



Transcript of episode 66

Misinformation, Misunderstandings, and Myths in Education

Emily Kircher-Morris: [00:00:31] Hey there. Welcome to episode 66. I'm Emily Kircher-Morris. Today we're happy to have Erin Morris Miller and Hope Wilson. At the virtual 67th annual National Association for Gifted Children conference in November, they will be part of a panel discussing pseudoscience in the area of neurodiversity and gifted ed. We'll get a preview of what they'll be discussing. And we hope some of our conversation will help parents, teachers, and counselors fact-check some commonly held beliefs that don't hold up under scrutiny. That's straight ahead.

First, part of the success of this podcast can be credited to input from you. We get a lot of interaction and suggestions through social media and groups like our Facebook Mind Matters Gifted Ed and Advocacy group. We'd love for you to join us there or follow us on social media. You can find us on Facebook and Insta as Mind Matters Podcast. And on Twitter, we are @MindMattersPod.

Up next...

Erin Morris Miller: [00:01:58] Hi, I'm Erin Morris Miller. I'm an associate professor of psychology at Bridgewater College.

Hope Wilson: [00:02:04] I'm Dr. Hope Wilson and I'm an associate professor at the University of North Florida in the department of education.

Emily Kircher-Morris: [00:02:11] Stay with us.

(break)

Conversations like the one you're about to hear often generate higher than usual comments and discussion on our social media pages. We're going to talk about pseudoscience, misunderstandings, and mythology in the field of neurodiversity and education. Things that are popular beliefs with little or possibly no corroborating evidence.

Here for the discussion today are Erin Miller and Hope Wilson, thanks to both of you for joining us.

Erin Morris Miller: [00:03:52] I'm so happy to be here. I was saying it for both of us, because I know that we both are so happy,

Hope Wilson: [00:03:57] I know, this is very exciting.

Emily Kircher-Morris: [00:04:00] Before we dig in, Erin, tell us a little bit about you.

Erin Morris Miller: [00:04:04] I'm the mother of two teenage children, and I am mostly interested in doing research about social emotional issues, as well as how people understand talent and how their thinking about talent affects their decisions.

Emily Kircher-Morris: [00:04:22] And Hope?

Hope Wilson: [00:04:23] My research really focuses on a lot of different things in gifted education and I really enjoy looking at those transition points. So, starting kindergarten, starting middle school, starting high school, starting college. And I have a, a tween and a daughter who's about to start college this year.

Emily Kircher-Morris: [00:04:41] I think that this is an important topic. Uh, this was presented at the National Association for Gifted Children last year, and it's also going to be a signature session at this upcoming virtual conference in November, correct?

Hope Wilson: [00:04:53] Yeah. Correct.

Emily Kircher-Morris: [00:04:54] Let's just start off and define what we're talking about when we use the term pseudoscience, because we're going to be talking about how that specifically relates to the field of gifted and high-ability studies.

Erin Morris Miller: [00:05:07] So when I think of pseudoscience, it's when something appears to be following all of the guidelines and steps of the scientific method and, um, and the different ways that are like part of the domain of science. So it seems to be following it, but, um, but something in there breaks down. So it looks like it is good science on a first read, but when you look closer, you're like, Oh, okay, there's a problem with this. This isn't actually how you were supposed to study this, or you didn't really describe this correctly.

So like you cited this study, but that doesn't support what the assertion you made or you made an assertion here but what you cited was someone's essay. So that actually, that doesn't count. Like, that is not how you do science. Um, and then that also includes, um, methodological things. So, um, when there's an issue with the methodology.

Hope Wilson: [00:06:11] A lot of times it's based upon a personal experience, um, with how we interact with the world, but it's not necessarily generalizable to an entire population.

Emily Kircher-Morris: [00:06:21] The one that I see very often is the confusion about correlation and causation. Especially when we're talking about, I think, social science fields in general, we talked about a lot of different things with that. Talk about that a little bit. Like, where do we see this occurring most often?

Hope Wilson: [00:06:38] I think the news is really a place where we see a lot of the correlation/causation myth happening. It's really easy to say, Oh, these two things happen at the same time. You know, one was caused the other. And that's kind of how our brains are designed to think about things, but it doesn't bear out. Right? That there's usually another variable. There's something else that's actually the causal factor. So I think a classic example is like red wine making you healthier.

But, you know, we can also think about the fact that people who drink red wine are also usually have more income, and there's a lot of factors that go along with income that would make someone healthier. So just because people who drink more red wine are healthier, may not be that causal agent.

Emily Kircher-Morris: [00:07:19] So you're taking my justification for red wine, but okay.

Hope Wilson: [00:07:22] Sorry. I just broke a lot of hearts out there, I know.

Emily Kircher-Morris: [00:07:24] Yeah, so that's interesting. That's interesting that you mentioned the news specifically because I think you're right, and I think that that's where a lot of people see pieces of information, and you're right about how our brains kind of function. We're always trying to put those puzzle pieces together, but they don't always fit that way. What else would you add about, specifically, the professional fields that we might see this occurring as well?

Erin Morris Miller: [00:07:46] In the field that we're in, the way that I see it a lot, I have parents that say my gifted child is so irritable. Oh, they're so irritable. They just seem to be like, they're always like getting so upset about things. And that that must be connected. Oh, so it's because they are gifted, but that's unlike likely to be the case when you actually talk more, you're like, Oh, well, um, their environment is making them irritable. They are in an irritating environment. And anyone that was in that environment would be irritable. It's actually just a normal human response to a difficult situation. And then if you get a whole bunch of gifted children together and they've had similar experiences, then you'll be like, Oh, now I have a sample. Look at this whole sample, it's not a single observation, it's an entire sample, but you have to look for that other cause.

Emily Kircher-Morris: [00:08:41] And I know one of the other things that is a problem, I think just in the social sciences in general, not just education, but psychology and you know, um, all of these things that we study, I know there's a lot of talk about, like, the replication crisis, you know, and, and we have a problem there with the research, and that influences it as well. What do you feel like are some of the reasons that's occurring in those fields, and especially in education?

Hope Wilson: [00:09:05] I think one of the key reasons why we see, um, a replication crisis, I mean, one is that doing replication studies isn't highly valued in our publishing field.

So we, so if I redo a study that someone else has already done, um, a lot of journals and a lot of publication outlets would just be like, well, we already knew that so why would I publish this again? So, um, but I think, um, it, maybe the deeper problem of why we might not see the same results again, is that, um, education is so contextual.

So when I'm looking at a set of students, um, in their behaviors or what I might find, it depends so much upon lots of factors in that environment, teacher, the school, the socioeconomic, and the situation. So many things can't really measure very well. And so for me to think that I could do the same thing with a different group of kids and get the same results. Um, that might just be a fallacy without considering all of those interaction effects.

And we might not just have the right methodology yet to really figure out what are the, how do those things all interact with each other?

Erin Morris Miller: [00:10:15] When I was, um, in graduate school, we were, uh, I was at the university of Virginia and we were working on a lot of studies about differentiation. I was working with Carol Tomlinson and I wasn't actually part of this research cause I just had different interests. But of course I knew what, you know, what was going on. And it seemed to continuously come down to, the teacher was the key variable. And it kind of came down to the art of teaching as what was making these different interventions work.

And that's really difficult from a research standpoint, if you're just wanting to have quantitative information, you can't see that in the quantitative. And then also it's not a great answer for people be like, Oh, well it was the teacher that makes the difference. That's something you can't just replicate, you, you mean you can't just make copies of a teacher.

Hope Wilson: [00:11:07] Yeah you think about the medical sciences and they use like rats and mice that have the exact same genetic code, right? And we're trying to do this with like wildly different students and teachers and environments, and it makes sense that we wouldn't get the exact same results, but that doesn't mean we can't find generalizable findings and education. Um, it doesn't mean that there aren't things that generally work with all kids or with gifted kids. Um, it just means that, um, we have to consider the context as well.

Erin Morris Miller: [00:11:40] It's not a cookie cutter kind of an experience.

Hope Wilson: [00:11:43] And I think that's part of the problem, is that, um, I think people love a packaged curriculum that we could just give to teachers and they could just implement and it would solve all our problems. And unfortunately, I think the solutions for education are not going to come in a box with a nice label that says this will solve your problems.

Emily Kircher-Morris: [00:12:03] You mentioned that the differences come down a lot of times to the teachers. Do you think it's skill level of the teacher? Is it personality? Is it relationship? I mean, I'm kind of going off the cuff here. I don't know if you've researched that enough to be able to answer that question, but I'm curious.

Erin Morris Miller: [00:12:19] Yes. It's all of those things. Um, and the interaction with a student and so not every student is going to love every teacher, is going to connect with every teacher. And then the same thing is with parenting. There's an interaction that happens between the child and what they're bringing into the situation, and the parent and what the parent is bringing into the situation.

Emily Kircher-Morris: [00:12:45] Definitely.

Hope Wilson: [00:12:46] But I do think that, um, one thing that colleges of education don't necessarily concentrate enough on are those building of relationships. So we do a lot of work on building the skill of teaching, building the content knowledge that teachers need, um, but really highlighting the importance of the relationship between the student and

teacher and that ethic of care, um, is so important in learning. And I think that comes up over and over again in studies. Um, and I think that's really important, especially in a gifted classroom or particularly in.

Erin Morris Miller: [00:13:16] But we do know things that are bad, you know, like if we can eliminate all the things that you definitely should not do, there's a nice list of like, don't do this.

Emily Kircher-Morris: [00:13:26] Let's bring this back to the gifted ed lens. In my experience, you know, both being in the classroom and then being in the mental health field, working with gifted kids, there's no clear identification of best practices sometimes. Or if there is people are not necessarily aware of it. Like I feel with literacy, for example, when you're teaching a child to read, there's a lot of research and a lot of information about kind of how to do that. What do you think are some of the factors that have influenced gifted education specifically, and the influence of pseudo-science?

Erin Morris Miller: [00:14:00] One thing that you can say and be pretty sure that you're giving good advice is, acceleration. So acceleration seems to be something that we can generalize and say, this is something you should try. This should be in the toolbox. If this isn't happening, then you're, you're not really going to be able to serve that population. I mean, so we do have like one thing that from the research, I feel like we can say for sure.

But on the idea of pseudo science, we have a lot of difficulty with the deficit focus. Um, looking for that, that way that the child must be suffering. I think that there's multiple reasons for that. I mean, one, there is this idea that if... that like the pluses and minuses must balance out for a human being, you know, with one, if you've got something good, there must be something bad, and that, that, so that they can be balanced out and that makes people feel, people who are not in the field, perhaps feel more comfortable with that idea. Oh, well, you know, they're also very, very sensitive and fragile.

And so that's the thing that's balancing it out. But also, I think some of the individuals who gravitate towards pseudoscience have a larger voice. And that, that seems to be a problem that I see.

Emily Kircher-Morris: [00:15:26] It's much easier to justify spending the money and, you know, the time to help bring those kids who are struggling up. And so then there's a natural draw to always focus on the negatives, because that somehow makes it more fair or equitable, to provide advanced learning opportunities, when really it's, the equity piece is just every student should be able to learn at the level that is appropriate for them. And that's not always the same for all kids just based on their birthday.

Erin Morris Miller: [00:15:57] We have the problem with the samples that, that we're able to study. Our samples always seem to be biased in some way. People who aren't struggling don't go to see a therapist. People who are being well served don't necessarily seek out additional services. And so it's very difficult for us to get that population of gifted children into our samples.

Hope Wilson: [00:16:22] I think there's also a couple of other factors that have influenced why we haven't framed the need for our programs well, um, and one of them is we haven't reckoned with, um, our past as well as we could have done. Um, certainly the history of gifted education is wrought with, um, ethical and racial biases that, um, have increased the amount of, um, disparities within our schools. And that's something that we as a field need to recognize and say, we've moved past this, or that we're working to move past this, and here's ways in which we're working actively towards better models that will serve all groups of students who are advanced. The other thing that we kind of struggled with is, in something like reading and, um, it's pretty easy to measure progress, right? Like, if you can read a word then you're getting better at it. And in something like gifted education, it's much more difficult to kind of figure out what that construct is that we're trying to measure that we're getting better at. Like, even the question of like, what is an effective gifted education program? Like, I don't know that our field has really even answered that question very well. Whereas an effective reading program, it's pretty clear, like the kid can read. Right?

Emily Kircher-Morris: [00:17:34] We often mix the academic piece of giftedness, the cognitive ability, with perhaps the psychological needs of, of giftedness, which are not necessarily always the same. And it's interesting for me, my path starting as a teacher, and I was very passionate and interested in the social and emotional needs of gifted kids, which is why I went into the field that I did with mental health as a therapist. But I also recognize that serving the social and emotional needs in the gifted ed classroom muddies the waters as far as what are the goals and purposes of those programs, because we don't necessarily have those types of programs for other populations of students in the same way,

Hope Wilson: [00:18:14] I would argue that all students in school need a social and emotional curriculum. That we're not doing a good job of counseling and providing mental health services, um, to our population of kids at large. So I don't know that the gifted population is special in needing those services, um, but that our larger school population is in great need.

Erin Morris Miller: [00:18:38] And a lot of times when the cognitive isn't met, that's when you know, you have predictable social, emotional reactions, emotional reactions, when your academic needs aren't being met, you are going to have a, you know, you're going to have an emotional reaction to that. That's normal and natural and not limited just to, to gifted children. Um, it's all children. If your needs are not being met in the classroom, then you're going to have an emotional reaction to that. That's human. The same thing in the workplace. You know, if you're feeling like I'm not being challenged in my workplace, I'm not feeling proud of the work that I'm doing, you're going to have an emotional response. And so all children need to feel challenged and proud of the work that they're doing.

Hope Wilson: [00:19:28] And certainly, um, your intelligence is going to interact with your social emotional needs in general. And then that's why it's important that school counselors and mental health professionals, um, have some sort of background in gifted education or gifted children, because there is that interaction that can make diagnoses and, um, counseling more difficult or more complicated.

Erin Morris Miller: [00:19:52] I mean, one of the things I was just thinking about today, and it might be a little bit of an aside, but a lot of times something that is a normal reaction does not seem so when there's that interaction with intelligence. For a younger child and they are feeling frustrated, like they might say like, "you're ruining my life and I hate you," and like run out of the room and that's an extreme response, but, you know, as a parent you're like, okay, all right, you know, that's just kind of par for the course. But I mean, you're, the child is trying to think of something bad to say. You know, and normally it might be like, "you're the meanest" or "you're the meanie." But sometimes for gifted children that have like very good reasoning and verbal abilities, what pops in their head is like an extremely pointed and cutting remark. And you wonder like, well, have you been thinking about this this whole time? Do you ponder this? But no, it actually was like, I'm going to try to say something angry. And the thing that I come up is actually something that like is actually really hurtful, but the intention was no different.

This it's something I did to my mother. I said, "you know what? I love you. But I don't like or admire you. And if you didn't have money, I would run away." But like, it really was like, the same response as like, "you're a meanie and you're running my life." But what popped into my mind was like, that would be the thing that you would say for something that was hurtful. And I brought that story up a couple of times with, with parents who are just like, Oh, they seem so unhappy. And they tell me something that their child said, and I'm like, well, that's kind of funny. I mean, like that, that was, that was really clever, but no more, you know, but like no more intentional the intention behind it was no different.

Emily Kircher-Morris: [00:21:39] That's what I think makes parenting sometimes tricky. They do process their experiences differently. And that's kind of what I think with a lot of the science stuff too. It's so difficult to sort through the noise, especially for people who are not in researching fields. When I wrote the draft of my book for, for teaching twice exceptional learners, I ran into so many roadblocks, you know, one of which was that much research was behind paywalls and I couldn't access it because I'm not associated with a university. And then beyond that, as a master's level clinician, there was some of that statistical quantitative research that was difficult for me to understand, and I have some resources to be able to go and figure those things out. And so for most people it's just inaccessible.

Hope Wilson: [00:22:30] Absolutely. And I think also when we translate our research to practice, um, or translate it for, for people, it's not going to sound as flashy as someone who isn't going to base it on research. So I'm not going to say, Oh, I have the solution to all of your gifted kid's problems. Cause that's not true.

I'm going to say, well with this small population of people and I did this one thing, and this seemed to work, um, given all of these limitations and that doesn't sell well, as opposed to someone who could come in and say, well, this worked with my kid and I think it'll work for everybody.

Erin Morris Miller: [00:23:05] Academics are rewarded for being right. And so making a mistake is a bigger deal. So making a mistake is something that you don't want to do. You don't want to overreach. You don't want to say something that can be refuted later. And not

everyone is rewarded for that. There's different rewards for, for different individuals who are wanting to be part of the field.

Um, okay. I'm sorry. I can't say this to be... cause I'm like there's frauds, there's terrible frauds, but there are people who, who see rewards for saying things that are not supported and that can, that can be challenging.

Emily Kircher-Morris: [00:23:47] Well, and I think also it goes back to, does that person have access to all of that research? Do they really understand the difference between like anecdotal evidence versus more rigorous types of studies? And people relate to stuff so they connect with it, but that doesn't necessarily serve our population always as well. One of the examples that comes to mind, and this is just in education in general, but that I feel like is sometimes pretty much misunderstood or maybe glorified a little bit more than it should be is even like growth mindset stuff. As far as impact on overall academics, there's not a lot of research that really supports that growth mindset makes a ton of difference as far as academic achievement. Now I, as a counselor, I will say, I think there's a definite benefit to it for the social and emotional piece, because really what you're talking about, there's a, some cognitive behavioral techniques to manage your emotions, to get through things that are difficult, but it doesn't necessarily translate to academics. What are some other examples that you have seen?

Hope Wilson: [00:24:45] Well, I mean, I think the big one's learning styles, right? I think that's the one that always comes to mind, right? That there's really no evidence that people learn in one specific way, but that multimodal education in which you're teaching in lots of different ways works for everybody better.

Erin Morris Miller: [00:25:01] So you might hear about learning styles and then change the way that you teach, and you think that you're directing it towards a specific student. So like, well, I'm gonna add more spacial things into my teaching. I'm going to add more movement into my teaching. And it's not that you're responding to a specific learning style, it's that everyone learns better if they use multiple parts of their cortex. So that improves everyone's learning. And so it looks like that you have collected evidence for learning styles because your students are doing better, but it's not specific to, as you know, you don't have a style, it's not kinesthetic people and spacial people.

I mean, you can have preferences based on your experiences, but generally, the way the mind works is the more parts of your mind that you use the better you're going to understand and remember something. Again, it's kind of that, that correlation and causation again. That you attributed it to learning styles, but actually it was elaborative and coding, like a different cognitive thing.

Hope Wilson: [00:26:14] Another example would be, um, multiple intelligence theory. There's no empirical support that those... how many are there 12 now? Um, intelligences are developed separately and that they all kind of stand alone and there's just not empirical support.

Emily Kircher-Morris: [00:26:31] And also there's research that shows that there is correlation between somebody who is academically strong in one area is more likely to be academically strong in those other areas, too. And that goes back to that general G factor of, of intelligence.

Hope Wilson: [00:26:46] That's another one that I hear teachers use all the time, like, Oh, multiple intelligences. And we know that different people are good at different things, right? And we want to think that everyone is special in some way. And of course everyone is special, but that doesn't mean that everyone is gifted or that everyone has an extreme level of proficiency in an area.

And quite frankly, most of the intelligences, um, aren't things that we would teach in school. So the relevance to a classroom is not important. Like I probably shouldn't take time out of my curriculum to go on a nature walk if that doesn't have anything to do with my standards.

Erin Morris Miller: [00:27:24] And also, I mean, if you, if you push Gardner, then he will say that, you know, 80 to 90% of people are average or in the average range on all of these abilities.

So, you know, like, cause I push and he was like, well, yes, like people are average, that's what average means. and I was like, ah, but you never say that loud enough that like people really understand.

And also I get kind of frustrated with the idea that, that we're associating some of having a, a certain ability with values. And, and that's a problem too. You're not a more valuable person as far as like humanity. You're not necessarily going to be happier. You're not necessarily going to have a more fulfilled life. Like all of those things are completely separate. Like, we're talking about educational needs here. That's what we're focused on. That the students have an educational need that we're trying to address in the classroom, but it's not about who's important or who is more valued. And we've got to really separate those two things.

Emily Kircher-Morris: [00:28:34] I think the other elephant in the room in gifted education is, is the theory of over-excitabilities. And it's hard to talk about because there are a lot of people who are really, can really relate to it and connect with it and understand it. And, and my thought is there's just not a lot of research out there that supports it.

I like that comparison with the big five personality model with openness to experience. And that that's a better way to understand some of those characteristics. What are your thoughts about that?

Hope Wilson: [00:29:01] I'll start off by saying that I actually got into a fight with my husband about this when he was going through his gifted certification training. Cause he was all in, and I was like, wait, no, take a step back, have you not been listening to me for the last five years? Um, yes. It's definitely out there as something that I think people intuitively want to relate to. The big red flag for me is that no one outside of our field talks about X over-excitabilities. And that, that should be a big red flag to all of us, that may be other, if other smart people who aren't in gifted education aren't talking about it, that's a problem.

Erin Morris Miller: [00:29:39] Yeah. I did a Psychnet search, because I predicted that Hope would say that. And over the last 30 years there's been about a hundred articles published on Dubroski and 99% of them in gifted and talented journals.

Emily Kircher-Morris: [00:29:56] When I learned about over-excitabilities originally, I was all in. I really, I connected with it. I understood it. I could apply it with my students. And I was invited to go and speak to a group of psychologists who worked with kids, and it was, um, kind of a professional development type of thing that they were doing, more informal, kind of a workshop, but they invited me to go and talk about bright kids. And we started talking about this and one of them goes, Oh, well, that's like the facets of openness to experience in psychology. And I, I stopped in my tracks and I felt really dumb actually, that first of all, there was this other correlation, but second of all, that I'm trying to tell them about this thing and none of them have ever heard of it. And then once I started doing more investigation and, and kind of looked at it differently, I realized that, I think sometimes we're doing our kids a disservice by not using common language that other professionals use.

I know that's hard because there are a lot of really important people in the field of gifted education who, who strongly support over-excitabilities, and I'm not saying it's, it's not... I'm just saying there's maybe a better context for us to talk about that in a different way. A different lens to look at it, not necessarily as an inherent component of giftedness, but as some traits that could also co-occur.

Erin Morris Miller: [00:31:13] When I was in Gifted 101, the first class as a graduate student, I was enamored with Dubroski. I read everything that could be read and found. I sought people out at conferences. When it was, um, near the end of the semester when we had returned back to it, um, my professor actually brought me to the room and was like, observe the over-excitabile person. Like, look at what she's wearing. Like, talk about your tags. You know, like as a course, I took all the tags out of my clothes. I mean that, like, I was the living example for like what this would look like. But after that initial infatuation with it, and again, as like looking at the research, I, you have to come to the conclusion that, like, either you're a researcher and a scientist or you're not.

And so, you know, you look at the research and it, it is, for the Big Five there's thousands and thousands of articles using this paradigm. And psychologists did consider the more psychodynamic type theories. Like that was something that was considered over time and then abandoned because it was not a productive way. It was not, it wasn't producing results. It wasn't predicting anything. It wasn't helping anyone that another thing like Big Five or HEXACO, you know, there are several modern theories, um, that you can use for development and personality and those kinds of things, that are just better. Like they do a better job at understanding people, um, then, you know, then things that have been abandoned. You know, it's not that Dubroski didn't exist. It did exist, it just was not something that was successful in psychology at, at large. And even if you love it, you have to look and accept the way that that research is going. That was my journey with it.

Big Five is what I teach my students when I want to teach them about the major theories of personality. And it does have a lot of research behind it.

Hope Wilson: [00:33:34] That's how we have to frame ourselves as, as lifelong learners, right? Is that we have to move on from things that don't have evidence to support it. And that can be a hard thing to let go, and to admit that you are wrong. So I have this dream of like making t-shirts for all of us that say things like, "I used to think this, but now I think this based upon the evidence," because I think it's really important to model as researchers, as people who maybe know stuff, that we change our minds, and that when we get new evidence, theories adapt. And I think that another problem with the over-excitabilities issue is that it excuses behaviors in gifted kids that need more help. So I see parents and teachers saying, Oh, well, you know, that kid, they're just really sensitive, and that's an over-excitability. When really that kid's really depressed and needs counseling and needs interventions and needs help.

And we're just saying, Oh, they're gifted so it's okay. Or a kid who has ADHD, is twice-exceptional and we excuse that as giftedness and then they don't get the support that they need to really help them be the full, true person that they can be. So when we isolate our theories in gifted ed from the wider community of psychology, then we do our students a disservice in real, tangible ways.

Emily Kircher-Morris: [00:35:06] Erin and Hope, thank you guys so much for your time today talking about this. I know this will be a really useful conversation for people to hear.

Erin Morris Miller: [00:35:14] Thank you so much. It was great.

Emily Kircher-Morris: [00:35:21] What is it that makes these topics persist? And is there really any harm that is coming from them? One of the major issues that makes this a difficult problem to overcome is the fact that much of the research that delves into the nuance of the information is behind paywalls. Practitioners, or people who are just interested, can't even get the actual studies without paying for them. Then, if they can get a copy of the peer reviewed research, it's often written in psychological jargon. There's a communication gap between academia and the general public. Also, who has time to keep up on all this information if you don't work in research? The harm is relative depending on the population of students that you're working with.

If for example, you spend a lot of instructional time learning about growth mindset, when the research doesn't show that it makes significant impact on overall achievement, we have to ask - would that time be better spent elsewhere? Is that more impactful for some students than for others? We need researchers to do a better job of sharing the information in a way that is accessible and practical.

As educators and parents, we need to be wary of programs and curriculums that tout a one-size-fits-all solution, but may be motivated more by the opportunity to sell that curriculum than the research behind it. And, we need to establish more open science practices that reward following the scientific process to find accurate results, even if those results aren't going to end up being click bait. I'm Emily Kircher-Morris. See you next time on Mind Matters.

Dave Morris: [00:37:21] Our thanks to Erin Morris Miller and Hope Wilson. You can find out more about them at our website, www.MindMattersPodcast.com, just click on the episode 66 page. Thanks to the artists and musicians of Epidemic Sound, who work hard to make the music we use on Mind Matters. And thank you to our Patrimon patrons who slip us a little cash every month to keep the lights on. If you feel the pull to help us out as well, go to www.MindMattersPodcast.com and click 'support' at the top of the page. There you'll find links to Patreon and to our PayPal portal, where you can make a one-time donation. For Emily this is Dave Morris, this podcast's Executive Producer and Emily's sous chef. Stay safe. Stay healthy. See you next time.

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