...: [01:04:37](#)

When I do a lot of training with my speech pathology graduate students, they say, why would I have to graph that? Well, in



speech pathology you wouldn't. But it is kind of nice to be looking at the trends and in behavior analysis we really look to the graphs rather than trying to compute all the data because you can see a trend really quickly. Is this an ascending or descending trends and what might we need to do if we're having a problem? So that piece is something that I really work to collaborate with my SLPs on around, Hey, how can we take data on that together? How can you take data on that and your session that would help me identify what I'm working on and vice versa. And so I think data collection is a great opportunity

Melanie Olson G...: [01:05:18](#)

for collaboration, but it is a little different between the profession.

Karen Chung: [01:05:22](#)

Yes, Thank you, Noor as a behavior analyst and you're educating speech therapist about, you know, this is what behavior analysts do really, really well. What would you point out?

Noor Syed: [01:05:32](#)

I think, I know we'll talk about this a bit later in the program, but really analyzing the function of a behavior. So why, why does a behavior happen? And that's not just maladaptive or aggressive behaviors and appropriate behaviors. It's any type of behavior. Why does it happen? Why do we smile at someone when they smile at us? Why do we stop at a stop sign? Why do we go at a green light? Understanding the function of behavior allows us to really intervene and allows us to, increase the behaviors that we'd like to see increase and decrease the behaviors that we'd like to see decreased. So it's broader than just, it's broader than just changing inappropriate behaviors. It's really that idea of skill acquisition and it's catching opportunities for appropriate behaviors and delivering reinforcement effectively so that we can see those appropriate behaviors again. And I think that the required competencies, I love that it talks about behavior change considerations, fundamental elements of behavior change because it doesn't speak to just maladaptive behaviors. It's behavior in general and a behavior or something anybody can do or any organism can do editing time. So it's great that we're, we're discussing that and looking at it a bit more holistically.

Karen Chung: [01:06:43](#)

Okay, so the ethics code, the BACB ethics code is a long document, twenty four pages, addresses a lot of different areas. I should can see ten different points, but the BACB code is



similar to the ASHA code actually speaks to specifically speaks to the importance of collaboration. A 1.02 boundaries of competence and 2.03 consultation. As you can see, it talks about making appropriate consultations and referrals. You can't do that if you don't know what the other parties aren't doing. So hence the importance of collaboration and understanding, you know, who does what in do you know what you guys bring to the table and who should be working on what. Often times there are similar goals that you were working on. At the same time. We can talk a little bit more about that. And let's take a five minute break.

- Noor Syed: [01:07:30](#) Great.
- Karen Chung: [01:17:39](#) Well I can't see you. Are we all back?
- Noor Syed: [01:17:42](#) Not yet.
- Melanie Olson G...: [01:18:00](#) Okay, we're all here.
- Karen Chung: [01:18:02](#) Okay, great. Thank you. So just quickly, some fundamental control to apply behavior analysis. Noor, can you speak to that really quickly please. What do we need to know?
- Noor Syed: [01:18:15](#) That's a, a really long definition and I'm going to highlight components of that. I think what's really important about applied behavior analysis is that we've talked a lot so far about the principles of behavior and behavior change considerations. So it's figuring out what those are. Using investigation and systematic replications of our studies. So using, you know, really being able to analyze whether there is a functional relationship between what we're doing and the behavior that we're trying to change. And so once we've found these found these ideas, these principles, and we've replicated time and time again, now let's see, can they actually be used to improve socially significant behavior?
- Noor Syed: [01:19:00](#) And I think that is the key concept and behavior analysis. It's utilizing those processes that we've, found through the science to try to make changes for the better and the individuals that we serve, which I really think is, is the cornerstone of behavior analysis. To touch upon those idea, the seven dimensions, just super briefly. Again, it's the idea that behavior is measurable,



it's observable, it's countable, and that it's actually being, what we're doing is being applied to obtain change that's going to benefit the learners that we do serve. We analyze our data to figure out if things are working or not. We describe things in a way that, someone else can implement with ease, or be able to read our procedures such that they can go ahead and implement it because replication and generalize ability. So does this work with other populations is an incredibly important part of what we do as behavior analysts. But if there was one thing that I can say to take away from that long definition, it's this idea that we are systematically using principles of behavior. Things that research has indicated has been effective to make improvements that matter to those with whom we work.

Karen Chung: [01:20:16](#) Oh, thank you. And I know that we can speak on this slide forever and ever, but Jennifer, if you'd like to speak to this slide, that would be great.

Jennifer Rumfol...: [01:20:26](#) Sure. Yes. So as we've mentioned, you know, when we talk about behavior, it can be anything that anyone does at any time. But generally when we're called DNS service providers, at least for me as a consultant, I often get called in when a student is in crisis. And we need to figure some things out. So the first thing you know, that we're really looking at is decreasing. Any kind of negative behavior. And again, it may be very extreme. We're very, kind of mild, relatively speaking. So what we do when we go in and are looking through that lens to look at that problem behavior or that negative behavior, the thing we want to see less of, we look at the contingencies in the environment.

Jennifer Rumfol...: [01:21:05](#) As you really what controls that behavior. A lot of times we do get caught up in kind of the triggers of, you know, every time you present a task to a student, you get problem behavior or this, classmate may yell and that may trigger problem behavior. But we really need to focus on what happens after the behavior because through our science, we do find, that that is the maintaining variable that that makes those behaviors effective in those environments and then increases the future likelihood that that behavior will come out again in the future. So we really are looking at, through that lens what's going on in the environment, what are the things that are occurring before that behavior happens and what are the things



that are happening? And as an objective observer, it's much easier to see them when you are the person engaging in that situation with that student.

Jennifer Rumfol...: [01:21:56](#) So sometimes we have difficulty having staff report on what actually happens, in the environment afterwards because they're in it. So they can't necessarily parse those, those pieces out for us. But that's really the important piece. And then the example here, you know, the antecedent being the teacher gives the student a worksheet and the consequence and the behavior may be, you know, ripping the worksheet or throwing it to the floor and the consequences that the student escapes completing that work, at least in the short term. It's hard to admit to those things sometimes when you are the instructor that that would be, what happens because you almost feel then that you have, you know, let the student get away with something. But, again, those are the things we're looking at. Once we know those pieces, then we can develop a plan to address that specific behavior.

Jennifer Rumfol...: [01:22:44](#) So we look for that skill acquisition piece. Initially it's really important to be looking at that target replacement behavior to serve the same function which Noor, had, you know, talked about earlier, that that's a hallmark of what we do is look for the function of the behavior. And once we know that, then we can look to give the students another way to get the same results in that environment through more appropriate means. So in this example, if the teacher gives a student a worksheet, we may teach the student to say, I'm not ready yet, or I need a break, or you know, thank you as an immediate replacement behavior as a short term, solution to that problem. And then what we want to do is really increase their ability to look at the deficits that are contributing to that situation. Specifically, is it a skill deficit with a math problem, a math concept, and then we'll, you know, break down further from their replacement behavior.

Jennifer Rumfol...: [01:23:36](#) And then we also want to, maybe they do have the skill, but really working as aversive to them are difficult for them. So we want to provide those antecedent manipulations, excuse me. What really are those proactive things that we do to prevent the problem behavior? Make it less likely that that behavior may be, evoked in that situation or it may come out.



So we may, you know, give them, direct attention from a staff member, to facilitate the completion of that work, so that they're not frustrated. And really increasing that skill acquisition. So we may provide an intervention academically to improve the skill set that that, worksheet is looking to accomplish. So again, it's a, it's a kind of a continuum there for sure. We start with a very short term replacement behavior and then look to increase the skills to help them be able to manage that same situation in the future in a more appropriate way.

Karen Chung: [01:24:33](#)

Well, thank you. That was very well done. There are some myths obviously, and how the hamper collaboration, I'm not going to go into those because you'll get a copy of this. There's other materials that we're going to cover it that I think [inaudible] able. Okay. So this is a really easy way to think about this. And when Melanie first brought this up and kind of provided the structure to think about this, I thought, Oh, what a great framework. So, Melanie, can you speak to this slide please?

Melanie Olson G...: [01:24:57](#)

Sure. So, you know, when I think about speech, language pathology, we're are so trained in form, so that's sort of the behavior that we need to teach the form of the behavior. So that's what we teach. We are good at knowing what targets to pick. We have a really strong training in linguistics, and a really strong training in language and speech production targets. We have a lot of courses in sounds and sound samples and grammatical form and formal properties of language. So when we're looking at shaping a particular behavior, this is how we start that, you know, if I'm picking an articulation target and we're going to get more into that later, it's been, I know that Johnny can do "B" in the beginning of a word. Well, I know as a speech pathologist, I need to shape up, "B" in the middle of the word and at the end of the word, but I might have difficulty trying to do that shaping, even though I know what I need to teach.

Karen Chung: [01:25:59](#)

Oh, you speak a little bit more to this slide actually all of the panelists don't finish a fuel interview.

Melanie Olson G...: [01:26:08](#)

Sure. So like, you know, thinking about form, you know, we're already participating in classroom activities when we're looking at a speech language pathology approach to working with



individuals with communication deficits. We're looking at existing curriculum and materials both pre-academic and academic. For us language is a little different, right? We're looking at talking, listening, reading, writing. You may see us refer to it as receptive and expressive. So you know, what we comprehend and what we express. And that can come out in the form of talking or speech. It can come out in the form of reading or excuse me, writing. And then, you know, our listening behavior would be considered like receptive language. So following directions and reading, we cover the area of social skills under the term pragmatics. And so you're going to see speech language pathologists talking a lot about, Oh, we're gonna work on pragmatic skills. To us, that basically means, how we use language and what social situations are we using. The, the language, life skills, executive function. This can also be one of those terms that you'll hear. Speech language pathologist use really organizational skills, time management skills, being able to demonstrate, recall and things of that nature and that kind of adheres to memory and attention as well. And that again, kind of speaks to the what or the form of the skills that we're trying to teach

Karen Chung:

[01:27:45](#)

Noor or Jennifer, anything else before we move on to the next slide?

Jennifer

Rumfol...:

[01:27:48](#)

I'd like to just add about the pragmatic piece. I see that's where really behavior analysis fits in so nicely in the, in the speech from, because when we talk about pragmatics, when we break those down, break that down into specific skills that we're looking at. You know, we have that checklist of, you know, are they requesting, are they labeling, are they initiating interactions, are they, having conversations? And those really fit into when we look at verbal behavior in the operants, that we define a little differently, but in terms of manding and tacting and things. So it's really how we use our language, is the behavioral side of things versus that form piece where we're analyzing the, the semantic or the content piece. So I love to point that out when I'm talking with, speech pathologists about a behavioral perspective that that's really where we fit in very well is looking at how we use language in a social setting. And then we break that down further from a behavioral perspective.



- Noor Syed: [01:28:48](#) We, I think we, a subsequent slide is going to talk about function, why the behavior is occurring. And it's great and we can definitely move on to that slide because there's, there's so many parallels in what we do as behavior analysts, from what Melanie and Jennifer just spoke so well too. And I love hearing about it because there's, I see so much continuance, but the behavioral analytic premise is, and this is what Melanie had talked about before with Noam Chomsky and BF Skinner. So BF Skinner talks about why the behavior is occurring and Chomsky replied to talk about form cause that's, something great to really think about. But in behavior analysis, our main goal as at first to think of the function of the behavior because as Jennifer spoke to in one of the previous slides, when we can identify what the function of the behavior is, we can focus our interventions on, addressing that why of the behavior.
- Noor Syed: [01:29:44](#) So in that previous example, the student engaging, engaged in acting out a behavior. So whatever we define that to be, when presented with a worksheet. And so the Y you know, as evidenced by the fact that he did escape, the worksheet could be to escape. Right. And as Jennifer mentioned, now you can teach a short term replacement behavior, which is to say, I need a break. Can I do this later? Can I do the other worksheet first before allowing us to address what are the prerequisite skills that are lacking or what is the motivational contingency that's not strong enough to allow him to help him to, to enable him to finish the worksheet. And so it's really fantastic because we're looking at how the individual that with whom we are working can mediate or change his environment, which is what verbal behavior is. When we know what tools and learner needs to be able to be more independent and to be able to affect his or her environment to gain access to something, we can think of an intervention or develop an intervention based off the principles of behavior that will help this person learn those tools, which is incredibly important in our behavioral analytic premise.
- Karen Chung: [01:30:59](#) Okay. So related to that, an ABA approach. So focusing on the function, what does this mean? And Melanie, if you can speak to this.
- Melanie Olson G...: [01:31:08](#) Sure, so you know, we're really looking at focusing on function. We're not necessarily thinking about the form or the topography of the behavior. We're thinking about why is this



happening. So there's different ways that we can look at how we set up the environment for, evoking a particular response. So there's different types of behavior analytics, sort of, where the environmental variables might be considered. So natural teaching environment is one. So you'll see more of like a naturalistic type of ABA where it may be more play-based, but you're doing, your antecedent manipulation in your consequence manipulation. But it's more of an unnatural environment. And you'll see this with a certain types of behavior analysts working in those environments. Pivotal response training. Now as speech language pathologists, the kegels actually presented at ASHA last year and pivotal response kind of came out in the natural language paradigm that we were trained in.

Melanie Olson G...: [01:32:09](#)

But here again, we have that marriage where we have a behavior analyst and a speech pathologist that came up with pivotal response and it's basically looking at behavior costs or teaching specific behaviors that will kind of spread beyond what they were just initially trained for it. They generalize to other, other untrained skill areas. And then we think about most of the time people are thinking of behavior analyst as discrete trial teaching and sitting there in our rigid scope of practice. But that's really being able to manipulate those antecedents and consequences very specifically. So that's one method of how we may implement behavior analysis. And again, we're looking at pre and academic, pre-academic and academic skills. We're looking at language as well as behavior analysts, but we look at language as behavior, hence verbal behavior. So we're looking at the function of that verbal behavior, not just the semantics or the syntax of the language.

Melanie Olson G...: [01:33:10](#)

Also, behavior analysts do look at social skills and like Jennifer spoke to nicely, you know, breaking it down to those skills and looking at the repertoires that we need to potentially teach life skills as well. And then also a lot of the times and behavior analysis, we just get looked at as just, you know, reducing problem or negative behaviors or we only get called in when there's a problem behavior. And yes, behaviors can interfere with learning and that is something that we absolutely can target. But it is more than just managing problem or negative behaviors.



- Noor Syed: [01:33:49](#) You know, I thought that was, that was so well kind of put and if I could just continue to clarify that idea of behavior analysis and the principles of behavior with this focus on function. So, in the previous example, Mohammad cried to have access to an item. So how do we evoke or how do we get this little guy to talk? So items that you know, that he really, really, really likes you can put that insight, but maybe out of reach, maybe it's in a clear cabinet, next to you. And so he goes over and then you can teach him how to point to it. Or you can teach them how to say cookie. And if he's not able to stay cookie right now, maybe you accept any vocal approximation, maybe you accept [inaudible]. And what that does is that it teaches that contingency that by engaging in this appropriate behavior, engaging in this, verbal behavior response topography, you're going to have access to something that you really, really like, which, speak to the idea of motivation.
- Noor Syed: [01:34:47](#) So, you know, when we know what they're motivated to have access for, that is something that we consider when we consider the function of the behavior. It allows us to set up the environment to lend itself to, eliciting those responses, which is really great. And catching those responses in the moment. So pivotal response training, you know, he's reaching for an item and then you say cookie and all of a sudden he echoes cookie and it's like, you're getting it. This is exciting. You know, so it's, as Melanie said, it's more than done just more than just great trial training. It's catching every opportunity for learning and delivering reinforcement for those opportunities and then setting up opportunities so there's even more potential to deliver positive reinforcement and instruction and that lends itself into everything. Academic curricula, social skills. I love the way you, you know, asked your friends to play or asking a friend to play. The friend says, yes, that's a positive, reinforce that contingency. And so it really is being able to look at why this is happening and then take those principles, always bringing it full circle and creating the environment to really foster and then deliver reinforcement for those appropriate behaviors.
- Melanie Olson G...: [01:35:54](#) And just to chime in on that, in speech pathology, we think about sabotaging the environment, but we're not necessarily thinking of it from that behavioral perspective. So we may have our own term for it, but it is actually a behavioral approach to teaching language.



- Karen Chung: [01:36:14](#) That actually segues very nicely into terminology, often seems to get in the way. So there's a lot of things that are happening because they're focusing on the same or it's kind of getting the waste, so Jennifer would you speak to the slide please?
- Jennifer Rumfol...: [01:36:29](#) Sure. Like I mentioned before with kind of that pragmatics term, you know, when we break all of those things down, we see really specific repertoires that we want to teach. And when we look at the speech language terms, you know, again, looking at that form and structure, we usually, classify things in a receptive or an expressive realm. And it's a little challenging to think about because a lot of things require both, an ability to, understand what's being sent to you and then an ability to express, the correct response it can be very difficult separating those repertoires. But what we look at is, you know, are they following directions? Are they using the vocabulary? And hopefully we're looking at speech pathologist in a functional way, not just being able to label flashcards. But can they use those things to comment in their natural environment?
- Jennifer Rumfol...: [01:37:16](#) I'm looking at sentence length and grammar, and really understanding again, the use of words and those, the contexts and the appropriate, form again with the grammar piece. In speech language terms, articulation is really that speech component. When we look at sounds very specifically, and then the pragmatics being kind of that social skills and use of language. And when we mirror those things with behavior analytic terms, we usually talk about with verbal behavior. Again, a very, kind of a niche in ABA, where we have specific terminology that distinguishes that part of our field. They really are just different terms for understanding the same type of, function for that language. So we use manding and kind of the behavioral world. And, in Skinner's analysis of her behavior and operands and requesting is what we have always used a speech pathologist or getting the things that you want and you need and your environment.
- Jennifer Rumfol...: [01:38:16](#) Echoic being able to imitate those sounds. Again, we usually a speech pathologist, we use imitation of a sound versus the term echoic although it could probably be used as well in that speech pathology realm. Tacting is a unique term that we generally don't use in speech pathology. Really just means that labeling. So being able to look at the stimuli and



named something about it. And when we talk about vocabulary again to speech pathologist, we usually think about, you know, they can label 10 animals in a category and they can label ten colors and looking at it that way. And and then the next piece is that attributes are what we think of as the features we commonly use function in both realms, thinking about what the item does, what purpose it serves for us. So being able to say that chairs for sitting on or that a cup is for drinking.

Jennifer

Rumfol...:

[01:39:08](#) And then the class meaning category, again, how we usually refer to those things in the speech world. Categories versus class, although they are synonymous. And then intraverbal again is a very unique term that most speech pathologists have not heard unless they've been introduced to verbal behavior. And that really is that conversational skills piece. Being able to respond without a visual stimuli present without that one-to-one correspondence of, of a model. So this everything from being able to tell you what animal sound a cow makes to be able to answer very complex questions or tell you about all of the features and functions of a piece of pizza or a piece of machinery. So again, the, the overlap is there, but our terminology is quite distinct at times.

Noor Syed:

[01:39:57](#)

Well, if I may ask a question actually to Melanie and Jennifer about those terms, Karen, if you wouldn't mind going back one just super quickly. And the idea of verbal behavior, we really, we really look at, how the speaker, how the individual can mediate his or her environment. So how, how can he, how can this person affect the environment to have access to things, to be more independent. And so when we look at those terms like manding, echoic and so on, in some respects, you know, we're almost looking at a hierarchy, not necessarily perfectly so, but you know, going back to that example with Mohammad, when we know that this, this individual wanted to access something, we would work on manding first and then, you know, move into labeling and then move into this idea of being able to, act as a speaker and a listener to have a conversation, you know, and to listen to someone and respond. So in the speech language terms, is that that also far follow a hierarchy or is that something that you might target concurrently.

Melanie Olson G...:

[01:41:00](#)

So typically, you know, we're looking at receptive and expressive skills separately. So we're not necessarily thinking



about requesting over labeling. First we're thinking about what can they understand and then how are they getting their needs met, and then what vocabulary are they using? And so, it's more specific to under like really thinking about speaker and listener behavior. They're primarily concerned with today have speaker and do they have listeners skills that sort of the basic, when looking at the receptive and expressive terms.

Noor Syed: [01:41:38](#) Okay, great. Thank you. I know we talk a lot about the speaker half and we haven't talked a lot about the listener half in verbal behavior here. So it's great to hear that, that there's commonalities with those two.

Melanie Olson G...: [01:41:50](#) And that bi-directional naming that you know, you get into when you think about verbal behavior, but speech pathologists are really well versed in that naming. So it's something that, yeah, it goes to that bi-directional naming of both the receptive and expressive naming. It goes both ways.

Noor Syed: [01:42:08](#) And just for our listeners, I love that Melanie brought that up, that the idea of bi-directional naming is, you know, how do kids learn how to admit the name of something and then also find it. So if we were to say like, this is a, this is a pineapple, and they, you can then say, Hey, can you go find the pineapple? And they're able to do that. And that's something that we've now discussed is bi-directional maybe,

Karen Chung: [01:42:30](#) It says, but I think it's an area that there's huge opportunities to collaborate together. No speech therapists like a lot of information. They take a lot of data, they do a lot of assessments and obviously, you know, data's a foundation of a behavior analysis and assessments, various assessment tools being used. I don't want to go through all of the bullet points, but so Jennifer, if you want to just speak to like the type of assessment that you guys are doing it in speech that would benefit behavior, you know, behavior analyst.

Jennifer Rumfol...: [01:43:02](#) Well, I think a lot of our standardized testing has a lot of skills that, really present themselves well to being targets for behavioral intervention and, and speech language intervention as well. You know, when I do, evaluations in the clinic, it is a very strict protocol that you do go through. In terms of standardized testing, but then we do pull from these other



kind of hallmarks or pillars in the field where we, use them as guides for curriculum almost. And I feel like those are, paralleled with some of the information that is in things like the BB map where it's also breaking things down based on research. And speech, we probably use a little more of a developmental model where, in the BB map and, and again, maybe one of you can speak a little bit more to that, you know, it's based on that, that research of how those skills are being, demonstrated especially with children with autism or, or language delays.

- Jennifer Rumfol...: [01:44:00](#) But I think there's a lot of carryover between the two. But again, we usually, As speech pathologist when we write an assessment report. We are saying, you know, moderate to severe impairment in receptive language skills versus delineating, you know, we may in our content, but it's an overall language inability in a receptive area and overall language and ability and expressive area. And I think in behavior analysis we break those down further to those specific components. Again, that discreet form, for requesting as being a separate repertoire in and of itself even finer than an expressive language piece. So I think there's a lot of overlap there. I think the speech language tends to be more, clinical in terms of what similarly like a psychologist would do. And then behavior analysis. It's it's just, in my experience he's a different kind of assessment process
- Melanie Olson G...: [01:44:59](#) and also another great collaboration myriad is that VB MAPP has Dr. Barbash where that doing the a coke analysis, both speech and behavior is embedded in the VB map.
- Noor Syed: [01:45:14](#) I'll say, I'll [inaudible] just a tiny bit. With that previous slide, I think that we are starting to use more norm reference assessments as well as criteria and reference assessments in behavior analysis. I think we have a history of, of generally using those that are criteria and reference as curricular guides such as the VB MAPP, the ABLES you know, a falls, things of that nature. But I have seen definitely an increase in using norm reference assessments as well.
- Karen Chung: [01:45:44](#) who wants to speak to this slide?
- Melanie Olson G...: [01:45:47](#) I can speak to the speech language pathology components. So we may allow our goals in speech language pathology to be



more of a broader application. So, you know, we kind of talk a little bit about receptive and expressive. We may not necessarily break it down, to that specific repertoire like you might in behavior analysis. So a broader view of a goal, increased receptive, increased expressive language skills. It's really based on the skill deficits that are shown during the assessment. So I'm working towards building skill acquisition and again, developmentally based. So we're looking at developmental sequences in our target. So, you know, we're not necessarily going to work on a speech target. That might be a later developmental sequence. Like maybe ask, you know, if I have a three year old that is having difficulty making this sound, it may not be developmentally appropriate for me to be targeting that. If it's not in their current repertoire, I may not pick that target. And so I'm looking to that to sort of guide what targets I may choose. And then, you know, we're focused on language and language being, sort of the labeling, as well as that receptive and expressive component. Thinking about how we can build language and expose the learner to more language. So you might see a very neutral holistic approach to modeling a lot of language.

Noor Syed:

[01:47:16](#)

Oh, I'm sorry, in behavior analysis. And it's similar in some ways, but I think there's a stronger emphasis in Jennifer. Melanie, please let me know if you agree with this. On operational definitions, I'm really targeting a criterion referenced longterm objective and then creating short term objectives that are very measurable. So whereas SLPs, according to this seem to write more general goals, you'll see much more specific goals and behavior analysis. So for example, you might operationally define manding as using a one word request to request items, you know, around the house, let's say. And then the longterm goal is that the learner will be able to engage in this behavior across home community, a playground, you know, school things like that. So the conditions are specified, behavior is specified and the criteria for mastery as specified. And generally we also built in, maintenance. So how does this maintain over time in generalization? How can we assess if this is present in different conditions? That focus of courses on communication, and it's per functioning level, but it's, it's really in terms of how the goals are written are very measurable. And I think that lends



itself to this idea of database decision making and behavior analysis.

Melanie Olson G...: [01:48:36](#)

But, but I also think two SLPs absolutely, we'll add that criteria and reference, but we're not always good about tracking it. So you may see it in our goals, but we may not be taking data the entire time which can lend itself to, are we really doing that database decision making? I think that the learner is meeting that 80% criteria, but I may not be looking at the generalization or the maintenance skills.

Karen Chung: [01:49:02](#)

Interesting. Jennifer can you speak with this slide please

Jennifer Rumfol...: [01:49:08](#)

Sure. I think, you know, when we look at intervention, and again this is very specific to individual speech language pathologists and behavior analysts as well. So know we're making some general statements about things from our own experiences. However, there is, you know, variation even within that, as I'm sure we've all experienced, you know, with our colleagues and being parts of teams. But really our goal is communication. And, and a lot of problem behavior is a communication, deficits or it's communicating something. So we want to look at those methods for intervention. So in looking at the speech language pathology side of things, you know, one of the things that we, I think do really well again is remediation of articulation errors, which may impact their ability to mand and ask for things or to be understood in a certain social situation. And that again is from that foundational training that you take a whole course in, you know, and kind of articulation and, and, motor speech.

Jennifer Rumfol...: [01:50:04](#)

So to understand how even your, physically your body works to produce those sounds is something that is, a niche for speech pathologists, in, you know, in terms of establishing those early word approximations and shaping things to be more articulate. And we have extensive knowledge about augmentative systems. So for, a lot of students with autism are nonverbal. You may be looking to implement, although tech or a high tech system, to augment their communication, and again, supplement, their programming in order to decrease any problem behaviors that are coming from a communicative deficit. And then we really do understand those developmental sequences of communication and speech.



And while, I think traditionally we adhere to those. I think from working as a behavior analyst, we do see that we can sometimes step outside of those developmental norms when the social significance is of such importance that we can teach sometimes an S sound to a child whose name is Sam. At an early level using some, some really strong behavioral strategies and principles. So I think that it's, again, great carry over and can be a great, mix for collaboration when we, when we recognize those, those key components for intervention,

Noor Syed:

[01:51:25](#)

I think that's so important. In my experience collaborating with different disciplines. And in this case, particularly with speech language pathologists, you know, I've seen, SLPs with whom I've worked, utilize strategies to teach different sounds. And I think that's, I think that's wonderful. You know, so if we, in my previous example I talked about, accepting perhaps any vocalization that might be functional, if we're able to, you know, sort of immediately start working on a vocalization that's a closer approximation to the target sound or the target word, let's do it, you know, and let's take data on it. So I always go back to let's, let's, let's look at the data. Let's see if this is working and if we're able to then intervene so that we can teach the child to make the appropriate sound, that's incredibly important. And so I think that is absolutely something that while we might first start with accepting any vocalization, I think it's so important then to bring in our speech language pathologists and say, is this something that we can possibly teach? Because then, Melanie had spoken about shaping, you know, right. If we're able to do that, we're going to skip ahead. And that idea of shaping to get closer and closer to the target goal, which is ideally what we always want, right? We want learning to happen as fast as possible so that we can then target higher order learning opportunities. So that's a really wonderful way to start collaborating immediately with your team.

Karen Chung:

[01:52:45](#)

So this is the final slide and I think that, in my opinion, probably the most important because it brings everything. So what are some of the values that are contributed by each discipline that should really be appreciated and think, you know, was sort of as a foundation for collaboration. And Jennifer, you start please.

Jennifer

Rumfol...:

[01:53:06](#)

Sure. Again to speak a bit to that speech language pathology side of things. When we look at, academic



success, social success, even just activities of daily living, a lot of times language is just the foundation for success across all of those domains and all of those areas. So, you know, I was once at a conference where they said, you know, you're not able to speak for the first, you know, two minutes, but you need to communicate everything about yourself to, to the person sitting next to you. And you know, it's really difficult to do any of that without language. And if you don't have a shared communication system, you're not going to be able to move past that barrier very easily. And when we look at even education now going towards more of a, a common core approach. And, even in math you used to be able to be great at manipulating numbers and math and now you have to explain how you got your answer.

Jennifer

Rumfol...:

[01:54:00](#) So, you know, language is really critical across all of those areas. So again, I think that understanding that developmental sequence of language and how we can increase like the utterance and things, really is again, something that we, we hone in the speech pathology curriculum and our training. And then again with communication and access to alternative methods of communication in terms of low tech, like a picture exchange communication system to a Dynavox or a Proloquo to go augmentative system on an iPad. Those are things that we do get training in and we have lots of practicum experience with. And that's something that again, I think contributes to the value in that collaboration piece. And speech-language sessions are really a great time whether they're pull out or push in to work on this communication systems and to be taking all of those targets from discrete trial tape training and from there, even their academic instruction and really work on those within those, pull out individualized sessions and be kind of a parallel to the more specific instruction going on with them during maybe some of their, discrete trial training or natural environment training that's going on outside of your sessions.

Jennifer

Rumfol...:

[01:55:11](#) And then we do have those developmental, guides, that serve as kind of our curriculum when we're establishing those pieces. And again, those are very parallel to the things that are now coming out in the field of behavior analysis to support our instruction across those disciplines.



- Karen Chung: [01:55:27](#) Noor I'd like you to speak to the behavior analysis side and Melanie, if you can wrap it all up, I would appreciate that. I think it would get that close.
- Noor Syed: [01:55:34](#) I love this slide. This is arguably my favorite slide in the entire presentation and it's so important to talk about and behavior analysis and then in collaboration. So I'm analyzing the environment as we'd spoken about before to find those establishing operations. And so by that we mean what can we put in place that will make what ever it is that is reinforcing even stronger of a reinforcer. So again, putting something maybe inside but out of reach if the child, you know, wants to, wants this items so you can teach them to request it. And so being able to set up the environment in that way. Something that we do and behavior analysis and absolutely is done in speech language pathology. And then once we do get a vocalization, as I mentioned, we can prompt the "guh" sound if it's appropriate and there are ways to prompt that or the "puh" and there are ways to prompt that as well. So it's really, it's very much manipulation of the environment to evoke those responses, catching every opportunity for success and delivering reinforcement for that success.
- Noor Syed: [01:56:38](#) And that I think is prevalent in and speech language pathology. So really again, understanding why the behavior occurs. That differs a bit because we focus on function versus form, but it's important to start to marry those I think, because if we can teach an appropriate form while capitalizing on those establishing operations, let's do that because it's going to happen. You know, we'll get that target response sooner rather than later. And one way that we can figure out if this is working is through our data collection and through our visual analyses and really being able to, as it says, interpret those contingencies. Is my antecedent functioning to have this response occur? And then is my consequence effective? Because if both of those things are in place, we're going to see learning happening as soon as possible. And I think that that's something that we can really collaborate with our colleagues and who are speech language pathologists because now we're saying, okay, if it's not working for you, what are the contingencies that you have in place? Let's have some consistency. Maybe you can set up your session so that you're



manipulating the environment in a way that's similar to how I am. Again, consistency will hopefully lead to greater outcomes.

Karen Chung: [01:57:45](#)

Melanie in closing.

Melanie Olson G...: [01:57:47](#)

Sure, enclosing so this is a really great time. I think in both professions this is such a great opportunity for more collaboration and shared knowledge because I think that function, shapes form and without understanding that function from a behavior analytic perspective, it's really hard for us as speech pathologist to sometimes teach our learners. And I think that we have a lot of great opportunities as speech pathologists to learn from our behavior analytic, consults and collaboration and how we can be more effective in our targets. And I also think behavior analytic perspective, can learn a little bit around, you know, certain aspects of shaping up a co-ax and other things. But overall I think both professions have a lot of overlapping areas that could benefit from each other. I don't think this is a, a turf battle. I think this is a really clear way

Melanie Olson G...: [01:58:42](#)

to kind of work together, show mutual respect and continue to work together as we develop more systems for individuals with autism, using principles of behavior, but really working together as a team.

Karen Chung: [01:58:54](#)

Thank you. So in closing, you guys have demonstrated extremely well how collaboration can benefit from both parties. I think this was a great dialogue, great information. Thank you everybody for attending and we would love to hear from you about what you thought about this particular webinar and the benefits of it in terms of you being able to apply it immediately in practice and some future sessions, what types of topics you would like for us to cover that would be extremely beneficial as we can build out the series. So Jennifer, Melanie, Noor, thank you so much. You guys were amazing.

Noor Syed: [01:59:29](#)

Thank you all so much. Have a good day.

Melanie Olson G...: [01:59:31](#)

Bye now.

Jennifer Rumfol...: [01:59:34](#)

Bye bye.



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