

Welcome to the Baloney Detection Podcast. I am your host James Kabrhel, AKA, doctor K. This podcast combines my love for teaching with my desire to break down and debunk pseudoscience and scientific misinformation. Each episode, we will look at a different topic, where we will have a lovely conversation with someone with a unique perspective on science and education.

Over the years, I have realized that trying to figuratively beat people over the head with science. As I explain, it is not the best way to communicate effectively and to start conversations about sensitive subjects. To give a short history of some of the topics that I have talked about in my own classrooms, in colleague's classrooms. In community lectures, I have talked about terms like chemical free, natural organic. I have talked about vaccines in the anti vax movement. I have talked about fad diets, I have talked about supplements. I have talked about gluten free consumer products. I have talked about GMOs, you can imagine that a lot of these could potentially be very controversial subjects. Okay. And I would love to be able to have someone come in and learn about these subjects from me. Selfishly, I would love to be able to change people's minds. And I think Previously, I thought the best way is to. I've done this literally. Get up on a table in my classroom and it's get up on the front bench and stand over literally stand over the people that I am speaking to and shout at them like I'm giving a sermon from somewhere in the hopes that I can speak loudly and forcefully enough to change their minds. We have seen those of us that have been alive long enough, and this is not new in the area of social media of politicians doing the same thing of being at a rally and trying to speak with the loudest voice. It's not necessarily politicians, it could be celebrities, it could be educators, it could be virtually anyone.

And within the last few years, I've realized with some self reflection that that isn't the best way to convince anyone and it isn't the best way to start a conversation. It's a very easy way to make someone defensive about the things that they believe in, the choices that they've made, the experiences that they've had. I shouldn't say no one, but very few people who are going to react positively to being yelled at or even spoken to in a polite voice, and I'd like to think that I use a polite voice most of the time with language that is harsh and judgmental. You are never going to start a conversation from a place of superiority or judgment. And it's very easy for a scientist and academic like myself to feel superior when coming from a place of I know what the data is. Okay. Other people who are not experts or people who look at peer review data or aggregate data or things like that. Are not going to immediately understand a set of data points. They're not going to immediately understand scientific jargon. It's going to sound like a foreign language. It's going to sound agree. There's going to be confusion. Understandably, there's going to be confusion. And it's just I can understand people wanting to withdraw from a situation or conversation like that. If they don't feel like there is a level of understanding and empathy and willingness to communicate. So I started with my classes since I have multiple classes during the week, and I'm speaking to them all the time of Not framing conversation about sensitive subjects in terms of, I know what I'm talking about. Okay. I

have changed my manner. I have changed my language. I have tried to speak with a voice that is much more like the voice that I am using now, for lack of a better term radio voice and not a in classroom pedagogical voice. Kind of like that traditional view of a lecturer in front of a classroom, large classroom that's speaking with a loud voice or with a microphone. Because I want to encourage conversation, more that I want to try to influence people into changing their minds. Now, do I want people to change their minds? Yes, I do. Particularly if they are making choices that are detrimental to their own health, to the environment, to the world. To other people. But you can't change minds by force. It's I feel like even if you could the choice could immediately be undone. So it's better to have polite conversation more than anything else. So I try to create a safe environment within my classroom, within spaces which I converse with people of, I am open to what you are willing to say. And I want to hear what people have to say because not everyone is going to agree with me. Not everyone has the knowledge base that I have as a chemist, as a scientist, as a teacher of more than 15 years. I have to understand that it's important to relate to people on their level, and that they have different experiences and different expertise than I do. Okay. And that's how we can understand and relate to each other and maybe then we can establish a method of communication that works for both of us. This is certainly a challenge. Communication on this level is a significant challenge. I have the opportunity to speak and teach to a lot of young people a lot as a relative term. You know, I have 20 to 30 students every semester. It's an emphasis on treating people respectfully with the students like adults, even some of them are 17 18, but they are old enough to be processing information and making their own decisions and choices. And that's one of the things that I tend to frame these conversations with. The three words choices have consequences. Because we are human beings and we have free will, and we can make decisions, we make any number of 100 or 1,000 or 1 million decisions every day on a second by second basis. But when it comes to buying things, eating, using things, putting fuel into our cars, buying a new car, buying an electric car. Even things like choosing to come to class or not choosing to come to class, all of these choices have consequences, and some of them are minor and some of them are major. Okay. And what we can do is look at the choices that other people have made over the years. The choice to create nuclear energy or to use nuclear energy as nuclear weapons. The choice to use fossil fuels and to extract fossil fuels from the Earth. The choice to lately go from more fuel based fossil fuel based cars to electric cars. To use plastics to reduce plastics, to recycle plastics. These are all important choices that we make on a day to day basis that can be framed in scientific, sociological, economic, philosophical, environmental choices, factors, and I think it's become more important that we make people aware of the choices that they are making and the impacts those choices have. More than trying to Okay. Make people choose differently. Just by as I said at the beginning of this, getting up on the bully pulpit, Your choice is wrong. Make this one instead. People don't want to admit that they were wrong in the choices that they made. It's a very difficult thing to do, on a human level. It's a very difficult thing to do to admit that you were wrong by doing x thing, even though it had y negative consequence. It's it's a challenging thing. There are so many layers in

terms of emotion and personality to go into analyzing a single choice. I think if we look at conversations about choices in relationship to environmental choices, climate choices, food choices, with a bit more empathy for people in terms of how they come to the decisions that they make, Then I think we can have some more productive discussions about how we change our behavior and habits in the long term to create a better society. One of the ways that we can do this is by encouraging people to process information in a slow and Okay. Productive way. And that can be incredibly challenging in a society that is based on a 24 hour news cycle on social media, on the Internet on echo chambers in person and online with biased news sources without proper fact checking where everyone has an opinion and sometimes more than one opinion. So it's a great challenge, but The challenges that we have in a society that is that complex technologically speaking, are really not any difference. If we go back decades to the sale of supplements in stores when it was more about traveling salesmen and books and pamphlets and magazines and advertisements in those media rather than, you know, the Internet, it's not all that different. It's the same conversations. It's just faster and on a wider scale, Because we do have access to information so readily at our fingertips, quite literally at our fingertips with our handheld computers. So that's why I feel like it's so important to engage in these challenging conversations. In a positive way. Because technology will only get better faster stronger. We will get more information. We will go to further places. We will have more choices to make. And so I think it is imperative on us in positions of I loathe to say the word power because I don't want to view it that way. Those of us who are teachers who come in contact with younger generations on a regular basis to speak to them in conversations rather than try to push them into certain directions academically, intellectually. It's about talking, less than lecturing. I think that is to circle back to sort the beginning of this is where I have come over the past few years as an educator, that it is much more about conversations on an equal level that it is about Being on a soap box. I'd love to be able to take my figurative soap box and not step on my literal soap box, lab bench and in my lecture room, just to take all that away and to be able to speak to people one on one or one on groups in a way that encourages them just to think about their own choices and hopefully make better choices. That's how we're going to create a better, more informed citizenry. Whether it's through students or whether it's through the community just by having frank conversations. And hopefully, some people will listen in good faith, and think about the choices that they've made and make better choices. That's the hope. I think that's the best that we can hope for. To sort of end this conversation is that I now have a mantra that I share with my students about making realistic expectations for themselves. And we have to have realistic expectations for us as educators for people. In terms of choices that they make ideas that they share. Okay. And if we have those realistic expectations for choices and for conversations, I think we can make real headway. It's not being able to make those earth shattering profound changes all at once. That's not the way that things usually function. In an emergency sure, that's how you can get things to change, but you have to be able to make those incremental changes also. And I think that's where we can have a bigger effect on the future is talking and making those incremental changes.

So thank you for letting me talk for now nearly 20 minutes about this particular subject because in a way, it's cathartic for me to share about the changes and how I have communicated and perceived things. It's important for me to recognize that I was doing things incorrectly and that I needed to change. And I will continue to change and adapt as I learn more about myself as an educator, myself as a person, and the students that I have and their experiences. I can only try to be positive about what that will lead to in the future. Okay. So I look forward to having another conversation with you soon. And we will talk a lot more about words, about situations, about current events as we go through. And this is doctor James Abril. I will see you next time. Okay. Bale Detection is a production of Phoenix Studios at the University of Wisconsin Green Bay. Phoenix Studio's executive producer is Ryan Martin, and the production manager is Rachel Scray. Our audio production coordinator is Bill Salk. Our graphic designer for Baloney Detection is Logan Severance. If you haven't already, please remember to rate, review, and subscribe to our podcast on your favorite podcast platform. You can also head over to our website at UWGB EU Podcasts to check out past episodes of this and all of our shows. I'm your host, doctor K. Thanks for listening. Be good people and do good things.