# Noticing the red flags for children’s learning and development: How an occupational therapy lens can support your work as an educator – A conversation with Dr Anoo Bhopti

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| What is the importance of a movement-rich early learning environment? |

Through movement children have opportunities to learn and develop, and these types of experiences contribute to the development of healthy brain architecture. Healthy brain architecture depends on a sturdy foundation built by appropriate input from a child’s senses along with stable, responsive relationships with caring adults. Adult responses need to be reliable and appropriate to encourage responses from children, and this helps their brains develop (Shonkoff 2000).

An inviting and stimulating early learning environment encourages the child to move and learn. Within this type of environment children experience different sensations and textures and are introduced to important concepts such as size, shape and depth. These experiences help children to develop an early understanding of spatial relations and support them to learn about their own bodies.

When we think about movement experiences from this perspective, we can see that they are very important for children as they contribute to the continuation and strengthening of their neurological connections and help build healthy brain architecture. Based on our knowledge of motor learning theory, we know that practice is extremely important for children to firstly experience, then learn and ultimately consolidate independent movement.

Did you know that a toddler will fall, on average, 17 times an hour while they are learning to walk (Adolf et al., 2012)? Thinking about this fact can help to guide our practice and might direct us to set up an environment where very young children can walk and fall safely. In setting up the environment in such a way, we are encouraging them to practise their motor skills and encouraging them to walk. The more they practise, the stronger their brain wiring is, and they learn and consolidate new skills.

Some children might have developed more competence and preference for gross motor skill experiences than fine motor skill experiences, so it is important to note and remember that we should expose children to and encourage them to practise all of kinds of movement – practice leads to competence.

When intentionally setting up an environment that will encourage movement learning opportunities, think about safety first and then plan on including some obstacles, undulating surfaces and a variety of sensory textures to enable children - especially toddlers - to navigate, problem-solve and experience successes as they move around and engage with the environment. Setting up such movement-rich environments with intention can help children extend their gross motor, fine motor, communication and pretend play and social skills, and will provide you with opportunities to notice more about children’s motor skills

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| What are some possible reg flags that educators should look out for when working with children? |

Below are some examples of ‘red flags’ you might notice when you set up a movement-rich early learning environment.

* You might notice that some children are unable or much less inclined than their peers to move, crawl or walk, or that they appear clumsy in comparison to their peers.
* Some children may dislike certain textures or movements and mention these flags to your supervisors or to their parents.
* You might notice differences in children’s muscle tone – does one child consistently feel much tighter or perhaps much looser in their hips and legs when you change their nappy?
* You will be able to notice if they have asymmetries – do they use one hand more than the other or keep their hands fisted even if they are more than six months of age?
* Do they show any asymmetry when they walk? For example, does it seem like they are using one leg more than the other or limping, toe-walking or showing any noticeable differences between how they use their legs?
* Are they unable or struggling to transition from lying to sitting, or from sitting to standing up on their own?
* You will notice sensory preferences or dislikes – for example, they may not like loud noises or sudden movements, such as going down a slide; or they may seek some movements a lot more than other movements, such as swinging high or jumping from heights; or they may dislike sensory activities, such as messy play, sand play or walking on grass. (Be mindful that some cultures don’t like messy play so this could also be an underlying reason.)
* You might notice delays in fine motor skills related to their hand use, which may be limited to taking objects to their mouth to explore (mouthing). Are they building with toys and using toys for functional play, or are they just exploring? Children start building with toys at as early as 9–10 months and start putting objects into containers – are they participating in such play?
* Are they joining in pretend play? Can they feed a doll or a teddy? Children start engaging in basic pretend play at as early as 12–16 months. Are they playing in the home corner or doll house, or do they not know how to engage in such pretend play?
* You might notice early communication signs – if they are not making babbling noises or drawing attention, this might be of concern.
* You might notice some delays in social attention – eye contact, response to name, pointing to ‘show’, following gaze, waving, clapping and other gestures, copying others, pretend play, showing toys to others, shared smiles and sharing emotions.

When you create environments that provide many opportunities for children to practise their motor skills and you observe and note their progression, you can be an important contributor to building understanding of the child for their family and other professionals. The information you provide can be instrumental in helping everyone concerned with the child to create a holistic understanding of the child’s progress. Please recognise that parents may be at different stages in their understanding of their child’s development or may not yet be open to hearing of your concerns. It is important to remember that if you have meaningful and accurate documentation about children’s learning and development, this may provide you with multiple ways to speak to families and other professionals

If you have concerns about children’s development, make sure that you discuss these concerns with the educational leader or coordinator of the service prior to talking to the family.

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| What is the role of play in supporting and extending children’s motor development? |

Play provides many opportunities for children to build and consolidate a range of skills. When an educator intentionally creates playful learning opportunities and observes children involved in playful experiences, they are able to capture authentic assessment detail.

Educators can intentionally create learning opportunities through play that can further extend motor skills. Experiences such as obstacle courses, boxes to hide in, objects to push and pull, sand to dig and pour, as well as peg boards and puzzles all support ongoing motor development.

Documenting children’s playful learning opportunities may look something like the following examples:

*In order to further extend these skills, we are currently setting up pretend play with dolls and teacups and a picnic. However, we observed that ‘John’ was not interested in this play, preferring instead to play with bubbles.*

Or

*We observed that ‘John’ was not aware of his peers while he was playing and prefers to play with only one or two toys. We will continue to offer such experiences and extend John’s social opportunities so that he can start interacting with his peers and engage in pretend play.*

Educators are a very important part of multidisciplinary assessments, so it is essential to record accurate and meaningful observations of children. Early learning environments can be places where children spend a significant part of their day, and observing children in these play-based environments can add rigor and authenticity to the observations recorded. These types of authentic assessments can be useful to other professionals in determining diagnostic outcomes for young children.

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| What practical strategies can be put in place to support children’s motor development? |

Healthy brain architecture is shaped by ‘serve and return’ interactions. This means that when a child cries, points at something or engages in some way (the ‘serve’) and an adult responds with words, eye contact or physical touch (the ‘return’), neural pathways are built and strengthened in the child’s brain, supporting their development of communication and social skills ([Center on the Developing Child, Harvard University](mailto:https://developingchild.harvard.edu/science/key-concepts/serve-and-return/)).

The five steps below, recommended by the Center on the Developing Child at Harvard University, highlight the importance of environments that are rich and adults who are responsive to children.

1. *Notice the serve and share the child’s focus of attention*  
   Look for what the child is doing (are they pointing at something, moving their arms or legs, making a sound?) and share their attention. Look for these opportunities, for example, when you are feeding them or changing their nappies.
2. *Return the serve by supporting and encouraging*
3. You can make a sound or say ‘What’s that? I see!’ Or just smile or nod to let them know you are noticing their serve. You may pick up a toy they seem to be pointing to and show them.
4. *Give it a name*
5. You can give the thing they are pointing to or moving a name: for example, ‘Those are your toes!’ Or ‘Oh, that is teddy!’ You can name anything – a person, a thing, an action, a feeling or a combination of these.
6. *Take turns … and wait*  
   Keep the interaction going back and forth. Waiting is crucial and it is amazing what we can see when we wait, because children take time to respond.
7. *Practise endings and beginnings*  
   Use words such as ‘Oh, you want to play with that’ when they approach an activity, or ‘All done’ when they move away.

*This Fact Sheet was developed by Dr Anoo Bhopti*

Anoo is a lecturer and researcher at La Trobe University, Melbourne, and a paediatric occupational therapist. Anoo’s research and practice is embedded within the early childhood intervention and disability sector, with an emphasis on inclusion and participation, caregiver wellbeing and family quality of life. Anoo was a co-author on a report for the National Disability Insurance Agency (NDIA) and collaboratively published the *National Guidelines for Best Practice in Early Childhood Intervention.*

This fact sheet supports information contained in the Victorian Curriculum and Assessment Authority (VCAA) September 2021 Twilight Webinar – ‘Noticing the red flags for children’s learning and development: How an occupational therapy lens can support your work as an educator’.

Edited vignettes of this webinar are published on the [Early Years Professional Learning](https://www.vcaa.vic.edu.au/news-and-events/professional-learning/earlyyears-professional-learning/Pages/Index.aspx) webpage of the VCAA website.

#### References

Adolph, KE, Cole, WG, Komati, M, Garciaguirre, JS, Badaly, D, Lingeman, JM, Chan, GL, & Sotsky, RB 2012, ‘How do you learn to walk? Thousands of steps and dozens of falls per day’, *Psychological science*, Vol. 23, No. 11, pp. 1387–1394, <https://doi.org/10.1177/0956797612446346>

Center on the Developing Child 2017, ‘5 Steps for Brain-building Serve and Return’, Harvard University, <https://developingchild.harvard.edu/resources/5-steps-for-brain-building-serve-and-return/>

Shonkoff, JP & Phillips, DA (eds.) 2000, *From neurons to neighborhoods: The science of early childhood development*, National Academy Press, Washington

#### Additional resources that might be useful.

[The Australian Parenting Website](https://raisingchildren.net.au/), Department of Social Services

[‘Early signs of Autism’](https://raisingchildren.net.au/autism/learning-about-autism/assessment-diagnosis/early-signs-of-asd), The Australian Parenting Website, Department of Social Services

#### Additional VCAA resources.

Download copies of [VCAA early years resources](https://www.vcaa.vic.edu.au/curriculum/earlyyears/ey-curriculum-resources/Pages/Index.aspx).

Order [free hard copies](https://www.vcaa.vic.edu.au/curriculum/earlyyears/ey-curriculum-resources/Pages/Birth-to-8years.aspx) of VCAA early years resources.

Sign up to the [VCAA Early Years Alert](https://www.vcaa.vic.edu.au/curriculum/earlyyears/veyldf/Pages/Index.aspx#:~:text=For%20news%20about%20VEYLDF%20resources%20and%20professional%20learning%2C%20subscribe%20to%20the%20Early%20Years%20Alert) to be informed about new resources and professional learning opportunities.

Contact the Early Years Unit, VCAA:

Email: [veyldf@education.vic.gov.au](mailto:veyldf@education.vic.gov.au)

Phone: (03) 9059 5158