

# Let's Talk Learning Disabilities

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## EPISODE 24

Welcome to Let's Talk Learning Disabilities with Laurie Peterson and Abbey Weinstein. Laurie & Abbey spend their days talking about dyslexia, dysgraphia, dyscalculia, & ADHD they talk to parents of struggling students and adults who have had a lifetime of academic challenges. They want to share those stories, along with their own insights with you through simple conversation. So, *let's talk learning disabilities.*

Laurie: Hey everybody. Welcome to episode number 24 of Let's Talk Learning Disabilities. This is Laurie!

Abbey: And this is Abbey

Laurie: and we are so excited. You're here today. We have a very special guest, Dr. Lindsay Berry from the vision advancement center in Frisco, Texas, and Lindsay.

Dr. Berry: Hi, thank you for having me.

Abbey: Thank you for joining us.

Laurie: We are super excited. So today we are going to talk a little bit more about visual processing disorders. I know Abbey and I have spent a lot of time talking to you guys about visual processing, because it's not something that a lot of people know about. And when people think about issues with vision, they think about farsighted, nearsighted, stigmatism, things like that. And so our goal is to help families, grown-ups, whoever understand that there's so much more to vision than just your acuity, right? And so I think Dr. Barry, if you don't mind, just giving us a little bit of background about you and kind of how you landed in this role?

Dr. Berry: Yes. Well, thank you again for having me here. I'm very excited to be here. Um, but I am one of those weird eye doctors that actually does not wear glasses or contacts. So everyone's like, well, how did you get into this? And where did you? Yeah, so, um, I, when I was in college, I took an anatomy class and we studied the eye for about two weeks and I was just like, wow! This is really cool. And there's so much that you can learn from the eye and I'm having not known much about vision. I just thought it was, you know, can you see far away? Can you see up close and that's kind of it. But then when I learned that you can find systemic diseases like diabetes or high blood pressure, I thought that was really cool. And then we learned about the neuroanatomy of the eye and you can actually diagnose brain tumors or strokes from the eye.

Laurie: Yeah, that's pretty cool.

Dr. Berry: Yeah, I think so, too. So there's a lot that goes on. Like you had mentioned, it's more than just seeing and this more than just your peripheral vision. There's a lot more that the brain does with the eyes. And that's where it really drew me in. I just fell in love. So, um, I've been doing this aspect of optometry for almost 10 years now. And so, um, what I do is just a little bit different than normal optometry. I do do regular eye exams. So just checking for glasses and contacts in the ocular health. Um, but I take it a step further to really look at how the eyes and brain are working together. And so that's the part that can really be the difference between using your eyes and using your eyes well, and, um, you know, seeing is about 20% of how we use your eyes. Um, so the other 80%, what are we doing? That's the stuff that we don't think about. And there's a lot of people that, you know, we just take it for granted because it's something that's automatic, but the people that have these issues with their vision, it can be really debilitating and they don't know where to go. They'll go to a normal eye exam and they'll say, Hey, your, your eyes are good. You can see 20/20, but then they're like, well, something's wrong. What's going on? So that's where we come in.

Laurie: So we call it, call it a visual processing disorder. I'm not sure if that's the name that you would use, an over encompassing name, but what, what, what does that, what does that mean exactly?

Laindsey: Yeah, so I actually break it down into two separate parts. Okay. So I think of it as our visual acquisition skills and then visual processing. So visual acquisition skills would be more of how our eyes and brain work together to gather information. So how do they work together to bring it into our brain? So then we can then process it. So that would be the second part, that visual processing, which is taking that information and making sense of it and understanding what the eyes are seeing. So visual acquisition skills are going to be the eye-tracking, eye-teaming and eye-focusing. So that's how we can gather that information. So eye-tracking is how well you can point to something, follow something and then track along like a line of words when you're reading. Um, eye-teaming is using the two eyes together. So how well do they point at the same thing so that you can get things like depth perception and eye, hand coordination also very important. Um, and then there's eye-focusing, which is that third part. So eye-focusing is related to how well you can read the eye chart, but it's staying. How easy is it for you to make it clear, and keep it clear. Cause that's the key is when you're looking up close, you may be able to make it clear for a second, but can you keep it clear for 20, 30 minutes or hours at school, four hours at work like we're doing on the computers now.

Laurie: And so if it's not staying clear, that means it's something about the way your eyes are working together?

Dr. Berry: Yeah, exactly. I know the brain is saying I can make it clear, but I can't do this for a long term. I'll just do it really quickly to get a glimpse of it. And then I'm going to relax because it's too hard.

Laurie: Oh, interesting. Okay. So then what are some of the symptoms? Yeah. What are some of the symptoms when people, children, and adults come into your office? What are some of the main symptoms you hear?

Dr. Berry: So the, some of the main things where you're hearing from people is that they're having difficulty reading. So reading is either inefficient or difficult for them. So they'll skip lines, skip words. Or in turn have poor reading comprehension because they're so focused on where their eyes are supposed to go. That they're not understanding what they're reading. Other things we hear are things of visual fatigue. So they'll say things like my eyes are tired or they rub their eyes a lot or they're closing or covering one

eye. We'll hear that from parents that they see their child either like resting their head on their arm or their page to try to cover up one eye. Um, or we'll also hear things about headaches, um, and tired eyes, especially at the end of the day, after a long day of school or work.

Laurie: You know, we don't hear, I feel like we don't get students or clients with headaches, the headaches, we do get the comprehension. And we do talk to them about the fact that the physical act of reading is so difficult that all of your efforts and energy are just going into reading every single word. But by the time you get through it, you're like, I don't even have any idea what I just read. I had to work so hard. So then I have to go back and read it all over again.

Dr. Berry: Exactly. And so they find that they read things over and over again. Yep. And then it makes reading not fun either. And these are the kids where they say, I don't like reading. Well, I wouldn't either. If I had to read it four times and I still didn't know.

Laurie: What about words moving around on the page?

Dr. Berry: Yes. That one's very common too. So that can be either an eye tracking or eye-teaming issue. So that one is, so if it's eye-teaming, it's actually because they may be seeing double. So if their eyes are not working together, it can make things. Split into two, so it can look like they're moving or swimming when it's actually, their eyes are the ones that are moving around because they don't know where to point in space.

Abbey: That's interesting. I have heard students complain of the words moving on the page. And what about writing backwards or reversing letters beyond the developmentally appropriate stages of reversals?

Dr. Berry: Yep. So that's going to be more into that visual processing part of the. Vision or that I was talking about. So, not necessarily are the eyes gathering information, but now it's looking at information, but has no idea how to make sense of what that is. So for a child, that's having issues with letter a number reversals, let's take B and D for example. So that's a stick and a circle. That's how you draw that. Correct? So whether you draw it with a stick on the left side or the stick on the right side to these kids and these

peg patients, it looks the same to them and their brain. It's a, a. They don't care, which side of the stick, the circles on it's just those two parts and that's how they do it. So that's where that processing, they need to understand that there's a right and a left side of their body, a right and left side of their world, and then a right, and a left side of letters and figures. And that's how they'll be able to distinguish that.

Laurie: So would those kids also most likely struggled to know, right. And left outside of, I mean, in a big, you know, their hands, or directionally?

Dr. Berry: Yep. Absolutely. So sometimes we'll even see, these are the kids that have a hard time determining which one is their dominant hand. They're more of the ambidextrous or they'll be right-handed, but they'll write with their left hand sometimes too, because they just don't know that there's a difference in the sidedness of their body. But yeah, these are the ones that are also really bad with directions and you'll tell them to go, right. And they go left right away. Or they have to use those tricks of using their hand to tell you, you know, L versus a backwards L.

Abbey: Are those also the kids that struggle with hand-eye coordination or bumping into things and not being able to catch balls that are coming at them?

Dr. Berry: Yeah. So that's another aspect of it. So we call those visual spatial skills, which is a part of visual processing. So again, you're, you're understanding exactly when you have to know where your body is in space. That's how you can be able to interact with other things. So, if you have no idea where your body is, how are you expected to track a ball and then know where it is and put your hand at that spot, or have the timing where the ball comes towards you to catch it. So it's just, it's beyond what their brain is able to understand and what their eyes are able to process at that time.

Laurie: I got a handful of parents that will say their student is very clumsy and always bumping into things and they just thought they weren't paying attention. Right. It's because.

Dr. Berry: Yeah, it could be, yeah, it could be attention. We see a lot of kids with attention issues and, but it could be visual attention or just, yeah. They don't understand that spatial awareness, the distance, how far

things are. And a lot of times, you know, vision is a huge part of balance too. So if there's any issues with their visual system, it could be that it's affecting their balance as well. So balance, and then poor eye hand coordination or depth perception on top of that. These kids are gonna hate sports. They're not going to learn how to ride a bike. And so they're going to be the ones that are going to, you know, avoid those tasks because they're just too challenging.

Laurie: I will also not be very good at parking their car in the line. Most of my issue. And I'm pretty sure it's not visual spatial. I think it's just, I'm in a hurry, but in a hurry, I'm always laughing. I'm like maybe I should go get tested.

Dr. Berry: Always be careful in a parking lot of an optometrist.

Laurie: What about being able to like in geometry when kids have to visualize a shape and how it rotates? So we have a couple of tests that require them to build a road. A set of blocks or rotate a shape. So when we see that they can't do that, where is that disconnect?

Dr. Berry: Yeah. So that's actually a pretty high level visual processing skill. That's usually one that involves what's called visualization. So you have to be able to actually make a mental picture in your mind of what this image is, and then be able to manipulate it to rotate it. So there's some lower level of visual skills called like discrimination. So discrimination means, can you look at an object and recognize what it is? So if they can't even do that lower level idea of recognizing what that is, they're not going to be able to create that mental picture and rotate it. There's another one that's called spatial relations. So that's being able to tell when things are different. So it's kind of along the same lines, recognizing similarities and differences in things. If they. Small, you know, those, that lower level skill. How are we ever going to be able to manipulate, um, a word or an object to be able to change it?

Laurie: And that's like recognizing different fonts or noticing when something's italicized or bolded.

Dr. Berry: Or presented even just in a different manner. They may see it on one page in one font and then see it in another page, maybe in the same font, but it's just a different style. And they'll look totally different to them.

Laurie: So that sometimes when we hear about parents that say, they know the word on this page and we turn the page and they don't know what is there. And it's like what was it, did it look different?

Dr. Berry: Right? Yeah.

Laurie: That's interesting.

Dr. Berry: And part of that could be visual memory too. So visual memory is a huge concern with reading, spelling words, because if they can't create that mental picture and remember what it looks like in their mind, they're not going to be able to remember things like sight words, or recognize those things in different aspects and, you know, spelling, if they, if they can't remember those things in order, that word might look like it's spelled right when it's actually all kinds of messed up stuff in the middle.

Abbey: So what about memorizing math facts? If, if a child is struggling to memorize their math facts after repeated addition, is that a visual memory task?

Dr. Berry: It could potentially be. We see that often, but it could be something else as well, but if there are poor visual memory skills that can absolutely play into it. And sometimes the math facts are harder because a lot of times people will use what's called auditory substitution to remember things. A lot of us do that. If you've ever tried to remember someone's phone number or a spelling word, like I was trying to spell cat a lot of times I would say C a T C a T, but am I using vision or am I using my auditory system? Usually it's auditory. And whether it's out loud or in their mind, we can do that. So, um, but if they can chew it purely with vision, they should be able to look at it. And so sometimes math facts are hard because it's harder to say those things out loud versus with letters.

Laurie: So I think too, what's interesting is for the longest time I was so, you know, we were in the practice here, we were so focused on the reading.

Dr. Berry: Yes.

Laurie: But we've seen a lot of kids come through now that it's affecting math because they can't line their problems up or they don't see the plus sign versus the minus sign or the plus versus the multiplication sign. Um, and so, and sometimes it doesn't even impact their reading as much as their math because of the talk a little bit about the seeing up, up and down versus left to right.

Dr. Berry: Yeah. So we have, um, our eye movements are actually, we develop horizontal eye movements first and then vertical eye movement. Second, those are naturally harder. Um, but what's interesting is as the world's changing with technology, A lot of scrolling and a lot of stuff we're doing is vertical. So these movements that we didn't used to have to do often in the world, like think back a hundred years ago, what were they doing vertically? Right. Everything was horizontal eye movement. So the fact that we're having to do a lot more of this vertical movements or our visual processing doesn't work as efficiently that way. Cause it's a, it's an unnatural movement. So. Scrolling on phones and devices is really, we're seeing changes in how they're they have to process it.

Laurie: That was one of the questions too, is how do you feel like screen time and technology? Does that exacerbate the visual processing issues?

Dr. Berry: Yeah, so as far as I could remember a visual efficiency or acquisition skills and then visual processing, purely visual processing of their ability to recognize things and be able to process that information. Screen-time won't affect that, but the acquisition skills are how easy it is to use their eyes. Absolutely. That's going to be effected by screen time. So screen time is usually just an increased amount of time doing things up close. Cause majority of screens are within arms length. So a lot of these eye-teaming, eye-tracking, eye-focusing skills are exacerbated or worse within the task that they're doing up close within arms length. So if they're spending extended time up close, it's just making them do something that's hard. Even longer throughout the day, we always recommend either decreased screen time. I

can't tell them to eliminate it because they're doing it at school. It's just not realistic in our world. So decreasing the amount of time they're spending on screens, but more importantly taking breaks.

Laurie: But doesn't that wouldn't, I would think. Trying to do all those activities on the screen. If I'm having visual acquisition issues, I would think it would not be fun or it would be hard for me.

Dr. Berry: Yeah. And a lot of times it's not. So if it's not something that's very interesting to them, they're going to avoid it. And so sometimes these kids will look like they have attention issues or add ADHD. Because they're going to avoid something that's hard and it may not be that they truly have an attention issue. They're just avoiding something that's really annoying and hard for them physically.

Abbey: In the classroom too. I think they can look inattentive because they are looking away from their work and the visual material to get a break from what might be visually overstimulating to them. So they look like they're staring off into space. Daydreaming wandering.

Dr. Berry: Yeah. So they're just trying to take a break, but yeah, unfortunately the teachers will say, excuse me, get back on task. And they're like, oh man, what? My eyes are tired. They don't say that. But they're feeling that, exactly.

Laurie: Exactly. So what about adults? Do many, do, do you see a lot of adults that you diagnosed with these issues?

Dr. Berry: Unfortunately, no. I wish we saw more. I think with adults, what happens is they've just developed these coping mechanisms and they've just accepted the fact that these are things that are hard for me, and I'm just going to avoid them, you know, the, the patients or the, the adults with these visual processing or visual acquisition issues. A lot of times they are not good at reading. They're not good at spreadsheets. So they're probably just not going to be an accountant, you know, going to choose careers that are not, that don't have that task demand. Yeah, exactly. So, um, unfortunately that year we see that, but what I think is interesting is when parents bring in their children, Oh, my husband has this issue. I had my head, like my husband

had these issues growing up where I had issues with this or grandma had. So you'll see that it runs in families. And then it's like, they'll kind of live a light bulb goes on. Right. I wonder if I had done this when I was younger, if this would have helped me. Right.

Laurie: I feel like I've encouraged a lot of parents to go get tested, go see you with their child. Right. Like, why don't you go get a twofer, right? Like go in because it's probably the same thing. You know, when they say they make the same comments here and oftentimes they miss. Self-diagnosis it as dyslexia, because this is difficult. A lot of times, just the general difficulty with reading people just, oh, it must be dyslexia. So when we really start talking about it, Oh, that sounds exactly like what I've been dealing with. And so we encourage them because you can make it better.

Abbey: I think we do get a lot of clients that initially come in thinking it's dyslexia and it ends up being a visual processing disorder and not dyslexia at all, especially in the younger ones that are still writing backwards, reversing letters, skipping lines, struggling with reading. Um, we also see what. Um, a lot of individuals that we've diagnosed with visual processing disorders seem to, when they're reading sentences, seem to insert endings and insert little words or drop endings, insert little words like articles like the, or, uh, that are not there. So how has that, uh, manifestation of possible visual processing disorder?

Dr. Berry: Good question. So a lot of times these kids are very inefficient in the reading abilities. So if their eyes are having to work so hard just to move across the page and they have to point at each word, it's very labor intensive. So they're going to get very tired. So when they start to get tired, they're going to just start using their instinct. Rather than their vision to fill in what they think they're guessing or they'll look at the beginning of a word and see that it starts with a C when it should be one word, they're going to fill it in with something else that starts with C, because they don't want them to take the effort to actually use their eyes, to see the rest of it.

Laurie: Is it possible sometimes that their eyes are even skipping over the word?

Dr. Berry: Absolutely. They could totally miss it. And, but then again, their intelligence will come in and tell them, Ooh, that doesn't make sense. So it should be there's another word that should be here. So I'm just going to put it, I'm just gonna put it. Yeah, fill it in with their creativity. So a lot of times I'll have parents that come in and say, you know, one of the main things I hear from them is that there's a mismatch between my child's intelligence and how they're performing in school. And that's why these kids are able to get by sometimes later until third, fourth, fifth, get to something college because they they've used their intelligence to compensate for these poor visual skills.

Laurie: I always tell parents too. And I, you know, sometimes they don't know what they don't know. Right. That's just how it looks to them. So they don't know that it should look different. So unless you can crawl in their head and look out their eyes, no one would know that that was there. So until they get a test or they, something comes up to make someone look at that, they just assume everyone else sees it the same way and they just must be really bad at it.

Dr. Berry: Exactly.

Laurie: So I think that's a very, um, it's very frustrating. Those kids are feel very defeated. Like I must just not be very smart, when it's exactly the opposite.

Abbey: Especially when it's affecting them in multiple subjects, not just reading.

Laurie: But they've come up with strategies. They're really incredibly smart to come up with these strategies to work around it. That we're just going to make it a lot easier. Yeah.

Abbey: Yeah. And we see, even sometimes when we're testing. Some of our activities, we present visual material, where it's a lot on a page and it's line by line. And I've seen people take another piece of paper and cover up all the lines that they're not looking at. And so that they can focus better on the one line that they have to track and look at. So that to me is a red flag that they're compensating for some visual processing difficulties.

Dr. Berry: Yeah. A hundred percent. Yep. Cause it's just too, it's their brain just says, oh my goodness, there's too much going on. I could possibly look at all of this. So I have to break it down piece by piece.

Laurie: So now that we kind of understand what these issues are, how do you treat them?

Dr. Berry: Yeah, good question. So we usually use a combination of lenses and prisms. So depending on what their specific difficulty is, we can use relaxation glasses. So maybe just the glasses that they wear when they're doing things up close. Um, we also use what's called prism. So prism lenses can enhance the way that the eyes and brain or community. It doesn't necessarily change the way that they see as far as their acuity or the clarity of their vision, but it can just make things more efficient for them and make it easier for them to do these things or they see space differently. Um, and then the other way we treat it is through vision therapy. So vision therapy is an individualized treatment program that 's designed for each patient to help enhance the way that the eyes and brain are working together. So we'll work on these eye-tracking skills on the eye-teaming skills, eye-focusing skills, and then teach them how to process vision appropriately. Because a lot of things are what a lot of people don't know is that vision is a learned experience. We are all born with. But none of us know how to use them and through our development. And as we grow through, you know, the stages of sitting, crawling, walking, you know, using our hands to grab things and grasp things as an infant, those are all experiences that we go through and it teaches our eyes how to work together, how to focus, teaches them about depth perception, um, even things like peek-a-boo with babies. You know, that's a game that's working on a visual skill. So all of these little things that we've been doing since infancy, teaches us these visual skills, right? So somewhere along the way, a lot of these kids have either missed a milestone or didn't do that, you know, specific skill long enough for it to be ingrained. And now we just have to give them the opportunity again, to learn these visual skills and apply it to their lives.

Abbey: Interesting.

Laurie: Is it ever too late?

Dr. Berry: No, never. And that's the wonderful thing about neuroplasticity is, you know, the brain is always learning new things. So we even have adults that have had brain injuries. And they'll have visual processing issues after that injury or stroke or something. And we can actually teach them these visual skills again. So

Laurie: That is fascinating to me. So how long does the typical treatment take? I mean, obviously with lenses, do you notice that?

Dr. Berry: Yeah, so sometimes they'll notice it immediately in the office or I'll see these little things and then they'll come back for a one month followup and they're like, oh my goodness. My child is now reading more efficiently. Um, they can catch a ball. They're learning how to ride their bikes. So sometimes it can be very dramatic like that. Not all cases are, I wish they were all that easy, but, um, but sometimes. You know, lenses aren't appropriate and we have to do therapy. We'll usually do weekly therapy. So they'll come in once a week for an hour. We'll do different activities with them. And I would say on average, it's about five to six months of therapy, but some can be as little as three months and they're done and they're done for life. And that's the nice part is this is a lifelong fix. So the brain,

Abbey: That's what I was going to ask, so do you consider it a fix?

Dr. Berry: Yes. Yeah. So I always, you know, this is a funny way to put it, but I always tell people the brain is kind of like people in that were a little bit. Right. We're all a little lazy where we don't want to do more work than we have to. Right. No one wants to do more work than they have to. So if the brain is the same way, it says, well, Hey, if you teach me an easier, more efficient way to do this, I'm going to do that instead of this old inefficient way of doing things. So the brain has so much going on, why would it do more? So once we teach it this new way, it's going to stick with that. Unless, you know, again, there's another injury or something that happens. But if not, you've got this new skill that you can use for life.

Laurie: So is there anything that a parent can look for, you know, in the early years, like during those developmental stages, that might be a red flag?

Dr. Berry: Yep. So if they really are reliant on using their finger, when they're reading another one would be like, if they're following something, like if you just hold your finger out and have them follow it with their eyes, if they're over five years old, they shouldn't be, shouldn't have to, you've used their head to follow that. So if you're noticing that they're doing a lot of head movements or they're very wiggly and they're moving their body a lot that tells me that they haven't developed some good, gross motor skills, and they're not going to be able to use their fine eye movements to be able to track along the page. Some other things you can look for is just, or just, you know, work on at home is teach, having kids practice rights and lefts, or teaching them rights and lefts in the world. So doing different activities where they have to use a right hand for something and then their left hand for something else.

Laurie: And when you think about the kinds of things kids are doing at home with screen time and taking away. Talking about right and left. When does that come up?

Abbey: You don't really have to worry about it anymore.

Dr. Berry: So sometimes I'll tell parents just to play a little game at home, like just doing whatever you're normally doing. When the kids brushing their teeth, are you using your right hand or your left hand when you're grabbing to, you know, put your shoe on which foot are you putting that shoe on your right foot or your left foot? So just getting them familiar with. Different sides of the world, different sides of their body. So then they can use that skill to apply it to letters and numbers and eventually leave.

Abbey: That's amazing.

Laurie: Fascinating.

Dr. Berry: It is fascinating.

Laurie: Do you find that with your diagnosis and you may not know this, but are school's receptive to accommodating these kids as they're going through therapy?

Dr. Berry: I haven't had any pushback yet, which has been really, really rewarding to see. And it's been really nice for the patients and the families going through this too. So usually after evaluation, you know, obviously my goal is that once they go through therapy, they won't need any of these accommodations. But usually what happens is in the meantime, they're going to need something to help them go through school. So usually I'll send a list of accommodations for the classroom that can help them perform better in the classroom. And a lot of teachers are receptive to it. I think it's partly because it's interesting to them. It's something that they don't know about. So they're curious to see, like, huh, how is this going to work? Or, I'm hoping that they start thinking about other students that they have that could benefit as well.

Abbey: What about copying difficulty copying from the board or even it's a hard gain from one page to the next page flat on a desk surface. Does that come under the visual acquisition skills or the visual processing and skills?

Dr. Berry: Can be a combination of both. So if you think about eye-tracking, so being able to keep their place that's super important for copying, um, eye-teaming is also important for copying. So if they're copying from the board to their paper, if they're eyes can't point, or they're not quick at teaming together far away and then up close, kind of that back and forth that can cause issues there. Same thing with eye-focusing. So if they can make things really clear far away, but it takes a lot of effort to make it clear. That can interfere with talking from the board. But then if we look at visual processing, think about, can they recognize the letters? Do they know that word? And then visual memory? Do they remember what they just said? Or which were they just copied or did they skip around? Sometimes what I'll see is if there's a word that's repeated in the sentence that the teacher wrote on the board, they'll skip to the second one and miss half of that sentence. So there's a combination of, unfortunately, both of them. So copying from the board is very, very challenging skill.

Laurie: I feel like that one, and then the scantron forms.

Dr. Berry: Oh, yes... Yeah, those are torture.

Laurie: Those are the big ones. Um, and, and also I think sometimes helping them with like making the font a little bit bigger.

Dr. Berry: Yes, absolutely.

Laurie: It takes up more space on the page

Dr. Berry: and bigger, and it's less work for their eyes to track. So the bigger something is the less efficient or accurate our eyes have to be. So if it's bigger, it gives them a little more wiggle room for their difficulties that they're having. Yep.

Abbey: And what about having more white space on the page? Like less visual information on the page.

Dr. Berry: Yep, less distractions. So I say, if you can kind of separate things, that's going to be better. Um, and then also, you know, just spreading things out, you know, if there's. Put things on different pages or spread it out to one on top one on bottom that can help as well.

Laurie: We had a student come in. Um, I don't know. It's been a couple of years now. It seems like it was just yesterday, but she was younger, she was like third grade and she had some glasses. They looked a lot like sh so Dr. Barry brought all kinds of toys today, which we'll put some pictures on our, in the show notes you can see, but they had kind of a tint to them, a very light tint. And so I asked her, I'm like, tell me about your glasses. How do they help you? And she said, When I wear my glasses, I can see the spaces between the words and when I don't have them on, I can't see the spaces. And I thought, well, that would make reading really hard if you can't see the space. Absolutely. Tell me how that tint or what, what is, what is that about?

Dr. Berry: Yeah, so there's a certain type of lens called an Irlen lens is probably what she was wearing, but there's those lenses that his idea is that yes, exactly. It's the idea is that it's, um, to enhance contrast. And make things look more, more spaced. So it's enhancing how things are processed. So it's similar to so likely she had some kind of either visual acquisition or processing or a combination of those issues. So we accomplish the same thing,

but without tints. So a lot of times parents have looked at and they'll find online that if you put different colored overlays. Yep. It's the very similar idea. And this to me is just something that says we have a vision problem going on here. Let's fix it rather than having them rely on these glasses. Or rely on these colored overlays for the rest of their life. Why don't we fix this problem in a couple of months and get them?

Laurie: So it's been a long time since I was in the school district, but when I was there, we actually had some, a staff member trained to do Irlen screenings, which I thought was pretty advanced for a school district. But I also feel like that's just such a little piece of the whole picture, right?

Dr. Berry: And it's kind of putting a bandaid on this, this problem. So it's going to help for a while, but it's only going to get you so far. And it's kind of, you know, these kids that have developed these coping mechanisms, it's kind of the same thing. You know, it's going to help them to a certain extent, but then you're going to get to the point where it's just not going to make much of a difference, and they're still going to reach that plateau where we need something else to help us out.

Abbey: It's not conducive in the real world to have a colored overlay.

Dr. Berry: Well thinking about screen time, it doesn't work on screens either. And that's where we do a lot of our learning, so.

Abbey: True.

Laurie: We had a student who found pink to be her color that, but she needed like pink lenses, pink, like, and I'm like, you cannot, you're going to have to eventually figure out how to fix this because you can't, everything can't be pink. We love pink, but drive. And how do you, yeah, so, um,

Dr. Berry: That's where we say let's fix the problem rather than using this bandaid and get you back to normal.

Laurie: That is so cool.

Abbey: That is really cool. So, some of these different tools that you brought with you, Dr. Barry, besides the glasses with the tint, I'm looking at cards that have words written vertically. I'm looking at cards that, to me, it looks like double vision and some other types of lenses are these all tools you use in vision therapy and how do some of them work or what's the purpose of that?

Dr. Berry: So some of these. For demonstrations, because vision, I can't go inside your brain and see what you're seeing and neither can your parents. And so I understand the visual system really well. So I understand what these kids are seeing and kind of what it would look like. But to a parent who doesn't know what visual processing is, who they've taken their child to exams before and been told their eyes are perfect. They're kind of probably looking at me like crazy because I'm saying there's all these vision problems with their child. So I try to use a lot of demonstrations and to show them and have them see. Feel what it's like to have these visual problems. So the double vision can be very disorienting if you've never seen it.

Laurie & Abbey: Absolutely makes sense.

Dr. Berry: And these visual tracking issues, I can say visual tracking, but what does that mean? It's hard to kind of understand what it would feel like to have a visual tracking issue. So, um, these demonstrations can show you kind of how labor intensive it is to read when your eyes aren't moving, how they're supposed to, but, um, some of these, so there's the lenses and the prisms we'll actually use in therapy as training tools and. They're not good at reading, so I'm not going to have them just sit and read in therapy. That's not going to be conducive, that's just me, but I'm going to give them the visual skills that they need to be efficient readers. And so we'll work on all of these different activities that will make more efficient eye movements. So their brain can focus on the actual learning part of reading, rather than what their eyes have to do to read.

Laurie: I always tell parents when we're talking about, you know, coming to see you and I'm pretty sure, sure. You're going to find something pretty significant that, you know, this is a good time to take a break from making them read. Yes. You know, you read to them let's work on the comprehension stuff while you get treatment. And I always give the analogy. It's like, if you were training for a marathon and you had a stress fracture in your foot,

you're not going to keep running on it. You're going to let that heal while you go lift weights. And while you go do other things, maybe swim, build your muscles in a different way so that when you come back and your foot is here. And you can run, you can run again. So comprehension or skills that all kids need. So exacting on that. And I always say, you know, when you see Dr. Berry, she's gonna explain to you that it's okay to take a break from reading. It's a little bit torturous to make them read.

Dr. Berry: And sometimes that's hard for parents to hear because they're like, well, they're not good at reading. Why would we take a break? We need to do more reading and reading Judah. Exactly. And so sometimes the unit will have patients where, you know, they may need to be taken out of school to come to therapy. And that can be a very tough decision for a parent to take these kids out of school. But if they're not benefiting, if they're sitting there just spacing off into Lala land for that hour, wouldn't you rather take them out and give them the therapy that they need to be more efficient readers and do these things rather than sitting there and being, you know, just not getting what they're not getting anything out of that class

Abbey: They're not getting anything out of the instruction anyway, that makes sense.

Laurie: Well this is, it looks like a visioned, like do they're just random letters, but you've got the dark, you've got tinted lines going through it on the vertical. So tell me about that.

Dr. Berry: Yeah. So this one we're actually using to check to make sure that the brain is actually using both eyes together. So we use this in combination with these lenses. So when you put these glasses on, if your brain is not using information from one eye, you won't be able to see under one of those vertical bars. Because again, I can't see what you're seeing, but we've developed tools and devices that can help us make sure that the kids are using both eyes together. And not that there would, they would cheat on purpose, but sometimes the brain just has a hard time, so. If I covered your eye,

Laurie: I can't see anything on the bottom.

Dr. Berry: You can't see part of it. Yeah. So sometimes that happens without me covering your eye. The, so the brain would intentionally because it's having a hard time using one eye versus the other. It would block out information and just use the one that's easier.

Abbey: So is that if your eyes are not eye-teaming?

Dr. Berry: Correct. So this could be either eye-teaming or an eye-focusing issue. So if one eye is better at focusing than the other, that one may do all the work and the other one just kind of sits there.

Laurie: You said this was a tracking test. There's another booklet in here and it's got numbers. And again, we'll put pictures of these in the show notes, but it's got numbers spaced out kind of weird, but in rows, theoretically. And so when someone goes to read these numbers, you're looking to see what?

Dr. Berry: We're looking at the accuracy of the eye movements. So this is the test that we do to check for eye-tracking skills.

Laurie: See if they can stay on the line even though they're way spaced out.

Dr. Berry: So the directions are start at the top and you're going to read across in the rows, just like you're reading a book, trying to stay in the straight lines, but you can not use your finger or block it out. We have to use eyes only.

Laurie: Oh, I can see, this would be something I would see a lot of the kids we see that would struggle with this.

Dr. Berry: So we see a lot of skipping lines, rereading lines, skipping numbers, or even substituting numbers.

Laurie: Or working with diagonally.

Dr. Berry: We call that stair-stepping, they're just trying to work on their way down, but not, not efficiently.

Laurie: Cool. Well, I will, we'll get some. So we can kind of share them with everybody so they can kind of see, especially like the, um, the double-vision one and then the reading up and down one. That one's very cool. So really quick, because I do want to put this one because I know you and I talked about this one before, where the words are going vertically. It's a paragraph.

Dr. Berry: Yep. So this is the one that's a demonstration of how difficult is to read if you have poor eye tracking skills. So it's trying to simulate. If you have no idea where your eyes are supposed to go next. Reading is going to be very labor intensive. You're probably going to mess up some words. You're going to get lost and where you're supposed to go. And then the idea is if you read maybe two or three sentences on there, did you remember what you read? Or were you so focused on where you were supposed to go, that you weren't even paying attention to what the words said? So try that out. When you see that picture and the, uh, the notes there, go ahead and try it out and just read it out loud and see, see how it feels.

Abbey: I love that you helped the parents see what their kids are seeing and how they're dealing with everyday struggles.

Dr. Berry: Right. I see it at home and they, they see that there's something wrong, but they don't really understand that. And even when I tell them the eyes are not working well, if you can feel it and experience it, it makes, it makes it so much easier to understand.

Laurie: Yeah. So we're going to put all your information in our show notes, but if parents have questions or want more information, where can they find you?

Dr. Berry: Yeah, so they can go to our website, which is [www.visionadvancement.com](http://www.visionadvancement.com). And then, or you can just Google vision advancement center or Google my name, Dr. Lindsay Berry. And you can find us there.

Laurie: And for families that are outside of the Dallas Fort worth area that are in other states, how, you know, are you. Then virtually, or can you help them find someone in their area?

Dr. Berry: Yeah. So usually therapy is going to be better if it's in-person so that we can kind of address these things one-on-one. So there is a, a group called college of optometrists and vision development, and it's a group of eye doctors just like me, where we're working on this eye-brain connection. So if you go to the C O V D website, so COVd.org, um, there is a link at the very top of the page that says, find a doctor or locate a doctor, and you can just type in your zip code and it'll give you the doctors that are near you.

Abbey: That's a great resource.

Laurie: Well, thank you. Thank you for all of your information. This has been, again, I feel like this information, it never gets old talking about it does just, it's so common and

Abbey: It's become very pervasive. I see it in a lot of students we see.

Laurie: We do. And I think because people come to us because their kids are struggling. And this turns out to be one of the reasons, one of the more frequently diagnosed reasons. Um, but it's so unknown about like, people just don't know about it.

Abbey: And you know, another thing I wanted to point out is that most schools do not identify visual processing disorders. They're diagnosticians, school psychologists, they are not trained in identifying visual processing disorders. And so many times these kids are misdiagnosed. They're given inappropriate diagnosis. They're not getting the appropriate interventions they need. So if you feel like your child, you know, really presents with a lot of these symptoms that we've talked about and might be having a visual processing disorder, it is good to get a private evaluation done, where we can determine if there is a visual processing disorder, we can refer you to someone like Dr. Lindsay Berry and get you the help you need.

Laurie: We see a lot of kids that come, that have been through a dyslexia program and they've completed it. And they're still struggling. And what we find out is either they also had a visual processing or visual acquisition issue. So the program was not effective, right. Even though they still had dyslexia or they really didn't even have dyslexia, this is what they had. But because when they did the testing, they didn't. They met enough of the

criteria that they thought, well, we'll just call it dyslexia, which I get, because when you don't know

Dr. Berry: You call it the closest thing

Laurie: Right, you call it the closest thing, but then they go through these programs and they're just not making progress and everybody's frustrated and it's just...Time is lost. So if you've got a child that's in a program and you're just not seeing the progress that you would expect, or that other kids are making, then maybe it's time to look at something else.

Dr. Berry: And I would say, yeah, I would just say it's important to, you know, even if they've had an eye exam, make sure you find a doctor that actually does this type of testing and therapy, because it's definitely different seeing a regular eye doctor that's just checking your vision then looking at the eye-brain connection.

Dr. Berry: We've had kids come in with a prescription that they didn't need because the doctor didn't know what to do. They're like, well, I see that. So I think we're just going to give you these near-sighted or whatever glasses and we'll just go and the kids don't wear them.

Abbey: Yeah, that's right. Exactly. They don't cause it doesn't help them. So they need to look for an optometrist that focuses on the eye brain connection or. He says they focus on learning related vision issues?

Dr. Berry: Yep, yep. Usually the keyword is going to be vision therapy, anyone that does vision therapy, and some it'll be kind of tricky because there are some doctors that have it on their website, but they don't actually do the therapy in office, or they won't do that type of evaluation. So the COVD website is a wonderful resource, but then you can also call the office and just, you know, ask them some of these questions, you know, do you look at, you know, visual processing skills and if they are kind of confused or don't know what you're talking about, next office.

Laurie: So if you guys have questions, do not hesitate to email Abbey or I at [letstalklearningdisabilities@gmail.com](mailto:letstalklearningdisabilities@gmail.com). We are happy to answer any of your

vision related questions. And if we don't have the answer, clearly we know how to find Dr. Berry. She'll have the answer. We'll put all of this information in the show notes, so you guys can reference it. Dr. Barry, thank you so much for being here today. This has been wonderful.

Dr. Berry: Absolutely, I love being here!

Abbey: You're always so informative and insightful. I love that. I love the way you explained it. It makes total sense. It does make sense.

Dr. Berry: It's a hard concept so I'm glad, I'm glad we can talk it through.

Abbey: Thank you.

Laurie: Well, you guys have a great day. Thank you so much for joining us today.

Abbey: Thank you everybody.

Laurie: Have a great day. We'll see you guys, uh, episode 25. We're going to be like a quarter or whatever that's going to be. What is that?

Abbey: Our silver anniversary or I think it's silver.

Laurie: What gift should we get each other? We're going to have to talk about that. All right guys, have a good day.

Abbey: Have a good day.

Length of episode 40:35