Speaker 1: Hello, hello, hello, children. I am Count Olaf, your new guardian. Do you know what this is?

Speaker 2: It looks like a list.

Speaker 1: Wrong. It's a list. A list of chores.

Sarah McConnell: This is Lemony Snicket's A Series of Unfortunate Events. It's on Netflix and based on the children's novels of the same name.

Speaker 1: We are setting out on a very top secret expedition. What do you say, Baudelaires? Are you in?

Sarah McConnell: This dark children's book series tells a story of orphaned kids who are subjected to one unfortunate event after another. That raises the question are there stories that are too dark for children?

Sarah McConnell: I'm Sarah McConnell and today on With Good Reason gothic literature for kids. Later in the show training teachers to reach difficult students without the yelling.

Kevin S.: You can have high expectations and you can have structure and you can want children to do their best and when they're not you can be disappointed in them and you can tell them that but you can also do that in a way that's respectful.

Sarah McConnell: First, Rhonda Brock-Servais is a professor of English at Longwood University and a children's literature expert, especially gothic literature for children. She says creepy tales for kids are more popular than ever.

Rhonda: Yes, horror is actually kind of on the outs. Gothic is more of the word of the day for scary stuff for kids. You can identify them by a series of things, mostly children being unprotected in the world would be the key thing, but other elements like ghosts or empty houses or the presence of the past that has to be resolved before the child can go forward into the future.

Sarah McConnell: Are you only talking about teenage literature?

Rhonda: Absolutely not. The stuff materializes for very, very young children. Early reader stuff, second, third grade.

Sarah McConnell: Name a few really popular ones that most of us might recognize.

Rhonda: Probably one of the most popular ones is Coraline by Neil Gaiman but the Series of Unfortunate Events by Lemony Snicket, the books actually open with the deaths of the parents and these three young people being thrown out into the

world and it is a world that doesn't care about them. I think that lack of protection, that lack of place is a real identifying factor in children's gothic.

Sarah McConnell: I don't know Coraline. Tell me about that.

Rhonda: Well, Neil Gaiman is an enormously popular dark fantasy author who writes for all ages but in Coraline she discovers sort of an Alice in Wonderland type looking glass world that is ruled over by a person called The Other Mother, who is exactly like her mother only perfect. She makes all the food Coraline wants, she's going to let Coraline stay up however late she wants.

Rhonda: The scary thing is that she has black buttons for eyes. She doesn't have actual eyes. She says to Coraline, "If you come and live with me and let me love you and you love me, if you let me sew these buttons on your eyes, you get to have whatever you want forever." What you find out that this Other Mother has done this to children previously and she eventually loses entrust in them and there's a very important line where Coraline actually says, "You don't understand. I don't want what I want. If I got everything I wanted then that wouldn't be life."

Sarah McConnell: Is this the same age that, let's say, Goosebumps appealed to at a certain point?

Rhonda: Mm-hmm (affirmative).

Sarah McConnell: Is Goosebumps part of this genre?

Rhonda: I would say so. Yeah. There's been a resurgence of that kind of thing. As far as teen books, of course, there's a ton of scary books for teenagers out there.

Sarah McConnell: Do you think the genre is more popular now for academics but not so much for the children themselves?

Rhonda: Actually my suspicion is that it's actually more popular with child readers and I think that's because we're in a very frightening cultural moment. This sort of permanent fear of somebody releasing a virus or another terrorist attack or Iran dropping a bomb on us and even though I think culturally we want to protect children, the truth of the matter is children exist in the same world adults exist in and have some knowledge of what's going on even if they don't understand it.

Rhonda: Part of what scary literature can do, whether an adult or a child, is give you a scare that you can master to help build the psychological capacity to deal with fright. I mean, when you're reading a scary book or watching a scary film it's a very controlled thing. If it's too scary I can put the book down, I can turn the film off. You can say to yourself, "I did this."

Rhonda: With Goosebumps there are anecdotes from years ago about kids who read the Goosebumps even though it was scaring them, it was bothering them, but it was sort of a, "I can do this. I can prove I can do this."

Sarah McConnell: "I can eat hot stuff."

Rhonda: Right. Very much, yes, kind of the same thing.

Sarah McConnell: How about you? Did you read gothic or horror stories when you were young?

Rhonda: Yes.

Sarah McConnell: Were there any?

Rhonda: I don't know that there were any written specifically for children but by the time I was 10 or 11 I was reading what my mother read, which was a lot of the late '60s and early '70s first-wave horror boom for adults.

Sarah McConnell: She loved horror?

Rhonda: She did. We watched monster movies every Saturday afternoon. It was great. I loved old fairytales. I loved that.

Sarah McConnell: Name some of those.

Rhonda: My mom had this great book of Russian fairytales and those feature a witch character named Baba Yaga who is this cannibalistic witch who has a hot [inaudible 00:05:42] feet. Much like the sea witch in The Little Mermaid. Girls would go to her and say, "I need help." She'd say, "Okay, fine. Do this thing first." There were always chances for characters to prove themselves.

Sarah McConnell: Why weren't these just too scary for you? Why did you love horror? Other than you'd been weaned on it by your mother.

Rhonda: I had kind of a chaotic and frightening childhood. I didn't understand what was going on in the world or I didn't know what to expect. Part of what horror teaches you is you are capable of dealing with that, with the unexpected.

Rhonda: G.K. Chesterton has this great quote where he says, "Fairytales are not important because they tell us there are dragons. Fairytales are important because they tell us dragons can be slain."

Sarah McConnell: Right. It's so interesting because I would have thought you would have craved safe and secure stories of safe and secure children in their beds with attentive, stable families.

Rhonda: Well, the thing is I think we have a tendency to essentialize children and there are probably children who want that. That was not what I wanted or needed at that age. Children's gothic is not going to be for every child. There are going to be children who are genuinely frightened and then there are going to be other children who are quite gleeful.

Sarah McConnell: What do you think is the history of gothic or horror stories? I first was made aware of it through Goosebumps for children's literature and Stephen King for adults. It goes back much, much further.

Rhonda: The original sort of scary story, outside of things like folk stories and ghost stories, which have been with us probably as long as we've been able to speak, actually happened as part of the cultural enlightenment. It was a reason to say, "No, reason and intellect are not everything. We have emotions and we need to explore these emotions."

Rhonda: In 1764, a man named Horace Walpole published a book called The Castle of Otranto; A Gothic Story. He was intentionally being reactionary and trying to write something outrageous and over the top and full of emotion and rejecting the idea of the primacy of the intellect and reason.

Sarah McConnell: Isn't that fascinating that back then there were these sort of types that wanted a Game of Thrones kind of rampaging creativity?

Rhonda: Absolutely. The Castle of Otranto opens within the first paragraph with a giant helmet falling out of the sky and crushing a young man on the way to his wedding. When I teach it in classes I always say, "Where do we go from there?"

Sarah McConnell: What sort of evolved in the horror or gothic genre after the 1700s?

Rhonda: That over the topness kind of disappears. You get things like domestic dramas. Jane Eyre is a very famous example when Jane Eyre is actually very gothic. When you think about it you have the mad woman locked away in the attic. Later on you get what is sometimes called Colonial Gothic and you end up with Joseph Conrad writing Heart of Darkness, which is a great example of that.

Sarah McConnell: How do we get from the delicious pleasure that adults may find in reading horror fiction to feeding horror stories to our children? Do we do this with very, very young children?

Rhonda: Well, a lot of fairytales have scary elements to it. Think about poor Snow White whose stepmother wants to eat her heart. I mean, that's a pretty clear horror element and those are given to very young children. The Little Mermaid, right? The young girl who has her tongue cut out and makes all these painful sacrifices in order to get what she wants.

Rhonda: Another really great writer that uses gothic elements is Roald Dahl. He's a classic writer everybody knows, James and the Giant Peach or Matilda or Charlie and the Chocolate Factory. Those are probably the big ones that everybody knows.

Sarah McConnell: Witches.

Rhonda: Witches is ... That is a world where children are not protected. It is the child's responsibility to figure out what is going on and find a way to protect himself.

Sarah McConnell: Do you feel like a lot of children grow up with that same sort of feeling of chaos and insecurity that you endured and therefore feel like we're told the world is a safe place but it's not my lived experience?

Rhonda: Absolutely. Even if you don't have the extreme version of chaos and insecurity I did as a child, just being a child I think is to some degree chaos and insecurity. If for no other reason then you're always under somebody else's control. Even if that somebody else loves you. "Eat your green beans. Go to bed. Do this, do that." No matter how much your parents love you, you are under their command. You are smaller, you are weaker. In these scary books it's sort of acknowledging, "Yes, life can be difficult. Yes, it can seem like people are out to get you" and to provide that sort of reassurance that, yes, you'll get through it, you'll learn to deal with this.

Sarah McConnell: Since adults are writing these books do you think that they're understanding of the threat the world poses has changed over the decades?

Rhonda: It seems to me in the most recent boom of children's gothic the threat is, for lack of a better word, higher. The children are thrown back on their own devices more. Some of the more recent books lack ... I don't want to say lack reassurance but things don't get completely put to rights the way they might have been 20 or 30 years ago. Happily ever after, that checked out years ago. But, I mean, these books say there is an ever after, right? Maybe it's not a happily ever after but there is an ever after in which you have some control and some agency and made some friends and your life is going to go on.

Sarah McConnell: Rhonda Brock-Servais is a professor of English at Longwood University. Coming up next, how bringing monsters into the classroom can help kids learn. With the monster project, students who don't know each other work together to build a monster.

Sarah McConnell: It starts when classes from all over the world swap drawings they make of monster parts. Then the students in each class bring that monster to life. A group in Australia might have a monster whose eyes were designed in South Africa, hands that were drawn in Germany, and horns that come from Russia. Once the monster sculptures are finished all of the classrooms vote on their favorite.

Sarah McConnell: Terry Smith, an education professor from Radford University heads up the project.

Terry Smith: The latest monster was a monster named Bobby Wasabi. He comes from a third grade class in Haddonfield, New Jersey.

Sarah McConnell: I heard another name. There was one created by a class not so long ago called Hogzilla Chuck Norris Duck Ape.

Terry Smith: That was the year before. That was really a great monster. That monster came from the Miriam School in St. Louis. The Miriam School is a great example because this is a total special needs school. The entire school is. What I really like is the fact that everybody gets to participate in the classroom. We're not separating people out by ability saying, "Well, you can't do this." You know, you just have to design, cut, tape.

Sarah McConnell: I can see why making monsters is universally fun for this age child in the classroom. How is it schoolwork?

Terry Smith: There's all this education going on as far as following directions, reading, writing, planning, there's math in there, there's science in there, all different things like that.

Terry Smith: We actually have a theme to each time we build a monster. This last monster, as a matter of fact, our theme was STEM. What would your monster do using STEM to make the world a better place? Everybody operated on that theme as they're building their individual monsters. The monsters came out with light bulbs, swinging arms, claws, rollers, some of them had electronic power packs on them, different things like that but even if we don't do that the geography part to me is probably the biggest part of the thing.

Terry Smith: The children become attached to where the parts come from. The teacher uses his or her own creativity now to build on that and create lessons about other parts of the world and to point out where these parts came from. When they look and say, "I have the hands. The hands came from Little Rock, Arkansas. Where is Little Rock, Arkansas?" Or the hands came from Brooklyn, New York. Where is that?

Terry Smith: Students now they have a social connection reason for knowing where that place is now. That's part of what they've just learned and what they've just done.

Sarah McConnell: I loved seeing the boys from Pakistan who made a little video of themselves and said, "Hello, monster project. Here we are from Pakistan" and they introduced themselves and talked about what they were making. Then the next video had three youngsters from an American school saying ...

Terry Smith: Those were my students.

Sarah McConnell: They were your students? Who are they?

Terry Smith: They were my fourth grade students when I was teaching in Hannibal, Missouri. Fourth grade.

Sarah McConnell: That was so great because here you had happy, carefree youngsters saying howdy to each other between Pakistan and Missouri.

Terry Smith: That's right. That's right. It's kids wanting to know how they live in different places. We talk a lot in the classroom about this. We talk about the idea of we're way more alike than we are different. It may not appear that way when we hear the grownups talk about it, about how different we are and the problems we're having, but the kids see how similar we all are.

Sarah McConnell: You brought with you some of the video that was recorded in these classrooms. You recorded some but you also had some sent to you.

Terry Smith: Yes. This one is one that comes from [Kwizuta Natal 00:15:44], a school of about 45 students, mostly boys, one principal, and one main teacher. The sound file we have here is from a little boy named [Sizway 00:15:58].

Speaker 7: Hello. This is [Sizway Konos 00:16:05]. Our monster is finished. We are now busy painting. We don't have a orange or red [inaudible 00:16:18] school to buy us more paint. By next week [inaudible 00:16:34] will be done. Sorry about the delay on our side. Thank you.

Sarah McConnell: I'm so struck by his English abilities, his delightful accent, his adorable sensibilities, "So sorry for the delay."

Terry Smith: I know. I felt the same thing. They're out of orange and red paint, the principal has left the building to go into town to get the paint so they can come back and finish Spazzy. Every monster has a name. This monster is Spazzy. Of course, he's very polite. I noticed that also.

Sarah McConnell: Something as simple as this earnest young man describing his monster teaches us so much.

Terry Smith: Well, you can imagine how the students in my class responded. They had all the opportunities to hear these other people speaking, these other kids, and they're just amazed to hear, especially the accent, the way they speak, and then once a teacher brings up the fact that, "You know, guess what? That's not their native language. That's not his native language. He speaks two or more languages. How many do you speak?" We actually did learn a lot of Chinese with some of

our Taiwanese partners. The kids were exchanging Mandarin Chinese and learning to speak it and making voice files the same way.

Sarah McConnell: You also brought a couple of clips from interviews you did with some of the students in your classrooms. Can you share those with me?

Terry Smith: Absolutely.

Speaker 8: I'm doing the teeth.

Speaker 9: I'm doing the tongue.

Terry Smith: Where is all this stuff?

Speaker 8: Here's my tongue.

Speaker 9: Here's the mouth.

Terry Smith: How are you going to make it work together?

Speaker 9: We're going to glue these down and then we're going to fit the tongue ...

Terry Smith: What if they don't fit? What are you going to do then?

Speaker 8: Make a new mouth.

Speaker 9: Make a bigger mouth.

Terry Smith: Does the tongue fit in there?

Speaker 9: Yes.

Terry Smith: Show me how.

Speaker 8: Put the tongue this way. [inaudible 00:18:19].

Speaker 9: We might hang it like this.

Speaker 8: We might put tonsils in the back.

Sarah McConnell: I love that.

Terry Smith: The thing is we only described one of those parts in our class. Just one. All those descriptions came from other schools and other kids.

Sarah McConnell: Yeah.

Terry Smith: Each class gets to describe just one part.

Sarah McConnell: If a teacher is interested in this and would love to participate with his or her classroom what do they do?

Terry Smith: All they have to do is send me an email.

Sarah McConnell: Really?

Terry Smith: I'll tell them all about it. You can do as little as you want or as much as you want.

Sarah McConnell: This is really great. Terry Smith, thank you.

Terry Smith: You're welcome.

Sarah McConnell: That is Terry Smith, a professor of education at Radford University, who is heading up the monster project. Coming up next, when yelling doesn't stop kids from misbehaving.

Sarah McConnell: Every classroom has what teachers might call a problem child. My next guest says those children are often mishandled. Kevin Sutherland is a professor at Virginia Commonwealth University school of education. His program called Best In Class trains teachers to stop bad behaviors in children before they begin.

Sarah McConnell: Kevin, have you seen that viral video where the teacher at a Success Academy in New York was harshly disciplining a first grader for having trouble figuring out a math problem?

Speaker 10: Go to the conduct chair and sit. There's nothing that infuriates me more than when you don't do what's on your paper. Somebody come up and show me how she should have counted to get her answer that was one and a split. Show my friends and teach them. [inaudible 00:20:30]. Thank you. Do not go back to your seat and show me one thing and then don't do it here. You're confusing everybody. Very upset and very disappointed.

Sarah McConnell: That was a little first grader in a uniform who was having trouble figuring out the math problem.

Kevin S.: Right. I think the problem with situations like that is that children they carry forward those experiences in school and with teachers into the future. How does it impact their interactions not only with that teacher but with other teachers? How do they feel about school as a result of that?

Sarah McConnell: Is there a tendency for educators to think these inner city kids who grow up under tougher circumstances need to have more discipline imposed on them?

Kevin S.: I'm sure that some teachers might feel that way. Teachers and schools are under a lot of pressure to show academic progress. I think that pressure may manifest itself in teachers feeling stressed to the point of snapping with children. I think that may be some of what you saw there.

Sarah McConnell: However, this particular teacher we were talking about is considered their model teacher. She gets great results. Can we not admit that sometimes this kind of harsh discipline, high expectations can yield high test scores?

Kevin S.: I don't know that there's a correlation there or an association. I really don't. If I think back to my favorite teacher in elementary school, Miss Anderson, who was wonderful but we were scared to death of her going into third grade because she had this reputation of being really mean and really strict. She had really high expectations for us. She was no nonsense.

Kevin S.: Once we figured out what she wanted she was wonderful. You can have high expectations and you can have structure and you can want children to do their best and when they're not you can be disappointed in them and you can tell them that but you can also do that in a way that's respectful.

Sarah McConnell: You had an experience right out of college with one of your first jobs where you worked at a school for children who had behavior disorders and experienced this sort of, "Do I yell or don't I yell?" yourself.

Kevin S.: Right. I was starting out. I was a young, early twenties, and didn't really know what I was doing, was working with some folks that had been doing this for 20, 30, 40 years. Those individuals had these strong relationships with these kids. They were father figures, mother figures, grandmother figures.

Kevin S.: For me, coming in and trying to emulate some of these folks it didn't work because I was young, I was white. Most of the folks I worked with were African-American. I wasn't a yeller. Anybody that knows me knows that that's not my persona.

Sarah McConnell: Did you try yelling?

Kevin S.: Oh, I did and it didn't work. It crashed and burned. I mean, the kids looked at me like I was an idiot. Fortunately, for me, I was reflective enough to figure that out pretty quickly.

Sarah McConnell: It probably ... You know how they say we learn from failure. It probably helped you get to where you are now with the program.

Kevin S.: Sure. To some degree. If I can, there's another story that when I was teaching in an elementary school in a self-contained classroom for students that had significant behavior problems I had a little girl and she was really struggling. She was in foster care. She would have these incredible tantrums.

Kevin S.:	I had the bright idea that I was going to audio tape her during one of these tantrums, she was like 11 years old, and play it back to her later so she could hear how she sounded. I did that. Fortunately, before I played it back for her I listened to the audio tape and what I heard was mortifying because I heard myself. I continued to put demands on her as she became more and more upset as opposed to backing off and to being more thoughtful about how I responded.
Kevin S.:	I was taking her aggression and misbehavior and oppositional behavior as an affront to me. Therefore, I didn't attack her but I continued to put demands on her at a point in time in which she was not emotionally ready to respond to those demands. I learned a great deal from that. Of course, I didn't play the tape for her but it helped me understand better how to respond when kids are oppositional or non-compliant.
Sarah McConnell:	What is it that you're doing now with this teacher training program to help them cope with small children who have these emotional outbursts and can't control themselves?
Kevin S.:	A colleague of mine, Dr. Maureen Conroy, at the University of Florida, we developed a program called Best In Class. Best In Class really focuses on the two or so children per classroom that really struggle behaviorally. We coach the teachers in their classrooms to try to improve teacher/child interactions.
Kevin S.:	For example, imagine a young child that has trouble keeping their hands to themselves. They're pushing, they're shoving on the way to the water fountain every day. What typically happens is rather than saying something the teacher will wait for the problem and then she'll yell at the kid or reprimand him and say, "What are you doing? I told you not to do that" versus anticipating when the problem is going to occur and so getting ready to go to the water fountain and saying, "You know, James, I really want you to keep your hands to yourself today. That'd be great."
Kevin S.:	Then as he's walking down the hall she sees him and she says, "You know, you're doing a really nice job keeping your hands to yourself, James. Let's keep that up, okay? Great job." She's anticipating when problems occur because a lot of these little problems escalate into big problems and that's what we're trying to prevent.
Sarah McConnell:	What age group is Best In Class reaching now?
Kevin S.:	We're in preschool. Three to four years old. We focus on things like structured rules, giving kids opportunities to perform the behaviors you want them to see rather than assuming that they know how to do it. We give them training on telling a child what they did well and why you like that. We have trained coaches that go into classrooms and work with teachers each week and give them feedback on their implementation or their practices with these young children in the classroom.

Sarah McConnell: Why aren't the teachers doing this already? Why don't they already have that training from their schools of education?

Kevin S.: I think that we do need to provide more training in classroom management. I think that's absolutely an issue. I will also say as a former teacher and when you're in a classroom with 15, 20, 25 kids you're doing your best to meet the needs of everyone. You don't always recognize that this one child, all your responses to that child are reactive because you have 15, 16, 18 other children in the classroom that you're working with.

Kevin S.: The coaches provide another set of eyes in the classroom and can help the teacher see what they're doing and maybe what they could do a little bit better.

Sarah McConnell: I know there are many early intervention programs for children who have these control issues. How is yours unique?

Kevin S.: Our program is not a pullout program so we don't pull children out of the classroom. We work with the teachers. We feel like by working with the teachers not only can we help the children that are the focus of intervention this year but the teachers can use these learned skills and practices next year and the following year. We see it as more of a way to help teachers sustain some of these practices and benefit larger numbers of kids.

Sarah McConnell: Kevin Sutherland, this has been wonderful. Thank you for talking with me and With Good Reason.

Kevin S.: Thank you. Appreciate it.

Sarah McConnell: Kevin Sutherland is a professor of education at Virginia Common Wealth University's school of education. This is With Good Reason. We'll be right back.

Sarah McConnell: The following is an encore presentation of With Good Reason. In the lab at the Curry School of Education at the University of Virginia they're using videos to spot the essential characteristics of an excellent teacher. With Good Reason producer Allison Quantz paid a visit to the lab to see what they're uncovering.

Bob Pianta: Okay. Let's look at that. Let's look at this one here.

Allison Quantz: Bob Pianta presses play on the screen in front of us and a preschool class starts up.

Bob Pianta: Okay, so one of the things we're seeing here in this video is the teacher's doing a nice job of drawing the kids together in a conversation.

Allison Quantz: Pianta is the founder and director of the Center For Advanced Study of Teaching and Learning at the University of Virginia. He believes he can see the difference between a good teacher and a bad teacher.

Bob Pianta: Okay. She just did a really nice job of connecting with that little kid, little Carson over here asking him what he didn't do when he was at school. She quieted her voice when she responded back to him because his voice was quiet. She kind of mirrored his vocal tone.

Bob Pianta: Then at the same time while she's talking to Carson the little girl right next to her leans over and she high fives the little girl. [crosstalk 00:29:19].

Allison Quantz: These small things, quieting her voice, high fiving the other student, this is how we can tell the woman in the video is a good teacher.

Bob Pianta: This is the way a really effective teacher can orchestrate three or four things all at once. Now she's [crosstalk 00:29:33].

Allison Quantz: All it takes is observing a classroom for just four 15 minute sessions.

Bob Pianta: What makes a good teacher? We pay attention to three broad areas of their behavior. [crosstalk 00:29:44].

Allison Quantz: One, emotional support, which means several things.

Bob Pianta: The ways they respond sensitively to different kids' needs in the classroom. The way they convey to the kids an understanding that the teacher understands where the kids are coming from.

Allison Quantz: Two, classroom organization.

Bob Pianta: Classroom organization and within that area we look at features of the teacher's management of the kid's behavior, the way they manage time, is this a fairly productive classroom, and the way they manage a lesson.

Allison Quantz: And three, instructional support.

Bob Pianta: That really gets at the quality of teacher's feedback for kids' learning, the richness of their language with kids, and the way that they press kids' thinking and conceptual understanding of the material.

Allison Quantz: He's created a system that breaks down these three categories and allows an observer to rate the teacher on a scale of one to seven. Pianta says he can train anyone to use the rating system.

Bob Pianta: We're going to look now at a lesson in a high school classroom [crosstalk 00:30:45].

Allison Quantz: According to Pianta this high school teacher does just about everything right.

Bob Pianta: Right now all the kids are working [crosstalk 00:30:50].

Allison Quantz: The kids are working together to define intelligence.

Bob Pianta: She's allowing plenty of conversation among the kids.

Allison Quantz: The teacher is circulating around the room stopping to question each group.

Bob Pianta: She's lingering here for quite a while. She's asking them more questions. She's pushing them a little bit. She says, "I want you to explain this a little bit more." "I want to know why." That's creating a press on these kids performance and their thinking about this big concept of intelligence.

Allison Quantz: I didn't understand what was so special about this teacher until I saw the next classroom.

Bob Pianta: Okay. I'm going to show you one now that it's a social studies history class on the presidency.

Allison Quantz: The difference was striking. These kids were sitting quietly at their desks but you could tell they just weren't thinking very hard.

Bob Pianta: Here's what's happening here. You've got the teacher at the front of the room kind of mostly talking to the kids. The teacher just asked the kids, "Can you read the definition of [crosstalk 00:31:50]."

Allison Quantz: The students were really just reading out loud from their textbook or from the PowerPoint.

Bob Pianta: There's not much being produced by the kids in this particular lesson. What's the flow here of information? The flow is from the teacher out [crosstalk 00:32:04].

Allison Quantz: Now this young social studies teacher was doing a pretty good job. The students were well behaved and they gave her correct answers. In the world of teaching, there's a big difference between pretty good and excellent.

Bob Pianta: If you look at kids who move through schools it's the teachers whose classrooms they land in that matter the most. That is particularly important for kids who may be vulnerable for one reason or another.

Allison Quantz: How does all this help? What does it matter that we can separate the good from the bad? To answer that I want to play the last thing Pianta said about that young social studies teacher.

Bob Pianta: The teacher that we're watching here around American presidency she's going to be a terrific teacher.

Allison Quantz: She's going to be a terrific teacher. That is perhaps the most important idea to get out of Pianta's study. A bad teacher doesn't have to stay a bad teacher. Pianta firmly believes that his observation system isn't just about evaluating. It's about improving.

Bob Pianta: You know, we have a little bit of a one-size fits-all model of teacher preparation and support, whether it's in higher ed or whether it's out in the field.

Allison Quantz: With a system you can identify the gaps in a teacher's skills. This is a teacher who needs help on the emotional side of things, that's a teacher who needs more training in classroom organization.

Bob Pianta: If we can understand that a little bit better than we can do a much better job of tailoring the supports that they need to be successful in the classroom and I really think that that holds a tremendous amount of promise for us.

Allison Quantz: What surprised Pianta the most is that almost without fail teachers are ready for something like this. Whether they've been in the classroom for 20 years or two months, they're hungry for the chance to improve. For With Good Reason, I'm Allison Quantz.

Sarah McConnell: Robert Pianta is dean of the Curry School of Education at the University of Virginia. This piece was produced with help from [Laina 00:33:58] Richards.

Sarah McConnell: The University of Maryland, Baltimore County has gained a reputation for strong teachers, especially in the STEM fields. When Freeman Hrabowski became president there in 1992 his mission was to make it cool to be smart and he's been wildly successful.

Sarah McConnell: Among many other things he doesn't have a football team. Instead he has a national champion chess team that gets lauded the way most champion football teams do. The University of Maryland, Baltimore County produces more African-American PHDs in science and engineering than just about any other university in the country. Named by Time magazine as one of the 10 best college presidents, Freeman Hrabowski is leading a revolution in STEM education.

Sarah McConnell: Let me get a feeling for what the baseline was at University of Maryland, Baltimore County when you first arrived. You came as provost. Was it a school on the rise?

Freeman H.: The institution was very young. It was only 20 years old. It was working to become a research campus. It was attracting very, very strong faculty across disciplines. It was being very successful I would say in the social sciences and humanities. We sent a lot of young students of all races to law school, for example, into policy graduate programs.

Freeman H.: However, it turns out that students were not succeeding in science, white or black. Keep in mind that the institution had been formed ... The charter was actually in 1963. UMBC, the University of Maryland, Baltimore County became the first institution in our state formed at a time when students of all races could come here. Every other institution had been formed either for blacks or whites but here from the beginning students of all races could attend.

Freeman H.: It was predominantly white and it still is but about 15% of our students are African-American today and about 20% are of Asian descent. Perhaps 3%, 4% Hispanic.

Sarah McConnell: What did you want to do when you became president?

Freeman H.: I had already been working on the issue of increasing the number of minorities succeeding here in science, particularly African-Americans. I was aware that only 2% of the PHDs in the country in science and engineering were awarded to African-Americans.

Freeman H.: My colleagues here were amazing in being willing to experiment, to figure out what could we do to become a leader in that area. Well, it worked so well that by the time I was president we had begun to send more students of all races on to graduate and professional schools in science and engineering, not just those at the very top.

Sarah McConnell: Is the success primarily because you all are highly skilled at recruiting top notch scholars to join the ranks of other top notch scholars?

Freeman H.: I think that's a part of it. I think most important elected officials in Maryland really get it. They understand that the future of this state is closely connected to the quality of both K through 12 and higher education and that investing in these colleges and universities will mean producing increasingly large numbers of well prepared leaders.

Freeman H.: You start there with that context. Then this is a campus that takes great pride in the world of faculty on campus and staff and students. We've all been focused on academic innovation. For four years in a row US News has named us the most academically innovative, this top up-and-coming university. We have been redesigning courses from chemistry to digital humanities and the first year writing course.

Freeman H.: It's an exciting place, you're right, because of the brain power but also because of the attitude of people. I think because of when we were founded, a time of hope in the '60s, I honestly think that there's a culture here of saying, "We're good but we can be much better. We're not willing to say we've arrived." I always say any time an institution believes it's arrived it is beginning to go the other way.

Sarah McConnell: But you're not a place that takes mediocre students who are a little bit tentative academically and churns them into academic powerhouses, right?

Freeman H.: No. You know, I make no apologies about the fact to people that we look for the very best prepared students we can have. With regard to students who are not as well prepared we are working on K through 12 initiatives from two upward bound programs to strengthening math and science teaching to adopting an elementary and middle school. We're doing a lot of that to help kids come up to a standard.

Freeman H.: We do believe some campuses need to be known for students of all races coming up to the standard, being serious about the work. Nothing takes the place of hard work. These are very, very high achieving students from those schools.

Freeman H.: We need to think about public universities attracting high achieving students. We are making the statement, "You don't have to be rich to be brilliant." We take pride in knowing that students here are very smart and enjoy being very smart. We need to teach working and middle class kids not that it's simply okay to be smart but that it's great to be smart.

Sarah McConnell: Well, what about too large a percentage of the population, and in particular, the African-American population, that can't make it on the UMBC campus where students are languishing, bored in classrooms with no real academic vision?

Freeman H.: Well, there are two things to be said. We now lead the country in producing African-Americans who go on and get PHDs in science and MD PHDs. At the same time, though, that we are attracting these well prepared students we are working with K through 12 to build the skills of children in schools in this area.

Freeman H.: It would be a serious flaw in thinking that because we are a public university we should be doing remedial education. When we think about African-Americans and minorities everybody thinks about the remedial problem. Who thinks about the talented 10?

Sarah McConnell: But the talented 10 are doing fine.

Freeman H.: They're not doing fine. That's absolutely wrong.

Sarah McConnell: They can go to Harvard ... But let me say. They can go to Harvard, Stanford, Berkeley.

Freeman H.: But you're so wrong. You're so wrong when it comes to science. I have to tell you that. You're absolutely wrong. What percent of the PHDs in this country do you think in science and engineering go to African-Americans? What would you think?

Sarah McConnell: 10%.

Freeman H.: No. It's 2%.

Sarah McConnell: 2%?

Freeman H.: It's 2%. What percent of the scientists at NIH are black? NIH, the National Institutes of Health, that has all of the most important research involving health disparities in America where health disparities are a major part of the economic challenge we face? What percent of the scientists do you think are African-American?

Sarah McConnell: 10%.

Freeman H.: Under 1%. Let me give you a statistic that you'll find interesting. It doesn't surprise people that only 20% of blacks and Hispanics who begin with a major in science and engineering will graduate in science and engineering. It shocks people to learn that only 32% of whites who begin with a major in pre-med or science or engineering will graduate in those areas.

Freeman H.: Now the first response from many is, "Well, they weren't as well prepared." Well, we find that often the higher the SATs and more selective the university, the greater the chance the student will leave science within the first year and move over to humanities or social sciences. Even the well prepared students who begin with an interest in becoming doctors for example will tend to get wiped out. They end up not doing well in that first year or two. They get discouraged and they leave it and go to areas where they can succeed.

Sarah McConnell: Okay. Tough luck. They wiped out.

Freeman H.: But here's the problem. This is where you clearly don't understand. You clearly don't. Do you know that ... If I tell you that 11% of the bachelors in Europe are in science and engineering what percent do you think we have in America of 25 year olds?

Sarah McConnell: I don't know.

Freeman H.: It's 6%. For Americans of colors it's not quite 2%. 2% at most. There's been a 50% decline in the number of women majoring in computer science in this country of all races. We're talking about a million and a half jobs going unfilled in America if we can't find more people majoring in these disciplines and so the question of under-representation and under-productivity in degrees, those two questions are inextricably linked.

Sarah McConnell: Let me ask you something. Do you think there just is a limited pool of academic talent and you are the Coach K of STEM education? It can't be replicated by someone who doesn't have your energy, enthusiasm, and charisma?

Freeman H.: All of that is just not the case. I love the way you make these statements. You keep getting my blood boiling. I love it. No, no, no. I don't think there's a limit on talent. We have so many ... Every math teacher can have an impact on thousands of lives.

Freeman H.: When we produce a student of any race who is excellent in the mathematics, not okay but excellent in the mathematics, who knows how to explain concepts in different wants, who understands that children learn in different ways, you've got somebody who can change thousands of lives.

Freeman H.: We are doing a lot to make sure there will be more children who can make it. We have our own school that we've adopted. We're using that school to develop practices that can be used by others in strengthening the teaching and learning process because strengthening the teaching and learning process and making sure that children have good role models can make a big difference.

Sarah McConnell: Let me ask you this. If you were not president of UMBC and you were deposited onto a poor-performing campus of a comparable college, let's say, in a rural Southern part of America where the tradition has been very poor performance, what would be the first few things you would do?

Freeman H.: I want to know what are the attitudes of people? You want faculty and staff who care deeply about the students. You want faculty and staff who will take the time not to be judgemental but to challenge the students to be their best. We have to know the students well enough to figure out what they need in order to success. What is it that gets students to become excited?

Freeman H.: Course redesign can help in any situation. Having students simply sit and be lectured to for an hour is not going to get most people really engaged. We have to empower students by flipping classes and by looking at ways of shortening the part that's lecture and getting them more involved in solving problems or doing the actual writing or involved in research and showing them how the work connects to the real world.

Freeman H.: They need to see how whatever skills they are developing will be used in some particular job, whether it's their writing skills or their thinking skills. Very important.

Sarah McConnell: Dr. Hrabowski, thank you so much for taking the time with me today.

Freeman H.: You've been a great interviewer. You got my blood boiling in the best possible way.

Sarah McConnell: Wonderful.

Freeman H.: Come visit UMBC, please.

Sarah McConnell: Thank you. Bye.

Freeman H.: Take care. Bye bye.

Sarah McConnell: Freeman Hrabowski is the president of the University of Maryland, Baltimore County.

Sarah McConnell: Many of the best teachers are beginning to understand that one surprising barrier to teaching young children math or science is language. This is the focus of research by Anne Charity Hudley, a professor of education, English, and linguistics at the College of William and Mary. She's looking into how very small language differences between teachers and students in the classroom can build up over the years and contribute to the achievement gap that keeps too many students from ever reaching their potential.

Sarah McConnell: How did you become interested in studying STEM and language?

Charity: My father is an obstetrician gynecologist and my mom was a pediatrician. My father really believed that because they had Southern accents and African-American Southern accents that going into STEM areas would be easier for them than perhaps going into English or kind of more subjective subjects. What he said to me was that he did not want to give up speaking the way that his mother spoke, people in his community.

Sarah McConnell: In a class like math or science why would language matter? What kinds of differences are we talking about if everybody is speaking English?

Charity: For example, if a student is trying to read a word problem or a scientific lab report if they have differences in the way they pronounce words it's going to be sometimes a delay in how they map what they're reading onto the way that they speak.

Charity: For example, many African-American students may use the phrase, "It is" or, "It's" where other speakers may use, "There are" or, "There is". Many word problems start off with this concept of, "There are five pigs in a blanket" so that the concepts the students have they know that something is there that exists but they're trying to figure out is there a meaning difference here between it's, there are, right?

Charity: One feature that we know is challenging for student is S. That's S that makes a plural as in the word eggs. If you have a word problem that says, "A student went to the store and they're buying five eggs and two loaves of bread" students who don't use the S when they're speaking as frequently may have a hard time recognizing that there's a plural issue with that S and get really confused on that word problem.

Sarah McConnell: Is that a major problem or is that a very minor problem with only a few children?

Charity: What we're seeing is that the teachers do see this as a major, major issue. It's not just because of the small nuances of the word problem. It's how these differences build up over time such that students don't feel like they want to do math or science at all.

Charity: One teacher reported on a situation that she watched between a teacher and a student in a math class. Again, this is a first grade student and the students were doing math using dice in the classroom. One little boy, an African-American boy, raised his hand and he said to the teacher, "Ma'am, I ain't got no dice." The teacher looked at the boy and responded, "In this classroom we speak English" really harshly.

Charity: The teacher who was observing who was really thinking, "Gosh, there's got to be a better way to do this." Those type of situations, what we're finding is that they can discourage the student from not just speaking in class but really from being eager to participate in math at all.

Sarah McConnell: Truthfully, if I were the little child that would crush me.

Charity: Yes. That's what we're looking at that sometimes these things seem very small but to the students these issues are huge. The student is already feeling like they don't belong. We have to start thinking about the power of some of the things that we've said to general students, majority students, Caucasian students where there is no kind of ramification but there may be specific nuances between that white teacher, that white professor, saying it to the African-American student.

Charity: Another math teacher that we've worked with he really thought about this because he did have this attitude, "Oh, these are really small things", right? He realized that in his classes a lot of times he was using the word "error" or

"mistake" when a kid said something using African-American varieties or language.

Charity: He decided this year that he wasn't going to use mistake or error. He was just going to talk about a student's home or cultural language versus their school language, the language of his classroom. He said just that small difference he could see the students' attitudes change, not just towards him but towards coming in that classroom and thinking about themselves as mathematicians.

Sarah McConnell: Anne Charity Hudley is a professor of education, English, and linguistics at the College of William and Mary.

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Sarah McConnell: With Good Reason is produced in Charlottesville by Virginia Humanities. Our production team is Allison Quantz, Elliot Majerczyk, and Cass Adair. Jeannie Palin handles listener services. For the podcast go to With Good Reason Radio dot org. I'm Sarah McConnell. Thanks for listening.