TURN AUTISM AROUND
WITH DR. MARY BARBERA

Transcript for Podcast Episode: 014

Dr. Rick Kubina: Fluency and Precision Teaching

Hosted by: Dr. Mary Barbera

Mary: You're listening to the Turn Autism Around podcast, episode number 14, and in today's episode I'm interviewing Dr. Rick Kubina, who is my BCBA mentor and I'm going to introduce him in a second. Before I do that, I'd like to give a shout out to one of the iTunes reviewers. It's... This one is from Tay719 who said, "I'm so thankful that I found out about Mary Barbera one and a half years ago after my son was diagnosed with autism. I took her online course and learned so many ways of how to help my son during every day struggles when ABA was a foreign concept to me at the time. Now I feel like we're on the right track to leading a successful life. Thanks, Mary for all of your time and effort to help us turn autism around."

So happy to hear from you Tay719. I'm so thankful when I hear that people are gaining skills from my online courses and as you can see, she's an avid listener already to the podcast, so that is just awesome.

If you would like to leave me a rating and review, I would love to give you a shout out on a future episode. And now let's get to Dr. Rick Kubina's interview. Dr. Kubina is a board certified behavior analyst. He was my mentor for my BCBA, so I'll be forever grateful. We talk about how I met Rick and what kind of work he's doing. He's a professor of special education at Penn State University. He's also the director of research at CentralReach and the author of dozens of journal articles and books and I am just so excited to interview Dr. Rick Cobina.

Welcome to the Turn Autism Around podcast for both parents and professionals in the autism world who want to turn things around, be less stressed and lead happier lives. And now your host, autism mom, behavior analyst and bestselling author, Dr. Mary Barbera.

Mary: Okay, well I am so excited to have you here, Rick. Thanks for agreeing to join us today.

Rick: Thank you for having me.

Mary: So I know that your primary work isn't just about autism, but you have been in the autism world in some respect for many years. So, can you describe your fall into the autism world and how you got involved with being a board-certified behavior analyst and working with kids with autism?

Rick: It's a good question. That takes me back to when I was a master's student at Ohio State University. I was supplementing my income working for a behavioral service, so it was emergent, and one of my very first clients had autism and that just put me down the road. I mean, it was a very interesting experience. That client was also the first time I got smacked in the face. Uh, it just totally caught me off guard and, uh, that client turned out to be just such a charming young man. But, uh, being able to take this science of behavior, help him do better at life, you know, reduce his, uh, you know, when he would get upset and he would frequently become aggressive, he would strike out. And of course he had some issues with communication, but taking behavior analysis back then, from what I knew about it and applying it was very dramatic and it impacted me in a way that I suppose at that time told me I was on the right path because it was 93 and I was a graduate student and I had just done with my undergrad. So I was just starting to move into the field. So it was a very impactful experience and turned out to be very positive.

Mary: And how old was this young man?

Rick: He was... He must've been 16 at the time.

Mary: Wow. Yeah. So a lot of people got started when I asked them. They get started and they're working with, you know, little three-year-olds who are making all kinds of progress. And you know, with my journey with Lucas getting diagnosed, you know, it was like early on, but when you are all of a sudden, you know, thrown into a 16-year-old with aggression, it can be kind of scary.

Rick: No doubt. And what was fascinating about the story, he was a... He went into a foster family and it was just such a remarkable experience because the foster family was very strong. But this was the first time the day had ever had someone with a disability. They were in Columbus and they were used to working with people who didn't have disabilities but did come from very difficult circumstances. And you learn a lot.

Rick: And what I would say to your listeners is it's never too late. And sometimes people think, I think you're probably when you talk with people, you get this narrative that you... Early intervention is very important. Let's just put that out there. Very important. But that doesn't mean you can't help people in any age. You can work with adults and still do things. Of course, what we know through

biology, through neurology, the impacts, if you very early can be very great. And we don't know what happens when you intervene at different times, but nevertheless you can still have a... do great things, and that was an important lesson for me.

Mary: So were you in Ohio State at this point?

Rick: Yes, I was working on my master's degree.

Mary: Okay. So can you describe like how you got to like professionally, undergrad, how you found out about ABA and then graduate and doctoral level? Like how did, how did that all work out for you?

Rick: It worked out through dumb luck. That's all I can say to begin my story. When you're an undergrad and you go... You don't know anything, you're in high school one moment, you're like, you know, I think I want to be this when I grow up. I wanted it to be a clinical psychologist. I read this book called Dibs in Search of Self when I was in... It was, it was a psychoanalytic book, but what resonated with me was using these, using psychology to help this child who couldn't speak. That was the story of the book. And at one point I was actually into psychoanalytic-analysis. Thank the universe I didn't follow that path. But yeah, you're impressionable and you don't know a lot when you're young and you're trying to absorb all of this information. But I happened to be at a university that had an eclectic group of faculty.

Rick: I suppose many psychology departments are like that, but we had about three behavior analysts on staff and one of those happened to also be a precision teacher. His name was Steve Graf, and it turned out he was a very big name in precision teaching. So, I started to understand how behavior analysis work. It made sense to me. I started applying some of that to myself. I wrapped it in with this thing called precision teaching and I was being successful in, in the limited things that I was doing. I was volunteering back then, but I started in the 80s, mid-eighties, I started in 85 and that was the tail end of the institutionalization was having an effect on a lot of mental health institutions. But we still had a mental health institution called Woodside Receiving Hospital. So I volunteered there for a number of years so I could gain experience working with people with schizophrenia and in different, uh, mental health issues.

Rick: But there I was able to apply just some very, very basic kind of reinforcement things. I did some charting and I was hooked and I asked my advisor, I said, I want to learn more about this. When I go to graduate school. I was applying to clinical psychology programs. He's, you need to go to Ohio State University. There's this guy there named John Cooper. John Cooper happened to be a very big name in behavior analysis. He also is a very big name in precision teaching. So

through dumb luck, I applied there, they accepted me and then I worked with, uh, with John Cooper, Bill Heward, Tim Heron, Diane Sainato, Ralph Gardner, all of these great people in behavior analysis, and that set me on my journey. I practiced for three years as a behavior analyst and a special education teacher. And I decided that at that point when I looked around and I saw no one else was using this amazing technology that I should go back to Ohio State, get my doctorate and work with people, work with undergrads. Ohio State, that program was in special ed. So, I went from psychology to special ed and then I stayed in special education. So that's my story.

Mary: Where did you work with Steve Graf? Where was the undergrad?

Rick: Youngstown State University. Yeah, that's in Ohio. I grew up... Youngstown is my area where I grew up, so Youngstown is the university right there.

Mary: Cool. Okay. So, that's great to know kind of your background as a professional since the podcast is for both parents and professionals. I wanted to kind of get your, uh, history professionally too. So I remember the first time I met you, it was about 2001 I think. And I was at a conference where you did a presentation on, fluency and fluency-based procedures and Lucas was about four at the time, I think. And I was really interested in, in your presentation. And really what got me was at the end was, like you said, if anybody wants to contact me, here's my email address. I'm like, oh my God, he's given me his email. I couldn't believe it.

Mary: So I contacted you and um, and then you started consulting a little bit for Lucas and then you ended up becoming over time my BCBA mentor and we co-authored an article together and everything, but can you take us back, because I think there is a lot of confusion among even professionals in terms of, you know, what is fluency and how does that relate to precision teaching and how does that relate to the Standard Celeration Charts and how does that relate to ABA? And I think, I feel like with your mentorship, I kind of, you know, know how they fit together, but I do think that especially for parents it's very confusing, and even for professionals. So can you kind of start out with, you know, what you may have been talking about in that first initial, uh, conference, you know, about fluency and then kind of go from there.

Rick: Behavioral fluent, you make good points, and that is we have the science of behavior. It is a real science. There are all kinds of information in there. Parents who are new to the field, how do you learn about a science? It would be like me even right now trying to learn about biology and in the whole science there. There's just a ton of information. It's well-developed and if we can recognize that then we can appreciate the complexity of this endeavor. Out of behavior analysis, which contemporary behavior analysis began with Skinner, one of the one of Skinner's doctoral students, his name was Ogden Lindsley, he noticed that

Skinner was incredibly exceptional because of two reasons. He had a standard visual display. Everybody who looked at the animals at the time when he was developing behavior analysis, was on this thing called a cumulative record and he used a measure called rate or frequency.

Rick: So Lindsley said, I'm going to take those two ideas and help parents, teachers, students themselves access this science and he created this method called precision teaching. It should have been called precision measurement because Lindsey's idea was it could be precision nursing, precision teaching, precision social work. In other words, there are ways to precisely measure behavior and you can apply it to whatever profession you would like.

Rick: It stuck with precision teaching because it was most popular in schools and now instead of it being precision measurement applied to all these other disciplines, precision behavior analysis, even it's just turned precision teaching. But this measurement system now has grown to its own very sizable set of methods, procedures, discoveries that have come out of. It's a measurement system. It doesn't tell you how to teach, it doesn't tell you what to do. What it shows you is how well are the interventions that you apply to are working. It gives you feedback. It takes you from data to insight in record time, gives you this strongly actionable information.

Rick: To practitioners, it has taken off in the field, especially for those who work with students with autism because it helps people discern whether this intervention they're doing is working or not. Incredibly valuable to have that. So if you understand where I'm going, we have the science of behavior, we'll call that behavior analysis, out of behavior analysis, Lindsley developed this thing called precision teaching and within precision teaching, precision teachers, one thing that they do is they measure behavior with incredible precision. They time everything. They will put it on this chart and see what happens.

Rick: Out of timing behaviors for short periods of time, one of the discoveries was, oh, when students make these certain high-frequency behaviors or high rate behaviors, these cool things happen, which would be they don't tend to forget what it is they learned. If they have a skill, let's say it's color identification, they can apply those colors to more complex skills that involve identifying colors. In other words, they made progress through the curriculum when they reached certain frequency ranges and that spawned this concept called behavioral fluency.

Rick: So behavioral fluency was discovered out of... When I say behavior fluency was discovered, I don't mean to say fluency was discovered. Back in the early 1900s people understood there were these incredible studies with telegraphers that showed if they were fluent, all of these incredible things could happen. Well,

precision teachers functionally defined this concept of behavioral fluency and found that if you reach these high rates of response, it's not just high rates, but it's also being accurate, that many good things can happen.

Rick: And that's the concept of behavioral fluency and how it came from precision teaching and how precision teaching was envisioned from these wonderful things that happened with behavior analysis. There's a lot of information that goes into all of this, but behavioral fluency is oftentimes misunderstood. Many people think precision teaching is doing behavioral fluency. In other words, you have to go fast. That's a myth of precision teaching. You don't need to do behavior fluency to do precision teaching. If you have the desire to be precise, to know that the thing that you're measuring is exactly what you want it to be measuring, to be counting your behaviors with very good units of measurement, to be putting it on this graph that's going to give you all of this information to problem solve. That's the precision teaching system. It's incredibly powerful. My personal feeling is our entire field should be doing it. We can go down that path, but I'm going to stop my response now because I'll really start preaching when I get to that particular point.

Mary: Okay. So precision teaching, you know, is, is part of applied behavior analysis, but it is in some ways a, just like the verbal behavior approach is a type of applied behavior analysis. I know I'm like really simplifying things, but precision teaching is depth. If you're practicing precision teaching, you're, you're practicing the science of applied behavior analysis. Would you agree with that?

Rick: Uh, yes and no. You could do precision teaching without doing behavior analysis because it's mainly a measurement system. Precision owes a debt to behavior analysis and many of the concepts that you find in the measurement of behavior analysis, you'll also find those in precision teaching. But there are more than just what we have in behavior analysis. So that's my kind of yes and no answer to that.

Mary: Okay. So, I did my doctoral dissertation on the use of fluency-based procedures. And so let's just back up a little bit because I think for the late person and then for the parent especially and even for a lot of the professionals, I understand the point about precision teaching being precise and, and you know, looking at the rate and um, and that you don't have to necessarily go fast, but there are stages of learning like the acquisition phase and the mastery and the... can you describe this, the stage of learning? So like if I am brand new, I'm going to learn to fly a plane, obviously, we're not going to be taking my rate of, you know, turning on the buttons because I don't even know anything. Right? And so for a lot of our learners, they are starting at the beginning. And so, can you describe the stages of learning and, and maybe you don't even call it the stage of learning, but, just where fluency fits into the acquisition and mastery phase.

Rick: Stages of learning, also people will use the term levels of learning, both of them mean the same thing, is a way of understanding that when we learn things, it's not one, two. You don't have information. I teach it to you go, you're done. That's a very simplistic way of understanding learning. There are stages that develop across time and the very first stage would be entry level.

Rick: All of the, all of your audience can just imagine something that they don't know how to do or they're not good at the entry level means you have no ability to do that particular skill where it's a very low frequency. I can't speak Spanish, but I know a few words. I'm clearly at the entry level of, of speaking the language. The next stage is called acquisition and the goal of the acquisition is to become accurate with responses.

Rick: If I were learning Spanish, someone would have some method of teaching me. Maybe it's choral responding, maybe it's some active student responding where the person says something and I write something or I touch a card or there's all kinds of ways of, maybe it's modeling, in our science... I'll just stop there. I'm not going to go off too much into that.

Rick: There's some way of teaching people something, and you get the behavior to an accurate level. Now if you stop there, which is what most people do, man, I would say 90% of our field of behavior analysis adopts that model where they stop right there and then there are other stages that follow. The next stage that should follow from any behaviors is something that's called proficiency. The proficiency stage in the goal of that is to have fluency... It's not just accurate responding, it's also speeding that up.

Rick: And when I say fast, I don't want people to think that everything is fast. Another word to use can be pace. Like you and I are having a conversation right now. I'm not speaking as if I am at an auction. No, my voice is at a pace that we would consider fluent. So the notion of speed because it's defined is speed and accuracy, people think I got to go super-fast. No, you don't have to go super-fast. You have to reach certain thresholds.

Rick: Social skills. If you're teaching social skills, there's a threshold, a pace of interaction that we would consider fluent. So that next stage of learning would say that whatever the skill is that you find important, if it reaches this stage, then it's going to, there's going to be impact. It's going to impact these later stages. The stage after the proficiency stage is called maintenance. That means that your behavior will occur over time. If you skipped the frequency building, then if you just go from accuracy to maintenance, it depends... There's going to be an effect and impact on that maintenance. You could get maintenance depending on how accurate the behavior goes and how much you use that skill in whatever the

environment is. But if you don't use it a lot, your maintenance, will quickly dissipate and the person will forget what you taught them and unfortunately, that happens all too often. People will, let's say tacting, your audience knows about that since you are an expert in verbal behavior and you teach people these concepts, so tacting would be something where you see this all, I see this all the time in programs, people say, oh, we want these kids to learn these tacts, we'll do this acquisition program. Then it goes away and they never see it again. Then people scratch their heads and like, well, I used discrete trial instruction or I use natural environment training and my client doesn't know it and sometimes that get, that gets blamed on autism or it gets blamed on something else.

Rick: Nobody ever bothers to blame it on their own teaching. No one ever looks at themselves and says, huh, I skipped this stage of learning. I just let someone acquired it and then it, you know, falls apart. Again, if you, for your audience members, if you are learning Spanish and I taught you a bunch of verbs and you never applied it, you never use it in actual language in three weeks go by, how well are you going to remember all of those verbs or nouns? You will definitely have very poor retention and the behavior will not maintain.

Rick: That moves into the next phase, which is generalization. Generalization means, can you use that behavior in other environments with different people and so on? That will be a… that's affected by two things. It's affected by the acquisition stage. People talk about training for generalization. Whenever you teach people in that acquisition phase, however you're teaching folks, you should at that point be preparing for this later stage of generalizations.

Rick: Another point is generalization is not going to occur if the person can't remember whatever those skills are. So that's where the proficiency stage and building fluency is also important. The last stage is called adaptation or generativity and that means the person is now extending whatever the skill is. If you think about creativity, that would be that last stage.

Rick: So those stages give you a blueprint for how you can program or how you can teach people effectively. You don't have to do all of those stages every single time. People often ask me about building fluency and you don't have to build fluency for every single thing out there because if you were doing that, you would never, you just wouldn't have enough time to get through things. But you must be strategic with it. You must understand what skills do need to be brought to fluency, and that's where this whole science of understanding curriculum, curriculum development, blends with behavior analysis, blends with these stages of learning. And if you can put all that together and you have the knowledge, you can create incredibly dramatic results for students. But it requires knowledge and expertise of all of those domains that I just shared with you.

Mary: Wow. So it is a lot. And I remember after I first met you and saw you speak for the very first time, I think at the time Lucas was still primarily in the Lovaas type ABA program. And so one of the biggest like, aha moments that I had back in 2001 was that we would get the acquisition and then we would have these maintenance binders. And, we had stacks of maintenance binders and every, you know, two weeks we'd have to do these programs and he would lose skills. And, and so we then program for that fluency piece before. And so basically after I learned about fluency, we were able to get rid of the maintenance binders.

Mary: Um, and then that was right around the same time we started to incorporate a verbal behavior approach with mixed and varied card system, which so then you go from the acquisition to the known box and so these skills are being practiced and if something falls apart in the known box or I have, within my online courses I, I show videos of, of, I can think of this one little boy Chino and he was doing mixed VB like clap your hands and you know, I'll touch your nose, or, or what's this called? And for, for body parts, both receptively and tack them his, his time to response or the latency was slow. He was making errors. He was slow.

Mary: So because I knew about fluency and precision teaching, I was able to say, hey guys, we need to pull out body parts and we need to do fluency body parts receptively and fluency body parts tact. And then when we pushed it all back together, he was fluent, you know, he, he then generalizes the skills and he like not going at a super high rate but going at an acceptable rate. So that that two second three, second five-second pause is, is, is really never okay. Like people were like, well they have auditory processing problems, you know, we just need to give them more time to answer, what's your name? No, it's a fluency problem and it's an, it could be an acquisition problem or could be a fluency problem.

Mary: I remember when Lucas went to an approved private school, we had taught him through your fluency procedures that you taught me, we had taught him to label or tact everybody in his little preschool class. He went to a typical preschool class with a shadow. But then when he got to the approved private school, uh, we also taught him to say hi and bye the people, the, uh, video modeling and a bunch of other techniques that I used. And so, but when he got to the school, he was just using the first name of his teacher to say hi and bye. So somebody else would say, Hi Lucas, and he, he incorrectly say hi to his teacher's name. And I was just like, okay, so that is an acquisition problem. He doesn't know the new names of the people. He still has this problem like where he's at now.

Mary: He's in an adult program and the, we have to teach him the names of the people. Like this isn't like a one, like you said, it's not like a once and done. You know, you're never going to have to work on this skill because there's going to be new people, there's going to be new items that you're going to need to know the names of. And so it's, while it sounds complicated, precision teaching and

fluency and acquisition, and generalization, it is really important that we understand how to analyze not only the good behaviors we want, but errors. You know, we, we analyze where the errors are coming from and not to blame the learner on, they're just a slow learner and it, you know, we tried everything. No, you probably didn't. And fluency is a big part of what I look at when kids are making errors and those, those stages, those acquisition and all kinds of things.

Mary: So I, I really, uh, I remember calling you up actually when he was, when Lucas was at the approved private school, you were my mentor. And I was like, okay, we taught them all these people's names from the school. He went back, he said hi and bye to the names, we need to publish this. And you were like, Mary, we can publish something that you don't even have a design, you don't have anything, like, but you did tell me I will help you with the design and um, we will publish, you know, we can, we can try to publish something.

Mary: So, we did publish together an article called Using Transfer Procedures to Teach Tact to a Child with Autism. It was in the analysis of verbal behavior in 2005. Jack, Dr. Jack Michael, was the editor and I remember you helping me set up. It was a multiple baseline design study and we're going to put that study in the show notes, so you guys can look at it there. But it was a, it was an exciting study. I remember being an actually a precision teaching conference and, and somebody said, Oh, you're the author of, and I thought they were going to say the Verbal Behavior Approach and they're like that transfer procedure. It's actually quite a classic study now because people are doing dissertations on it. And um, any, any thoughts on that study, if you even remember?

Rick: I do remember it. I can tell you that of all the things that I've written, I've probably published over 50 some articles both maybe 60. I can't count or I lost track of them. That is one of the ones that people will always come up to me and say, oh, that paper was really important. So I get that too. And something you may not know, well I'm sure you don't know this, but I have been, uh, I've been close with Jack through the years and he was incredibly impressed with you. The fact that at the time you're a mom and you took the, you spent a lot of your time learning about verbal behavior and then applying it to your son. And Jack was so impressed with that because he saw that as something that he wanted many parents to understand this science and, and to use it.

Rick: And of course it turned out to be a very good study and many people were able to replicate it. And uh, I recall that, that my whole role in that paper was bringing the experimental design to with the measurement, but all of it was your idea. You had the understanding of, of what should happen. You are integrating the procedures of verbal behavior and behavior analysis and you know, that you came up with that. So I was very pleased and fortunate to be able to work with

you on that. And in retrospect, seeing what a significant contribution that made in our field, again, it was my dumb luck to have met you.

Mary: It was definitely my luck to meet you. Um, you've been very instrumental. So, you have now written a few books and you have a few more coming out. So I'd like you to tell us, uh, what your books are, what they're about, what we can expect in the future for more books.

Rick: I'm trying to get the world to pay attention to precision teaching. In our field of behavior analysis, I see many, many problems that happen with almost everybody, and it's because they are using a terribly poor measurement system. There are crude measurement systems and there are things within that measurement systems that you could do to make it poor and we're doing things that are making it poor. For example, when we start off with defining behavior, how should you define behavior? Most people use operational definitions. That's the most popular way to do it. We're starting to have evidence that shows us that's not the best way to define what that target behavior is.

Rick: Precision teaching, we use these things called pinpoints, which is a great concept. Our field needs to know about that. The next step would be how do you count behavior? Many, many people use something called interval recording where they will sample bits of behavior. Whenever you use those interval records, you that interval record is going to give you information, but it's going to do one of two things. It's going to overestimate the occurrence of behavior or it's going to underestimate the occurrence of the behavior. It's going to give you air. I have a problem with that. I feel, and I say this all the time when I talk about this, our field should ban that measurement. We should be using dimensional measures, which are things like frequency or rate, duration, latency as you mentioned earlier, even counting the behavior by itself is okay. Uh, so that's another thing. And then the display that you use now, the displays that we use, if you open up any behavioral journal, I will guarantee you nine out of 10 of those articles have construction errors. There'll be errors in their scaling, there'll be errors in how they physically proportion, there'll be errors and in all kinds of issues.

Rick: If you have errors in the main method for you to understand if what you're learning or what you're trying to learn is which is my intervention working or not? If your display is telling you that you have a big an effect when you really don't and the reason why you think you have a big effect is because you have this graph, it's misinformed or misinforming yourself because it's ill-formed that creates problems and this is happening throughout our field. It is a huge problem. Precision teaching solves those problems. This precision measurement approach, so the books that I'm writing are trying to bring awareness to these issues and show people alternatives. If you measure the behavior better, you will

understand the effects of what you were doing. So behavior analysis is the most powerful science that we have out there for changing behavior.

Rick: It's a science of behavior and many of the things now that are coming out of behavior analysis, so verbal behavior, which is part of behavior analysis, but it's a focus on language communication. Other than that approach and in just behavior analysis can be augmented and can show us how well things are working if we use precision teaching. Unfortunately precision teaching, there's not a lot of books out there on it and how you use it, so it's not something that people can just pick up.

Rick: So I've written two books so far. The first book I've written with my co-author Kirsten Yurich, that's called the Precision Teaching Book. That's a 450-page treaties on many parts of behavior or on precision teaching. My most recent book, which I just published, it just went on sale about a month ago, is called The Precision Teaching Implementation Manual. It's about a 200-page book and it shows people how would you take this and implement with your clients?

Rick: I have other books that I'll be publishing. Uh, they are getting into the curriculum, particularly for reading and math. How can you... We'll be developing methods to help people who are interested in excelling in those particular topical areas. How can they use this? The behavioral fluency stuff we talked about earlier, how do they use concepts from there? How they use materials to help their students, their clients, their children, pick up those skills. So that's where I'm at right now and is taking up a lot of time. As you know, writing a book is not something you can just pull off. It takes time to do it and I'm still actively publishing and working with students and doing research.

Mary: And you are still a professor of special education at Penn State, is that correct?

Rick: I am.

Mary: And then you're also doing some other work in the medical field.

Rick: I, so the, yeah, I'm very, I've been very fortunate in my connections and the people I've met and where my research agenda is taking me. I happened to be working with... I have an appointment at the Albert Einstein School of Medicine and I'm working with an orthopedic surgeon and we are applying the behavioral fluency methods that we talked about earlier to orthopedic surgeons.

Rick: The way the orthopedic surgeons at anybody out there who has a skill can attest to this. How do you get good at something? Think about your own personal journey. How did you get good at whatever? If you're a golfer, if you have, if you, if you, if you knit, if you play a musical instrument, if you write, if you read, if you

publicly speak, whenever you, you know, if you're a truck driver, if you, or if you're nurse, whatever you are, the skills that you bring to the table, how do you get good at that? And we have this technology in behavioral fluency that can help people in a humane way, learn these skills in an efficient way, in an effective way. So I'm able, I have this appointment and I'm doing a study with my colleague and, and emerging surgeons at a different level and we're studying different aspects of how behavioral fluency can help the surgeons become better with their surgical skills. So that's where we're at right now. We're just starting to do that research and hopefully, that will be something that has legs and can impact all of the people, all the surgeons, all the people who do work.

Mary: That's awesome. That's very exciting because I'm a nurse and my husband's a physician and you know, everywhere I go I'm just like, oh my gosh, you know, waitresses and bartenders and, and pilots and you know, even in the nursing field it was like I was preparing to be a behavior analyst my whole life without even knowing, you know, what ABA was. But I did a lot of precision work and, and read the book From Novice to Expert and, and so I've always been like, we need to be nice to nurses, you know, like the new ones, like you, can't throw people under the bus. And I think there was an article in the nursing field called Don't Eat Your Young, you know, like we all are beginners in some areas, in some things. And, and, and our kids with autism and our clients and our kids with autism, they tend to be, you know, really in need of a lot of patience, but a lot of good teaching and a lot of, you know, not wasting a lot of time trying things that don't work. And I think if people learned more about precision teaching and fluency based procedures and the phases of learning, there'd be a lot less time wasted for our learners.

Rick: Let me, let me pick up on what you're saying here in, in the medical field and what you have experienced in nursing is the same thing with medical school. There's a lot of punishment, a lot of coercion, and if you don't do things right there are these negative effects. It's very unsettling. It's not fun, and Marty Levy, who's the person I'm working with, he tries to take the approach of being positive and using the good parts of our science and that's completely different. What we know is if you set up negative learning environments and you apply punishment and you're a punishing person, that relationship that you're developing with a person is not going to be a relationship that you're going to like. If you're a parent, it's very difficult because you have your child and you want your child to succeed. And sometimes if the child is doing something that we don't want, it's very easy to apply a punitive thing which makes that behavior go down very quickly.

Rick: But the problem with that is that behavior is going to come back at some point. You are fostering a negative relationship with your child and sometimes depending on how much and how you use that, you could really be doing

damage to your child, and patience is indeed a virtue, but it's not enough. You also need to have a method of being able to give your child a way of succeeding.

Rick: And that's true for raising your child, it's true for learning our skills. And that's what, and I'm sure this is true for you too, that's what's attractive about behavior analysis is it looks at changing the environment. It doesn't place blame on the person. It is very liberating in the sense that if someone doesn't know how to do something, it's not their fault. It's the fault of the environment. And if we can all remember that, that will change the way we approach how we instruct people, and it also can help you when you're dealing with a frustrating situation. It can give you peace of mind understanding that... myself, we met back in 2001. What I know now from what I knew then, if I could talk to Rick in 2001 I would have said, you need to do these other things, but I don't beat myself up over that because that's what science is. It's a progressive enterprise where we keep learning more and more things.

Rick: But uh, the fact that I now am able to understand why things are going on and I have a lot of knowledge of how to help people when things are going down this path, how to get out of these plateaus or if the, if the behavior is going down, I now have that. But what, what I always tell myself when I'd like to tell other people is don't beat yourself up over... all we can do as practitioners and parents is try to apply the best methods that we have out there. And if they're not working, it's not because you're a bad person, it's not because you're, you're lacking something. You just need to go out and try new things. You need to embrace knowledge, embrace the science of behavior, talk to professionals. And if you're... for your parents, I'm not suggesting all the parents out there become BCBAs. You have jobs and you can't abandon your job to learn this entire field. But what you can do is look for people who are experts in the field. Listening to Mary and many of the experts that she brings on and the wisdom of the people that she speaks to, that can help you start to understand and learn about the science of behavior so you can become better consumers of knowledge.

Mary: Right. Right. Well, I think that is a good way to wrap things up. Any additional advice? How about for new BCBAs? Like, what would your advice be about... you said about talking to Rick in 2001. What about like, or even not new BCBAs, any behavior analysts or professional, what would your advice be?

Rick: Be open-mindedly skeptical. Everyone needs to adopt that. Unfortunately, in our field, I feel we have developed tribalism where people will learn something in graduate school or they have done a certain approach for a long time and it closes them off to new approaches because that's not how we do things. Like I learned how to do this approach.

Rick: You talked about early on Lovaas who had, he put, I don't want to say he put behavior analysis on the map, but his research study greatly accelerated the use of behavior analysis. You just cannot deny that. And many of the contributions that Lovaas made were great, but if all you have, if you are still just using the Lovaas approach and you're not open to verbal behavior, you're not open to a lot of the things coming out with RFT or ACT or… and looking at what else is out there.

Rick: There's pivotal response training, there's... people have studied things in behavior analysis and being openly mindedly... open-minded and skeptical is good because you need to look for evidence. What works, what doesn't work. And the only way you'll know that is through searching through evidence, but don't take my word for it as an authoritarian figure, an authority figure, not authoritarian whatever. That's a big difference isn't it? Authority figure and uh, that's going to lead you down a path to knowledge. And that's what everyone needs to do. I'm at right now focusing on measurement and the huge proponent of precision teaching, not because it's something that I have had a personal allegiance to, because it works. If you don't believe me, look at the evidence and as more evidence comes out, people will gravitate towards precision teaching. So those new BCBA's and the BCBA's that aren't familiar with it, read a book on it. Read an article on it. Join a Facebook group. Because you are willing to find that the measurement systems that we have right now are going to change.

Rick: You can be ahead of the curve if you start embracing precision measurement and you will be able to help your clients more effectively, you will be a more effective behavior analyst. And that's why most of us have gone into this field: to help people and to do it effectively and to do it efficiently. So I would end my comments by saying be open-mindedly skeptical. Don't just shut things out because you're not aware of it. And the precision teaching and the precision measurement, look into that because that's going to help you measure what you're doing, which can help you understand the effects of your interventions better.

Mary: Great. So how can people follow you? Follow your work, buy your books, what? What is the best place for them to visit?

Rick: Greatness achieved... is it greatnessachieved.com is the, our publishing company? And I put my books up there. I'm going to be also publishing other people. So that's expanding. A lot of interesting topics and new books are coming out there. For those of you who are on LinkedIn, link in with me. I publish a blog.

Rick: The other thing I didn't mention is I work for a company called CentralReach. I'm the director of research for them and they have a blog. You can find a lot of my

information there. I do workshops for CentralReach, which is a blending of using technology and precision teaching and other things. That's another way to look me up. Facebook me. I would be more than happy to be friends with you. Uh, I'm very tame on my Facebook page; I don't talk about politics or things that bug me. I just put embarrassing pictures of myself up there and I think that's probably what Facebook should be. Your cat pictures and your other things.

Mary: Okay. So, so Facebook, LinkedIn, greatnessachieved.com, and CentralReach are some good ways to follow Rick's work. And um, you know, I also like if I get stuck in something and I know Rick has published about it or talked about it, I just google Rick Kubina and whatever subject I'm looking for. So, you could probably find some articles and some, some talks. I know you, you even had some experience with, with brain injury and those sorts of things early on. So, like, if you're interested in his newer research with the orthopedic surgeon, you could probably even, you know, start googling around and, and as Rick comes up with more and more studies and more and more articles, I know I'm going to be following Rick forever. And I'm eternally grateful that you agreed to be my BCBA mentor back in the day. So thanks so much for your time today. I learned a lot and I hope my, the people listening did too. So thanks so much and have a great day.

Rick: Thanks for having me.

Thanks for listening to the turn autism around podcast with Dr. Mary Barbera. For more information, visit Mary barbera.com.