Catherine Ross: Hello, and welcome to Dead Ideas in Teaching and Learning, a higher education podcast from the Center for Teaching and Learning at Columbia. I'm Catherine Ross, the Center's Executive Director. Let's get started.

My cohost today is Caitlin DeClercq, who is an Assistant Director on the Graduate Student Programs and Services Team here in the CTL. I invited Caitlin to join me on this podcast episode because she's the one who discovered our guest's book and recommended it to me and others to read. And so who is our guest? Our guest today is Susan Hrach, author of the book *Minding Bodies: How physical space, sensation, and movement affect learning*. As a quick reminder for our listeners, in this podcast series, we are exploring dead ideas in teaching and learning. In other words, ideas that are widely believed though not true and that drive many systems and behaviors in connection to teaching, exercising what Diane Pike called, "the tyranny of dead ideas."

Susan Hrach is a professor of English and the Director of the Faculty Center for the Enhancement of Teaching and Learning at Columbus State University in Columbus, Georgia. She is the winner of the University System of Georgia Regents Scholarship of Teaching and Learning Award, and is widely recognized for her innovations in teaching world literature. Welcome to our Dead Ideas podcast, Susan. It's such a delight to have you as our guest.

Susan Hrach: I'm delighted to be here. Thank you for the invitation.

Catherine Ross: And welcome to Caitlin, my co-hosts today.

Caitlin DeClercq: Thanks so much, Catherine. I'm glad to be here.

Catherine Ross: So, let's get started by setting the stage. I want to talk about your new book, *Minding Bodies*, and I'm going to read a quote here from the book. *Minding Bodies* talks about how, quote, "we shift the focus of adult learning from an exclusively mental effort toward an embodied sensory rich experience, offering new strategies to maximize the effectiveness of time..."
spent learning together on campus, as well as remote." End of quote. I think that's a very good summary of the book.

[00:02:24] I discovered this book, as I said earlier, when Caitlin recommended it to me because I was drafting a resource to guide some classroom innovation conversations at Columbia. And it was so great to be able to bring the research from your book to this classroom committee, to help put that in the conversation. People understand that the mind-body connection is often missing from conversations about teaching, and this is a classic dead idea that your book addresses so well. So I'm quite anxious to unpack that dead idea. And with that, I'm going to turn the mic over to Caitlin, who will kick off the interview.

[00:03:06] **Caitlin DeClercq**: Great. Thanks so much, Catherine. So, I have a background in architecture, and of course then I'm well versed in thinking through how to navigate and leverage the various affordances of physical classrooms in service of pedagogical goals. But Susan, your book really opened my eyes to a broader and more nuanced view of what sociologist Donna Hughes terms the, quote, "physical context of learning." In short, you show how attention to students' sensory experiences and their need for movement, embodied cognition, and even just getting outside can maximize student learning and engagement. This notion of embodied presence felt especially poignant to me as we return back to the classroom after more than a year of social distancing and remote instruction, which is really the exact moment in which I discovered your book.

[00:03:48] So, of course, I'm eager to learn more. Let's go ahead and get started with some questions. So first, Susan, you open your book with a chapter entitled "No More Brains on Sticks." So I'd like to start there. What's lost when we see students as mere "brains on sticks?"

[00:04:03] **Susan Hrach**: Thank you Caitlin. Yeah, it's such an interesting metaphor and I've heard some other great ones as well, such as "the body is just a chauffer for the mind" and a few others that convey the same idea. But basically, these are now being challenged by neuroscience that shows that your brain is highly influenced by what's going on in the rest of your body. And in fact, we can't separate the two. They're always working in conjunction with each other. Learning demands energy that the body has to support.

[00:04:38] So I think faculty have been imagining that students' physical wellbeing is somebody else's problem, but in fact, it directly affects their cognitive performance. So we need to care about bodily wellbeing.
Caitlin DeClercq: I'm curious if you could say a bit more about what led you to this realization. Oftentimes there are these, kind of these epiphanies that lead us uncovering these dead ideas. So, can you say a bit more about what made you think a bit more about this idea of "brains on sticks," and what might be wrong with it?

Susan Hrach: Yeah, yeah, absolutely. So my privilege to design and lead study abroad courses allowed me to see what happens when there are these immersive experiential learning opportunities. And in fact, you know, when I first started teaching abroad, we spent a decent amount of time in the designated classroom spaces, and then we'd go outside for field trips. And... and then over the years I realized, like, oh my gosh, we've come 5,000 miles away. What are we doing in this classroom? We can do anything that we need to learn in this program, out in the place, where it's happening. And so the next step, to imagine, well, why are we limiting ourselves to being inside these indoor boxes of classrooms when we're on campus? And is that really the best way to learn?

We can't take everybody 5,000 miles away to interact with, in my case, you know, early modern literature and figures from that time and place, but we can certainly bring them to archives, to museums, other spaces in which learning will be more experiential and hands-on. So that's what got me interested in figuring out why it works. And I was fortunate to do just a lot of reading on my own in the science of embodied cognition.

Caitlin DeClercq: This reminds me of being a TA at Berkeley. I remember I had a section ahead of me in which I had to talk about observational methods, and was really just kind of dreading, like, here's the three tenants of how to conduct an observation. So, sort of on a whim, I took my class outside and there was this really active cafe that was kind of an extension of campus right across the street, and this beautifully redesigned plaza between my classroom and where this cafe was. And no one was ever in this plaza, even though it was beautiful and highly designed.

So I just thought, okay, let's observe, what do we see here? What's happening? And it ended up being a really nice way to, of course, meet the learning objectives of the day, but to also get students to think really critically about space, which was especially good given that these were budding architects that I was working with.

So, I think this... this reminds me of a couple things. One, I really appreciate your point that, um, we don't need to take students 5,000 miles away to have these transformative experiences. Oftentimes, just a kind of slight
change in context can be really helpful. But it makes me wonder too, if there's almost another dead idea at play here, which is the idea that maybe classrooms are just, kind of, empty boxes. And of course, the way that they're designed often in higher ed reinforced this idea. Drab walls, white walls, standardized furniture. So I'm wondering if there's anything you want to say about this... about, kind of, maybe how we don't give classroom spaces enough credit.

[00:07:47] **Susan Hrach:** Yes, absolutely. And that's a great story about you're on a whim deciding to do something different with your students. Because, you know, I find a lot of the ideas that I describe in my book and that I was reconsidering, are not... they're not new. It's not like no one's ever thought to do these things before. I just finally had a more evidence-based reason to understand why they work. And in the case of classroom spaces, it's a similar thing. We don't appreciate how much the physical, the built environment, is shaping our cognitive process and our expectation for what's going to happen in that space.

[00:08:27] So if you walk into a room that is tiered down to a center in which there's a giant screen, and there's a computer next to it, and a podium, then that's already shaped everyone's expectations about what will happen in this space. Because they've been in similar spaces before. These are all, sort of, steps to like telling your brain that it can go ahead and go into auto pilot cruise mode, because it's too familiar. And it, in fact, presents an obstacle to students being able to perceive and process new ideas, because their brains are already sort of half-lulled into a less receptive space because of the conditions of the room.

[00:09:16] And so, you know, particularly when people close all the blinds, they turn a room into a little cave. That's just not conducive to our brains operating, you know, in their optimal, most open.

[00:09:30] **Caitlin DeClercq:** I think this is a really lovely shift. Oh, Catherine, yes.

[00:09:34] **Catherine Ross:** This just reminded me of the work Michael West did way back around 2010, when he had his students do the ethnography of students today, and they showed pictures of that type of classroom, and on the back of the seat they had scrawled; "If students learn what they do, what do they learn by sitting here?" And then on the black board, way down in the front, they had written; "The information is up here." And so it's very disempowering for students, right? They don't see themselves as co-creators of learning, they see themselves as listening to the expert in the front of the room.
Susan Hrach: Yes. Yes. That's a great visual of it as well. And unfortunately, I think that lecture hall space even informs our behavior when we're in a space that is not tiered, to say, but tends to be used in the same way. It's like, we've all got that image so deeply embedded in our brains, we can't think of what else to do with a room.

And I have to say, I like to do a lot of small group work, and I would have students pull desks around and rearrange things. But even I was a little befuddled by the idea that active learning classroom furniture might involve stools and sofas and beanbags and things that were not placed in a uniform way. Because I thought, well, how can I do my tidy groups of four conversations if everyone's not sitting around the same sort of table with the same sort of chairs. And then in the process of doing this research, I realized that when they have choices about where to sit, and are able to engage with each other in a way that's a little bit novel, that in fact, there's no reason at all why you can't do the same group activities. They might work even better. It was just my preconceived notion that it all had to look symmetrical and be uniform.

Caitlin DeClercq: I love this idea of finding agency in spaces that are typically so determining of our behaviors. That's such a lovely point. It's actually brings me to the second question that I have, which is really to think a bit more about the role of the physical classroom in shaping student learning. Susan, you use the science of embodied cognition to show that. And I quote here, "active learning works even better when students bodies are engaged."

So building on this insight, you offer a number of helpful interventions for instructors and campus changemakers alike to re-imagine campus learning spaces. So, what I thought I would do is share a couple of these principles you articulate in the book and then ask you to elaborate on what they tell us about how to better leverage learning spaces and supportive student learning.

So, first up, our bodies are in a state of constant motion. What are some implications of this?

Susan Hrach: Yeah, thank you for doing such a succinct summary of those principles. So, the state of motion involves both internal motion, as well as what we more traditionally think of as locomotion - that we're... we're moving through a space. And it also involves manipulation, in other words, the ways that we can use our hands to move and to be able to sense things. But the fact that we're... we're constantly moving internally and within the space offers us basically the most natural way to learn that our brains developed. Because we
were primarily moving through our environments, and human beings have such a wide range of motion. Our bodies do so many different small motor movements as well as large motor movements so that... This is what some evolutionary biologists attribute the size and complexity of our brains to - that they developed specifically in order to manage all of these complex movements.

[00:13:32] So harnessing that motion, that ability to move, and also our constantly shifting internal sensations, needs to play a role in figuring out how to help students learn.

[00:13:44] Caitlin DeClercq: I'm curious if you could say a bit more about how might we think about this principle in terms of, maybe students or instructors who have physical limitations. Or for whom maybe some of the ideas might be coming to mind right now, like getting students to get up and move around the room, to maybe look at various objects, or kind of engage each other in conversation. What are some additional ways you might think about movement that could be accommodating of these limitations?

[00:14:06] Susan Hrach: Right, and I have been so mindful of... of ways in which I don't want to create any sort of exclusionary recommendations. And also the fact that, really on any given day, all of us have different ranges of mobility. We might be dealing with some sort of temporary pulled muscle, or we might be just super tired. We might have a backache - we're all different on different days.

[00:14:46] But I would say, you know, there are ways to think about the body that also don't have to involve being very mobile around or outside of your classroom. They have to deal with your internal sensations. So taking time to use contemplative practices like mindful breathing, or a very brief body scan where you're just calling attention to, say, your toes, your fingers. And having students just... just take a moment to get in touch with the motion going on inside of their bodies. And, are you clenching your fists? And why is that? You know, can we kind of be more present in this space? Is a great way to acknowledge the body and the classroom in a way that doesn't have to be limited to people with full ranges of motion.

[00:15:42] Caitlin DeClercq: I love that this is also a nice way to bring in reflective practices, right? And maybe to have some of these conversations that might help build the rapport that we know is so important, at least in setting up positive classroom climates.
So, the second principle that you articulate is that knowledge is constructed through embodied experience. So this in mind, what should we do? What should we be thinking about?

Susan Hrach: Right. So this is a great prompt for me to discuss the role of gesturing, and the way that gestures both communicate things to other people, but also sort of to yourself. So if you can use your hands to enumerate the things that you want to discuss while you're thinking through something - I think foreign language classrooms have adopted these kinds of principles really well. If you can come up with gestures that you will associate with certain sorts of concepts or words, those are helpful for bringing them more deeply into your memory. And they're allowing you to embody what you know.

The other really powerful gesture is raising your hand. I have this great anecdote that I heard Cathy Davidson share, actually, about Samuel Delany, a science fiction writer and creative writing teacher, where he asked all of his students to all raise their hands every time he asked a question, and he would call therefore on anyone. And they had the opportunity to say what they... what they thought might be an answer, or to say, I'd like to hear what so-and-so has to say about it.

But he did this because it's empowering to raise your hand - sticking your hand up in the air as a way of signaling to yourself that you're there. You're present. You matter. You have a right to be in that space. And he recognized that when students haven't raised their hands in a class for maybe years, that it reinforces their sense of disempowerment in a classroom, or that they're sort of silent, because they're not even claiming the kind of physical right to be in that space.

Caitlin DeClercq: I love that example, I actually just wrote it down. I'm doing a workshop on a very similar topic later on, next semester, and it makes me realize - this would be a really wonderful practice that we could all do together. And reminds me of this idea too, of getting students to sort of speak as early as... as possible in the class. Even if it's just saying their name, right? Something that's very proximal to them.

But I love the way that this is embodied, and right - it is empowering. I imagine it also is a source of great attention too - I'm like present in a very different way when my arm is raised.

Susan Hrach: My own students, I think, would let you know that if I ask a question and I get a sense that, like, no one is going to answer, it's a very
dead space, then I say, oh, it looks like we all need to stand up! And now we're going to stretch. Where this is... it's not okay, just to sort of sit there and expect somebody in the room to... to carry the ball. We're all in this together, and if we're not feeling like we have enough energy to even participate in a conversation, we need to shake it up a little bit.

[00:18:56] Caitlin DeClercq: I think that's... that's so beautiful. And it just occurred to me too, while you were sharing that story, that I think there's often... there's this imbalance too, right? Where, often - I'm thinking about a big classroom space here, but it could be at any size - and often the instructors are the ones that are assumed to be physically active. We're often standing, we're gesticulating, we're moving around the room. And even a lot of active learning classrooms are designed like this, right? The idea that the instructor is the one moving around, and there is that imbalance. So, even just the act of, let's all stand up. Or, let's all raise our hands - sort of instigating all bodies in the room in some way, which I think is really lovely.

[00:19:27] Susan Hrach: Absolutely. And you know, in the days when we were attending conferences - remember those, in-person? I remember suddenly, just within the last couple of years, being so conscious of all of the moaning and whining at the end of a long day of sitting in those conference chairs and listening. And it was as if we just had completely forgotten that this is what we ask our students to do all the time, and yet we don't love it ourselves. We had to... we had to sit in their shoes, I guess, to mix metaphors there.

[00:20:01] Caitlin DeClercq: Right! I want to shift our conversation now to think about how to work toward, um, the types of change that you advocate. In the final chapter of Minding Bodies, you outlined five recommendations to center the body in teaching and learning. Let me just summarize those here; number one, recognize the impact of our physical spaces on learning; number two, take our classes outside whenever we can; three, infuse learning with sensory experiences; four, build movement into classroom time; and five, use movement to build social relationships among students.

[00:20:33] We've gotten a nice preview of a lot of these, actually, through our conversation. And the good news here is that, as you say, and I'm quoting here, "some of these actions require only a shift in attitude and awareness on the part of the faculty - a shift that costs no money and requires little investment of institutional resources." Yet, and this seems like an important yet, you also acknowledged possible resistance to these ideas. That even that we are, quote, "swimming against the current of educational and cultural norms." Can you
elaborate on this and maybe suggest some ways to respond to this type of resistance?

[00:21:06] **Susan Hrach:** Sure, yeah. I mean, some of the implications for understanding how our cognitive processes are shaped by our embodied sensations mean that we might want to try really unorthodox things in a classroom. I think one of the most powerful things we might want to make use of, and I have not been brave enough to do this myself, I got to say, even though I love to dance - we should be dancing with our students.

[00:21:36] And I wanted to explain why. For one thing, it raises their level of energy. But I've also learned that, when you move in synchrony with other people - so with a rhythm, in coordination in some way, so ideally it would be you performing some sort of dance with particular steps together - it actually enhances your willingness to cooperate with each other and enhances your sense of compassion with other people. So even the simplest, I mean, series of clapping, or... this is why people do the wave at sports stadiums, right? It builds the sense of community among the spectators. But this would help our students to feel a sense of belonging, which we know is so critical to their success. And it would potentially improve their performance in collaborative learning, because they've built this sense of trust, or connection, together.

[00:22:39] And there are other bold things to do, I suppose, then turn your classroom into a dance floor, but that's an extreme example of, you know, resisting norms that I can think of. And mostly our norms have been built around this idea that you sit still and you're quiet and you listen, and this is the way that you learn. Talk about a dead idea! This has been dead for several decades, but it's just so hard to resist that norm.

[00:23:10] And, you know, I was even following a great little thread on Twitter recently about rigor, and everyone's concern with rigor. And then someone pointed out, rigor comes from the Latin word for stiff. Rigor mortis is the stiffness of the dead. And so, isn't that fascinating? I mean, rigor is all caught up in stasis, and stillness, and stiffness, and so, wow! There's maybe a place for us to ponder, if we're prepared to let go of this idea of stiffness and rigor, and the way that we've traditionally thought of it, what would it look like then to have some plasticity and some mobility and some ability to change? And isn't that really what we're all about in this transformative business of learning?

[00:24:03] **Caitlin DeClercq:** I think that's so true. And if I might just share one more quick little anecdote here. As you were talking, I remembered that I think my entire dissertation must have been written on post-it notes, out while I was
walking. You know, these are where the big connections would come. And so it's interesting too, that we think about these outcomes, right, as being, like, all buttoned up, and that's where the kind of the rigidness comes in. But the process is messy, and can be messy.

[00:24:24] But it also occurs to me that, I was thinking, why do I not go walk around now, in my current context? And I think it's because I have a lot less control over my time. And, you mentioned this in the book too, that time and space are big drivers of our ability to put into place a lot of these big changes that we're... that we're thinking about. We have these rigid class schedules... if there's anything more you want to say there.

[00:24:45] **Susan Hrach:** I mean, I think some institutions are doing some really interesting and creative work with rethinking the way time is meted out. The credit hours as judged by seat time - isn't that revealing, and terrible? But, you know, these are all so clearly reflective of an industrial model, and the factory. I think we're finally ready to let go of the 20th century and say, learning is not a factory. It's some more like a garden.

[00:25:15] And it's going to have to look a little bit like, as you say Caitlin, messier, a little more organic, a little more outside.

[00:25:25] **Caitlin DeClercq:** That's lovely. What a lovely metaphor. So now, thanks so much, and I would now like to turn the mic back over to Catherine.

[00:25:32] **Catherine Ross:** Thank you, Caitlin. And I want to say thank you to Susan for that take-down of rigor. That is one of the most massive dead ideas in higher education, and I love how you just sort of neatly took it down. Also, as someone who has taught Russian and English to speakers of other languages, and who routinely had my students going outside to play Simon Says in learning the imperatives of verbs, for example, or to create a map of campus and then decide how to give somebody else directions to a destination on campus - I really appreciate finding out that there's actually science behind this.

[00:26:13] **Susan Hrach:** Oh, Catherine! I mean, those are such beautifully creative ideas. I think any listener can appreciate, if you were in a classroom, trying to learn Russian verbs and you learned them by going outside and having to give literal directions to someone, how much easier it would be to remember and make use of those in live, unscripted contexts than if you had been sitting in a desk, just trying to will them into your brain.
Catherine Ross: Yes. Anyone who has studied Russian knows that the Russian verbs of motion are a particularly difficult concept, and also just very difficult to master the different prefixes and things that are used on those verbs. So I would start out with, sort of, giving them commands and having them act them out, and then build up to them giving each other commands. So, it seemed to help them a lot. And... and it reduced the fear, which was really important in keeping people in Russian.

All right. So I want to, um, ask the final question that I always love hearing the answers to, and that is finding out what it is that keeps you motivated and inspired to believe in the possibility of change in higher education teaching, when we're faced with things, like you pointed out, credit hours being equivalent to seat time, because those metaphors are powerful. Um, so how do you...

Susan Hrach: They are!

Catherine Ross: How do you keep going?

Susan Hrach: Thank you. I think this is a great question and I appreciate your asking it because we all need to get back in touch with our inspiration and motivation. Caitlin, you mentioned that you first came across my book as we were, sort of, still in pandemic mode, and coming out of it, maybe, I guess. And I was finishing up the draft of it just when we were going into lockdown. And so it was kind of a terrifying moment when I thought, oh my gosh, that's it. My book is pointless. We're going online and we're never coming back.

And so then I was feeling hopeful about the fact that, if it was possible for us to make the adaptations that we did when it was necessary, when we had to rethink the delivery of all of our courses - who knew that we'd have the rug pulled out from under us that way? Who knew we'd be shaken up so fundamentally? And I think that gives me hope, that we can do really big transformative things in the future. And now that we've had some of our most comfortable assumptions shaken up by the pandemic, that leaves us in a more vulnerable - but more open - state to make other changes.

I mean, faculty and administrators are... are human beings just like students, and so therefore, we can experience these new kinds of behaviors firsthand. We know we're humans with bodies too. We can feel and experience the things that we know would be good for our students as well. We can take care of ourselves and our own wellbeing, and be more mindful about how our
own level of activity, of movement, of the spaces that we work in, are shaping our own processes.

[00:29:51] And then think about the ways that we can help our students. I love this quote, or the sentiment that has been attributed to at least four different people that I know of, including Einstein and Stephen Hawking - but it's basically that, intelligence is the ability to change. That the "new smart" is the ability to change your mind. And so, that gives me hope.

[00:30:17] **Catherine Ross:** Thank you so much for that, Susan. It's lovely how you have reframed these somewhat turbulent times to be a time of opportunity, and I really appreciate that, and I'm sure our listeners will as well. So thank you again, for being here today. And thank you Caitlin, for joining me as co-host today.

[00:30:40] **Caitlin DeClercq:** Thank you.

[00:30:41] **Susan Hrach:** Thanks, it's been such a pleasure.

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