Mary Holwell:

The Reggio Emilia approach recognises the importance of the environment and describes it as being the third teacher. I'm interested, Anoo, in why you think it's important for educators to create environments that provide rich opportunities for movement.

Anoo Bhopti:

Yeah. Hi everyone and thanks everybody for that very long introduction. So yes, let's get into it Mary. So we know already that children learn through the environment. So I know that all of you who are here are working with children and you know the basic things, but we will just go over them, just so that we can all be on the same page and probably learn again. And it's important to remember the children, when they develop, their development is influenced by the environment, and the interplay between the environment and their innate abilities and their experiences. So it's not just that they're learning, they're just growing and developing because of their brain, but it's also what experiences they're having that are shaping, that they're learning and they're growing and their brain is learning through the movement, through the environment.

Anoo Bhopti:

Development of cognition when you're working with children, it's not just that the movement helps them to move, but they also learn cognition through simple to complex tasks that they do. And they go from inside out. So they're very concrete at the start, and then they learn abstract. They're very personal, and then they become more worldly. And I really think it is through movement that they learn to explore. And if they were just sitting in a spot or playing in the same areas, then they would not be able to explore as much and learn about what's around them.

Anoo Bhopti:

We also know, Mary, about motor learning theories that help us understand movement and motor learning theories consider the nervous system maturation, of course, as one of the influence, but also rely on practice and experiences getting repeated over time so that children can learn. So those repetitions in movement rich environments actually have a big influence on the learning and development and growth of children. So it's really important to be mindful of the environments and the richer the environment, the more movement opportunities, you're actually working at the level where the brain is developing.

Anoo Bhopti:

And I always feel, so if you look at the neurology literature and how the basic architecture of the brain is constructed in the early life, it is important to remember that as educators, if when we work with very young children, we are actually privileged. We're helping their brain grow and we are tapping into that, plasticity, is what we call it. So what happens is a child's brain is plastic, which means it has the ability to be changed gradually by its own activity. So there's constant circuits being developed. So they're born with a full brain, but the connections are formed the more they experience rich experiences. So they might be movement experiences, they might be singing, they might be cognitive experiences, but that's what is happening. So the simpler circuits are formed first, but the more rich their environment is, then the complex brain circuits have been formed.

Anoo Bhopti:

And so what happens is these experiences start shaping the quality of the brain architecture. In some ways, you as teachers are helping the brain architecture develop, making the brain rich and it might be, so lack of that rich experiences can create fragile foundation for learning. But the rich experiences actually have a very strong and sturdy foundation for learning skills. And a lot of that comes, and we know that that happens because of the plasticity and the ability of the brain, but also that all of us together, if we work together, then we help little children explore the interesting environments. And that leads to significant, what we call, dendritic branching. So in their brain there's growth happening, and the size of the brain tissues increase and they get rich experiences. So early movement experiences and rich experiences help children grow, develop their brain size and develop the richness. So it's really important.

Mary Holwell:

Thank you, thanks Anoo. There's probably a slide that many educators have seen during their time, either at university or perhaps when they've attended professional learning, that shows pictures of how synapses have been pruned as children mature a little bit. That they have all these, as you said, all these dendrites and all these neurons there, but then some are kept and some fall away. And those that are kept, are kept because there's been a rich environment that's promoted more and more learning for the child, or more and more development.

Anoo Bhopti:

Absolutely. So it's like your wires, they get thicker and thicker. The more they get exposed, they get thicker and thicker and richer and dense.

Mary Holwell:

Yes, and I really liked that idea that you spoke to of the child starts being very personal and then becomes very worldly. They start internally and then they start looking outwards. And that's a great thing I think for educators to remember and think about, thank you.

Anoo Bhopti:

Absolutely. So they are in their little own world and that's actually important because they need to develop that sense of self and their sense of where their body is. And then they go outwards. So even with concepts, they learn simple first and concrete concepts first, and then they go abstract.

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