The Think Inclusive Podcast

Season 6, Episode 3

Rob Horner | The Connection Between PBIS and ABA

Audio Transcript

Rob Horner:
Hello. This is Rob Horner from the University of Oregon, and you're listening to the Think Inclusive podcast.

Tim Villegas:
Recording from my office in beautiful Marietta, Georgia, you are listening to the Think Inclusive podcast, episode 18. Today we have Dr. Rob Horner, director of the Technical Assistance Center on Positive Behavioral Interventions and Supports. We talk about the history of PBIS and the somewhat controversial foundation in applied behavioral analysis.

Tim Villegas:
After the podcast, please visit patreon.com\thinkinclusivepodcast where you can support our goal to bring you in-depth interviews with inclusive education and community advocacy thought leaders. Also, you can help other people find us by giving us a five-star review on ApplePodcasts or wherever you listen to the Think Inclusive podcast. Without further ado, here is the interview.

Tim Villegas:
All right. Hello everybody. Thank you for Dr. Rob Horner for joining us on the Think Inclusive podcast. Dr. Horner is a professor emeritus of special education at the University of Oregon. He is the director of the technical assistance center on positive behavioral interventions and supports, otherwise known as PBIS, which is how we're going to refer it to.

Tim Villegas:
Dr. Horner has also been the associate editor of JABA, which is the journal of applied behavior analysis. Over Dr. Horner's 25 year ... Dr. Horner has a 25-year history of research grants, management, and systems change related to school reform and positive behavior support, and he has published or 150 professional papers and six texts. Once again, thank you for being here.

Rob Horner:
Happy to be here.

Tim Villegas:
Awesome. Why I asked you to come onto the podcast was the PBIS and applied behavior analysis is something that gets brought up a lot when we're talking about inclusive education and specifically on how it relates to disability rights and also just supports that we put in place for students with challenging behavior in the schools. Since I know that you have such a body of work in explaining that, and that is a

passion of yours with your work, I wanted to have you on and have you explain and talk a little bit about what ABA is in its relationship to PBIS.

Tim Villegas:
We have a lot of listeners that are educators, but we also have a lot of disability rights advocates and activists that listen and read the content on our website, and a lot of parents. So, I think this is going to be a worthwhile conversation. Why don't we go ahead and start off with explaining ... I know that people have heard what ABA is, but what in your opinion would be the best definition of applied behavior analysis?

Rob Horner:
Okay. I mean-

Tim Villegas:
Is that a bit ... That's too big of a question, I'm guessing.

Rob Horner:
It's a good place to start.

Tim Villegas:
Okay.

Rob Horner:
Let's do it this way.

Tim Villegas:
Sure.

Rob Horner:
The basic thing to do is separate a definition of behavior analysis from applied behavior analysis.

Tim Villegas:
Fantastic.

Rob Horner:
Behavior analysis is the study of the fundamental principles of human behavior. You start with the realization and understanding that people behave in ways that are non-random. There are patterns. There are systems. There are structures. If you accept that as a premise, then you want to say, "Well, there clearly are going to be fundamental, lawful, predictable relationships that help us to understand those patterns of behavior. Behavior analysis is essentially the study of those patterns of behavior with particular emphasis on the relationship between behavior and the environment.

Rob Horner:
If you were to think about why people behave the way they do, everyone would agree that some part of behavior is due to the physiology or the nurture effect that you've got. More recently, people have argued extensively that the social context you're in helps to define how you behave. Those are both probably true, but from a behavior analytic perspective, what we're really interested in is how what you

learn from the environment around you changes how you behave over time. So, behavior analysis is the study of the fundamental principles of human behavior.

Rob Horner:
Applied behavior analysis is the application of those principles to solving socially important problems or challenges. Applied behavior analysis is a very important combination of the use of scientific principles to achieve socially valued outcomes, so it marries values and science. In that regard, it is a much more complex and interfaces much more directly with how we behave as parents, how we behave as citizens, how we behave as friends and partners. When you think about how people behave in context, that's really where you're talking about the role of applied behavior analysis.

Tim Villegas:
Okay. So, when we're talking about ... Because what I'm assuming is that with applied behavior analysis, that positive behavior intervention and supports is a framework that is coming out of applied behavior analysis. Is that correct?

Rob Horner:
It is. Positive behavior interventions and support, so PBIS?

Tim Villegas:
Mm-hmm (affirmative).

Rob Horner:
I [inaudible 00:06:43] the fact that you got that it's a framework. It's not a curriculum. It's not a specific set of practices, but it uses the fundamental principles of applied behavior analysis in a larger context. We like to define PBIS as always starting with socially valued outcomes. Not just the reduction of problem behavior, but actually the development of the adaptive pro-social and successful behaviors that allow someone to be successful in a family, in a community, in a school, in a work setting.

Rob Horner:
PBIS combines a set of practices drawn from ABA with a set of systems that are organizationally designed to promote sustainability and scalability with the data structures that really incorporate the iterative process of continual reflection and improvement. If you think about PBIS, always start with, one, socially valued outcomes; two, scientifically credible practices; three, organizational systems that are necessary for sustainability and scalability and the continual use of data for assessment and improvement.

Rob Horner:
In that regard, one of the things that we're most impressed and pleased by is that when in PBIS, we on a regular basis assess not only what the outcomes are for students and families, but we also assess the extent to which we're actually implementing practices as they have been operationally defined. So, we incorporate treatment integrity or fidelity measure as part of the PBIS process. There are right now over 25,000 schools in the United States, a quarter of all schools in the U.S., are actively engaged in implementing PBIS, and data from last academic year allows us to describe over 14,000 of them in terms of the extent to which they're implementing with fidelity, so that gives you a little bit of the ...

Rob Horner:

There's a direct link between ABA and PBIS, but PBIS incorporates some of the organizational systems and data structures that aren't necessarily attached to ABA. But then you get into everybody has their own definition.

Tim Villegas:
Right. Right, which I guess is going to bring me to one of the main reasons why I wanted to have this conversation with you is that I hear many disability rights activists share concern about PBIS and the roots of applied behavior analysis and how it relates to, I guess, a traumatic or difficult past with having their behavior changed maybe without their consent or in a aversive way. I guess before we delve into that, and I don't know if you have an opinion about this, but is the history of applied behavior analysis ... Is that history problematic because of the, in some people's minds, the emphasis on compliance and control of behavior?

Rob Horner:
I think both the emphasis on compliance and control and also the exaggerated emphasis on the use of aversive procedures are sort of blemishes on applied behavior analysis that are atypical and more part of the fantasy than the reality. As with almost everything that you hear about something like this, there are elements of truth, and ABA is no different than any other formal practice. You got to remember, there are no good ideas that we can't do badly. I would argue that for the tremendous positive contributions that applied behavior analysis has made to society, you can definitely find examples where people have used the science inappropriately and unnecessarily.

Rob Horner:
Too often, people equate behavior analysis with A Clockwork Orange-type practices, and definitely, there were things that were done in institutional environments where people were not adequately protected. There were not adequate controls. There were not ethical procedures where people did things that were abhorrent. Given that, you stop and say it is important, I think, when you talk about applied behavior analysis. Not just behavior analysis as a set of principles, but applied behavior analysis as a application of those principles, to realize that ABA always starts with values.

Rob Horner:
So, if you're a disability rights advocate, or you are a parent, or you are a teacher, you don't do applied behavior analysis unless you first start by saying, "What do we value as formal outcomes? What do we value as critical features?" Applied behavior analysis is about the design of effective environments. It is not about the altering of people. It's about the creation of environments where people can be effective and successful. Understanding those principles is incredibly, incredibly important.

Rob Horner:
One of the things that I think Travis Thompson has done well is to argue that the greatest deficit of applied behavior analysis is that we have not informed our society enough about the basic principles that are affecting their behavior. To have people function as friends and parents and citizens without understanding the basic principles of positive and negative reinforcement is very similar to letting people run around in the sun without telling them about the effects of ultraviolet rays. I mean, they can get by for a while, but there's damage.

Rob Horner:
The idea that we are not being affected by the contingencies of the environments in which we live is simply unrealistic. Everybody is always in a situation where you are experiencing stimuli. You're

responding to things about you. You're getting feedback on the effectiveness and ineffectiveness, and that feedback is altering what you do. We're currently looking at an opiod epidemic. That epidemic is directly understandable from a behavioral perspective. We're looking at concerns around implicit bias in schools and communities. We're talking right now about conversations related to the role of power as it affects harassment.

Rob Horner:
Those are fundamental, basic things that we're talking about, all of which are directly affected by the contingencies in which we live. So, the greatest deficit that I would say ABA has is we have done an abysmal job of informing our society about the fundamental principles of human behavior and the power that understanding those principles gives people to establish lives that are much closer to what they actually value.

Tim Villegas:
As you were saying this, and you were kind of explaining how that this is really a way that you're looking at the world and how we can solve really big problems, I want to ask you do you think that I guess the behaviorism, or I'm not sure the exact term that you used, maybe behavior analysis, is the best way or the only way to look at explaining why we do what we do? Are there other ways to explain behavior, like personality or self-regulation or biological causes or concerns? Or is that also kind of in how you view or your worldview as far as behavior globally?

Rob Horner:
Okay. It's a good question, and it's something that we deal with all the time. The short answer is you combined some things that were similar with some things that were not similar.

Tim Villegas:
Okay.

Rob Horner:
Really, the big thing, Tim, that I would say is don't let applied behavior analysis become a religion. It's a science, so the issue is not we're in favor of applied behavior analysis. I'm not in favor of ABA. I'm in favor of understanding the fundamental principles of human behavior and using those in ways that help us to create a more nurturing and effective environment.

Rob Horner:
If you've got a better, faster, cheaper way to provide that explanation, I'm all for it. The notion of self-regulation is completely consistent with ABA principles. Now, even within applied behavior analysis, there's a very dedicated group of people called radical behaviors who very closely adhere to Skinner's writing. And there are people who are strong applied behavior analysts who are not quite as convinced or adamant as some groups. So, don't paint the entire field with a single brush. Allow for the fact that there are different levels and different understandings of some of the same variables.

Rob Horner:
At the same time, if you're a behavior analyst, you really believe in formally monitoring and observing behavior. Now, so what that does is it creates a big challenge for people who say, "Well, it's her personality," or, "It's her temperament." Most behavior analysts are very comfortable with the notion that physiology affects behavior. There are massive differences between the physiological, the hormonal, the biological structures of men and women, of people of different kinds.

Rob Horner:
You do in fact have biological characteristics that make certain behaviors more likely than others, and we really need to understand those. Understanding changes in physiology is what allows us to understand some of the traits and characteristics of autism, allows us to understand why some children have real difficulty reading and speaking. It also affects the extent to which people find social interaction reinforcing or not. So, there's no question that biological variables affect behavior.

Rob Horner:
It also, however, is I think unquestionable that simply assuming biology dictates everything is silly. We have unremitting sequences of formal, systematic studies demonstrating that learning history affects how you behave. What we're really about is conducting the research that will better help us to understand that with greater precision. I look especially at the work of Gerald Patterson, who looked at social learning theory and the impact of negative reinforcement on how family dynamics developed.

Rob Horner:
Patterson described just with phenomenal eloquence and clarity the effect of allowing escape from unpleasant situations to guide the training of your behavior leads to incredibly coercive and unhappy social interactions, especially among children and parents. It was his research, not just describing that, but then using that knowledge to both prevent and remediate family and child interaction patterns that has led to at least a dozen formal systems of responding to children with significant disabilities.

Rob Horner:
I would encourage you to look at the work of Joe Lucyshyn, University of British Columbia, work around families and children who are in different kinds of support and care facilities. The point is there are people who have used those principles eloquently. It's not that easy, so in part, that's what we are trying to do with PBIS. We want to take everything we know about basic principles of behavior and say, "If you know that, how do you create a classroom that is just a welcoming, a systemic, an effective learning environment, not just for those well-adjusted kids who will learn almost regardless of what you do, but for the full set of kids that you're going to experience in a pluralistic society?"

Rob Horner:
Now, if you can teach everybody, that means you're really teaching well. That's a hard thing to do. Understanding and building the ability to do that, in my mind, is going to require a very good understanding of basic principles of behavior.

Tim Villegas:
Thank you. Thank you very much for that, the explanation. I hear you talking about teachers and setting up their classrooms and administrators setting up their schools so that everyone can be successful. I know that that is part of PBIS. I have conversations with a lot of teachers who maybe they are in a PBIS school. Maybe they're not, but they have a classroom with students that do have challenging behavior.

Tim Villegas:
Many times, the assumption is, well, this particular student has significant and challenging behavior. It's disrupting the learning of everybody in the class, so therefore, they must be educated somewhere else, like a self-contained classroom, where there's going to be children who are working that also have challenging behavior or different intellectual disabilities or learning disabilities. How does PBIS and maybe applied behavior analysis ... How does that help us inform what we know about the effectiveness

or non-effectiveness of removing a child from a general education classroom into a more segregated or self-contained classroom?

Rob Horner:
Okay. That's a much more detailed question, so here's the actual answer to that.

Tim Villegas:
Okay.

Rob Horner:
First off, don't think about children as having challenging behavior. That makes it sounds as if Eric's defiance is inside him. Eric has learned to be defiant under certain situations. He will be defiant in situations A and B. He will be absolutely wonderful in situations D, E, and F. So, be careful about the mistake of labeling a student by her behavior or assuming that the behavior is somehow inside the student and in inextricably linked to that student.

Rob Horner:
Behavior is situation specific, so yes, you've got a kid. That kid is doing behaviors, and those behaviors are disruptive and interfering with everybody's education. So, if you're going to create a school, on the one hand, you have an obligation to everybody. You can't allow one student to nullify the educational opportunities of everybody else. That argument is what has led over and over again to exclusionary practices.

Rob Horner:
The second thing we know, and this is largely due to work of Tom [Deshawn 00:26:41] and others is taking a group of kids who behave badly and putting them together increases the likelihood that those kids will learn more bad behavior from each other, and therefore, that is ... It's very, very hard to argue that that's in the best interest of the student with a problem behavior. So, now you're sort of caught between a rock and a hard place.

Rob Horner:
You can't just leave a student in a room destroying the educational opportunities for everybody. Taking them out and isolating them allows ... It makes the other room easier for a little while. But our experience is that if you create an environment where one kid is behaving badly and you remove that student, that buys you about three weeks. Within three weeks, there will be another student who has learned to behave badly in that environment. So, tie behavior not just to students but to context of the environment.

Rob Horner:
Here's what PBIS does. PBIS says we will not be able to organize effective behavior support if the only thing we're doing is one student at a time interventions. We love functional behavioral assessment, individualized planning, comprehensive systems of care, but they are expensive. And quite frankly, very few schools do it with a level of precision that we would consider to be an elegant use of the technology.

Rob Horner:
Instead, let's do this. Let's start by saying, "What's the smallest number of critical features of an effective classroom? What's the smallest number that we should expect from everybody? Every

classroom that you walk into, what would you see?" If we say this is sort of like the ground or the floor of an effective environment, then we can build from that much more efficiently. Whatever we say is the ground cannot require any new resources, so what can we [inaudible 00:29:01] existing resources?

Rob Horner:
If you look within PBIS, we have identified 10 events, 10 features of effective classrooms, that are very strongly supported in the literature. They are features that there is no teacher in the United States right now who can't do them, and they are directly related to not just improved social behavior, but improved academic outcome. And they're not that complicated. They're things like start within the first 10 days of school and identify three to five positively stated behavioral expectations, like be respectful, be responsible, be safe.

Rob Horner:
Teach not just the words, but teach what it means. So, being respectful means you raise your hand. Don't just tell people raising your hand is what you do. Teach them. Teach them how to do it and when to do it and use good teaching pedagogy. Actually show this is an example of doing it the right way. This is an example of doing it the wrong way, so let's actually practice it.

Rob Horner:
Second, don't just teach isolated behaviors, but teach routines. Most classrooms involve a series of five to nine routines. A routine would be something like how does the teacher get everybody's attention at the beginning of class? How do you move from individual activities to group instruction? How do you in an elementary school break into small groups? Get ready to go to lunch? Come back from recess? What's the routine that we do? All teachers tell kids what to do. Good teachers teach those routines, so teach expectations. Teach the routines.

Rob Horner:
Third, build at least a formal system for acknowledging doing things the right way so that in your classroom, students are recognized for doing things correctly at least five times as often as they're corrected for doing things wrong. Create a positive environment. This is not hard to do. I was a teacher. We built this because we were teachers, not because we're a bunch of university people. In part, those are simple examples.

Rob Horner:
The other big one is consequences for problem behavior need to be tied to the function of the behavior, not the form of the behavior. Function means it's as important to know why somebody keeps doing something as it is to know what they do. It's also important to know where and when problem behavior is most and least likely. If you know that a student is behaving disruptively to get attention, one of the last things you want to do is give them attention. If you know that a student is behaving badly because she's embarrassed that she doesn't know how to do the work, sending her out of the class is negatively reinforcing that behavior.

Rob Horner:
Think what I've just said. What I've gone through sounds like intuitively obvious information. That is not information that is reflected in schools. So now, I actually am answering your question, but I'm trying to do it systematically.

Tim Villegas:

Yes.

Rob Horner:
With PBIS, you've got this one student who's behaving badly. Our first question is not, "What are you going to do to fix that student?" Our first question is, "Does that classroom deliver the 10 core features of a minimally effective environment?" If you're not doing that, start with those things because that draws the student in. Regardless of what else you do, if you don't do those things, the positive behaviors that the student does are not going to get acknowledged and trapped and rewarded and encouraged. So, unless you are teaching and encouraging what you want, you have no right in our framework of complaining about what they're doing wrong.

Rob Horner:
Second, now, you're going to have ... Our experience is you will have about 80 to 85% of students who behave well if you do things with instituting the smallest, cheapest set of practices for making a school work. But you're still going to have 10 to 15% of kids who are creating unhappiness, and that's still too many. Then, you stop, and you say, "Well, wait a minute. What are those kids doing?" and again, what's the smallest thing we could add that would make life better?

Rob Horner:
We look at the literature again, and we look at the work of Leanne Hawken, and we look at the work of many people who have studied more systematic self-regulatory systems, and it says here's what you want to do. You want to make sure you've done the teaching so the student understands what they're supposed to do. Then, you want to increase the structure, so you exaggerate the prompts and the cues in the environment for when to behave well and how to get feedback. Three, you want to up the frequency and precision of feedback. Four, you want to really make sure that problem behaviors are not being rewarded by peers or inadvertently by teachers.

Rob Horner:
How would you do that? There are four practices, four programs. One is called Check In Check Out. One is called First Step to Success. Another is Check and Connect. Another is a social skills program. There are programs. All have the same core features. They increase structure, increase instruction, increase feedback, increase the precision with which consequences are tailored to function. The great part is they're cheap. You can implement Check In Check Out for an entire elementary school for a cost of about 10 hours a week, and the data indicate you'll get at least a 50% reduction in problem behavior with two-thirds of the students who go on the case.

Rob Horner:
What that means is now ... Remember, we've got 80, 85% of kids who are behaving pretty well. Now, we captured another 12%. That means we've only got 2 to 3% of the kids who have really much more significant needs. They actually have mental health needs, or they have social situations that are exaggerated and dangerous and traumatic. Or, they have disabilities that actually alter their ability to respond successfully to an otherwise effective environment. For those students, there is no program. You've got to individualize.

Rob Horner:
To do that, you need to understand their behavioral profile, their academic profile, their mental health profile, their social context profiles, and you build a comprehensive individualized plan. Those are likely to be successful, but they're also quite expensive, So, those are not things that you can do a lot of. That's

where you're going to rely on social workers, counselors, special school psychologists, people with much more in-depth behavioral training who can work not just with the teacher and the student but also often with family and peers.

Rob Horner:
Now what you've got ... Look what just happened. You created a question, which is how do we deal with Eric when he's stabilizing room nine? I'm giving an answer that says, "Here are three tiers. I want you to start with basic stuff. I want you to add a second layer, and only then, if Eric is still a player, then we're going to have the resources basically to deal with Eric." Now, you raised it as what about inclusive versus exclusive? You could convince me that we need to remove Eric for a brief period of the day to do training on the academic skill that he's behind because when he's with the other kids and sees that he's not operating like everybody else, that's highly aversive to him.

Rob Horner:
But I would say there are other ways of dealing with that. I could do peer instruction. Look at what Charlie Greenwood has taught us about peer interaction and instruction as a way to obviate that kind of problem. If you take the time and actually combine both respect for the child and application of the science of human behavior, the intervention you're going to come up with is far less draconian and far more tailored to both the context and the student. Because the other thing you do is you do not build behavior analytic programs that don't fit the context. There's never one way to solve the problem, so what you want to do is to come up with something that is both technically sound and a good contextual fit. It must ...

Rob Horner:
The things that we ask a teacher to do or that we ask the behavior specialist to do must fit her or his values, skills, resources, and administrative support. When you build programs that are tailored to function and designed to fit the context, you get things that are both implemented with fidelity and implemented with impact.

Tim Villegas:
What I heard you saying before about how many schools around the country that are implementing PBIS, which I think if I remember correctly is around 25,000. Is that correct?

Rob Horner:
[inaudible 00:39:49] Yeah.

Tim Villegas:
Okay.

Rob Horner:
The United States has a little over 100,000 schools.

Tim Villegas:
Okay. You said that about 14,000 of them are implementing PBIS with fidelity.

Rob Horner:
No, I said 14,000 of them measured fidelity.

Tim Villegas:
Measured fidelity.

Rob Horner:
So, part of ...

Tim Villegas:
Oh, okay.

Rob Horner:
Yeah [inaudible 00:40:06]

Tim Villegas:
Okay. I see what you mean.

Rob Horner:
The reason why that's so important is if you're really a behavior analyst, I mean, come on. The most important contribution of behavior analysis to the world is to teach the measurement of behavior over time in iterative manner and using those data for decision making. I mean, the principles of behavior are really fascinating and fantastic and wonderful, but there is no doubt in my mind that our major contribution to the world is really getting much more emphasis in the collection and use of data for decision making. And we see that so often in PBIS.

Rob Horner:
We actually have done two randomized controlled trials in North Carolina and Oregon where we've shown that teams in schools that would meet and talk about behavior problems shifted from discussions that were essentially just admiring the problem to being taught this is actually how you use data to organize and implement solutions. When they did that, they were the exact same humans. It was really great. You can see people implement practices that are locally relevant and effective, and over time, they actually produce change in student outcomes.

Tim Villegas:
Now, I know that there's a big push in schools in general with data and using that to make decisions educationally, and I wonder if the schools that are using PBIS, if they are taking that into consideration. They're using the information that they gather from doing their formative assessments in creating interventions for students who have gaps in their academics.

Tim Villegas:
But I don't see that necessarily with behavior, and I wonder if it's really the same kind of way of answering the ... or coming up with the solutions to the problems is if we can get school to buy into both of those. Is that what you see when you look at our educational system as it stands right now, that the concern about accountability and test scores ... If we maybe focus that energy into also expected behavior and those values, that we would also see the same sort of transformation?

Rob Horner:
Okay, several different questions.

Tim Villegas:

Sorry. Sorry.

Rob Horner:
[crosstalk 00:43:13] This is actually a really big topic. Using annual assessments of student performance is a realistic thing to do, and we should hold ourselves accountable for the performance of kids on reading, math, science, writing performance. Even if what you really believe is we need to do a much better job of teaching problem solving and critical thinking, there's no difference between saying, "Yep, we need to do that, but come on, you still have to teach people how to read and do basic math and science."

Rob Horner:
Those are things that the school system should do. Pretending that an annual assessment is going to have any effect on actual day-to-day student behavior is not very impressive. Part of what we know is you need data that is much more frequently collected, much cheaper and easier. We need strategies where you're not spending two weeks assessing kids. For literacy in elementary schools, we know that you can assess the literacy scores of a student in about five minutes. Within that time, you can get a pretty good idea of where a particular student is moving, and that ability is going to become easier and easier and easier to collect as the technology becomes better at interpreting voice recognition.

Rob Horner:
So in part, a teacher in second or third grade who's teaching reading should know regularly how well kids are doing in terms of literacy. When I say know, they should know not just oral reading fluency, but they should be able to say, "Is this child having difficulty due to vocabulary deficits, due to phonemic segmentation, due to lack of mastery of the alphabetic principle?" I mean, you can look and say, "How should I tailor support?" And if I've got 12 kids who have really significant vocabulary deficits, and I've got nine kids who are vocabulary rich, I should build groups where the kids are doing different things. I can tailor that and make that work, and I'm going to give each set of kids the things that they need. You can do differentiated instruction. You can differentiate to accommodate three or four groups of kids in an elementary classroom with existing resources.

Rob Horner:
Now, behaviorally, you're going to do exactly the same thing, so part of what I want to know is if you sit down as a school, not as a classroom, but as a school, and you say, "How many times in the past week did we send kids to the office for problem behavior?" And of the 22 times, where was that most likely to happen? In the classroom? In the hallway? In the cafeteria? In the playground? If I know how often and I know where, then I want to say, "What were they doing, who was doing it, and what's our best understanding of why they keep doing it?" You may be able to say, "Well, we've got a problem in the cafeteria because we've got a whole bunch of hungry elementary kids lining up in the hallway for nine to 12 minutes." Is that developmentally wise? Isn't there a different way that we could release kids so that we decreased that clumping of kids in the hallway, just waiting to screw up? When you change the structure, you decrease problem behavior.

Rob Horner:
One elementary school in Portland, Oregon, was having a huge amount of aggression on the playground. They were particularly worried because kids of color were being sent to the office much more frequently than white kids were, so they brought in a bunch of people to take a look at doing sensitivity training. But when they actually looked at their data, what they saw was the vast majority of problems on the playground were really related to kids playing basketball. You had one group of kids who came from a

low-income area who were playing street rules with respect to basketball, and you had another group of kids who were using NBA rules.

Rob Horner:
Well, street rules basically argue that it's not a foul unless you're bleeding. That didn't work very well for the teachers and staff. So, the result was not to do a whole bunch of odd things, but rather to get every kid out there and say, "Okay, look. This is how you do a wall ball. This are the rules for basketball. In this location, we're playing NBA rules. Anybody have any questions about that? Let's go through what that looks like." After having taught that, they got a 65% reduction in instances of aggression on the playground. It was an example of paying attention to the data, defining and teaching low-cost, high-impact intervention. Behavior analysis and PBIS is not about control. It's about the design of effective environments where people can use effective self-regulation efficiently.

Tim Villegas:
I think that that is the ... I think that is the main thing that I'm gleaning from this conversation is that both PBIS and ABA are really looking at the environment first, and then what can we change about the environment that is going to help the environment be successful for everybody? Then, once we look at that, then we can narrow it down and say, "Well, it's successful for the majority of students except for these," and then focus a more strategic and individualized approach for those particular students.

Tim Villegas:
Like you said, the changing of the environment doesn't necessarily have to be expensive as far as monetarily. I think teachers in schools sometimes have to rearrange their resources. That sometimes becomes expensive in the sense that that means they have to change how they're doing things, which I think is part ... This can be a longer conversation, so I'm not really ... Because we only have a few more minutes. But I think that is part of the pushback, and I wonder if you see that, that schools aren't willing to change because that means they have to change what they're doing and how they've been doing it for so long.

Rob Horner:
Change is always difficult, so two things that I would suggest, Tim. One is it would be really good if your listeners would take a look at a recent book by Tony Biglan, Anthony Biglan, called The Nurture Effect. It is a book about using the science of human behavior to create a more nurturing society, and it's very accessible. It's not difficult. You don't have to know about statistics or research design to understand it, but it's an example of doing just what you were saying. The second thing about change is there is an entire field that's developing around what's called implementation science. It really is all about how do we implement effective practices not just so that we get them in place, but so we get them in place with a level of stability and rigor that they are producing social outcomes and they sustain over time?

Rob Horner:
One of our messages from PBIS is never produce a change in a school that you don't expect to last for a minimum of a decade. Don't do things for this week. Don't do things for this year that you're going to change next year. Think about a 10-year cycle and say, "What is it that we're going to put in place that's really going to be durable and effective?" One of the reasons you get such resistance to change is most teachers who have been in the field for 10 years or more have been asked to sweat blood to do changes almost every year. Every year you show up, and people say, "Well, we're going to try a new literacy curriculum. We're going to try a new bully prevention program. We're going to try a new this." Then,

you work really hard to put it in place only to have it replaced by something else the next year. You do that two or three times, and it really decreases your interest in getting excited about change.

Rob Horner:
So, when I talk to people about PBIS, I always do this. I say, "Look. First off, do you think the kids are going to change unless we do something different? Do you think that somehow over the summer, they're just going to get better?" Everybody says, "No." Then, you say, "Okay, let's agree. Let's agree, one, that we're not going to stop anything that's already working. If you got something that's working, we're going to keep doing it. Second, we're only going to do things that are evidence based. We're not just going to do what your cousin recommends. We're going to do things that actually have empirical documentation that they'll be helpful.

Rob Horner:
"Three, we're going to look for the smallest change that'll have the biggest benefit for children." So, we're not going to change everything. We're going to say, "What's the smallest two or three things we could change that would make the biggest impact? Let's do that, and do that well. Then, we can add some additional things. Finally, let's agree this. We're already working full-time, so if we're going to add something new, we need to define what we're going to stop doing to create the resources to make that possible and palatable." One of the great things right now is that schools do lots of things that are not very effective, and so part of being a good leader is building consensus not around what to do but why.

Rob Horner:
Then, coming up with an agreement that says, "We're not going to do new things on the backs of the children, family, or staff. We're actually going to be administratively responsible, and then, we're going to do it together, and we're going to measure. We're going to measure if we've done what we said we would do and if it benefits students. And we're not going to do that just once a year. We're going to do it regularly, and we're going to use that information to put in place the smallest number of procedures that'll make the biggest effect in this community, this school. Over time, we're going to build a highly inclusive, equitable environment, where kids can come from many, many different contexts and still be academically and socially successful."

Tim Villegas:
Well, Dr. Rob Horner, thank you so much for this fascinating conversation. I am very pleased that you took the time to speak with us today.

Rob Horner:
You're very welcome, Tim. I wish you well.

Tim Villegas:
That is our show. We would like to thank Dr. Rob Horner. Make sure you check out the PBIS website, pbis.org, for more information. Follow Think Inclusive on the web at thinkinclusive.us as well as Twitter, Facebook, Google Plus, and Instagram. Today's show was produced by myself, talking into USB headphones, a Zoom H1 Handy Recorder, MacBook Pro, GarageBand, and a Skype account. You can also subscribe to the Think Inclusive podcast via ApplePodcasts, Google Play, Stitcher, or Podomatic, the largest community of independent podcasters on the planet. From Marietta, Georgia, please join us again on the Think Inclusive podcast. Thanks for your time and attention.

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