

# Transcript

**Derek Bruff: [0:00]** this is leading I'm Derek breath. And this episode, we continue our miniseries on bodies and embodiment produced by Leah Marion Roberts, senior graduate teaching fellow at the Vanderbilt center for teaching. Leah has been interviewing experts who can help us understand why paying attention to bodies in teaching and learning spaces is so important today. Leah talks with Susan. Director of the faculty center for the enhancement of teaching and learning and professor of English at Columbus state university, Susan teaches early modern literature writing and translation studies and has designed and led study abroad programs in Oxford, England and Florence, Italy.

Her work at the faculty center includes career coaching and leadership development. Lay it reached out to Susan. However, because Susan is the author of the book *Minding by: How physical space sensation and movement affect learning* published in 2021 by West Virginia university press Susan and I are fellow authors in the teaching and learning in higher education series from West Virginia university press as are a few past podcast guests. I'm very glad to have another member of this great group of scholars on the podcast. In the interview. Susan rock shares some core understandings of bodies from her. How all those principles play out in the classroom and some very practical ways to enhance student learning and belonging through attention to bodies and the physical learning environment.

**Leah: [1:38]** Welcome Dr. Rock. It's so great to be with you today. I'm really looking forward to this conversation.

**Susan: [1:44]** Me too. I'm delighted. Thank you.

**Leah: [1:47]** So, I like to start with a question since we're going to be talking about bodies in a body mint, a question about that exact topic. So, do you have an embodied experience that you've had recently that you'd be willing to share with us?

**Susan: [2:00]** I do. And I've thought carefully about this because I wanted to think of an experience that wouldn't be. That would be something others had, perhaps some had something similar happened but that I was able to understand in a different way because of the research that I've done. So I want to tell you about visiting our local dog park. And first of all, I, as I just briefly touch on in the book, I. To just explain that pets. And also of course, our loved ones, our human loved ones are often kind of extensions like limbs of our bodies. Because as you know, science experiments have shown that when you snuggle with a pet or a baby or your loved one, it releases, you know, beta, endorphins and oxytocin and dopamine in your body.

Your relationship with this close. Other living creature is like an extension of your body. So, when you go to a playground, either with a small child or in this case because my kids are all older now and my memories of playgrounds are a little bit less vivid. I took my dog to our local dog. And it's a beautiful physical space. It's they've taken about the size of a football field and laid AstroTurf down and they've got white sparkly lights and there's music. And also, critical there's an Airstream trailer with a full bar, so that may have something to do with the experience, but it's a beautiful physical space.

And when you're there. The dogs are so happy. They're all racing around, and their tails are wagging and there's like a hundred tennis balls all over the place. So, there's balls flying in the air and people are, you know, just freely walking around and the dogs are just having fun and. You know, it's such a pleasurable experience to be outside, especially in the fall. The weather's great. And I find myself striking up conversations with strangers in a way that I normally avoid because I'm into a little more introverted and it occurred to me that because our dogs are like stretching, expanding our peri personal space over this whole field. That were circulating in a in an embodied way that kind of makes us a little bit more open and there's an element of risk there, which I think if it's a playground with little kids, people, maybe it's the risk overtakes their feelings of pleasure in that experience.

But that also heightens the sense of pleasure because you're just so happy to see. You know, little extension of yourself interacting so freely and playfully with others and it's sort of an encouragement to do so. And I just love it as an inter-species interaction.

**Leah: [5:13]** Wow. Thank you for that beautiful story. And, you know, it's really interesting because it connects with the moment or story that I wanted to share too. Because I had been feeling really anxious. The last few days just with, you know, all of the requirements and pressures of life. And I stepped outside to take the garbage out and I saw this kind of.

Haziness over. I looked up in the sky and saw this haziness over the moon. And the moon was, it was otherwise all the way clear, but just the sort of like light cover of clouds. And it was creating this luminescence. That was really beautiful. And just taking it. A couple of breaths and noticing that my whole body relaxed in a way that I hadn't experienced in a while.

And the sort of relationship that you're saying with that you may have with dogs, or sort of understanding yourself as bigger than just yourself and that, how that creates some openness pleasure. Also, a little riskiness. It always feels a little scary to think about space and what the moon really is and how that relates to what this, what we're doing here on this planet.

[00:06:24] But yeah. Thank you for,

**Susan: [6:26]** oh, I love your story too. And I know I can picture that moon and it is it's just a matter of noticing those moments. Yeah.

**Leah: [6:34]** Yeah. Yeah. Thank you for indulging in that opening. I want to move now into some questions about what the body is. This is a podcast series on bodies and embodiment. So could you share with us why a bodies, in other words, what are the core understandings about bodies that your research or discipline or practice maintains?

**Susan: [6:57]** Right. So. What I've found so important and interesting about paying attention to the body was that we have this, I think it's shaped by the way, our next separates our heads from the rest of our body. We have this artificial distinction that we've made between our brains and the rest of our bodies. And we've been a little. I think prejudiced by metaphors like the computer, or there were earlier ones that, you know, shaped our sense of what a brain does, but we forget that like your brain is in your body.

It is you're in your body is your brain and your brain is in your body. It's not separate from it. And so, what I learned that I think really made me feel convinced. Cognition can't be

separated from your body. Is that the people who study evolutionary development of the brain are moving towards this conception of our brains capacity to reuse neural connections or recycle neural connections.

And so, they Are pretty sure that are big complex brains developed because our bodies are capable of so many different movements. We have, you know, all of these fine motor skills and large motor skills. And the phrase that I like to use is, or that I, that I. Yeah, admired someone else's use of is that we're the Swiss army knives of motion because, you know, we just have all these different ways we can move and that's why our brains got so complex. And so then we're reusing or recycling those neural networks in order to think cognitive, you know, complex, abstract thoughts. So those things made me feel, you know, that you really can't talk about. Cognitive functioning without talking about the body.

**Leah: [8:58]** Yeah. Yeah. So, tell me a little bit more about Term embodiment and what the relationship is between studying bodies and people's lived experiences of being in a body, right?

**Susan: [9:09]** So I think at this moment where we're particularly interested in differences among human bodies it's a function of our kind of fascination with identity and that's all very important. And I think. Natural impulse of humans to be interested in what makes each of us unique. We have kind of an egocentric bias, but. As a species, we have so many more commonalities than differences. And so, you know, our cognitive processes or our biases for example, for narrative, we're always looking for ways to hang story things are our understandings on stories, including our own lives, our own identities. And it's super important for us to feel a sense of belonging to like an us.

We make us them distinctly. Pretty much all the time about everything. Those are commonalities of people's embodied experiences and I find them just really interesting as a way, I don't know, maybe to sort of, heal the fractured sense of how separate we are from each other.

**Leah: [10:18]** Yeah. Thank you. And so, as you're sort of speaking about. Connecting to each other and not, and melting maybe a little bit of those separations between self and other. How does this, so all of the things of life, the social, the cultural, the psychological, and or biological aspects of bodies, how do those things shape our lived experiences? And embodied experiences.

**Susan: [10:42]** So those things are all part of your prior experience that shapes your perception. And so, the box. And the brains, a default predictive mode means that your perceptions are always shaped by what you expect to happen. Your brain is just always trying to conserve energy by seeing or ha it's sensory perceptions are shaped by what it expects.

And so your embodied experience plays a huge role in your. You know, what you believe to be going on around you. And you, in order to change that, I mean, it just requires a huge high degree of self-awareness of recognition that, you know, while I think implicit bias is not something that you can erase, you can at least be capable of like. Acknowledging it and shaping your behavior to kind of, you know, overcome implicit biases that you may not find that you want.

**Leah: [11:55]** Yeah. Great. Thank you. So I want to move now into thinking about putting what we're talking about into context of teaching. So how do these ways of knowing and questions and understandings about bodies and embodiment translate to teaching?

**Susan: [12:10]** Yeah. So, the first thing that I noticed is just that we have to be a lot. I'm trying to be a lot more cognizant of the energy bandwidth of my students. So particularly over the course of a semester, it's a long haul and people, you know, Get very tired at different points in the semester. They're tired if they have a break and they come back, they may have more physical energy, but it takes a lot of energy to learn.

And so, you know, I'm thinking about the arc plant. I plan the arc of my semester, maybe with a little bit more sensitivity to how much energy students have at different points in time. And then I try to check in with them about how they are on any given day and give them opportunities to recover some of that bandwidth by going outside, for example by interacting with each other In a way that's planned and helps them to experience.

What I learned is important about interpersonal synchrony. So when you move together with other people, it creates this sense of belonging that can be restorative as.

**Leah: [13:20]** Ooh, could you tell me a little bit more about that? Yeah. And maybe giving an example from an activity that you do absolutely.

**Susan: [13:28]** Translate that. Yeah. So, just last week, for example, I wanted my students to practice interviewing somebody because I'm sending them out to interview an expert in this.

Research topic, but that they've each individually chosen. And I wanted them to practice that because being a good interviewer is not something that comes naturally.

So, it was a beautiful day and I decided that we should take a walk while we were practicing. And so, I asked them specifically to choose someone in the classroom who they had not had as much experience getting to know. And this is a class of about 18. So, they've at this point in the semester, they've all talked to each other on multiple occasions, but they've also kind of paired up with certain people.

They tend to. Next to you more often or whatever. So, I asked them to pick someone they don't know so well. And we took a walk along a campus path, and I think the exercise was improved by the fact that they didn't have to be staring into each other's. As they didn't have to be facing each other so they could talk more freely while they were walking.

The activity of walking typically helps us to think more creatively. So I think they're answering of the questions may have been more interesting than it would have been if we stayed in the class. And then also, I, you know, I just really wanted them to have 20 minutes of fresh air, which, you know, when we came back to the classroom, I said, how do we feel?

Do you feel like you've got a little bit more energy? Was that a good thing? And you know, they, some of them, you know, be grudgingly acknowledged that. Yeah. So, okay. That was all right. That was good. But I've also had them do things with. Small whiteboards. I have a set of like, desk size whiteboards, where they have to pick their whiteboard up and carry it around to a different say like the trays in front of the classroom wipe.

And exchange them with other people and a very like spatial physical way I could have had them just remain seated and sort of pass their whiteboard to the left or the right or whatever. And I decided no, we're going to make everybody stand up. Bring their whiteboard to one of the walls of the classroom and pick up another one and go back to their seat.

And I played kind of groovy music while they were doing these exercises and just the circulation of the bodies in the room. I noticed that they seemed to just feel a little bit more connected with each other.

**Leah: [16:09]** Yeah. So, the stories that you're sharing are reminding me of some of the core concepts in your book of embodied cognition is a field and a concept that you outlined for

people. And you talk a lot about the importance of movement. Could you share for our listeners a little bit about these practices that you chose and why you chose them and why they're grounded in what we know about how people learn?

**Susan: [16:35]** Yeah. Because the brain is sort of optimized to work while you're moving. Any experience that you can give your students with locomotion is, you know, actually moving their bodies to another place or a manipulation, which is, you know, touching. And also, any kind of sensation that they can notice within their bodies is helpful for cognition. So, any, if you take three minutes to do have just a deep breathing exercise and those are available lots of them on YouTube.

That you can pull up for free. So, you know, I am not somebody who has led to many of these contemplative practices of deep breathing, or I don't teach yoga. I, you know, this is an area that I'm still growing and learning. So, I lean pretty heavily on prerecorded exercises, but then I get to do them too.

So I may just continue doing. But they do affect the processing of your perception and noticing is the first step in learning for all humans, getting back to sort of, you know, our embodied commonalities, we learn by noticing really carefully and then imitating and then practice. And so, you know, those three steps, if you think about the way that you've learned any sort of skill or even acquired knowledge of some sort, you noticed it really carefully, then you kind of imitated it and then practiced. And that just takes time and takes energy.

**Leah: [18:22]** Yeah. Yeah. Is there anything else that you'd like to share with us about what you've noticed about incorporating embodied activities or any other relationships between bodies and embodiment in your teaching practices?

**Susan: [18:38]** I know. For example, during the pandemic you know, the same things everybody else was feeling. The zoom fatigue comes from staring at ourselves too much and staring into other people's eyes too much. That's it, you know, a drain on our energy. It became really clear from spending so much time in front of the screen. You know, why we need to go outside and move and. When I was teaching live synchronous classes online one of my students' favorite things was just to take a few moments to do chair yoga and You know, I discovered that chair yoga was initially designed for, you know, senior citizens and people with limited mobility, which made me sort of laugh when I was introducing it to 18-year-olds.

Like, okay, here we go. But they loved it and it just became clear that giving. Acknowledging that our bodies have needs, even in this very virtual setting was appreciated by them. And even though it feels a little awkward and outside of the norm, they were grateful. They, it was like acknowledging that we're all human beings together and that was.

**Leah: [19:58]** Yeah, I love that phrase that you said that bodies have needs. In regard to any context that we're in, including the sort of like boxes of computer screens that most people existed in for the last year and a half or so. Yeah, bodies have needs. That's a really important reminder. That's maybe, you know, obvious in lots of ways, but sometimes we forget.

**Susan: [20:19]** Yeah. And, you know, I should say not to completely bash on zoom you know, to be able to connect with loved ones and and, you know, colleagues who we haven't seen in a long time and see their faces. It's, it can be really. You know, a source of joy and, you know, my partner, Nick was just saying recently, remember when we used to think about seeing other people's voices or other people's faces, instead of just calling them on the phone as super futuristic and high-tech Jetsons, and it was going to be so awesome and now we've got it and we're like,

**Leah: [21:04]** Yeah. Yeah, absolutely. I'm even thinking about, like, in relationship to that point of bodies have needs like you know, the ability to be able to be in class and needing to go to the bathroom and being able to say let me just mute myself, turn my volume up. And like, depending on the outline of the space that you're in, you may still be able to listen and not miss what's happening in class is like, An interesting new phenomenon.

It is. Yeah. Which is a great segue into some questions I have for you about technology, because we know that bodies in a body mind theory and practice are often engaged in these questions of technology. So how does technology shape your teaching, especially as it relates to your understanding of bodies and embodiment and learning. Yeah.

**Susan: [21:53]** So, I love the opportunity to talk about technology, things that are not necessarily electronic. You know, and I think that's always a fun thing for everyone to. Feel good about a pencil is technology papers, technology, the

**Leah: [22:11]** whiteboards you told us about the whiteboards at desks.

**Susan: [22:14]** Yeah, absolutely. And so, I like to think about any sort of way to do cognitive



offloading as an affordance, right? It's a way that you can hold some ideas in a separate. So that you can continue thinking about other things and then come back to it later. So

**Leah: [22:38]** I love that framework. I've never heard about it that way I really liked that.

**Susan: [22:41]** Yeah. It's and I have to say I have been so happy to discover Annie Murphy Paul's book, the extended mind, which came out just I think a month after mine. But she talks about the way. If you use say whiteboards or any kind of separate technology to hold your, to offload your cognitive process, right.

That if you can then navigate those things spatially, that's a. Way that your brain is optimized to work as well. So, either putting things in different places around the classroom, or I'm even thinking about the way that I remember writing my first, really long seminar paper in graduate school, and I printed out all the pages and then cut them up with a scissor and was like rearranging them on a table.

I mean, that's it, that's the way that your brain can use space and. Technology to kind of, orient, you know, your ideas in a way that makes use of your embodied affordances. So active learning spaces, ideally need to be able to facilitate that kind of navigating. You should be able to, you know, move around the room pretty freely and the space should really facilitate variety.

So I resisted for a really long time having even a instructor station with a computer terminal in our big active learning room, because I didn't want there to be a front of the room. And I'm still a little bit disappointed that we had to cave in and get one, because it was just too difficult for everybody to always be learning how to hook up their devices to the projectors.

But This, the room still does have whiteboards on all four walls and furniture that rolls and that you can configure into, you know, a million different layouts. And I think that's the thing that keeps your alertness levels up because you can't just switch on your predicted. Expectations of what you think is going to happen in class today. The seating's different, the, you know, whatever we do, there might be different. And that keeps us in the best, most open state to learn, to notice, to do those steps of learning.

**Leah: [25:07]** do you have any more examples of the, these, like, ways that. You do cognitive offloading. So, we have whiteboards, maybe even as it just taking notes on a piece of paper

or on a whiteboard is, am I missing any other kinds of examples here?

**Susan: [25:24]** I mean, cognitive offloading can also be, you know, electronic. It could be on a Google doc. I mean, I think all of us have really Embraced the ways that we can collaborate on shared documents. Those have been really cool. In that particular example, you're not necessarily navigating spatially, but you are using a tool to, you know, hold your ideas while you go on thinking about something else.

Yeah. I mean, I guess I would say the other tools that maybe promote better say group work or teamwork would be things that allow people to, to share coordinated movement in some way. So, this is going to sound sort of ridiculous, but I mean, if you could have. Groups play short games of cards, for example, as a way of like getting to know each other or any kind of table game or.

Have them, you know, take a walk or do anything in which they're having to kind of, exchange objects or move together. There's one exercise in the book that I described mimicking each other's facial expressions. Those are ways that you build a sense of cohesion by having your bodies kind of lead the way. So you're using your body as an, as a technology there.

**Leah: [26:55]** Yeah. Oh, that's really cool. Thanks for sharing that. What about some of the hindrances of technology or some ways in which it might get in the way?

**Susan: [27:05]** Yeah, so I think my general principle there is that the easiest thing to do the most convenient thing to do may not necessarily lead to the best loan. So, yes, it's cool and easy to do, like polls, where students use their smartphones to, you know, respond to questions. It's fun. It's cool. It's easy. It's, you know, convenient if they all have a smartphone, but it would probably be more likely to stick in their long-term memory. If you did a room mapping exercise, where you break the room into quadrants and have them move to a corner of the room with the answer that they think is right, and then have to interact with people and talk about why they think it's the right answer.

And yes, that takes more time and yeah. You know, trouble to get up out of your chair and move somewhere. But I think in the end it leads to more it's it gives the students a spatial memory of their processing of that piece of information.

**Leah: [28:18]** Yeah. Yeah. I love that. That's a that type of activity I've found really helpful when talking about some You know, potentially personal and sensitive topics. There's a lesson in my and one of the classes that I've taught before, where we get into values and what are our values and how do our values shape our work. And but there's so much juiciness in those kinds of conversations to, to have people get an align as it relates to strongly disagree versus.

Strongly agree and working through some value, some sticky issues around values and how we think about them. I've found that exact thing that you're describing really helpful in using the whole space in a room. And rather than just having it be like, oh, this is, I agree or disagree on a piece of paper, but really having to hold that in your body. And depending on the topic sometimes. Randomize them as well, so that they're not necessarily speaking their own value, but

**Susan: [29:17]** I love that's a great exercise. And it also, I would think you know, promotes connection among the students then too, because they see, you know, where others are standing in the line and that's, it gives them a sense of all doing something together. It's coordinated. Yeah.

**Leah: [29:35]** How do you navigate student perceptions of or just even student readiness or willingness to engage in sort of different activities. And I'm also thinking here about different needs that individual students might have maybe relating to access. And how do you account for. All of that. Yeah. Designing

**Susan: [29:56]** these activities. Yeah. That's really important. I mean, there's a lot to be said here. And the first thing is that inclusivity is the most important piece. And so, I mean, I'm fortunate in that I teach small enough classes that I can know everybody in the room at a certain point and.

So it would be much more challenging to know exactly out of your 250-person class. You know, what people's levels of mobility are, but the focus on inclusivity, you should also do. It be transparent. In other words, I always explain to my students why I want them to move and I tell them, listen, I've done this research, our brains function in different, sometimes improved ways when we're standing or walking.

And so I want you to, you know, just keep that in mind is the reason why I want to try this. I want you to go out and get fresh air, for example, because I know that's going to be

stimulating for your sense of alertness. And then I'd take this recommendation from Leslie bears and lot hill at Pacific university that you, it's good to explain to students the difference between uncomfortable and unsafe.

So, you know, There are things that they don't feel comfortable doing, but that's different than it being unsafe. Right. And so, you know, I think just giving students lots of opportunity options, for example, if this is something that, you know, isn't going to work for you today, or you're just not, you know, whatever in a.

In a moment where this is something that you feel capable to handle today. Here's another option for you. And so, and that could work in really large classes. I would think that, you know, if you had different opportunities for people to choose, whether they would like to have their discussion by walking around the quad once or everybody gathering in this corner or whatever, those would be good ways to handle giving them some options.

**Leah: [32:17]** Yeah, thanks. This has been such a fabulous discussion. I want to close with among all of the things that we've talked about. If you had sort of one, or if you want to make it a couple that's okay. Too. One take home point that you would want listeners to hang on to from this conversation. What would that be and why?

**Susan: [32:36]** I actually have two takeaways. One of them is sort of a. I don't know, a little more radical, but I'm serious about it. I feel like faculty, because teaching faculty are such sort of free agents and that we have so much flexibility to be in our offices or not, or be on campus or not. That I really think it would be nice to promote our center.

Connection to each other. If faculty spaces could include things like ping pong tables or pool tables, or you know, opportunities to do something, I really, my big dream is to set up a badminton nets on campus. But but I mean, I've had experienced forming faculty staff. Tennis teams that are sort of transformative.

I mean, you just get to move around and do something completely different with colleagues and it just helps you relate to each other as human beings. And I just sort of feel like, you know, the stereotypical bad faculty meeting. I mean, maybe these could be, you know, I don't know, softened somewhat if we interacted with each other on a more embodied basis more often, but, okay.

So that's the one silly take away but not silly, really? No, but the one that's more connected to teaching and learning is just that, you know, learning deeply and meaningfully requires a lot of time and energy for learners and. To give your students enough time to notice carefully the things that you at a much more advanced or expert level of acquisition have, you know, have noticed for so many years that you.

You know, can't notice them anymore. You it's worth taking the time to slow down and give them the opportunity to really perceive what you want them to notice. And give them hands on. Movement-based if possible ways to do that noticing. And so, you know, if we have to sacrifice some of the, you know, huge amount of knowledge or skill or content that we might ideally want to share with our students.

I think allowing them to have more immersive. Memorable impactful experiences with a small piece of what we all know would be the way for them to continue being curious about what our area of expertise really is and want to know more about it in the future. And so, you know, we, there's no way that you can pass along everything that you know to your students in one semester so you have to select anything.

**Leah: [35:50]** Yeah. And I love that as a, like, almost like a reorientation of what the goals are for student learning. Even it's like, you really want your students to come away curious about this topic and maybe slowing down and having more embodied and relational experiences in the classroom around this content could be part of that. Yeah.

**Susan: [36:10]** Yeah. Maybe it's the leave and wanting more kind of principle. Yeah.

**Leah: [36:16]** And I love your kind of like part of what your take home point there is this lesson of slowing down, which as I reflect on my own embodied experiences, even what we opened with, like going to the dog park or stopping to watch the moon, while you take out the trash or something, I feel like slowing down is often the message that my body gives me if I listen.

**Susan: [36:37]** Yeah. Oh, that's wonderful. I'm so happy to just. Talk through these kind of cookie ideas with other people who seem really to get it and are super excited and interested in it.

**Leah: [36:52]** Yeah. Thank you so much for your time and all of your insight. This has been

one time.

**Susan: [36:56]** You're so welcome. Thank you for inviting me.

**Derek: [37:04]** That was Susan Rock, director of the faculty center for the enhancement of teaching and learning and professor of English at Columbus state university, and also author of *Minding Bodies*. How physical space sensation, and movement affect learning. Thanks to Susan for taking the time to talk with us and thanks to my center for teaching colleague Leah for the.

Leah. And I were both struck by Susan's comment that our bodies have needs, even in this very virtual setting. That's something that's easy to take for granted when we're not spending much time in front of our computers or when we live in bodies that work in pretty typical ways. Teaching and learning and working remotely during the pandemic taught a lot of us about the needs that our bodies have and the needs that our students' bodies.

For me, it was actually my first semester back on campus on a regular basis that showed me some of the limits of my body. Working at home for months, I would frequently go outside to get fresh air or walk the dogs. When I looked at the step count on my phone, it actually wasn't that far off from my 2019 average.

But when I went back to campus and worked in my office all day, still having all the zoom meetings, I didn't take the time to walk out. There were no dog scratching at the door to be let out. I guess that's when my lower back started acting up and I had to go to physical therapy to learn a whole new set of stretches.

Now I'm fortunate to have a body that pretty much always does what I need it to, but that's not always true for me. And it's not always true for our students. I really appreciate Susan Rock's advice on helping our students acknowledge and meet the needs of their bodies. I think I need to learn some of that chair.

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