Session 12 - Dr. Mary Lynch Barbera, BCBA-D

Matt: Hey, Mary Barbera. Thanks for joining me today. How are you doing?

Mary: Great! Thanks for having me here.

Matt: This is a treat because I can't tell you how many times I have lent out the "Verbal Behavior Approach" to never have gotten them back. I think personally, I've purchased at least 4-6 copies of them. To be talking to you here is, again, a real treat. Thanks for joining us today.

Mary: It's been great to have met you online and I look forward to hopefully meeting you in person sometime.

Matt: Yes, for sure. I'm familiar with your story. I know many of our listeners are, but for those who aren't, I want to take it back to the beginning. I know we are talking about other podcast episodes I've done. As you've probably figured out by now, my typical first question is asking people how they got into behavior analysis. Your story is obviously unique. Would you mind taking a few minutes and sharing that with the audience?

Mary: Not at all. I graduated with a Bachelor in Science in Nursing degree in the mid 80's. I had worked as a staff nurse in a neurology floor. I received my Master in Science in Nursing Administration from the University of Penn. I went on to become a head nurse/nurse manager of a floor. I went on to publish and do a little research in the nursing field. My areas of interest were always, because I was in the nursing administration, things like retention, and time management.

The most recent study and publication I did was on shift-to-shift reports. You'd have nurses going from 7:00 to 3:00, and then the second shift would come in 3:00 to 11:00, and then the night shift would come in. It just seemed that during those shift switches there was a lot of wasted time, a lot of overtime, a lot of patient falls, and patient complaints because they weren't attended to.

Back in the 90's or early 90's, we were tape-recording our reports. It was just a whole lot of—I described it as a bad game of "pass it down the alley." Without knowing what ABA was at all, I recorded and transcribed what people were saying, what nurses were saying to each other during shift to shift report. I highlighted what should be on the Kardex, and highlighted in a different color what should be in the Kardex, and what should be in the documents. I realized that 95 percent of what they were saying should have been written down.

We moved to a "silent report" system and proved that overtime went down, falls went down, and documentation was improved.

I really thought that after I had my children that I would go back and get a PhD in nursing, continue my work in studying things like shift-to-shift report. It eventually went hospitalwide, this new silent report system that I developed basically, by thinking "this just doesn't make sense." I was always interested in behavior change, managing people, programs, and things like that.

I married Charles, my husband now. He was a resident; an Emergency Medicine resident. We ended up moving back to Berks County, Pennsylvania where I grew up. I was 9 months pregnant with Lucas, so I had Lucas. Eighteen months later, I had Spencer. Things started to unravel with Lucas' behavior. Looking back it actually started to unravel closer to 15 months, but I was pregnant with Spencer and not really noticing.

My husband first mentioned the possibility that Lucas might have autism in early '98 right after Spencer was born. I took Spencer to a well visit. Charlie told me, "Ask the doctor how many words Lucas should have." I did. He said, "About 25 words." My husband was concerned because Lucas was not understanding about the baby. He's clueless, just not aware of what was happening. The doctor said 25 words.

I came home and I said, "He said he needed 25 words." Charles was like, "So, he didn't think he had autism?" I'm looking at him, staring at him, and going, "What are you talking about? He doesn't have autism." I told him, this is on the first page of my book, The Verbal Behavior Approach, I told Charlie, "I never, never want to hear the word 'autism' again." It's very ironic, right?

Matt: For sure, yes. Can I ask you a question real quick?

Mary: Go ahead.

Matt: I'm placing this in the chronological context back in the 90's. Autism was not on the radar screen as it is today. I just wanted to observe that it was remarkable that your husband had that inkling back then. Anyone who practices in the field for some period of time can tell so many stories about doctors missing signs and telling people to relax; doing all those things that we know is not a good idea. Here, your husband, he's not even a pediatrician; he's an Emergency Room doctor, that's pretty cool.

Mary: It was ironic too because I ended up the one in denial for the first year. After he mentioned the word "autism," I was the one in denial. This is another not funny story. I was counting those 25 words. Lucas had delayed echolalia, which I didn't even know what that was. We would go to the park, to the museum where they'd have ducks there. They'd have a sign, "Please do not feed the ducks."

We would take Lucas to the museum. He'd want to do these ritualistic things like, "Please do not feed the ducks," and in the middle of the night, he goes, "Please do not feed the ducks. Quack, quack." I'm counting "Please do not feed the ducks. Quack, quack" as 8 of his 25 words. I mean literally.

Matt: Getting close.

Mary: Yes, and then, "e i e i o." There's another 5 words. It's just crazy because as a parent, you don't want something to be wrong with your child. You'd hold on to these glimpses of words that would pop out or little singsongy things that he used to do. Maybe it's just a phase. There was just a lot of denial.

When Lucas was diagnosed, it was 1 in 500. It was getting out there though because he was diagnosed in 1999. My husband first mentioned it 1998. "Let Me Hear Your Voice" was published 1993. "Behavioral Intervention for Young Children with Autism" I believe was 1996. They were out. Once I've read those books—I actually read them right before he was diagnosed with moderate to severe autism.

The other thing is my husband and I thought, "If he gets diagnosed, it's going to be very mild." He was enrolled in 2-year old preschool. He went there without a shadow. It wasn't like he was completely out of control. He was a quiet, in his own world, and getting speech therapy, so a lot of people including the pediatrician, "Wait and see. He's just a boy. Maybe he'll grow out of it."

I didn't know at that point the early warning signs, which a big early warning sign is lack of pointing with your index finger. Once I found out that he had autism, I went on to work with Nancy Wiseman of First Signs. We went around the whole state in Pennsylvania to educate physicians on the earliest warning signs of autism.

I use my nursing background a lot. We, both being medical background, we started reading Let Me Hear Your Voice and behavior intervention, and figured out that ABA was the way to go. We had to advocate and fight pretty seriously at the time. We went to due process early on when he was just 3 years old. We started with Lovaas type ABA therapy. That was pretty much the main game in town.

At the time, Pennsylvania was a state that you are able to access almost 40 hours of therapy since he's been 3 years old. We got it started about 3 months after his diagnosis. He has gotten the best of the best treatment. We switched to a verbal behavior approach about a year into therapy in about 2000.

My first lawyer, after I testified in my due process case—I testified for about 5 hours.

Matt: Oh, my gosh.

Mary: I have a Master's in nursing. I did a little in-services for the preschool, and founded the Autism Society of Berks County. I get off the stand, and he goes, "You should become a Board Certified Behavior Analyst." I looked at him. I'm like, "Okay, what's that?" He told me, "It's a new certification that just came out recently. You could take a Distance Learning Program through Penn State," which is what I did.

Back in the day, the newer BCBAs take online programs. It's all online. This was a Distance Learning Program, which was great because I was not in a position to be traveling anywhere. I already had a big background. My Master's in nursing administration was very much OBM-ish as you can imagine. We got a box of VHS tapes and binders of PowerPoint printouts. I would sit there and watch the tapes of people at Penn State. It ended up to be a really great program for me.

I know a lot of behavior analysts are a little skeptical of, "Can you really learn online?" I'm a true believer that you can totally learn online.

Matt: I think there are a lot of different avenues. There are probably pros and cons to all the different ways in which you can learn about behavior analysis. For the moment, I want to hit the rewind button for a second.

You said you started with Lovaas therapy then transitioned to a verbal behavior format. Just more broadly speaking, as a parent not knowing what ABA is—I know it sounds like you educated yourself by reading and stuff like that, but when someone came in and started working with your son using a behavior analytic format, what were your first impressions from a parent's perspective not necessarily from a practitioner's one? I don't know if you still have that point that you can place yourself in that context.

Mary: I worked with a lot of new families with new diagnoses. I was thrilled that somebody who's going to come in with some expertise—there were different people. You don't need a real—there weren't behavior analysts back then. She was a Lovaastrained consultant, Lovaas replication site. She would come down from Pittsburgh. I think she only came once a month, but the first time she came, she came for 3 days.

I remember sitting in the living room with my husband. My parents came. Somebody watched Lucas for half a day. He was in the room and all 3 therapists were there. It's a big workshop type thing and she was explaining. To me, it made a lot of sense because I already have my Master's in nursing administration. I was interested in research. I was interested in formats, so it made a lot of sense.

I remember we were saying, "Lucas, come here. Lucas, touch your nose." She goes, "Okay, everybody stop saying 'Lucas.' He's the only child here. It's just adding to his language comprehension issues. You're more likely to say the child's name when you say "no," so she said, "Just stop using his name."

I wrote a blog on that. That's a page in my book about not overusing the child's name. I learned lessons from Day 1 and it was great. She was an amazing consultant. She was Lovaas-trained, but I think she had her Master's in preschool education. She's great.

One of the reasons we switched to a verbal behavior approach was because she moved south. We were going to get a brand new consultant anyway. One of my very good autism friends flew down to Florida at the same time to hear Dr. Vince Carbone speak down there. She came back. We had shared some of the same therapists with our 2 boys. She said, "Mary, we got to switch. This is unbelievable."

We bought the ABLLS. We tried to figure it out. Instead of hiring another Lovaas consultant, we hired a VB consultant, which at the time was a little iffy. I mean, obviously, in 2000 when the ABLLS just coming out in 1998, nobody really knew what they were doing. We learned. We figured it out.

Matt: I see. You go from there, and then you have this recommendation from the attorney to become a BCBA. You go ahead and do that. Take me from there to authoring the Verbal Behavior Approach. What were the circumstances under which that led you to think, "I should probably write a book?"

Mary: I became a behavior analyst in 2003, and right away I was recruited. I got an email from someone saying, "We want you to work for the Verbal Behavior Project of Pennsylvania," which was a statewide initiative. In 2002, they played around with 2 classrooms through—I think it was an \$80,000 grant from the Department of Education. They said, "You're being considered for a position."

I was just trying to get Lucas to have a decent Kindergarten experience. He was getting ready to go to Kindergarten, so I was networking with other parents through the VB Project. I was saying, "I know how to do the ABLLS. I'm a BCBA," or I'm getting ready to sit for BCBA. I wasn't a BCBA yet. Then somebody said, "She seems like she might be good." I wasn't really planning on going back to work, but then I thought, "All right, I'll go back to work."

I started working for the Verbal Behavior Project, but I was still doing those First Signs trainings for pediatricians. I was getting trained. Just on my own, I went to an ADOS training to try to get myself better skills. I went to the STAT training, "Screening Tool for Autism in Toddlers," by Wendy Stone. It was down in Nashville. I think she moved since then.

The STAT is like a mini ADOS. It can be done in non-clinical settings. You don't need a sterile room with a \$1500 kit. At least at the time, you can make your own kit. You could do it in homes, on floors with lots of distracters around. I got trained in that.

One of the things I had to do to get certified in the STAT was I had to take videos of a typical kid and a kid with delays that was 2 years old. Somebody at the time referred me to a family that had a 2-year old that was probably going to get a diagnosis. They came over my house. We'll just say the child's name was Tommy. The child came to the house. He was very delayed. He scored a 4 out of 4 on the STAT, which is the worst score. I also showed mom how to do the (??? 0:18:13.0) and ABLLS real quick. He hardly have any skills.

After the STAT, I showed her some manding techniques. She was on the edge of her seat. She's like, "Oh, my God." She was a nurse too. She said, "What can I read? What can I do? I need to learn all this stuff." I didn't have hours and hours to give her. I started recommending the books like "Let Me Hear Your Voice," and "Potty Training in a Day," not that she was into potty training, but some of the older books that had been my bibles. I'm like, "I wouldn't do half the stuff at Let Me Hear Your Voice because I had switched to a verbal behavior approach."

I was working with hundreds of kids in the Verbal Behavior Project, so it's way different. It's a very different philosophy. I started saying, "I want you to read this, but I don't want you to do it like that or he'll be a mess." I didn't have the time to help her. I said, "We're doing a Verbal Behavior Project training next week in Harrisburg. Even though you're not school age, I can get you a seat in the Beginner Training. It's 2 days. You have to get a babysitter. You have to drive to Harrisburg." She's like, "I'm doing it. I'm doing it." She went. She learned for 2 days, and then I didn't hear from her.

I saw her at the training. She came home. I sent in my tape to get certified in the STAT. Four months went by, and I heard from Wendy Stone or one of her people. They said, "You need to redo the STAT tape because "happy birthday" is on the balloon, and the balloons have to be plain." I was like, "What?"

Matt: Are you kidding me?

Mary: You can't even make this stuff up, right?

Matt: Oh, my goodness.

Mary: Oh, my gosh! I can't believe it. I thought, "I wanted to see how little Tommy was doing anyway," so I called the mom. I start out with, "How's Tommy?" She's like, "Great! That workshop was just incredible. I came back within 2 or 4 days. He was talking. I just learned so much there that I was able to implement it. He's talking. He's doing so much better." I said, "Great! Awesome! Can you bring him back, so I can do another STAT because "happy birthday" was on the balloons?" She brought him back.

Remember, 4 months prior he had scored a 4 out of 4, which is the worst score. The cutoff for autism is 2 or greater on the score. I think when she brought him back 4 months later, he only scored a .75 or a 1. He had done that well to totally change his STAT score. He no longer on that met the criteria for autism, but he got a diagnosis of autism or PDD-NOS. He's one of these kids that did really well.

Matt: Just flew (phonetic) with it.

Mary: I'm not sure where he's at today, but the last I ran into them, he was doing really well; almost included with everything. I don't know exactly where he was at, but he ended up doing really well.

At that point I thought I got to write this STAT. I have all of this knowledge in my head that I had gotten from going to the Carbone Clinic, listening to Mark Sundberg for days of trainings, working with hundreds of kids through the Verbal Behavior Project, learning myself how to do sign, how to transfer trials; just a bunch of different things.

I also went on to publish an article with Rick Kubina who was my BCBA mentor, called "Using Transfer Procedures to Teach a Child Tacts." That was my son, Lucas. It ended up to be a great study, which is available on my website. I was doing a lot of work with transfer trials, a lot of work with all kinds of different things.

We have done an article in our local newspaper too when Lucas was 4 or 5. When that reporter came—it was a great article. She did a 7-part series or something. It was a big article. Her name is Tracy Rasmussen. She told me, "If you ever want to write a book, I will help you." I contacted Tracy and she helped me write my book.

Matt: What a remarkable story. I think almost everyone I've interviewed this far has either written a book or published several articles, and things like that. One of the things I've been meaning to ask folks is what their writing process is. With respect to this book, which is obviously less academically focused and more so pointed at practitioners, and parents, and things like that; did you have a specific process for writing the book?

Mary: Yes. I used Dragon Dictation.

Matt: Really?

Mary: Yes. I use Dragon naturally speaking. I wrote my book 10 years ago in 2006. I was just at the Penn State Conference and I ran into Mark Sundberg, of course. We took our 10-year anniversary picture because 10 years ago in August 2006, I happen to be sitting next to him at the Penn State Conference at the Nittany Lion Inn.

I told him I was writing a book. He started saying, "Oh, wow!" I knew him a little bit from the Verbal Behavior Project, so he started manding for information. "Hey, what's the book about?" I'm like, "Okay, he's manding for information back." I said, "It's called The Verbal Behavior—" I don't even know if I had a title then. "It's about verbal behavior." He said, "How much of your parent perspective vs. how much are your professional?"

At that time, ten years ago, I was having trouble with the history of VB and comparing it to discrete trial Lovaas type therapy. I didn't want to take credit for any of the work that obviously was done before me. I was just the reporter, the translator of this information, not the creator of it. I was really struggling with that.

I said, "Maybe you could read the book or read what I have." He's like, "Yes." I'm like, "If you like it, you can endorse it." "Yes, yes, yes." I'm like, "Maybe you would even write the foreword." He's like, "It's okay. Yes." I'm like, "I just can't believe I just asked him to write the foreword!"

I get home and I'm all excited. I emailed him, "It's so great to see you. Thanks for agreeing to read it and you'll write the foreword." This is August and I said, "My deadline is September 30th to have the whole book done. I don't know if your foreword..." He writes right back and goes, "Oh, my gosh, Mary. I had no idea this is what your timeframe was like."

He was working on his VB-MAPP book and he was also going on a 2-week vacation leaving the next day. When he got back, he was going to Australia and writing his VB-MAPP book. He goes, "There's no way I can write the foreword or do anything for you. I'm so sorry."

I'm not going to give it up without the college try. I write back and said, "You don't have to do any of it. I really need help with the history and the comparison to discrete trial because that is critical. I don't want to anger the other camps in ABA. I don't want to take credit for something for something or report the history as being wrong," which it was pretty much wrong.

He said, "Okay. If you send me what you have right now," and I had half the book drafted; drafted, not in perfect shape. I have the book. "If you send it to me tonight, I will print it out and I'll read it on the plane tomorrow. I will give you general remarks when I get back at the end of August." I'm pushing sand. I'm thinking I'm sending him chapters on non-vocal to vocal, manding, and the history. I'm like, "Hopefully he doesn't think I'm a complete idiot."

Two weeks later when he got back, it was actually my mom's birthday because I remember the date, August 22. He emailed me and he said, "I love the book with capital love, and I want to write the foreword." I was screaming in my chair. I was so excited. I was thrilled.

Matt: Wow. What a story. That's amazing.

Mary: I have a lot of stories, Matt.

Matt: Stories are memorable, so that's good. In terms of the process, obviously, timelines notwithstanding the actual day to day process of writing the book; if you were to do a different book or another book, would you do it differently? Would you write it the same way using the same practices that you did with the first one?

Mary: I wrote a little E-book that's called "More Talking, Less Tantrums," 10 key components needed for autism treatment regardless of age, ability, or setting. That was a webinar I did that was transcribed, so that turned into a little E-book. I do think that talking out a book whether it's dictation or from a webinar, is the way that I find best to get started if something that monumental.

It was helpful having Tracy help me write it because she would take my words. She had 2 young kids. They were twins. They were typically developing, but they were 3. I think they may have had a little speech delays or something. She came over once I think with the twins. I showed her how to break up a cookie into 10 pieces and how to do a mand session just so she could get a feel for it.

She could explain it in lay people's terms. If I'd say something that she didn't understand, then she'd have to clarify with me, and then she would write it in a more layman's terms. I'm already speaking in layman's terms, and then she took it and made it even more understandable. She has a great writing style.

I said for Chapter 12, my last chapter, I don't even know how she's going to mash this together. You know what I mean? It was just random thoughts and soapboxes. When I got Chapter 12 back, after she got at it, it was very touching. I even cried, which I'm not a big crier. I was very happy with the way she works so well with me.

Matt: That's awesome. I've heard the term "curse of information." Certainly, we, as behavior analysts, often times have that curse of information. We have a large body of knowledge in a particular topic area. The way I've heard it described is that our knowledge is at a 10, and we often times when trying to communicate with lay people dial it back to 5 or 6. We really need to go back to 2 or 3 on a 10-point scale. It sounds like your Tracy was able to take the material and bring it back to a level where it would be received well by all readers.

Mary: But at the same time, people that you've interviewed before are at a much higher level than I am in terms of Applied Behavior Analysis. I feel that I've always been relatively newbie to the field. I think because of my nursing background have always brought things down for families to understand. A doctor might come in and say, "You have glioblastoma," and then they leave. The family-

Matt: They'll be looking at you saying, "Can you translate that please?"

Mary: Yes, "What did he say?" I think all long I've always been much—and I came in as a parent. I don't know that my knowledge is up at 10. I only have so much time on this earth. I equate myself with we're on a big mountain. We've got a lot of people to help get up the mountain. I am not at the top of the mountain by any stretch of imagination. I'm quarter way up, half way up.

If I can get people started and comfortable getting moving—my goal isn't to fine tune things that I am this major researcher because as you know it takes a lot of time to publish in a peer review journal. I feel like I have more of a gift at the lower level of trying to get just basic practical tips out.

Matt: I would say a different level than a lower level because I know you are reaching a lot of people, and it's making a difference. I guess as a-

Mary: A less analytical. I think very analytically, but I speak not as analytically as most people.

Matt: I know you have a course that you developed and launched to further get the information out there about using verbal behavioral strategies with kids on the spectrum. A similar question what I asked earlier, what were the circumstances that led you to think about creating a course?

Mary: That's a great question. I have been thinking, and trying, and wondering how to do it for about 5 years as online programs started. I don't love to travel. I have been to Australia twice to present on autism. I've been to France and Germany to present, Canada, and many, many parts of the United States. In fact from 2004 until 2014, I presented every year at the ABA conference. I also was asked to do 2-day workshops and keynotes all over the country and several parts of the world.

That's great. I do do that. I just don't do it a ton because I'm very busy. I have 2 sons. Lucas just turned 20, and Spencer is 18. Spencer is going off to college this fall. Our dynamics here if I go traveling for 5 days, I have to get coverage for Lucas. It gets complicated. My geography and history skills are lacking. I don't like to go to foreign countries internationally by myself. It's scary. I don't love to travel.

Even if I'm there and I am happy to be there when I am there, I'm presenting to 60, 100, 300 people; it's a lot of information. If I speak for 2 days, it's a lot of information and it's only to the set amount of people that are there. They go home and they try to implement this. Johnny's on the floor. I didn't show a video of Johnny on the floor when he did that. I wonder how to do that. I feel like I'm giving them too much information in condensed format.

When I went to present in the UK last year, some women flew in from Pakistan. Some women flew in from Spain. It's a lot of money for these people. It's a lot of money to pay me. It's a lot of travel time. I believe that it's just much more efficient for everyone to learn online.

I started in 2015. I launched a program called "Autism ABA Help Online Training for Professionals and Gung-ho Parents." I thought maybe "gung-ho" was too cutesy, but I always used to call myself a gung-ho parent because I'd be in the front at a conference. I went to so many conferences about so many different areas of autism. Definitely, I'm not a one camp kind of gal. If I can go to another type of camp and learn something that I can help Lucas or others, I'll go.

I decided to look up "gung-ho." It's something like "enthusiastically eager, especially in the times of warfare." I'm like, "That fits parents!" You don't have to be an expert parent. We've had parents take the course that have no idea what ABA is. We've had seasoned BCBAs take my online program. Literally, one guy said, "This course has changed my life as a behavior analyst."

Matt: Wow!

Mary: From a seasoned BCBA. Many seasoned BCBAs maintain ongoing membership because they like the camaraderie of our Facebook Group. They like to use the online training lessons to train their staff and to train their families. It's becoming quite a very exciting endeavor.

We've had people purchase the program from 40 different countries now. We've only launched 5 times. Only sold the program to a few hundred people, not anywhere near 500 or 1,000, but from 40 different countries; it's amazing to see. If we think about how limited the information is, especially to people in other countries, they can't get to see someone present.

I found that people are really able to follow the program and implement. I have exercises and homework that are optional. Just one of the examples is for homework. After the first "Getting Started" unit is, "Your child or client is there and you want to for an hour, write down all the things they say if anything. If they don't speak at all, if they say any sounds, I want you to write those down." We do the same activity after Unit 4.

The first time I ran the program, it was dripped out, which means you got Unit 1. The next week you got Unit 2. The next week you got Unit 3. It's a 5-week course. One of the very new parents just got the diagnosis. She took the course and she said in 5 weeks her son's language doubled. She knew that because we took data.

Matt: I see. (??? 0:39:45.3)

Mary: It was very empowering for people. I offer a "14-day money back guarantee." I think I've had 3 returns.

Matt: It's remarkable. People can find this at MaryBarbera.com. I knew you've got a couple of different websites, but is that the main-

Mary: No. That's my website, MaryBarbera.com. You can do a "/aah." We are going to give a \$50 for your podcast listeners. They can type in the coupon code. You put this in the Show Notes too. The coupon code, we type in "BEHAVIORPOD," all 1 word, all caps. That should bring you down \$50 off. Make sure your \$50 off comes off before you purchase. If there's any problem, you can contact me through my website.

I hope that your listeners will consider joining us. We've had about 300 people that have purchased so far, we've had about 40% behavior analysts, 40% parents, 10% speech pathologists, and 10% teachers or tutors. The ongoing membership is about 60% behavior analysts. We're creating quite a little tribe.

Matt: I was going to use that word actually.

Mary: Yes. It is definitely a very good tribe.

Matt: Have you had people taking your course and participating in your community while at the same time preparing either through taking courses or through supervision to sit for the exam?

Mary: I had had some students not as many as you would think though. Most of them are behavior analysts. Actually, there has been some, yes. I can think of a few. I thought there'd be more students, but I think students are probably overwhelmed with all the coursework they have.

Matt: Yes, that makes sense.

Mary: Somebody just contacted me the other day saying that she was pursuing her PhD, and she would like to study whether my course relieves parents' stress or something. I'm very open to working with people to see how this might work. We talked about maybe making it a RBT training. Right now, it's good for Type 3 CEUs for BCBAs, but I'm hoping soon to make that into Type 2 CEUs.

It's really exciting working—it's going to be done soon, this month hopefully, the Intermediate Learner Program. I'm taking all the stuff from the Basic program, which is going to be a pre-requisite for this Intermediate Learner Program. The Intermediate Learner Program is going to cover all VB-MAPP Level 2 and 3, and beyond.

I'm going to show videos of how to teach prepositions, pronouns, intraverbal webbing, and all kinds of things. Talking about some kids repeat "say." When you say, "say banana," they'll say "say banana." How do you fix things like that?

I'm talking about the analysis of how intermediate learners can get really messed up with their language. That's coming out. I have a beta testing group looking at those things now. I'm hoping to offer it to graduates of the Basic Autism ABA Help Program starting this fall.

Matt: That's very exciting. I think it would be interesting to see how your student demographic changes. If it does, do you still maintain that 40/40 10/10 ratio?

Mary: Yes.

Matt: With regard to the BCBAs who are in the program right now, is there a particular—for lack of a better word, profiler? Is that typical BCBA enrolled in your program is someone who maybe had a different focus in their graduate training? I'm just trying to think of-

Mary: Yes. We have several. I can think of a few that are traditionally Lovaas discrete trial trained. They're having families come to them wanting VB, so they're trying to see what that looks like. I've had lots of BCBAs that have seen me live or have read my book, and handed it out like you have. They want to learn more.

One of the things—and I don't that I answered this, but "why the online course vs. just my book?" A lot of people can read my book and read about the count and mand procedure in Chapter 2, but really, what does that look like? It looks different for different kids, obviously. I always struggled with "I think people are much more visual."

I've had the fortune—after I left the Verbal Behavior Project, which is now the PaTTAN Autism ABA initiative; they changed the name right after I left from the Pennsylvania Verbal Behavior Project. After I left the project in 2010, I completed my PhD in Leadership. My dissertation is on how to train people on the verbal operants. My dissertation is available on my website as well.

After I left the project, I started working with early intervention kids, Birth to 3. I was able then to formulate how to teach kids and how to train parents to teach kids and early intervention providers in more of a step-by-step format. I was able to develop my program. I've worked with the same handful of kids for the past 3 or 4 years as I've developed them. I have video permission for almost all of them, so that's been great.

I just attended a Penn State workshop. National Autism Conference at Penn State is every August. There's this wonderful researcher from Italy, Francesca Degli Espinosa. I'm probably totally butchering her name. I'm sorry if I did.

I saw her present last year on autoclitic framing. This year, she presented on Theory of Mind, which I wasn't even going to go to because I thought the description sounded really high functioning, and I have a lot of more early intermediate learners. She was so good last year with autoclitic framing then I thought I'm going to go. It was unbelievable. It's probably the best workshop I've been to in years.

Matt: It's always nice. We have a tendency to strike out sometimes. We can only make these choices of (overlapping conversation 0:47:11.5)

Mary: It was unbelievable. She showed some awesome videos. I had 2 or 3 clients of mine that I have video permission for. I literally was with one of my clients this morning and we got some awesome videos of just what I learned at the conference. I plan to show that within my online program either as a bonus or as part of the Intermediate Course if I can get myself together. It's just a lot of work to create these programs. You don't want people to be jumping into these advanced programs before they have the basics down for sure.

Matt: Absolutely. On that note, do you have any—I was going to ask you about any tips for practitioners to keep up to date on the research and things like that either online or in person. It sounds like you had a great in-person experience recently. Given that you are developing this expertise in online learning and things like that, do you have any tips for practitioners keeping up to date with stuff? Again, you can take that either way, either in-person or online.

Mary: A lot of my autism Continuing Education has been through going to the National Autism Conference, which I said is the first week of August every year at Penn State. They usually have really great speakers like Mark Sundberg, Vince Carbone, and Brian Iwata. There were multiple people there. They give 3-hour workshops. You can get your Continuing Education credits there, so it's a great conference.

You can also access a lot of these through webcasting. I'm not sure of the exact National Autism Conference's webcast, but I'm sure if you Google that, you could find it. Maybe, Matt, you could put it in the Show Notes. I find that you can do it in-person or online. Just seeing some of the videos that Francesca had was great.

I also saw Brian Iwata there. I've seen him in years past, but I hadn't seen him for a few years. I thought I'd go to see him, and that was really good. He presented on automatic reinforcement. I was interested because my son, Lucas, is 20, and he has had multiple issues with problem behaviors, self-injurious behavior of knuckle biting and head hitting or aggression when he has a headache or when he's startled. This started back when he was about 14 or 15.

Especially with my medical background, I maintained my nursing license. My husband is of course, a physician still. We're trying to figure out his biting his knuckle and his saying "head hurts." Lucas can say enough for us to realize that it's a medical issue. As a behavior analyst, I get concerned when behavior analysts say, "It's not medical. They ruled that out." I'm looking at them like, "How can you rule that out?" You go to a doctor, that doesn't mean you've ruled out all medical (??? 0:51:02.2) especially if the child doesn't speak or have any way to tell you what the problem is.

A few years ago, the doctor—the psychiatrist actually, diagnosed Lucas with a Autonomic Nervous System problem, and that was causing him to have an abnormal startle response. It's like that "fight or flight" response. When a startle happens, he goes very much in a "flight" situation, or a "fight" situation where some people when they get really startled or stressed, they might pass out or go the other way. He goes a little overboard. He's been on a medication for his startle response.

Now, when I go to see kids, occasionally, I'll do FBAs. I did one fairly recently at a residential treatment facility on a 17-year old. He has problem behaviors too. I'm looking around, and of course, all the kids there have major problem behaviors. I just have to think how much of this has a medical component.

I just think Brian Iwata at his talk at Penn State said there's been no published research on automatic negative behavior. It is shocking and disappointing, especially because I do believe that there's a medical component in many, many instances that is either undiscovered. There are just some issues.

Matt: It reminds me of the conversation I had with Greg Hanley in our second interview when we were talking about the relationship between practice and science. Sometimes science informs the practice; sometimes vice versa. This might be one of those things where you've seen a clinical effect with your son.

Mary: Totally a practice than science because I have done so much hands on with Lucas trying to figure out things for him like teach him to blow his nose for instance, how to teach him to tie his shoes. I would do blogs on this. There are YouTube videos. I would encourage students out there or people looking for dissertation topics or people looking for research topics to go on MaryBarbera.com and check out my blogs. I have a lot of procedures there and things that I feel pretty strongly about.

I've done my own kind of research over the years. When we were in the Verbal Behavior Project, we had to do case studies. In terms of our agreement, we'd have designs. We'd have graphs. It's not published, but I presented every year at the ABA Conference. Just because it's not in a peer-reviewed journal or a double-lined study as a medicine does not mean that it might not work. All the parents that believe in XYZ are crazy.

For a specific child like Lucas, for instance. When he was 6, he developed acute onset tics like motor or vocal tics. They were just getting worse and worse. I was a behavior analyst, so I got out my clicker and started keeping tallies, trying to figure out how frequently this was happening. Was there a behavioral function? What was the antecedent? It was all over the place. It was worse and worse. On a given day, it was 500 times a day. It turned out to 1.39 in 1 minute; that's how much it was happening. It was out of the blue.

I started doing research on acute onset tics online on Google. At the same time, he had open lesions on his legs. It looked like he had mosquito bites, but it was June. Nobody else had mosquito bites. They almost looked infected. I talked to my husband. I said, "Let's put him on antibiotic." Day 5 of the antibiotic, Lucas' tics went to 0 from 500. His legs cleared up.

He either had a staph infection, so I started looking into PANDAS. I don't know if you've ever heard of that. It's Pediatric Autoimmune Neuropsychiatric Disorder Associated with Strep. You can find out more at PandasNetwork.com or .org.

Matt: I'll find it and put it in the Show Notes.

Mary: They changed PANDAS to PANS now because what they're finding is a lot of times it's not related to strep. It's related to staph, or microplasm, or some other bacterial infection. Now, it's PANS, which is Pediatric Autoimmune Neuropsychiatric Syndrome. It can cause acute onset or exacerbation of tics and/or OCD. A lot of people believe that.

He went on to get the actual diagnosis years later, but we treated him almost every time he got tics, we treat it with antibiotics and he got better. The one time he still had the residual tics like 40 a day, the pediatrician put him on a strawberry (phonetic) antibiotic, and it kicked that out of him.

Do I have any peer-reviewed published data on that? No. I've seen other clients that all of a sudden have acute changes in behavior with tics. I tell the parents, "Go to the pediatrician. Look at this website. Get him on antibiotics." Sometimes antibiotics aren't on and off. Sometimes kids need clavulin (phonetic) therapy and steroids. That's a whole medical thing. Behavior analysts will try to treat it behaviorally and they won't be able to.

Matt: Right, because they're not addressing the underpinnings.

Mary: Yes. I think with my background as a nurse and a behavior analyst, I would have the ability and the interest in trying to design some studies to publish some of this stuff. At the same time, it's like how many things can you get into? I really have to prioritize.

To get it back to the online, how did I learn online, how to do the online stuff, like how to have a course, how to do marketing, and all that; I've been taking several classes online. One of the things I started out with is a small book called, "The Millionaire Messenger," by Brendon Burchard. Readers may want to check that out.

I follow Amy Porterfield's podcast on online marketing. I'm actually going out to San Diego this weekend to see Amy Porterfield live, which she hardly ever is live. I'm excited about that. I've been trying to learn all about online marketing, trying to get my message out, at the same time trying to learn new techniques for autism to help people around the world.

Matt: Very cool. Well, you've given me a lot of homework here, Mary, for the Show Notes. I've got a list to run down. I'll make sure to have all of that in there and more. I think we're probably about at our hour mark or so. I want to be respectful of your time. Is there anything else you want to leave with our audience?

Mary: It's been great getting to know you better through this podcast. Hopefully, my multiple stories will help inspire others. I think ABA is a great field. I'm excited that there are more things like this podcast and my online program to try to get the message out because I think we have a lot of research and a lot of knowledge. Now, disseminating that is so key to help people.

Matt: Agreed. Thank you so much for your time. Again, folks in the audience, you can find everything you need to know that we talked about today at MaryBarbera.com. Don't forget if you are interested in the course, there is that coupon "behaviorpod." Again, I'll put all that stuff in the shownotes@behavioralobservations.com.

Mary, thanks so much again for joining us today.

Mary: Thank you, Matt.

Matt: All right, take care.